SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM SB-2 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

SIGA PHARMACEUTICALS, INC. (Name of Small Business Issuer in its Charter)

DELAWARE 2834 13-3864870

Incorporation or Organization)

(State or Other Jurisdiction of (Primary Standard Industrial Classification Code Number)

(I.R.S.Employer Identification No.)

\_\_\_\_\_\_

666 Third Avenue New York, NY 10017 (212) 681-4970 (Address and Telephone Number of Principal Executive Offices and Principal Place of Business)

DAVID H. DE WEESE, PRESIDENT AND CHIEF EXECUTIVE OFFICER SIGA PHARMACEUTICALS, INC. 666 Third Avenue New York, NY 10017 (212) 681-4970

(Name, Address and Telephone Number of Agent For Service)

COPIES TO:

ADAM EILENBERG, ESQ. EILENBERG & ZIVIAN 666 Third Avenue New York, NY 10017 (212) 986-2468 Facsimile (212) 986-2399

KENNETH KOCH, ESQ. SQUADRON, ELLENOFF, PLESENT & SHEINFELD, LLP 551 Fifth Avenue New York, NY 10176 (212) 476-8362 Facsimile (212) 697-6686

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective. If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration

statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.[]

### Calculation of Registration Fee

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock, par value \$.0001			,,	\$ 4,924
Underwriter's Warrants, each to purchase one share of Common Stock(2)	325,000	0.001	325	(3)
Common Stock, par value \$.0001(4)(6)	325,000	5.50	\$ 1,787,500	\$ 542
Common Stock, par value \$.0001(5)(6)	100,000	5.00	\$ 500,000	\$ 152
Total:				\$ 5,618

- Estimated solely for the purpose of calculating the registration fee.
- To be issued to the Underwriter at the time of delivery and acceptance of the securities to be sold to the public hereunder.
- No fee due pursuant to Rule 457(g) under the Securities Act of 1933.
- (4) Issuable upon exercise of the Underwriter's Warrants.
   (5) Issuable upon exercise of warrants (the "Bridge Warrants") issued to certain persons in connection with a bridge financing completed on February 28, 1997.
- Also registered hereunder pursuant to Rule 416 are an indeterminate number of shares of Common Stock which may be issued pursuant to the anti-dilution provisions applicable to the Underwriter's Warrants and the Bridge

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

## SIGA PHARMACEUTICALS, INC.

Cross-Reference Sheet Showing Location in Prospectus of Information Required by Items required by Part 1 of Form SB-2

Item	Title of Item	Caption in Prospectus
1.	Front of Registration Statement and Outside Front Cover of	
2.	Prospectus	Front Cover Page
3.	ProspectusSummary Information and	Inside Front Cover Page
4.	Risk Factors	Prospectus Summary; Risk Factors Use of Proceeds
5.	Determination of Offering Price	Underwriting
6. 7.	Dilution Selling Security Holders	Dilution Not Applicable
8.	Plan of Distribution	Front Cover Page; Underwriting
9.	Legal Proceedings	Business
10.	Directors, Executive Officers, Promoters and	
11.	Control Persons Security Ownership of Certain Beneficial Owners	Management
12. 13.	and Management  Description of Securities  Interest of Named Experts	Principal Stockholders Description of Securities; Dividend Policy
14.	and CounselDisclosure of Commission	Legal Matters; Experts
	Position on Indemnification for Securities Act Liabilities	Description of Securities
15.	Organization Within Last Five Years	Certain Transactions
16. 17.	Description of Business Management's Discussion and Analysis or Plan of	Business
	Operation	Plan of Operation
18.	Description of Property	Business
19.	Certain Relationships and	
20.	Related Transactions  Market for Common Equity and Related Stockholder	Certain Transactions
	Matters	Description of Securities; Shares Eligible for Future Sale
21.	Executive Compensation	Management
22. 23.	Financial Statements Changes In and Disagreements With Accountants on	Financial Statements
	Accounting and Financial	
	Dicelecure	Not Applicable

Disclosure..... Not Applicable

Information contained herein is subject to completion or amendment. registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

### SIGA PHARMACEUTICALS, INC. 3,250,000 Shares of Common Stock

This Prospectus relates to an offering (the "Offering") by SIGA Pharmaceuticals, Inc. (the "Company") of 3,250,000 shares of common stock, par value \$.0001 per share (the "Common Stock") (sometimes hereinafter referred to as the "Securities"), to be sold on a "best-efforts, all-or-none" basis through Sunrise Securities Corp. (the "Underwriter"). Prior to the Offering, there has been no public market for the Common Stock. It is currently anticipated that the initial offering price will be \$5.00 per share. See "Underwriting" for information relating to the factors considered in determining the initial offering price.

The Company has applied for quotation of the Common Stock on The NASDAQ SmallCap Market ("Nasdaq") under the trading symbol "\_\_\_\_

The Company is a development stage, biopharmaceutical company which has suffered operating losses since its inception and which has received a going concern opinion from its independent accountants. As of December 31, 1996, the Company had an accumulated deficit of \$2,269,176. The Company expects to incur substantial additional operating losses in the development and commercialization of its technologies.

THE SECURITIES OFFERED HEREBY ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK. ONLY INVESTORS WHO CAN BEAR THE RISK OF LOSS OF THEIR ENTIRE INVESTMENT SHOULD INVEST. FOR A DESCRIPTION OF CERTAIN RISKS REGARDING AN INVESTMENT IN THE COMPANY AND IMMEDIATE SUBSTANTIAL DILUTION, SEE "RISK FACTORS" (PAGE 8) AND "DILUTION" (PAGE 19).

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESEN-TATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Price publi		Di a	rwriting scounts nd sions(1)		ceeds to	="		
Per Share	\$	5.00	\$	.50	\$	4.50			
Total(3)	\$16,250	,000	\$1,62	5,000	\$14,	625,000			
					(fo	ootnotes	appear o	n page 3)	
		S	unrise	Securitie	s Cor	).			
The da	+0 of th	ic Dr	ocnoctu	c ic				1007	

The date of this Prospectus is

[Inside Front Cover Page]

[Photo and Text]

- (1) Does not include additional compensation to the Underwriter consisting of (i) a non-accountable expense allowance equal to 3% of the gross proceeds of the Offering, of which \$45,000 has been paid by the Company to date and (ii) warrants entitling the Underwriter to purchase the number of shares of Common Stock equal to 10% of the number of shares of Common Stock sold in this Offering (the "Underwriter's Warrants"). The Company has also agreed to indemnify the Underwriter against certain civil liabilities, including those arising under the Securities Act of 1933, as amended (the "Securities Act"). See "Underwriting."
- (2) After deducting discounts and commissions payable to the Underwriter, but before payment of the Underwriter's non-accountable expense allowance (\$487,500) and the other expenses of the Offering payable by the Company (estimated at \$280,000). See "Underwriting."
- (3) The 3,250,000 shares of Common Stock are being offered on a "best-efforts, all-or-none" basis. Pending sale of all 3,250,000 shares, all proceeds of this Offering will be held in a non-interest bearing escrow account at [\_\_\_\_\_\_\_\_\_ Bank]. Unless all 3,250,000 shares are sold by [June 30, 1997], or by [September 30, 1997] if extended upon the mutual agreement of the Company and the Underwriter (and after the expiration of an additional 10 business days to permit clearance of the funds in escrow), the Offering will terminate and all funds collected will be promptly returned to the subscribers without deduction or interest. During the escrow period, subscribers will not be entitled to a return of their subscriptions. See "Underwriting."

Prior to the Offering, there has been no public market for the Common

Upon the consummation of the Offering, the Company's management and its existing stockholders will, in the aggregate, own beneficially shares having approximately 51% of the total voting power of the Company's outstanding stock.

This Prospectus also covers the offer and proposed sale by the Company of an estimated 100,000 shares of Common Stock issuable upon the exercise by the holders thereof of warrants (the "Bridge Warrants") to purchase an estimated 100,000 shares (the actual number of shares will be determined by dividing \$500,000 by the actual initial offering price per share) at an exercise price per share equal to the actual initial offering price per share issued to certain investors in connection with a private placement transaction completed on February 28, 1997 (the "Bridge Financing"). The Bridge Warrants are not exercisable until February 28, 1998. See "Plan of Operations--Bridge Financing."

The shares of Common Stock are being offered by the Underwriter on a "best efforts, all-or-none" basis. Subject to the provisions of the underwriting agreement between the Underwriter and the Company, the Underwriter reserves the right to withdraw, cancel or modify the Offering and to reject any order in whole or in part. Any modification to the Offering will be made by means of an amendment to this Prospectus. It is expected that delivery of certificates will be made against payment therefor at the office of the Underwriter, 135 East 57th St., New York, New York 10022, on or about , 1997.

TO INVEST IN THESE SECURITIES, A CALIFORNIA RESIDENT MUST HAVE, AS A MINIMUM, EITHER (i) A NET WORTH OF \$250,000, EXCLUSIVE OF HOME, HOME FURNISHINGS AND AUTOMOBILES, AND \$65,000 OF GROSS INCOME DURING THE LAST TAX YEAR AND ESTIMATED GROSS INCOME OF \$65,000 FOR THE CURRENT TAX YEAR OR (ii) A NET WORTH OF \$500,000, EXCLUSIVE OF HOME, HOME FURNISHINGS AND AUTOMOBILES.

No dealer, salesperson or other person is authorized to give any information or to make any representation other than as contained in this Prospectus and, if given or made, such information or representation must not be relied upon as having been authorized by the Company or any Underwriter. This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, by any person in any jurisdiction in which it is unlawful to make such an offer or solicitation. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create an implication that the information contained herein is correct as of any time subsequent to the date hereof.

### TABLE OF CONTENTS

# Page

Prospectus Summary

1100pcocao Cammar y 11111111111111111	
Risk Factors	8
Use of Proceeds	17
Capitalization	18
Dilution	19
Dividend Policy	20
Selected Financial Data	21
Plan of Operation	22
Business	25
Management	38
Principal Stockholders	42
Certain Transactions	43
Description of Securities	43
Shares Eligible for Future Sale	45
Underwriting	46
Legal Matters	47
Experts	47
Available Information	47
Glossary	48
Index to Financial Statements	F-1

Until \_\_\_\_\_\_\_, 1997 (25 days from the date of this Prospectus), all dealers effecting transactions in the registered securities, whether or not participating in this distribution, may be required to deliver a Prospectus. This is in addition to the obligation of dealers to deliver a Prospectus with respect to their solicitations to purchase the securities offered hereby.

As of the date of this Prospectus, the Company will become subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and, in accordance therewith, will file reports, proxy and information statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy and information statements and other information can be inspected and copied at the Public Reference Section of the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the following regional offices: New York Regional Office, Suite 1300, 7 World Trade Center, New York, New York 10048, and Chicago Regional Office, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511, and copies of such material may also be obtained from the Public Reference Section of the Commission at prescribed rates. The Commission maintains a World Wide Web site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants that file such information electronically. The Company's Common Stock is expected to be quoted on Nasdaq and such reports and other information can also be inspected at the offices of Nasdaq Operations, 1735 K Street N.W., Washington, D.C., 20006. The Company intends to furnish its stockholders with annual reports containing audited financial statements and such other reports as the Company deems appropriate or as may be required by law.

### PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and financial statements, including the notes thereto, appearing elsewhere in this Prospectus. Each prospective investor is urged to read this Prospectus in its entirety. Unless otherwise indicated, the information in this Prospectus does not give effect to the exercise of (a) the Underwriter's Warrants and (b) other outstanding options and warrants to purchase an aggregate of 761,017 shares of Common Stock (includes 100,000 Bridge Warrants based on the assumed initial public offering price). The initial public offering price per share of Common Stock is assumed to be \$5.00.

#### The Company

The Company is a development stage, biopharmaceutical company focused on the discovery, development and commercialization of vaccines, antibiotics and novel anti-infectives for serious infectious diseases. The Company's lead vaccine candidate is for the prevention of "strep throat." The Company is developing a technology for the mucosal delivery of its vaccines which may allow those vaccines to activate the immune system at the mucus-lined surfaces of the body - the mouth, the nose, the lungs and the gastrointestinal and urogenital tracts - the sites of entry for most infectious agents. The Company's anti-infectives programs, aimed at the increasingly serious problem of drug resistance, are designed to block the ability of bacteria to attach to human tissue, the first step in the infection process. The Company's technologies are licensed from The Rockefeller University ("Rockefeller").

#### Vaccine Candidates

The Company's lead vaccine candidate is for the prevention of group A streptococcal pharyngitis or "strep throat," a recurrent infection affecting between seven and 20 million children in the United States each year. Strep throat remains the most common childhood disease for which there is no vaccine available, and, if ineffectively treated, it can progress to rheumatic fever. No vaccine has been developed because of the more than 80 different serotypes of group A streptococcus, the bacterium that causes the disease. In order to be effective, a vaccine would have to be based upon an antigen (a molecule that triggers the immune response) common to most of the important serotypes. The high incidence of the disease, the potentially serious consequences of inadequate treatment and the recent emergence of drug-tolerant types of group A streptococcus create an important medical need for an effective vaccine.

The Company's proprietary antigen, licensed from Rockefeller, addresses the challenge of multiple serotypes in that this antigen is common to most types of the bacteria that cause strep throat, including types that have been associated with rheumatic fever. When a vaccine incorporating this antigen was orally administered to animals, it was shown to provide protection against multiple types of group A streptococcal infection. The Company's vaccine candidate for strep throat utilizes this antigen.

The Company is collaborating with the National Institutes of Health and the University of Maryland Center for Vaccine Development on the clinical development of this vaccine candidate and expects to file an Investigational New Drug Application ("IND") with the United States Food and Drug Administration (the "FDA") in 1997.

The Company is also developing a proprietary mucosal vaccine delivery system, also licensed from Rockefeller. Mucosally-delivered vaccines are considered attractive because such vaccines may mobilize an immune response concentrated at the site of infection and because they may activate both a mucosal IgA antibody response as well as a systemic IgG response. The Company's delivery system utilizes commensal bacteria (harmless bacteria that live in and on the body) that have been genetically engineered to continually present disease-associated antigens which stimulate an immune response at the body's mucosal surfaces thereby preventing infection at the earliest possible stage. By comparison, conventional vaccines primarily activate the slower-to-react systemic (internal) immune system and can have significant limitations, including variable efficacy and serious side effects. The Company believes that mucosal vaccines developed using its proprietary commensal delivery technology should provide a number of potential advantages over conventional vaccines, including: more complete

protection; fewer side effects; the potential for single dose administration; non-injectable administration; the potential for combination vaccine delivery; and lower cost production.

The Company's mucosal vaccine technology is potentially applicable to any infectious disease that begins at a mucosal surface. In addition to its strep throat vaccine, the Company is also developing vaccines to prevent sexually transmitted diseases.

Anti-Infectives and Antibiotics Therapy Candidates

The Company's anti-infectives program is targeted principally toward drug-resistant bacteria and hospital-acquired infections. According to estimates from the Centers for Disease Control, approximately two million hospital-acquired infections occur each year in the United States at a cost of \$4.5 billion.

The Company's anti-infectives approaches aim to block the ability of bacteria to attach to and colonize human tissue, thereby blocking infection at the first stage in the infection process. By comparison, antibiotics available today act by interfering with either the structure or the metabolism of a bacterial cell, affecting its ability to survive and to reproduce. No currently available antibiotics target the attachment of a bacterium to its target tissue. By preventing attachment, the bacteria would be readily cleared by the body's immune system.

The Company's lead anti-infectives program targets fibrinogen binding protein ("FBP"), a surface protein on staphylococcus aureus ("S. aureus") enabling the attachment of this organism to indwelling devices, such as catheters. S. aureus is the leading cause of hospital-acquired infections, and more than 95% of S. aureus infections are caused by organisms that are resistant to penicillin. Many strains of S. aureus are generally resistant to antibiotics, responding only to one drug, vancomycin, which can have serious side effects. Based on studies at Rockefeller, the Company believes antibodies to FBP may be effective in preventing bacterial attachment and is developing antibodies to FBP that will be evaluated for administration to patients at the time of hospitalization to prevent infection by S. aureus.

The Company's second anti-infectives program is based on a novel target for antibiotic therapy. The Company's founding scientists have identified an enzyme utilized by most gram-positive bacteria to anchor certain proteins to the bacterial cell wall. These surface proteins are the means by which certain bacteria recognize, adhere to and colonize specific tissue. The Company's strategy is to develop inhibitors to this enzyme. The Company believes this anti-infectives target will have wide applicability to gram-positive bacteria in general, including the increasing number of antibiotic resistant bacteria and a broad range of serious infectious diseases including pneumonia, meningitis and urinary tract infections. The Company intends to utilize a combination of structure-based drug design and high-throughput screening procedures to identify compounds that inhibit the anchoring process.

The Company was incorporated in Delaware in December 1995. The Company's executive offices are located at 666 Third Avenue, New York, NY, 10017, and its telephone number is (212) 681-4970.

## The Offering

Securities offered...... 3,250,000 shares of Common Stock.

Offering price	\$5.00 per share of Common Stock.
Common Stock outstanding after the Offering(1)	6,617,182 shares of Common Stock
Use of Proceeds	The net proceeds to the Company, aggregating approximately \$13,857,500, will be used to (i) repay short-term indebtedness of \$1,000,000 (plus accrued interest) incurred in the Bridge Financing and (ii) fund research and development activities, and the balance

used for working capital and general corporate purposes. See "Use of Proceeds."

Risk Factors.....

The securities offered hereby involve a high degree of risk and substantial immediate dilution to new investors. Only investors who can bear the risk of losing their entire investment should invest. See "Risk Factors" and "Dilution."

Proposed Nasdaq symbol....

11 11

- -----

(1) Excludes (i) 325,000 shares of Common Stock reserved for issuance upon exercise of the Underwriter's Warrants; (ii) 333,333 shares of Common Stock reserved for issuance upon the exercise of stock options which may be granted pursuant to the Company's 1996 Incentive and Non-Qualified Stock Option Plan (the "Plan") (options to purchase 33,334 shares of Common Stock at an exercise price of \$1.50 per share and 16,667 shares of Common Stock at an exercise price of \$3.00 per share have been granted and are outstanding under the Plan); (iii) 461,016 shares of Common Stock reserved for issuance upon the exercise of warrants granted to David H. de Weese, the Chairman, President and Chief Executive Officer of the Company, at an exercise price of \$3.00 per share (the "de Weese Warrants"); (iv) 150,000 shares of Common Stock reserved for issuance upon the exercise of warrants granted to Dr. Vincent Fischetti, the principal founding scientist of the Company's technologies, at an exercise price of \$1.50 per share (the "Fischetti Warrants"); and (v) an estimated 100,000 shares of Common Stock reserved for issuance upon the exercise of the Bridge Warrants. See "Plan of Operation--Bridge Financing," "Management--1996 Incentive and Non-Qualified Stock Option Plan" and "--Employment Agreements," Transactions" and "Underwriting."

### Summary Financial Information

The summary financial data set forth below is derived from and should be read in conjunction with the audited financial statements, including the notes thereto, appearing elsewhere in this prospectus.

	December 28, 1995 (Date of Inception) to December 31,	of to , 1995	Year En	ded r 31, 1996	December 28, 1995 (Date of Inception) to December 31, 1996
Statement of Operations Data: Operating expenses: General and administrative Research and development Patent preparation fees	\$ 2	1,000  		787,817 662,205 452,999	\$ 788,817 662,205 452,999
Stock option and warrant compensation				367,461	367,461
Total operating expenses  Interest Income		1,000 	•	270,482 2,306	2,271,482 2,306
Net loss	,	1,000) =====	` '	268,176) ======	\$(2,269,176) =======
Net loss per common share(1).	===:	 ====	\$	(0.66)	
		December	31, 199	6	
	Actual	Pro Form	na(2)	Pro Fo As Adj	rma usted(3) 
Balance Sheet Data: Working capital Total assets Total liabilities Stockholders' equity	\$232,050 580,918 180,938 399,980	\$	232,05 1,580,91 1,180,93 399,98	8 14,42 8 18	95,238 28,418 80,938 47,480

- (1) For information concerning the computation of net loss per share, see Note 2 of Notes to Financial Statements.
- (2) Pro forma adjustments reflect the Bridge Financing, completed February 28, 1997, whereby the Company issued bridge notes (the "Bridge Notes") in the principal amount of \$1,000,000 net of estimated offering costs of \$10,000. The Bridge Notes bear interest at 10% per annum and are due and payable together with accrued but unpaid interest, on the earlier of (a) the closing of an initial public offering of the Common Stock or (b) six months after the issuance of the Bridge Notes. In connection with the Bridge Financing, the purchasers of the Bridge Notes received the Bridge Warrants. See "Plan of Operation--Bridge Financing."
- (3) As adjusted to (i) give effect to the sale of securities offered hereby, net of expenses, at an assumed initial offering price of \$5.00 per share of Common Stock, (ii) repayment of the Bridge Notes in the principal amount of \$1,000,000 and accrued but unpaid interest thereon and (iii) the recognition of the unamortized portion of the debt issuance costs associated with the Bridge Notes as an expense.

THE PURCHASE OF COMMON STOCK IS SPECULATIVE AND INVOLVES A HIGH DEGREE OF RISK INCLUDING, BUT NOT NECESSARILY LIMITED TO, THE RISK FACTORS DESCRIBED BELOW. COMMON STOCK SHOULD NOT BE PURCHASED BY INVESTORS WHO CANNOT AFFORD THE LOSS OF THEIR ENTIRE INVESTMENT. PROSPECTIVE INVESTORS SHOULD CAREFULLY REVIEW AND CONSIDER THE FOLLOWING RISKS AS WELL AS THE OTHER INFORMATION CONTAINED IN THIS PROSPECTUS.

Limited Operating History; Accumulated Deficit; Operating Losses; Potential for Future Losses; Going Concern Explanatory Paragraph in Accountant's Report

The Company, a development stage, biopharmaceutical company, was incorporated in December 1995 and accordingly has a limited operating history. As of December 31, 1996, the Company had an accumulated deficit of \$2,269,176. The Company expects to incur substantial operating losses over the next several years and expects cumulative losses to increase as the Company's research and development and clinical efforts expand. Revenues, if any, that the Company may receive in the next few years will be limited to payments under research or product development relationships that the Company may establish and payments under license agreements that the Company may enter into. There can be no assurance that the Company will be able to establish any such relationships, enter into any such license agreements or generate revenues. To achieve profitable operations, the Company, alone or with others, must successfully identify and develop pharmaceutical products, conduct clinical trials, obtain regulatory approvals and manufacture and market its pharmaceutical products or enter into license agreements with third parties on acceptable terms. The Company may never achieve significant revenues or profitable operations. The report of independent accountants on the Company's financial statements included herein contains an explanatory paragraph stating that the Company's financial statements have been prepared assuming that the Company will continue as a going concern while expressing substantial doubt as to the Company's ability to do so. The Company's ability to continue as a going concern is dependent on its ability to generate sufficient cash flow to meet its obligations as they become due. The Company has suffered operating losses since inception and expects to incur substantial additional operating losses in the development and commercialization of its technologies. These and other factors discussed in Note 1 to the financial statements raise substantial doubt about the Company's ability to continue as a going concern. See "Plan of Operation" and Financial Statements and Notes thereto.

Early Stage of Development; Absence of Products; No Commercialization of Products Expected in Near Future

The Company's product candidates are in an early stage of development. The Company has not completed the development of any products and, accordingly, has not received any regulatory approvals, commenced marketing activities or generated revenues from the sale of products. The Company's product candidates will require significant additional development, pre-clinical and clinical trials, regulatory approval and additional investment prior to commercialization. The Company does not expect to market any products for several years. In addition, the Company's product candidates are subject to the risks of failure inherent in the development of products based on innovative technologies. Accordingly, there can be no assurance that the Company's research and development efforts will be successful, that any of the Company's product candidates will prove to be safe, effective and non-toxic in clinical trials, that any commercially successful products will be developed, that the proprietary or patent rights of others will not preclude the Company from marketing its product candidates or that others will not develop competitive or superior products. As a result of the early stage of development of product candidates and the extensive testing and regulatory review process that such product candidates must undergo, the Company cannot predict with certainty when it will be able to market any of its products, if at all. The Company's product development efforts are based on unproven scientific approaches. There is, therefore, substantial risk that these approaches may not prove to be successful. See "Business."

Future Capital Needs; Uncertainty Of Availability Of Additional Funding

to market its products. The Company's future capital requirements will depend on many factors, including continued scientific progress, progress with preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological and market developments, the ability of the Company to establish collaborative arrangements, effective commercialization activities and arrangements and the purchase or development of additional equipment and facilities. The Company expects the net proceeds of the Offering and the interest earned thereon will be sufficient to fund the Company's activities for at least 12 months. There can be no assurance, however, that changes in the Company's research and development plans or other events affecting the Company's operating expenses will not result in the utilization of such proceeds prior to that time. The Company has no other current sources of funding. As a result, the Company will need to raise substantial additional funds before any of the Company's product candidates achieves regulatory approvals, if at all. The Company intends to seek such additional funding through collaborative arrangements and through public or private financings. There can be no assurance that additional financing will be available, or, if available, that such additional financing will be available on terms acceptable to the Company. In addition, for a period of 12 months (6 months in the case of any public offering under the Securities Act) after the date of this Prospectus, the Underwriter's prior written consent is required if the Company seeks to raise additional funds through the issuance of equity. This may result in the Company being required to raise needed funding through the issuance of debt. If additional funds are raised by issuing debt, the Company will incur fixed payment obligations, which could delay the time, if any, when the Company may achieve positive cash flow. If adequate funds are not available, the Company may be required to delay, scale back or eliminate one or more of its principal product candidates or obtain funds through arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its technologies, product candidates or products that the Company would not otherwise relinquish. See "Use of Proceeds" and "Underwriting."

### Management's Broad Discretion in Application of Proceeds

The Company intends to use approximately \$1,000,000 (excluding accrued interest), or 7.2%, of the net proceeds of the Offering to repay outstanding indebtedness and the balance will be added to the Company's working capital and will be available for general corporate purposes, including the funding of the Company's research and development activities. As of the date of this Prospectus, the Company cannot specify with certainty the particular uses for the net proceeds to be added to its working capital. Accordingly, management of the Company will have broad discretion as to the application of the net proceeds of the Offering. See "Use of Proceeds" and "Plan of Operation."

### No Assurance of Regulatory Approval; Need for Extensive Clinical Trials

The production and marketing of the Company's principal product candidates, as well as certain of its research and development activities, are subject to regulation by governmental agencies in the United States and other countries. Any drug developed by the Company will be subject to a rigorous approval process pursuant to regulations administered by the United States Food and Drug Administration (the "FDA"), comparable agencies in other countries and, to a lesser extent, state regulatory authorities. The approval process for any one of the Company's product candidates is likely to take several years or more depending upon the type, complexity and novelty of the pharmaceutical product and will involve significant expenditures by the Company for which additional financing will be required. The cost to the Company of conducting clinical trials for any potential product can vary dramatically based on a number of factors, including the order and timing of clinical indications pursued and the extent of development and financial support, if any, from collaborators. Because of the intense competition in the biopharmaceutical market and concern over the safety of participating in clinical trials, the Company may have difficulty obtaining sufficient patient populations or the support of clinicians to conduct its clinical trials as planned and may have to expend substantial additional funds to obtain access to such resources, or delay or modify its plans significantly. There can be no assurance that the Company will be able to obtain necessary clearances for clinical trials or approvals for the manufacturing or marketing of any of its product candidates, that the Company will have sufficient resources to complete the required regulatory review process or that the Company can survive the inability to obtain, or delays in

obtaining, such approvals. Even if regulatory approvals are obtained, they may provide for significant limitations on the indicated uses for which a product may be marketed. As with all investigational products, additional government regulations may be promulgated requiring that additional research data be submitted that could delay marketing approval of any of the Company's product candidates. The subsequent discovery of previously unknown complications or the failure to comply with applicable regulatory requirements may result in restrictions on the marketing, or the withdrawal, of products or possible civil or criminal liabilities. In addition, the Company cannot predict whether any adverse government regulation might arise from future administrative actions. See "Business--Government Regulation."

As part of the regulatory review process, the Company must sponsor and file, or obtain through others, an Investigational New Drug Application ("IND") for each of its product candidates before the Company will be able to initiate the clinical trials necessary to generate safety and efficacy data for inclusion in an application for FDA marketing approval. The Company has not filed any INDs to date. Although the Company anticipates filing its first IND in 1997, the Company cannot predict with certainty when it might first submit any application for any product candidates for FDA or other regulatory review. There can be no assurance that clinical data from studies performed by the Company or others will be acceptable to the FDA or other regulatory agencies in support of any applications that may be submitted for regulatory approval and the FDA may, among other things, require the Company to collect additional data and conduct additional clinical studies prior to acceptance of any such applications.

## Technologies Subject to Licenses

As a licensee of certain research technologies, the Company has a license agreement with Rockefeller wherein the Company has acquired exclusive, worldwide rights to develop and commercialize such research technologies. Certain scientists at Oregon State University ("Oregon State") and Emory University ("Emory") are co-inventors of certain of such technologies and, therefore, Oregon State and Emory joined in the license grant to the Company. The agreement generally requires the Company to pay royalties on sales of products developed from the licensed technologies and fees on revenues from sublicensees, where applicable, and the Company is responsible for certain milestone payments and the costs of filing and prosecuting patent applications. In addition, the Company's research support agreements with Oregon State and Emory require that the Company commit certain sums annually for research and development of the licensed products and other technologies. Should the Company default on its obligations to Rockefeller under the license agreement, its license would terminate, which would have a material adverse effect on the Company's operations and prospects. See "Business--Licenses and Collaborative Research."

### Successful Development of Product Candidates

There can be no assurance that the Company's product candidates will be successfully developed into drugs that can be administered to humans or that any such drugs or therapies will prove to be safe and effective in clinical trials or cost-effective to manufacture. Further, any product candidates developed by the Company may prove to have adverse side effects.

## Dependence on Others; Collaborations

The Company's strategy for the research, development and commercialization of its product candidates will require the Company to enter into various arrangements with corporate and academic collaborators, licensors, licensees and others, and may therefore be dependent upon the subsequent success of these outside parties in performing their responsibilities. The Company currently has a license agreement with Rockefeller, Emory and Oregon State, research support agreements with Emory and Oregon State and a consulting agreement with Dr. Fischetti. There can be no assurance that the Company will be able to establish other collaborative arrangements or license agreements that the Company deems necessary or acceptable to develop and commercialize its product candidates or that such collaborative arrangements or license agreements will be successful. Moreover, certain of the collaborative arrangements that the Company may enter into in the future may place responsibility for pre-clinical testing and clinical trials and for preparing and submitting applications for regulatory approval for product candidates on the collaborative partner. Should a collaborative partner fail to develop or commercialize successfully any product candidate to which

the Company has rights, the Company's business may be adversely affected. See "Business--Licenses and Collaborative Research" and "Certain Transactions."

Uncertainty Regarding Patents and Proprietary Information

The Company's ability to compete effectively will depend, in part, on its success in protecting its proprietary technology in the United States and abroad. The patent positions of biopharmaceutical firms generally are highly uncertain and involve complex legal and factual questions. No consistent policy has emerged regarding the breadth of claims covered in biopharmaceutical patents. As its research projects develop, the Company intends to file additional patent applications with the United States Patent and Trademark Office (the "PTO") and with corresponding foreign patent authorities. There can be no assurance that the PTO or any foreign jurisdictions will grant the Company's patent applications or that the Company will obtain any patents or other protection for which application for patent protection has been made. No assurance can be given that patents issued to or licensed by the Company will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide any competitive advantage. The Company will also rely on trade secrets, know-how and continuing technological advancement in seeking to achieve a competitive position. No assurance can be given that the Company will be able to protect its rights to its unpatented trade secrets or that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets.

In addition to protecting its proprietary technology and trade secrets, the Company may be required to obtain additional licenses to patents or other proprietary rights from third parties. No assurance can be given that any additional licenses required under any patents or proprietary rights would be made available on acceptable terms, if at all. If the Company does not obtain required licenses, it could encounter delays in product development while it attempts to design around blocking patents, or it could find that the development, manufacture or sale of products requiring such licenses could be foreclosed.

The Company could also incur substantial costs in defending any patent infringement suits or in asserting any patent rights, including those granted by third parties. The PTO could institute interference proceedings against the Company in connection with one or more of the Company's patents or patent applications, and such proceedings could result in an adverse decision as to priority of invention. The PTO or others could also institute reexamination proceedings with the PTO against the Company in connection with one or more of the Company's patents or patent applications and such proceedings could result in an adverse decision as to the validity or scope of any patents that the Company may obtain or have the right to use. See "Business--Patents and Proprietary Rights."

Lack of Manufacturing, Marketing or Sales Capabilities

The Company has not invested in the development of commercial manufacturing, marketing, distribution or sales capabilities for any of its product candidates. The Company currently lacks the facilities to manufacture its product candidates in accordance with current Good Manufacturing Practices as prescribed by the FDA or to produce an adequate supply of compounds to meet future requirements for clinical trials. If the Company is unable to develop or contract for manufacturing capabilities on acceptable terms, the Company's ability to conduct pre-clinical and human clinical testing will be adversely affected, resulting in delays in the submission of products for regulatory approval and in the initiation of new development programs, which in turn could materially impair the Company's competitive position and the possibility of achieving profitability.

The Company will need to hire additional personnel skilled in clinical testing, regulatory compliance, marketing and sales as it develops products with commercial potential. There can be no assurance that the Company will be able to hire such personnel, or establish third-party relationships to provide any or all of these resources.

The biopharmaceutical industry is characterized by rapid and significant technological change. The Company's success will depend on its ability to develop and apply its technologies in the design and development of its product candidates and to establish and maintain a market for its product candidates. There also are many companies, both public and private, including major pharmaceutical and chemical companies, specialized biotechnology firms, universities and other research institutions engaged in developing pharmaceutical and biotechnology products. Many of these companies have substantially greater financial, technical, research and development, and human resources than the Company. Competitors may develop products or other technologies that are more effective than any that are being developed by the Company or may obtain FDA approval for products more rapidly than the Company. If the Company commences commercial sales of products, it still must compete in the manufacturing and marketing of such products, areas in which the Company has no experience. Many of these companies also have manufacturing facilities and established marketing capabilities that would enable such companies to market competing products through existing channels of distribution. See "Business--Competition."

Uncertainty of Pharmaceutical Pricing; Healthcare and Related Matters

The levels of revenues and profitability of pharmaceutical companies may be affected by the continuing efforts of governmental and third party payors to contain or reduce the costs of healthcare through various means. For example, in certain foreign markets, pricing of prescription pharmaceuticals is subject to governmental control. In the United States, there have been, and the Company expects that there will continue to be, a number of federal and state proposals to implement similar government control. It is uncertain what legislative proposals will be adopted or what actions federal, state or private payors for healthcare goods and services may take in response to any healthcare reform or legislation.

The Company cannot predict the effect that healthcare reforms may have on its business, and there can be no assurance that any such reforms will not have a material adverse effect on the Company. Further, to the extent that such proposals or reforms have a material adverse effect on the business, financial condition and profitability of other pharmaceutical companies that are prospective collaborators for certain of the Company's potential products, the Company's ability to commercialize its product candidates may be adversely affected. In addition, in both the United States and elsewhere, sales of prescription medical products are dependent in part on the availability of reimbursement to the consumer from third party payors, such as government and private insurance plans. Third party payors can indirectly affect the pricing or the relative attractiveness of the Company's product candidates by regulating the maximum amount of reimbursement that they will provide for the Company's product candidates or by denying reimbursement. There can be no assurance that, if and when marketed, the Company's product candidates will be considered costeffective by third party payors, that reimbursement will be available or, if available, that such third party payors' reimbursement policies will not adversely affect the Company's ability to sell its product candidates on a profitable basis. Limitations on, or failure to obtain, reimbursement for use of the Company's product candidates and changes in government and private third party payors' policies toward reimbursement could have a material adverse effect on the Company's ability to market its product candidates.

Dependence on Qualified Personnel and Consultants; Need for Additional Personnel

The Company's success is highly dependent on its ability to attract and retain qualified scientific and management personnel. The Company is highly dependent on its management, scientific staff, and consultants, including Dr. Vincent A. Fischetti. The loss of the services of Dr. Fischetti or other personnel or consultants could have a material adverse effect on the Company's operations. The Company has only one full-time executive officer, David de Weese, who holds the offices of President and Chief Executive Officer. Two of the Company's officers, Dr. Joshua Schein and Judson Cooper, are also officers of Virologix Corporation and Callisto Pharmaceuticals, Inc., privately held, development stage, pharmaceutical companies, and devote substantial amounts of their time to the three companies on a substantially equal basis. Although the Company has entered into employment agreements with each of its key management and scientific employees and consulting agreements with its key outside scientific

advisors, any of such persons may terminate his or her employment or consulting arrangement with the Company at any time on short notice. Accordingly, there can be no assurance that these employees and consultants will remain associated with the Company. The loss of the services of any of the Company's key personnel or consultants may impede the Company's ability to commercialize its product candidates.

The Company's planned activities may require additional expertise in areas such as pre-clinical testing, clinical trial management, regulatory affairs, manufacturing and marketing. Such activities may require the addition of new personnel and the development of additional expertise by existing management personnel. The Company faces intense competition for such personnel from other companies, academic institutions, government entities and other organizations, and there can be no assurance that the Company will be successful in hiring or retaining qualified personnel. The inability of the Company to develop additional expertise or to hire and retain such qualified personnel could have a material adverse effect on the Company's operations.

### Potential Product Liability and Availability of Insurance

The Company's business exposes it to potential liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. The use of the Company's drug candidates in clinical trials may expose the Company to product liability claims and possible adverse publicity. These risks will expand with respect to the Company's drug candidates, if any, that receive regulatory approval for commercial sale. Product liability insurance for the biotechnology industry is generally expensive, if available at all. The Company does not have product liability insurance but intends to obtain such coverage if and when its drug candidates are tested in clinical trials. There can be no assurance, however, that the Company will be able to obtain insurance coverage at acceptable costs or in a sufficient amount, if at all, or that a product liability claim would not adversely affect the Company's business, operating results or financial condition.

#### Lack of Research and Development Facilities

The Company does not maintain its own research and development facilities and does not intend to construct such facilities in the future. The Company sponsors research and development activities at Dr. Fischetti's laboratory at Rockefeller and at Oregon State and Emory. The Company's research and development efforts, therefore, are dependent upon its continued relationships with Dr. Fischetti, Rockefeller, Oregon State and Emory. In the absence of such relationships, the Company would need to develop a new research and development arrangement with a third party, the availability of which there can be no assurance. Any delay in finding suitable research and development facilities would postpone commercialization of the Company's products. See "Business--Human Resources and Facilities."

No Prior Public Market; Possible Volatility of Stock Price

Prior to this Offering, there has been no public market for the Company's

Common Stock. Accordingly, there can be no assurance that an active trading market will develop or be sustained subsequent to this Offering. The initial public offering price of the Common Stock will be determined by negotiations between the Company and the Underwriter and may not be indicative of the prices that may prevail in the public market. The Company has applied to have the Common Stock quoted on Nasdaq, but there is no assurance that the Company's future operating results will enable it to remain eligible for quotation on Nasdaq. If the Company is unable to satisfy such listing criteria in the future, the Common Stock may be delisted from trading on Nasdaq and consequently an investor could find it more difficult to dispose of, or to obtain accurate quotations as to the price of, the Common Stock. The stock market generally, and the biotechnology sector in particular, have experienced and are likely in the future to experience significant price and volume fluctuations which could adversely affect the market price of the Common Stock without regard to the significant fluctuations in response to variations in quarterly operating results, shortfalls in sales or earnings below analyst estimates, stock market conditions and other factors. There can be no assurance that the market price of the Common Stock will not experience significant fluctuations or decline below the initial public offering price.

## Control by Management and Existing Stockholders

Upon consummation of the Offering, the Company's management and existing holders of the Company's stock will, in the aggregate, own beneficially shares having approximately 51% of the total voting power of the Company's outstanding stock (without giving effect to the exercise of the Underwriter's Warrants, options granted under the Plan, the de Weese Warrants, the Fischetti Warrants or the Bridge Warrants). As a result, these stockholders, acting together, would be able to effectively control most matters requiring approval by the stockholders of the Company, including the election of all of the directors. See "Principal Stockholders."

#### Potential Conflicts of Interest

Certain persons who are principal stockholders and executive officers of the Company are involved in various relationships that could result in conflicts between their interests and those of other stockholders of the Company. Dr. Schein and Mr. Cooper have employment arrangements with two other operating companies, one of which is also in the process of making its initial public offering of securities, which could force one or both of them to compromise or divert their business attention from the concerns of the Company from time to time. Additionally, Dr. Schein and Mr. Cooper are principals of CSO Ventures LLC ("CSO"), a privately held limited liability company which has a consulting agreement with the Company. Under the terms of Dr. Schein and Mr. Cooper's employment agreements with the Company, they are each entitled to the payment of certain fees in connection with any sale of the Company. This provision, together with lower prices paid by them for their shares of Common Stock relative to the prices paid by investors in this Offering, could result in a situation in which the purchase price paid in connection with any sale of the Company represents a gain on their investment in the Company while simultaneously representing a loss to investors in this Offering. See "Certain Transactions" and "Management."

#### Lack of Dividends

The Company has not paid any dividends and does not contemplate paying dividends in the foreseeable future. It is currently anticipated that earnings, if any, will be retained by the Company to finance the development and expansion of the Company's business. See "Dividend Policy."

## Shares Eligible for Future Sale

Upon completion of this Offering, the Company will have outstanding 6,617,182 shares of Common Stock, without giving effect to shares of Common Stock issuable upon exercise of (i) the Underwriter's Warrants, (ii) options granted under the Plan, (iii) the de Weese Warrants, (iv) the Fischetti Warrants or (v) the Bridge Warrants. Of such 6,617,182 shares of Common Stock, the 3,250,000 shares to be sold by the Company in this Offering will be freely tradeable without restriction or further registration under the Act, except for any shares held by "affiliates" of the Company within the meaning of the Act which shares will be subject to the resale limitations of Rule 144 promulgated under the Act.

The remaining 3,367,182 shares (the "Restricted Shares") were issued by the Company in private transactions in reliance upon one or more exemptions contained in the Act. 1,288,012 of the Restricted Shares were issued in connection with two private placement transactions completed in March and September 1996, respectively (the "Private Shares") and 2,079,170 of the Restricted Shares were issued to the founders of the Company in December 1995 (the "Founders' Shares"). The Restricted Shares are deemed to be "restricted securities" within the meaning of Rule 144 promulgated pursuant to the Act and may be publicly sold only if registered under the Act or sold pursuant to exemptions therefrom. Because the Founders' Shares and 1,038,008 of the Private Shares acquired in the March 1996 private placement will have been held for more than one year as of the date of this Prospectus, such shares will be eligible for public sale in accordance with the requirements of Rule 144 (based on the recent amendment to Rule 144 which is effective April 21, 1997). In addition, the remaining 250,004 of the Private Shares will be eligible for public sale in September 1997. However, certain holders of the Private Shares and the holders of the Founders' Shares have agreed with the Underwriter not to sell or otherwise dispose of such shares for a period of six months and 24 months, respectively, after the date of

#### Dilution

This Offering involves immediate dilution of \$2.85 per share between the adjusted net tangible book value per share after the Offering and the per share public offering price of \$5.00 attributable to the Common Stock. Investors in the Offering will contribute 88% of the aggregate consideration received for the aggregate number of shares of Common Stock outstanding after the Offering, but will only own 49% of the aggregate number of shares of Common Stock outstanding after the Offering. See "Dilution."

#### Antitakeover Effect of Certificate of Incorporation

The Company's Certificate of Incorporation authorizes the Board of Directors to determine the rights, preferences, privileges and restrictions of unissued series of preferred stock, \$.0001 par value per share (the "Preferred Stock"), and to fix the number of shares of any series of Preferred Stock and the designation of any such series, without any vote or action by the Company's stockholders. Thus, the Board of Directors can authorize and issue up to 10,000,000 shares of Preferred Stock with voting or conversion rights that could adversely affect the voting or other rights of holders of the Company's Common Stock. In addition, the issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change of control of the Company, since the terms of the Preferred Stock that might be issued could potentially prohibit the Company's consummation of any merger, reorganization, sale of substantially all of its assets, liquidation or other extraordinary corporate transaction without the approval of the holders of the outstanding shares of the Common Stock. The Company, however, has no intention of adopting a stockholder rights plan ("poison pill") in the foreseeable future. See "Description of Securities--Preferred Stock."

### Best-Efforts Offering; Escrow of Investors' Funds

## Possible Delisting of Securities from Nasdaq

Following the Offering, the Company's Common Stock will meet the current Nasdaq listing requirements and is expected to be initially included on Nasdaq. There can be no assurance, however, that the Company will meet the criteria for continued listing. Continued inclusion on Nasdaq generally requires that (i) the Company maintain at least \$2,000,000 in total assets and \$1,000,000 in capital and surplus, (ii) the minimum bid price of the Common Stock be \$1.00 per share, (iii) there be at least 100,000 shares in the public float valued at \$200,000 or more, (iv) the Common Stock have at least two active market makers and (v) the Common Stock be held by at least 300 holders. The Nasdaq Stock Market has recently announced proposals which would increase the listing standards for inclusion on Nasdaq. If the listing standards are increased, the Company may be unable to satisfy the listing requirements for inclusion on Nasdaq.

If the Company is unable to satisfy Nasdaq's listing standards, its securities may be delisted from Nasdaq. In such event, trading, if any, in the Common Stock would thereafter be conducted in the over-the-counter market on the so-called "pink sheets" or the NASD's "Electronic Bulletin Board." Consequently, the liquidity of the Company's securities could be impaired, not only in the number of securities which

could be bought and sold, but also through delays in the timing of transactions, reduction in security analysts' and the news media's coverage of the Company and lower prices for the Company's securities than might otherwise be attained.

Risks of Low-Priced Stock; "Penny Stock" Restrictions

If the Company's securities were delisted from Nasdaq (See "--Possible Delisting of Securities from Nasdaq"), they could become subject to Rule 15g-9 under the Exchange Act, which imposes additional sales practice requirements on broker-dealers which sell such securities to persons other than established customers and "accredited investors" (generally, individuals with net worths in excess of \$1,000,000 or annual incomes exceeding \$200,000, or \$300,000 together with their spouses). For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to sale. Consequently, such rule may adversely affect the ability of broker-dealers to sell the Company's securities and may adversely affect the ability of purchasers in the Offering to sell in the secondary market any of the securities acquired hereby.

Commission regulations define a "penny stock" to be any non-Nasdaq equity security that has a market price (as therein defined) of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require delivery, prior to any transaction in a penny stock, of a disclosure schedule prepared by the Commission relating to the penny stock market. Disclosure is also required to be made about commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements are required to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

The foregoing required penny stock restrictions will not apply to the Company's securities if such securities are listed on Nasdaq and have certain price and volume information provided on a current and continuing basis or meet certain minimum net tangible assets or average revenue criteria. There can be no assurance that the Company's securities will qualify for exemption from these restrictions. In any event, even if the Company's securities were exempt from such restrictions, it would remain subject to Section 15(b)(6) of the Exchange Act, which gives the Commission the authority to prohibit any person that is engaged in unlawful conduct while participating in a distribution of a penny stock from associating with a broker-dealer or participating in a distribution of a penny stock, if the Commission finds that such a restriction would be in the public interest. If the Company's securities were subject to the rules on penny stocks, the market liquidity for the Company's securities could be severely adversely affected.

## Underwriter's First Initial Public Offering

The Underwriter has not previously acted as an underwriter in connection with an initial public offering, though it has acted as a syndicate member, sole placement agent, co-placement agent, selected dealer or sole participating broker in more than 18 public and private offerings. Prospective purchasers of shares of Common Stock offered hereby should consider the Underwriter's limited experience in evaluating an investment in the Common Stock. See "Underwriting."

No Market Making Activity by Underwriter

The Underwriter has indicated that it does not intend to act as a market maker in the Common Stock, which may adversely affect the price and liquidity of the Common Stock.

#### USE OF PROCEEDS

The net proceeds to the Company from the sale of the shares of Common Stock offered hereby are estimated to be \$13,857,500 after deducting the underwriting discount and estimated offering expenses payable by the Company and assuming an initial public offering price of \$5.00 per share. The Company intends to use approximately \$1,000,000 (excluding accrued interest) of the net proceeds to repay outstanding indebtedness incurred in the Bridge Financing. The Company anticipates utilizing a majority of the remaining net proceeds to fund the Company's research and development activities, including pre-clinical studies and clinical trials for the Company's proposed products. The amounts and timing of expenditures for each purpose will depend on the progress of the Company's research and development programs, technological advances, determinations as to commercial potential, the terms of any collaborative arrangements entered into by the Company for development and licensing, regulatory approvals and other factors, many of which are beyond the Company's control. The balance of the proceeds will be added to working capital and used for general corporate purposes.

The Company anticipates, based on currently proposed plans and assumptions relating to its operations, that the proceeds of this Offering will be sufficient to satisfy the Company's contemplated cash requirements for at least 12 months following the consummation of the Offering. In the event the Company's plans change or its assumptions change or prove to be inaccurate or the proceeds of the Offering prove to be insufficient to fund operations (due to unanticipated expenses, delays, problems or otherwise), the Company could be required to seek additional financing sooner than currently anticipated. The Company has no current arrangements with respect to, or sources of, additional financing and there can be no assurance that additional financing will be available to the Company when needed on commercially reasonable terms or at all. Any inability to obtain additional financing when needed would have a material adverse effect on the Company, including possibly requiring the Company to significantly curtail or cease its operations.

Until required for operations, the Company's policy is to invest its cash reserves in bank deposits, certificates of deposit, commercial paper, corporate notes, U.S. government instruments and other investment-grade quality instruments.

### CAPITALIZATION

The following table sets forth as of December 31, 1996 (i) the actual capitalization of the Company; (ii) the pro forma capitalization of the Company giving effect to the Bridge Financing; and (iii) the pro forma capitalization of the Company as adjusted to give effect to the receipt and anticipated use of the estimated net proceeds of this Offering. This table should be read in conjunction with the Company's Financial Statements and Notes thereto, "Selected Financial Data" and "Plan of Operation" included elsewhere in this Prospectus.

	Historical	Pro Forma(1)	Pro Forma As Adjusted(2)
Bridge Notes		\$ 1,000,000	
Stockholders' equity: Preferred Stock (\$0.0001 par value, 10,000,000 shares authorized, none issued and outstanding			
as adjusted(3)	2,668,819	2,668,819	
Total stockholders' equity	399,980	399,980	14,247,480
Total capitalization	\$ 399,980 ======	\$ 1,399,980 =======	\$14,247,480 =======

<sup>(1)</sup> Pro Forma adjustments reflect the Bridge Financing, completed on February 28, 1997, and the issuance of the Bridge Notes in the principal amount of \$1,000,000. See "Plan of Operation--Bridge Financing."

<sup>(2)</sup> Adjusted to reflect the sale of 3,250,000 shares of Common Stock offered hereby. See "Use of Proceeds."

<sup>(3)</sup> Assumes (i) no exercise of the Underwriter's Warrants; (ii) no exercise of options granted under the Plan; (iii) no exercise of the de Weese Warrants; (iv) no exercise of the Fischetti Warrants; and (v) no exercise of the Bridge Warrants. See "Plan of Operation--Bridge Financing," "Management--1996 Incentive and Non-Qualified Stock Option Plan" and "--Employment Agreements," "Description of Securities," "Underwriting" and "Certain Transactions."

<sup>(4)</sup> As adjusted to give effect to the recognition of the unamortized portion of debt issuance costs associated with the Bridge Financing as an expense.

#### DILUTION

As of December 31, 1996, the Company had a net tangible book value equal to \$399,980. See "Selected Financial Data." After giving effect to the sale of the 3,250,000 shares of Common Stock offered by the Company pursuant to this Prospectus at an assumed initial public offering price of \$5.00 per share, net of underwriting discounts and commissions and estimated expenses of the Offering payable by the Company, and application of a portion of the estimated net proceeds to repay the Bridge Notes as set forth under "Use of Proceeds," the proforma net tangible book value at such date would have been \$14,247,480 or \$2.15 per share. This represents an immediate increase in net tangible book value of \$2.03 per share to the existing stockholders and immediate dilution of \$2.85 per share (or 57%) to purchasers of the Common Stock offered hereby ("New Investors"). If the initial public offering price is higher or lower, the dilution to New Investors will be, respectively, greater or less. The following table illustrates the dilution per share:

Assumed public offering price(1)		\$5.00
Net tangible book value per share at December 31, 1996(2)	\$ .12	
Increase per share attributable to New Investors	2.03	
Pro forma net tangible book value per share after Offering		\$2.15
Dilution per share to New Investors		\$2.85
		======

- (1) Before deduction of underwriting discounts and commissions and estimated offering expenses payable by the Company.
- (2) Net tangible book value per share represents the Company's total tangible assets less its total liabilities divided by the number of shares of Common Stock outstanding.

The following table sets forth, with respect to existing stockholders and New Investors, a comparison of the number of shares of Common Stock acquired from the Company, the percentage ownership of such shares, the total consideration paid and the average price per share.

	Shares Purchased		Total Consideration Paid			
	Number	Percent	Amount	Percent	Average Price Per Share	
Existing Stockholders	3,367,182	50.9%	\$ 2,308,248	12.4%	\$0.69	
New Investors	3,250,000	49.1%	\$16,250,000	87.6%	\$5.00	
Total	6,617,182 =======	100.0%	\$18,558,248 =======	100.0%	\$2.80 ======	

The information contained in the above table does not give effect to the exercise of (i) the Underwriter's Warrants, (ii) options granted and outstanding under the Plan to purchase 50,001 shares of Common Stock, (iii) the de Weese Warrants, (iv) the Fischetti Warrants or (v) the Bridge Warrants. Exercise of such options and/or warrants would result in further dilution to New Investors.

## DIVIDEND POLICY

The Company currently anticipates that it will retain any future earnings for use in its business and does not anticipate paying any cash dividends in the foreseeable future. The payment of any future dividends will be at the discretion of the Board of Directors and will depend, among other things, upon the Company's future earnings, operations, capital requirements and financial condition, general business conditions and contractual restrictions on payment of dividends, if any.

## SELECTED FINANCIAL DATA

The following selected financial data for the periods shown have been derived from the Company's audited financial statements. This data should be read in conjunction with the "Plan of Operation" and with the Company's Financial Statements and the Notes thereto included elsewhere in this Prospectus.

	December 28, 1995 (Date of Inception) to December 31, 1995	Year Ended December 31, 1996	December 28, 1995 (Date of Inception) to December 31, 1996
Statement of Operations Data: Operating expenses: General and administrative Research and development Patent preparation fees Stock option and warrant compensation	· ·	\$ 787,817 662,205 452,999 367,461	\$ 788,817 662,205 452,999 367,461
Total operating expenses.	1,000	2,270,482	2,271,482
Interest income		2,306	2,306
Net loss	. \$(1,000) =====	\$(2,268,176) =======	\$(2,269,176) =======
Net loss per common share(1)	=====	\$ (0.66) ===================================	r 31, 1996
Balance Sheet Data: Working capital(deficit) Total assets Total liabilities Stockholders' equity	. 6 . 7	6,937 7,937	232,050 580,918 180,938 399,980

<sup>(1)</sup> For information concerning the computation of net loss per share, see Note 2 of Notes to Financial Statements.

- ------

#### PLAN OF OPERATION

The following discussion and analysis should be read in conjunction with the financial statements and notes thereto appearing elsewhere in this Prospectus.

### Results of Operations

The Company is a development stage, biopharmaceutical company. Since its inception in December 1995, the Company's efforts have been principally devoted to research and development, securing patent protection and raising capital. From inception through December 31, 1996, the Company has sustained cumulative losses of \$2,269,176, including non-cash charges in the amount of \$367,461 for stock option and warrant compensation expense. These losses have resulted primarily from expenditures incurred in connection with research and development, patent preparation and prosecution and general and administrative activities. From inception through December 31, 1996, research and development expenses amounted to \$662,205, patent preparation and prosecution expenses amounted to \$452,999 and general and administrative expenses amounted to \$452,999 and general and administrative expenses amounted to \$788,817.

The Company expects to continue to incur substantial research and development costs in the future resulting from ongoing research and development programs, manufacturing of products for use in clinical trials and pre-clinical and clinical testing of the Company's products. The Company also expects that general and administrative costs, including patent and regulatory costs, necessary to support clinical trials, research and development, manufacturing and the creation of a marketing and sales organization, if warranted, will increase in the future. Accordingly, the Company expects to incur increasing operating losses for the foreseeable future. There can be no assurance that the Company will ever achieve profitable operations.

To date, the Company has not marketed, or generated revenues from the commercialization of, any products. The Company's current drug candidates are not expected to be commercially available for several years.

General and administrative expenses from inception through December 31, 1996, were \$788,817, primarily due to personnel costs and associated operating costs. The Company anticipates that general and administrative expenses will increase substantially during the next 12 months as the Company increases its staffing levels.

Research and development expenditures consist primarily of payments for sponsored research and payments to its scientific consultants. Research and development expenses from inception through December 31, 1996 were \$662,205. Through December 31, 1996, the Company had made advance payments of \$392,708 for research support to Rockefeller for the period ending January 31, 1998. The Company has research support agreements with both Emory and Oregon State pursuant to which the Company is obligated to fund research through January 31, 1998 in the aggregate annual amount of \$183,320. The Company anticipates that its research and development expenses will increase during the next 12 months as the Company continues to fund research programs and pre-clinical and clinical testing for its product candidates and technologies under development. See " - Product Research and Development Plan."

During the year ended December 31, 1996, the Company recorded non-cash compensation expense in the amount of \$367,461 related to the issuance of compensatory stock options and warrants to the President of the Company and the consultant who serves as the Company's Chief Scientific Advisor. The warrants issued to the consultant were to compensate him for his efforts in introducing the Company to potential collaborative partners.

Liquidity and Capital Resources

1996 Private Placement Transactions

In March 1996, the Company completed a private placement transaction in which it sold 1,038,008 shares of Common Stock for an aggregate gross consideration of \$1,557,000. In September 1996, the Company completed a private placement transaction

in which it sold 250,004 shares of Common Stock for an aggregate gross consideration of \$750,000.

#### Bridge Financing

On February 28, 1997, the Company completed the Bridge Financing pursuant to which the Company issued Bridge Notes in the aggregate principal amount of \$1,000,000 and Bridge Warrants to purchase an estimated 100,000 shares in aggregate of the Company's Common Stock (the actual number of shares will be determined by dividing one-half the principal of the Bridge Notes (\$500,000) by the actual initial offering price per share) at an exercise price equal to the actual initial offering price per share. In the event an initial public offering of the Common Stock is not completed prior to the maturity date of the Bridge Notes, the holders of the Bridge Notes will receive Bridge Warrants to purchase an aggregate of 100,000 shares of Common Stock at an exercise price of \$5.00 per share. The Bridge Notes bear interest at the rate of 10% per annum and are due on the earlier of six months subsequent to the date of issuance or the closing of the Offering. The Bridge Warrants, which are exercisable from February 28, 1998 until February 28, 2002, were issued to the Bridge Investors because the interest rate on the Bridge Notes did not provide the Bridge Investors with a sufficient rate of return given the risks associated with their investment in the Bridge Notes. None of the Bridge Investors are affiliates of the Company. The Company intends to use a portion of the proceeds of the Offering to repay the Bridge Notes and the interest accrued thereon and will recognize a loss upon completion of the Offering relating to the unamortized portion of the debt issuance costs associated with the Bridge Financing.

#### Current Resources

The Company anticipates that its current resources, together with the net proceeds of the Offering, will be sufficient to finance the Company's currently anticipated needs for operating and capital expenditures for at least 12 months from the consummation of this Offering. In addition, the Company will attempt to generate additional working capital through a combination of collaborative agreements, strategic alliances and equity and debt financings. However, no assurance can be provided that additional capital will be obtained through these sources. In addition, for a period of 12 months (6 months in the case of any public offering under the Securities Act) after the date of this Prospectus, the Underwriter's prior written consent is required if the Company seeks to raise additional funds through the issuance of equity. If the Company is not able to obtain continued financing the Company may cease operation and purchasers of the Common Stock will, in all likelihood, lose their entire investment. See "Underwriting."

The Company's working capital and capital requirements will depend upon numerous factors, including progress of the Company's research and development programs; pre-clinical and clinical testing; timing and cost of obtaining regulatory approvals; levels of resources that the Company devotes to the development of manufacturing and marketing capabilities; technological advances; status of competitors; and ability of the Company to establish collaborative arrangements with other organizations.

Until required for operations, the Company's policy is to invest its cash reserves in bank deposits, certificates of deposit, commercial paper, corporate notes, U.S. government instruments and other investment-grade quality instruments.

At December 31, 1996, the Company had \$42,190 in cash and cash equivalents, and working capital of \$232,050. In accordance with the terms of the Bridge Notes, the Company will utilize proceeds of approximately \$1,000,000 upon completion of the Offering to repay the principal of, and accrued interest through consummation of the Offering on, the Bridge Notes. See "Use of Proceeds" and Note 9 of Notes to Financial Statements.

## Product Research and Development Plan

The Company's plan of operation for the 12 months following completion of this Offering will consist primarily of research and development and related activities including:

- . formulation and further pre-clinical development of the Company's vaccine candidate for strep throat, and if successful, the initiation of clinical trials. See "Business -- The Company's Product Candidates and Research and Discovery Programs -- Mucosal Vaccines."
- . further development of the Company's anti-infectives programs aimed at blocking the function or expression of certain bacterial surface proteins. See "Business -- The Company's Product Candidates and Research and Discovery Programs -- Anti-Infectives."
- . continuing the funding of the research on mucosal vaccines and novel anti-infectives currently being conducted at Oregon State and Emory. See "Business--Licenses and Collaborative Research."
- . continuing the prosecution and filing of patent applications. See "Business--Patents and Proprietary Rights."
- hiring additional employees, including a new Chief Financial Officer.

The actual research and development and related activities of the Company may vary significantly from current plans depending on numerous factors, including changes in the costs of such activities from current estimates, the results of the Company's research and development programs, the results of clinical studies, the timing of regulatory submissions, technological advances, determinations as to commercial potential and the status of competitive products. The focus and direction of the Company's operations will also be dependent upon the establishment of collaborative arrangements with other companies, and other factors.

The Company is a development stage, biopharmaceutical company focused on the discovery, development and commercialization of vaccines, antibiotics and novel anti-infectives for serious infectious diseases. The Company's lead vaccine candidate is for the prevention of "strep throat." The Company is developing a technology for the mucosal delivery of its vaccines which may allow those vaccines to activate the immune system at the mucus-lined surfaces of the body - the mouth, the nose, the lungs and the gastrointestinal and urogenital tracts - the sites of entry for most infectious agents. The Company's anti-infectives programs, aimed at the increasingly serious problem of drug resistance, are designed to block the ability of bacteria to attach to human tissue, the first step in the infection process. The Company's technologies are licensed from Rockefeller.

Summary

Vaccine Candidates

The Company's lead vaccine candidate is for the prevention of group A streptococcal pharyngitis or "strep throat," a recurrent infection affecting between seven and 20 million children in the United States each year. Strep throat remains the most common childhood disease for which there is no vaccine available, and, if ineffectively treated, it can progress to rheumatic fever. No vaccine has been developed because of the more than 80 different serotypes of group A streptococcus, the bacterium that causes the disease. In order to be effective, a vaccine would have to be based upon an antigen (a molecule that triggers the immune response) common to most of the important serotypes. The high incidence of the disease, the potentially serious consequences of inadequate treatment and the recent emergence of drug-tolerant types of group A streptococcus create an important medical need for an effective vaccine.

The Company's proprietary antigen, licensed from Rockefeller, addresses the challenge of multiple serotypes in that this antigen is common to most types of the bacteria that cause strep throat, including types that have been associated with rheumatic fever. When a vaccine incorporating this antigen was orally administered to animals, it was shown to provide protection against multiple types of group A streptococcal infection. Utilizing this antigen, the Company is developing a mucosal vaccine for strep throat.

The Company is collaborating with the National Institutes of Health and the University of Maryland Center for Vaccine Development on the clinical development of this vaccine candidate and expects to file an IND with the FDA in

The Company is also developing a proprietary mucosal vaccine delivery system, also licensed from Rockefeller. Mucosally-delivered vaccines are considered attractive because such vaccines may mobilize an immune response concentrated at the site of infection and because they may activate both a mucosal IgA antibody response as well as a systemic IgG response. The Company's delivery system utilizes commensal bacteria (harmless bacteria that live in and on the body) that have been genetically engineered to continually present disease-associated antigens which stimulate an immune response at the body's mucosal surfaces thereby preventing infection at the earliest possible stage. By comparison, conventional vaccines primarily activate the slower-to-react systemic (internal) immune system and can have significant limitations, including variable efficacy and serious side effects. The Company believes that mucosal vaccines developed using its proprietary commensal delivery technology should provide a number of potential advantages over conventional vaccines, including: more complete protection; fewer side effects; the potential for single dose administration; non-injectable administration; the potential for combination vaccine delivery; and lower cost production.

The Company's mucosal vaccine technology is potentially applicable to any infectious disease that begins at a mucosal surface. In addition to its strep throat vaccine, the Company is also developing vaccines to prevent sexually transmitted diseases.

## Anti-Infectives and Antibiotics Therapy Candidates

The Company's anti-infectives program is targeted principally toward drug-resistant bacteria and hospital-acquired infections. According to estimates from the Centers for Disease Control, approximately two million hospital-acquired infections occur each year in the United States at a cost of \$4.5 billion.

The Company's anti-infectives approaches aim to block the ability of bacteria to attach to and colonize human tissue, thereby blocking infection at the first stage in the infection process. By comparison, antibiotics available today act by interfering with either the structure or the metabolism of a bacterial cell, affecting its ability to survive and to reproduce. No currently available antibiotics target the attachment of a bacterium to its target tissue. By preventing attachment, the bacteria would be readily cleared by the body's immune system.

The Company's lead anti-infectives program targets fibrinogen binding protein ("FBP"), a surface protein on staphylococcus aureus ("S. aureus") enabling the attachment of this organism to indwelling devices, such as catheters. S. aureus is the leading cause of hospital-acquired infections, and more than 95% of S. aureus infections are caused by organisms that are resistant to penicillin. Many strains of S. aureus are generally resistant to antibiotics, responding only to one drug, vancomycin, which can have serious side effects. Based on studies at Rockefeller, the Company believes antibodies to FBP may be effective in preventing bacterial attachment and is developing antibodies to FBP that will be evaluated for administration to patients at the time of hospitalization to prevent infection by S. aureus.

The Company's second anti-infectives program is based on a novel target for antibiotic therapy. The Company's founding scientists have identified an enzyme, termed "sortase," utilized by most gram-positive bacteria to anchor certain proteins to the bacterial cell wall. These surface proteins are the means by which certain bacteria recognize, adhere to and colonize specific tissue. The Company's strategy is to develop inhibitors to sortase. The Company believes this anti-infectives target will have wide applicability to gram-positive bacteria in general, including the increasing number of antibiotic resistant bacteria and a broad range of serious infectious diseases including pneumonia, meningitis and urinary tract infections. The Company intends to utilize a combination of structure-based drug design and high-throughput screening procedures to identify compounds that inhibit the anchoring process.

## Background

Infectious Diseases

injectious biseases

Infectious diseases are the leading cause of death in the world. For most of the twentieth century, the incidence of infectious disease has decreased dramatically due to the use of antibiotics and the development of effective vaccines to prevent many common diseases. In recent years, however, this trend has reversed with the emergence of many new infectious diseases or the reemergence or increased incidence of known infectious diseases worldwide, a public health issue which has become "a threat to global health and security". There are many reasons for this emergence, including: (i) the intrusion of humans into formerly unpopulated or isolated populations has provided exposure to organisms previously unknown (e.g. Lyme disease, hantavirus, Ebola virus); (ii) the spread of disease-causing organisms has increased due to the ease of worldwide transportation; (iii) changes in human behavior, such as increased sexual activity and intravenous drug abuse, have contributed to the spread of diseases like human immunodeficiency virus ("HIV"), hepatitis, and chlamydia; (iv) the widespread use of day care facilities has exposed a larger number of children to infectious diseases and, as a result, their families; (v) the use of immunosuppressive drugs, particularly for cancer treatment, has rendered susceptible an ever growing number of people subject to infectious diseases which in otherwise healthy individuals would be benign; (vi) past complacency of public health officials has resulted in lowered surveillance of and reduced prevention programs for infectious diseases leading to an inability to react quickly to newly arising infectious threats; and (vii) increased antibiotic resistance has resulted in a major threat from organisms which were effectively and easily treated in the past.

As a result of these and other factors, the Centers for Disease Control and Prevention has estimated that between 1980 and 1992, in the United States, the mortality rate due to infectious diseases rose by 58%. Alarmingly, the age group most affected, ages 25 to 44 years, has experienced over a six-fold increase in infectious disease-related deaths during this period. Due to this increase, infectious diseases are now the third leading cause of death in the United States, following only cardiovascular and cancer-related deaths. The financial burden to the public to treat or prevent infectious diseases has been conservatively estimated to exceed \$120 billion annually. The problem of emergent infections, combined with the need to provide quality healthcare at a reasonable cost, have led to a reexamination of the approaches used to combat infectious diseases.

Immune System

The human immune system is a complex system of checks and balances, coupled with an intricate network of cells and effector molecules, which has evolved to stave off the intrusion of foreign elements into the body. To accomplish this the body has developed a means to determine the difference between self and nonself ("foreign"). Foreign substances include elements such as dust particles, pollen grains, infectious agents and antigens (the surface of these other structures generally are covered with antigens, or secrete them). Once the determination has been made that a foreign intruder exists, the body's defenses are triggered, beginning a cascade of events known collectively as the immune response. The end result, in a healthy person, is the successful clearance or elimination of the offending material. The immune response has been divided into two arms based principally on the ultimate effector mechanism which will fight the initial insult; these arms are known as the humoral and cellular immune responses. The humoral immune system employs a family of molecules circulating in the blood stream known as immunoglobulins, or antibodies, which are secreted by immune cells called lymphocytes. In terms of infectious diseases, these antibodies are very effective at combating invasions by bacteria, protozoan parasites, and some viruses, as well as specific proteins produced by these infectious agents. In contrast, a cellular immune response, as the name implies, uses effector cells of the immune system to generally target certain viruses and cancer cells.

A different delineation also exists within the immune system in terms of the site of the induction and the response of the immune system. The systemic immune system is generally regarded as that which is internal to the body, including the antibodies in the blood stream and lymphatic system and the cellular immune response in the tissues where foreign agents have encroached. The other active site, and the focus of the Company's vaccine efforts, is the mucosal immune system. This portion of the immune system is spread over the tissues lining the cavities of the body and those involved in the secretions which ultimately find their way to these cavities. Included in this vast network are the linings of the oral and nasopharyngeal cavity, the respiratory tract, the gastrointestinal tract, and the urogenital tract. This lining covers an area of almost 450 square meters, an area equivalent to approximately 90% of a basketball court. There are a number of physical barriers present which can prevent the invasion of infectious agents into the mucosal lining. Among these physical factors are: (i) the mucus which covers the lining of mucosal tissues; (ii) the production of protein degrading enzymes (proteases) which digest proteins either free in the mucosal environment or attached to infectious organisms, thereby decreasing their ability to invade the mucosal tissues; (iii) the peristaltic motion of the walls beneath the mucosa which function in moving digested food and, consequently, infectious agents which are present, through the digestive tract and out of the body; (iv) the motion of the cilia lining the mucosal cavities which carry infectious organisms through the body; and (v) the specialized cells which line the mucosa coupled with the tight junctions between them also provide a strong barrier to the penetration of infectious organisms into the deeper tissues.

The specific response which occurs in the mucosal immune system begins with the uptake of the infectious agent or antigen generally by a specialized cell lining the mucosa called an M cell. This cell facilitates the movement of the antigen to cells underlying the epithelial layer which can efficiently prepare the antigen and present it to cells of the immune system. Once stimulated, these cells can migrate to various parts of the mucosal system where they can either produce antibodies or induce effector cells specific for the offending (or, in the case of vaccines, immunizing) agent. Due to this migratory nature of the immune cells of the mucosal immune system, the entire system has been termed the common mucosal immune system. As a result of

this trafficking of immune cells, induction of a mucosal immune response at one site results in the expression of that specific response at multiple sites within the mucosal system; i.e. induction of an immune response in the oral cavity would lead to an immune response there, but also in the gut. The weakness of this common mucosal system is that generally the immune response is greater at the site of stimulation than at distant sites within the system, a problem which the Company hopes to circumvent using the site-specific aspects of its commensal vaccine delivery system.

The primary effector molecule of the mucosal immune response is an antibody known as secretory immunoglobulin A (sIgA), which is found in saliva, tears, and other secretions of the respiratory, gastrointestinal ("GI"), and urogenital tracts. Given that the mucosal surface covers such a large area, it is not surprising that the sIgA produced there accounts for greater than 75% of all the antibody produced in the body. SIgA performs a variety of important functions, including: (i) neutralization of viruses, toxins, and enzymes; (ii) inhibition of adherence of microorganisms to mucosal surfaces; (iii) immune exclusion of macromolecules and bacterial toxins; (iv) suppression of antibody-mediated inflammatory responses at mucosal surfaces; (v) synergism with nonspecific antibacterial factors, such as lactoferrin, peroxidase, and lysozyme; (vi) clearance of adsorbed antigen from the circulation; and (vii) interference with other infectious determinants. These factors, coupled with the non-specific barriers described above, form a formidable obstacle to invading infectious organisms.

Vaccines

Vaccines prevent disease by stimulating the body to produce a protective immune response to particular disease-causing organisms, or pathogens. Conventional vaccines consist of killed microorganisms (e.g. pertussis vaccine), live attenuated microorganisms (e.g. polio or smallpox vaccines) or components of microorganisms, called subunit vaccines (e.g. hepatitis B vaccine). These types of vaccines have been successful in many cases, as evidenced by the global eradication of smallpox through immunization. However, conventional vaccines can have significant limitations. For example, killed vaccines and component vaccines can have variable efficacy and may require boosters to maintain immunity. Attenuated vaccines, while generally more effective, can be associated with certain medical complications, such as neurological damage, allergic reaction, bleeding and infection. There are also a number of diseases for which conventional approaches have not been able to evoke a protective immune response. Aside from the oral polio vaccine, all of these vaccines are administered via the systemic route, i.e. through a needle. The World Health Organization has recently reported that in Eastern Europe 50% of the vaccine centers gave unsafe vaccines or used vaccines of doubtful potency. While clearly there are many factors contributing to this problem, one of the solutions is to alter the manner in which vaccines are delivered.

Most infectious agents enter the host's body through and initiate infection at one of the mucosal surfaces - the mouth, the nose, the lungs or the GI or urogenital tracts. For example, the influenza virus usually enters the body through the mouth or nose, salmonella through the GI tract and chlamydia through the urogenital tract. The body's mucosal surfaces present a physical barrier to pathogens and also possess a specific local immune system, which provides a primary line of defense against invading organisms. While conventional vaccines are designed to produce an effective systemic (internal) immune response, they are relatively ineffective at stimulating the mucosal immune system. It is now well recognized in the scientific and medical communities that the mucosal immune system represents an important target for immunization and that vaccines designed to activate the mucosal immune system may prevent a variety of diseases for which conventional vaccines provide only limited protection or do not exist.

Anti-infectives and Drug Resistance

Since their introduction in the 1940s, antibiotics have been the first line of defense against bacterial infections. Over the past few decades, however, bacterial resistance to existing antibiotics has been increasing, rendering some previously innocuous infections virtually untreatable. All current classes of antibiotics function by interfering with either the structure or the metabolism of a bacterial cell, affecting its ability to survive and to reproduce. For example, penicillin prevents production of new bacterial cell walls, tetracycline inhibits the synthesis

of new bacterial proteins, fluoroquinolones inhibit nucleic acid synthesis, and polymyxin B disrupts the integrity of bacterial membranes. Within any given population of infectious organisms, there are generally some cells which are not susceptible to the antibiotic selected for treatment. Because this population is so small, the host can usually remove the remainder of the resistant cells by its normal clearance mechanisms. If, however, a population of pathogens is given the opportunity to increase the percentage of resistant organisms within its number, then eventually the resistant organisms will predominate. There are several reasons for the recent emergence of antibiotic resistance in microorganisms: (i) indiscriminate prescribing of antibiotics by physicians to patients who do not require antibiotic treatment; (ii) non-compliance of dosing regimens by patients leading to incomplete clearance of the infectious agent; (iii) transfer of resistance genes from one organism to another; and (vi) the widespread use of antibiotics in cattle.

Antibiotic resistance has become a problem with many medically important bacteria, but has become particularly dangerous with respect to Mycobacterium tuberculosis (which causes TB), Neisseria gonorrheae (gonorrhea), Pseudomonas aeruginosa (infections in immunocompromised patients), S. aureus (hospital-acquired and other infections), Streptococcus pneumoniae (pneumonia, otitis media, meningitis), and Enterococcus spp. (bacteremia and GI tract infections). While new generations of antibiotics have been developed with broad spectrum activity, only one new class of antibiotics has been developed in the last two decades. The need for new classes of antibiotics and new targets for their action has become crucial to the health of the nation and the world.

The Company's Technologies

Vaccine Technologies: Mucosal Immunity and Vaccine Delivery

Using proprietary technology licensed from Rockefeller, the Company is developing certain commensal bacteria ("commensals") as a means to deliver mucosal vaccines. Commensals are harmless bacteria that naturally inhabit the body's surfaces - with different commensals inhabiting different surfaces, particularly the mucosal surfaces. The Company's vaccine candidates utilize genetically engineered commensals to deliver antigens from a variety of pathogens to the mucosal immune system. When administered, the genetically engineered ("recombinant") commensals colonize the mucosal surface and replicate. By activating a local mucosal immune response, the Company's vaccine candidates are designed to prevent infection and disease at the earliest possible stage. By comparison, most conventional vaccines are designed to act after infection has already occurred.

The Company's commensal vaccine candidates utilize gram-positive bacteria, one of two major classes of bacteria. Rockefeller scientists have identified a protein region that is used by gram-positive bacteria to anchor proteins to their surfaces. The Company is using the proprietary technology licensed from Rockefeller to fuse antigens from a wide range of infectious organisms, both viral and bacterial, to the surface protein anchor region of a variety of commensal organisms. By combining a specific antigen with a specific commensal, vaccines can be tailored to both the target pathogen and its mucosal point of entry.

To target an immune response to a particular mucosal surface, a vaccine would employ a commensal organism that naturally inhabits that surface. For example, vaccines targeting sexually transmitted diseases could employ Lactobacillus acidophilus, a commensal colonizing the female urogenital tract. Vaccines targeting GI diseases could employ Lactobacillus casei, a commensal colonizing the GI tract. The Company has conducted initial experiments using Streptococcus gordonii ("S. gordonii"), a commensal that colonizes the oral cavity and that can potentially be used in vaccines targeting pathogens that enter through the upper respiratory tract, such as the influenza virus.

By using an antigen unique to a given pathogen, the technology can potentially be applied to any infectious agent that enters the body through a mucosal surface. The Company's founding scientists have expressed and anchored a variety of viral and bacterial antigens on the outside of S. gordonii, including the M6 protein from group A streptococcus, a group of organisms that cause a range of diseases, including strep throat, necrotizing fasciitis, impetigo and scarlet fever. In addition, proteins from other infectious agents, such as HIV and human papilloma virus have also been

expressed using this system. The Company believes this technology will enable the expression of essentially any antigen regardless of size or shape. In animal studies, the Company has shown that the administration of a recombinant S. gordonii vaccine prototype induces both a local mucosal immune response and a systemic immune response.

The Company believes that mucosal vaccines developed using its proprietary commensal delivery technology should provide a number of advantages, including:

More complete protection than conventional vaccines: Mucosal vaccines in general may be more effective than conventional parenteral (injectable) vaccines, due to their ability to produce both a systemic and local (mucosal) immune response. By stopping infectious organisms at the earliest stage, the immune response has no need to eliminate pathogens which have already become established in the host.

Potential single dose administration: The commensal delivery has the potential to allow for long term colonization of the host, eliminating the need for boosters, while providing an extended exposure to the selected vaccine candidate(s).

Safety advantage over other live vectors: A number of bacterial pathogens have been genetically rendered less infectious, or attenuated, for use as live vaccine vectors. Commensals, by virtue of their harmless nature, offer a safer delivery without fears of genetic reversion to the infectious state inherent in attenuated pathogens or their ability to cause similar, although reduced, symptoms than the original organism.

Non-injectable administration: Oral, nasal, rectal or vaginal administration of the vaccine eliminates the need for painful injections with their potential adverse reactions.

Potential for combined vaccine delivery: The Children's Vaccine Initiative has called for the development of combined vaccines, specifically to reduce the number of needle sticks per child by combining several vaccines into one injection, thereby increasing compliance and decreasing disease. The Company believes its commensal delivery technology can be an effective method of delivery through multi-component vaccines within a single commensal organism that address multiple diseases or diseases caused by multiple strains of an infectious agent.

Eliminating need for refrigeration: One of the problems with the effective delivery of parenteral vaccines is the need for refrigeration at all stages culminating in injection. The stability of the commensal organisms in a freeze-dried state would, for the most part, eliminate the need for special climate conditions, a critical consideration, especially for the delivery of vaccines to developing countries.

Low cost production: By using a live bacterial vector, extensive downstream processing is eliminated, leading to considerable cost savings in the production of the vaccine. The potential for eliminating the need for refrigeration would add considerably to these savings by reducing the costs inherent in refrigeration for vaccine delivery.

Anti-Infectives Technology: Prevention of Attachment and Infectivity

The bacterial infectious process generally includes three steps: colonization, invasion and disease. The adherence of bacteria to a host's surface is crucial to establishing colonization. Bacteria cells adhere through a number of mechanisms, but generally by using highly specialized surface structures which, in turn, bind to specific structures or molecules on the host's cells or, as discussed below, to inanimate objects residing in the host. Once adhered, many bacteria will invade the host's cells and either establish residence or continue invasion into deeper tissues. During any of these stages, the invading bacteria can produce the molecules (toxins) which result in the outward manifestations of the disease. The severity of disease, while dependent on a large combination of factors, is often the result of the ability of the bacteria to persist in the host. These bacteria accomplish this persistence by

using surface molecules which can alter the host's non-specific mechanisms or its highly specific immune responses to clear or destroy the organisms.

Unlike conventional antibiotics, as discussed above, the Company's anti-infectives approaches aim to block the ability of pathogenic bacteria to attach to and colonize human tissue, thereby preventing infection at its earliest stage. The Company is pursuing two anti-infective strategies: (i) inhibiting the expression of bacterial surface proteins required for bacterial infectivity and (ii) blocking the tissue binding sites on bacterial surface proteins. The Company believes that these approaches have promise in the areas of hospital-acquired drug-resistant S. eeriest infections and a broad range of other diseases caused by gram-positive bacteria.

Bacterial attachment to tissues can be blocked using antibodies against their surface proteins. Antibodies, once bound to the bacterial surface proteins, preclude attachment to tissue permitting clearance by the body's natural defense mechanisms. S. eeriest, the causative agent in staph infections, uses a surface protein, FBP, to attach to fibrin (a blood component that coats foreign bodies) on the surfaces of indwelling catheters, prosthetic devices and artificial heart valves, leading to infection and disease. The Company is testing whether anti-FBP antibodies will block attachment of S. aureus to both catheters and human cells. If so, such antibodies may be used to provide preventive therapy against staph infections for patients entering the hospital for invasive procedures.

Many special surface proteins used by bacteria to infect the host are anchored in the bacterial cell wall. Scientists at Rockefeller have identified an amino acid sequence and related enzyme, sortase, that are essential for anchoring proteins to the surface of most gram-positive bacteria. Published information indicates that this amino acid sequence is shared by more than 50 different surface proteins found on a variety of gram-positive bacteria. This commonality suggests that sortase represents a promising target for the development of a new class of antibiotic products for the treatment of a wide range of infectious diseases. Experiments by the Company's founding scientists at Rockefeller have shown that without this sequence, proteins cannot become anchored to the bacterial surface and thus the bacteria are no longer capable of attachment, colonization or infection. Such "disarmed" bacteria should be readily cleared by the body's immune system. The Company is using a combination of structure-based drug design and high throughput screening procedures to identify compounds that inhibit sortase, thereby blocking the anchoring process. If successful, this strategy should provide relief from many gram-positive bacterial infections, but may prove particularly important in combating diseases caused by the emerging antibiotic resistance of the gram-positive organisms S. eeriest, Streptococcus pneumoniae, and the enterococci.

The Company's Product Candidates and Research and Discovery Programs

The following table lists the potential indications and current status of the Company's product candidates and research and discovery programs. A more detailed description of these product candidates and research and discovery programs follows this table. The Company's product candidates are subject to the risks of failure inherent in the development of products based on innovative technologies. See "Risk Factors - Early Stage of Development; Absence of Products; No Commercialization of Products Expected in Near Future."

Product Candidates/Program	Indication	Stage of Development*
Mucosal Vaccines	-	
Streptococcal vaccine HSV vaccine	Strep throat Herpes	Pre-clinical Research
Anti-infectives		
Anti-FBP antibody Bacterial attachment blockers	, ,	l infections Research fections Discovery

"Research" activities include initial research and development related to specific vaccine or antibiotic compounds or formulations and their delivery.

"Pre-clinical" indicates that the Company is conducting pharmacology testing, toxicity testing, formulation process development and/or development of the manufacturing process prior to possible submission of an TND

"Discovery" indicates that the Company is conducting studies to validate proof of concept and identify potential lead compounds.

Mucosal Vaccines

Development of the Company's mucosal vaccine candidates involves: (i) identifying a suitable immunizing antigen from a pathogen; (ii) selecting a commensal that naturally colonizes the mucosal point of entry for that pathogen; and (iii) genetically engineering the commensal to express the antigen on its surface for subsequent delivery to the target population.

Strep Throat Vaccine Candidate. Until the age of 15, many children suffer recurrent strep throat infections. Up to five percent of ineffectively treated strep throat cases progress to rheumatic fever, a debilitating heart disease which worsens with each succeeding streptococcal infection. Since the advent of penicillin therapy, rheumatic fever in the United States has experienced a dramatic decline. However, in the last decade, rheumatic fever has experienced a resurgence in this country. Part of the reason for this is the latent presence of this organism in children who do not display symptoms of a sore throat, and, therefore, remain untreated and at risk for development of rheumatic fever. Based on data from the Centers for Disease Control and Prevention, there are seven to 20 million cases of pharyngitis due to group A streptococcus in the United States each year. While the incidence of rheumatic fever remains relatively low in the United States, it is still an overwhelming problem in developing countries, particularly in Southeast Asia, South America, and India (where an estimated six million children suffer from this disease). Worldwide, it is estimated that one percent of all school age children in the developing world have rheumatic heart disease. Despite the relative ease of treating strep throat with antibiotics, the specter of antibiotic resistance is always present. In fact, resistance to erythromycin, the second line antibiotic in patients allergic to penicillin, has appeared in a large number of cases. There are over 32 million children in the principal age group targeted by the Company for vaccination. Historically, this pathogen has also been an important concern in the military population, which is also a primary target group for this vaccine.

No vaccine for strep throat has been developed because of the problems associated with identifying an antigen that is common to the more than 80 different serotypes of group A streptococcus, the bacterium that causes the disease. The Company has licensed from Rockefeller a proprietary antigen which is common to most types of group A streptococcus, including types that have been associated with rheumatic fever. When this antigen was orally administered to animals, it was shown to provide protection against multiple types of group A streptococcal infection. Utilizing this antigen, the Company is developing a mucosal vaccine for strep throat.

The Company is expressing the strep throat antigen on the surface of the commensal, S. gordonii. Because S. gordonii lives on the surface of the teeth and gums, the Company believes that a single oral dose of the vaccine may be adequate to provide protection. Indeed, investigations at other institutions have shown that organisms of this type can safely colonize in the human oral cavity for up to two years. The Company is currently conducting pre-clinical testing and is developing the manufacturing process for this vaccine candidate in anticipation of filing an IND in the United States in 1997.

Herpes Vaccine Candidate. Genital herpes is one of the most prevalent sexually transmitted diseases. In the United States, an estimated 40 million people have tested positive for antibodies to herpes simplex virus type 2 (HSV-2), indicating previous infection, and approximately one million new infections occur each year. The disease caused by HSV-2 is an often latent and recurrent infection leading to lesions on the genitalia and skin, as well as an epidemiological association with cervical cancer.

Currently, no effective vaccine exists to prevent infection by HSV-2. Two major surface proteins, designated gB and gD, facilitate binding of the virus to human tissue. In animal studies, antibodies to these surface proteins have been shown to

protect against infection and, therefore, show promise as vaccine candidates. The Company intends to incorporate gB and gD into Lactobacillus acidophilus, a commensal colonizing the female urogenital tract, for use as a herpes vaccine. Because, gB and gD are subject to patent protection, the Company would be required to license the right to use such proteins from the holders of the patents, of which no assurance can be given. See "Risk Factors - Uncertainty Regarding Patents and Proprietary Information."

Anti-Infectives

The Company intends to combat infections in the following ways: (i) development of antibodies to prevent binding of antibiotic resistant S. aureus to the surfaces of catheters and implanted medical devices and (ii) the development of a new class of anti-infectives designed to circumvent the problem of antibiotic resistance by crippling the infectious process in gram-positive bacteria.

Anti-FBP Antibody. Infection with S. aureus can result in a wide variety of disease manifestations, including skin and soft tissue infections, septic arthritis, osteomyelitis, bacteremia, abscess formation in various organs, scalded skin syndrome, and toxic shock syndrome. Approximately 25% of adults harbor S. aureus as asymptomatic carriers in the nose or on the haired areas of the skin. Indeed, S. aureus is the leading cause of hospital-acquired, or nosocomial, infections, according to figures from the Centers for Disease Control and Prevention's National Nosocomial Infections Surveillance System. In the hospital setting, S. aureus can cause serious infections in surgical patients, patients with indwelling or implanted devices (such as catheters and joint replacements), burn patients, the elderly and immunocompromised patients. More than 95% of S. aureus infections are due to organisms resistant to penicillin and now up to 22% are resistant to methicillin. Many strains of S. aureus are only sensitive to one drug, vancomycin, which can have serious side effects.

The Company is focusing on the prevention of staph infections in at-risk patients by inhibiting bacterial attachment. The Company has licensed rights to technology based on FBP, a protein on the surface of S. aureus. This molecule is responsible for the binding of S. aureus to the fibrin that becomes deposited on the surface of indwelling catheters, prosthetic devices and heart valve replacements as well as the endothelial cells lining blood vessels and the heart. Once bound, S. aureus multiplies and secretes a variety of toxins, which can result in widespread tissue damage and septic shock. Based on studies at Rockefeller, the Company believes antibodies against FBP may be effective in preventing attachment and is developing antibodies to FBP that will be evaluated for administration to patients at the time of hospitalization to prevent staph infections. The Company also intends to evaluate FBP as a vaccine to actively immunize patients at risk of developing staph infections, such as those with indwelling devices or those requiring frequent or long-term catheter use. To date, the Company's studies have used anti-FBP antibodies prepared in rabbits. The preparation of an anti-FBP antibody for use in human clinical trials will require significant additional development.

Targeted Disablement of Bacterial Infectivity. More than two million nosocomial infections occur each year. Of these, a large number are due to the occurrence of pathogenic gram-positive bacteria. Many of these bacteria have acquired antibiotic resistance and have become an increasing problem. The grampositive bacteria principally involved in these nosocomial infections include: S. aureus, coagulase-negative staphylococci and enterococci. S. aureus has been described above. The coagulase-negative staphylococci have become the leading cause of nosocomial bacteremia and, alarmingly, have shown a higher percentage of methicillin resistant strains (up to 78%) than S. aureus (up to 22%). enterococci have shown a disturbing propensity toward resistance to the antibiotic of last resort, vancomycin. Even more alarming is the fact that in certain cases where the last antibiotic of choice to treat a S. aureus or coagulase-negative infection is vancomycin, some strains of enterococci have evolved that may actually thrive on vancomycin, rendering the treatment potentially life threatening. Another important gram-positive organism with an increasing presence of antibiotic resistance is Streptococcus pneumoniae, an organism responsible for pneumonia and meningitis, and which is the leading cause of middle ear infections in children.

Scientists at Rockefeller have determined that many different surface proteins from a variety of gram-positive bacteria are attached to the bacterial surface via a common anchoring mechanism. These surface proteins are responsible for a wide variety of functions essential to the successful establishment of infection by the organism, including adherence, binding to serum proteins, resistance to phagocytosis (ingestion and destruction by the host's cells), cross-signaling between the bacterium and the host's cells, and various enzymatic processes. The Company has identified an enzyme, sortase, utilized by most gram-positive bacteria to anchor certain proteins to the bacterial cell wall. The Company intends to identify compounds that will inhibit sortase, thereby blocking the anchoring process and the ability of the bacteria to initiate or prolong infection. In this process, the Company is using molecular modeling to identify possible structures of the anchor region. Once these structures are identified, natural and synthetic molecules that may inhibit the anchoring process will be screened using an existing high throughput assay developed by Rockefeller and licensed to the Company. The Company believes that this approach represents a departure from conventional antibiotics and therefore may afford a method to circumvent the resistance mechanisms already established in many gram-positive organisms.

Licenses and Collaborative Research

The Company has entered into license agreements and collaborative research arrangements with the following universities:

 $\label{lem:continuous} \mbox{Rockefeller University. The Company and Rockefeller have entered into an} \\$ 

exclusive worldwide license agreement whereby the Company has obtained the right and license to make, use and sell mucosal vaccines based on gram-positive organisms and products for the therapy, prevention and diagnosis of diseases caused by streptococcus, staphylococcus and other organisms. The license covers two issued United States patents and one issued European patent as well as 11 pending United States patent applications and corresponding foreign patent applications. The issued United States patents expire in 2005 and 2014, respectively. The agreement generally requires the Company to pay royalties on sales of products developed from the licensed technologies and fees on revenues from sublicensees, where applicable, and the Company is responsible for certain milestone payments and for the costs of filing and prosecuting patent applications. Pursuant to the agreement, the Company has provided funding to Rockefeller for sponsored research through January 31, 1998, with exclusive license rights to all inventions and discoveries resulting from this research.

Emory. Emory is a party to the Company's license agreement with

Rockefeller whereby the Company has obtained the right and license to make, use and sell products for the therapy, prevention and diagnosis of diseases caused by streptococcus. Because the license relates to the same United States patent covered by the Rockefeller license, the Company has agreed to reimburse Rockefeller for Emory's patent expenses and Rockefeller will remit such amounts to Emory. Pursuant to a separate research support agreement with Emory, the Company is providing funding for sponsored research through January 31, 1998, with a right of first refusal to acquire exclusive license rights to all inventions and discoveries resulting from this research.

Oregon State. Oregon State is also a party to the Company's license  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

agreement with Rockefeller whereby the Company has obtained the right and license to make, use and sell products for the therapy, prevention and diagnosis of diseases caused by streptococcus. Because the license relates to the same United States patent covered by the Rockefeller license, the Company has agreed to reimburse Rockefeller for Oregon State's patent expenses and Rockefeller will remit such amounts to Oregon State. Pursuant to a separate research support agreement with Oregon State, the Company is providing funding for sponsored research through January 31, 1998, with exclusive license rights to all inventions and discoveries resulting from this research.

Manufacturing

The Company does not intend to invest in large scale manufacturing facilities unless and until its product candidates pass significant developmental hurdles. The Company believes that all of its existing products under development can be made using well understood manufacturing methods. Nevertheless, the Company has no manufacturing experience and it may not be able to develop reproducible and effective manufacturing processes at a reasonable cost. In such event, the Company will have to rely on third

party manufacturers whose availability and cost are presently unknown. The Company plans to contract with third party manufacturers to produce pre-clinical and clinical lots of its biological products. No assurances can be given that the Company will establish such relationships or manufacture its product candidates successfully. See "Risk Factors--Lack of Manufacturing, Marketing or Sales Capabilities."

# Marketing

The Company currently has no internal marketing and sales resources and personnel. The Company recognizes the challenges associated with marketing and sales in the pharmaceutical industry and anticipates undertaking these activities only for products that address large but focused therapeutic markets in which a small marketing organization can compete effectively. It is, however, the Company's present intention to seek marketing partners to assist it in later stages of regulatory and clinical development, process scale up, production and marketing. No assurances can be given that the Company will establish such relationships or market its product candidates successfully. "Risk Factors--Lack of Manufacturing, Marketing or Sales Capabilities."

# Patents and Proprietary Rights

Protection of the Company's proprietary compounds and technology is essential to the Company's business. The Company's policy is to seek, when appropriate, protection for its lead compounds and certain other proprietary technology by filing patent applications in the United States and other countries. The Company has licensed the rights to two issued United States patents and one issued European patent. The Company has also licensed the rights to 11 pending United States patent applications as well as corresponding foreign patent applications. The two issued United States patents expire in 2005 and 2014, respectively.

The Company also relies upon trade secret protection for its confidential and proprietary information. No assurance can be given that other companies will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets or that the Company can meaningfully protect its trade secrets.

The Company requires its employees, consultants, outside scientific collaborators and sponsored researchers and certain other advisors to enter into confidentiality agreements with the Company. These agreements will provide that all confidential information developed or made known to the individual during the course of the individual's relationship with the Company will be kept confidential and will not be disclosed to third parties except in specific circumstances. In the case of employees, such agreements will provide that all inventions conceived by the employee are the exclusive property of the Company. There can be no assurance, however, that these agreements will provide meaningful protection or adequate remedies for the Company's trade secrets in the event of unauthorized use or disclosure of such information.

# Government Regulation

Regulation by governmental authorities in the United States and other countries will be a significant factor in the production and marketing of any products that may be developed by the Company. The nature and the extent to which such regulation may apply to the Company will vary depending on the nature of any such products. Virtually all of the Company's potential products will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous pre-clinical and clinical testing and other approval procedures by the FDA and similar health authorities in foreign countries. Various federal statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of such products. The process of obtaining these approvals and the subsequent compliance with appropriate federal and foreign statutes and regulations requires the expenditure of substantial resources.

In order to test clinically, produce and market products for diagnostic or therapeutic use, a company must comply with mandatory procedures and safety standards established by the FDA and comparable agencies in foreign countries. Before beginning human clinical testing of a potential new drug, a company must file an IND and receive

clearance from the FDA. This application is a summary of the pre-clinical studies that were conducted to characterize the drug, including toxicity and safety studies, as well as an in-depth discussion of the human clinical studies that are being proposed.

The pre-marketing program required for approval of a new drug typically involves a time-consuming and costly three-phase process. In Phase I, trials are conducted with a small number of patients to determine the early safety profile, the pattern of drug distribution and metabolism. In Phase II, trials are conducted with small groups of patients afflicted with a target disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. In Phase III, large scale, multi-center comparative trials are conducted with patients afflicted with a target disease in order to provide enough data for statistical proof of efficacy and safety required by the FDA and others.

The FDA closely monitors the progress of each of the three phases of clinical testing and may, in its discretion, reevaluate, alter, suspend or terminate the testing based on the data that have been accumulated to that point and its assessment of the risk/benefit ratio to the patient. Estimates of the total time required for carrying out such clinical testing vary between two and ten years. Upon completion of such clinical testing, a company typically submits a New Drug Application ("NDA") or Product License Application ("PLA") to the FDA that summarizes the results and observations of the drug during the clinical testing. Based on its review of the NDA or PLA, the FDA will decide whether or not to approve the drug. This review process can be quite lengthy, and approval for the production and marketing of a new pharmaceutical product can require a number of years and substantial funding, and there can be no assurance that any approvals will be granted on a timely basis, if at all.

Once the product is approved for sale, FDA regulations govern the production process and marketing activities, and a post-marketing testing and surveillance program may be required to monitor continuously a product's usage and its effects. Product approvals may be withdrawn if compliance with regulatory standards is not maintained. Other countries in which any products developed by the Company may be marketed impose a similar regulatory process.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. The Company's competitors include most of the major pharmaceutical companies, which have financial, technical and marketing resources significantly greater than those of the Company. Biotechnology and other pharmaceutical competitors include Cubist Pharmaceuticals, Inc., Microcide Pharmaceuticals, Inc., Oravax, Inc., Maxim Pharmaceuticals, Inc., and Zynaxis, Inc. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint venture. The Company is aware of certain development projects for products to prevent or treat certain diseases targeted by the Company. The existence of these potential products or other products or treatments of which the Company is not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of products developed by the Company.

Human Resources and Facilities

The Company currently has six employees. In addition, the Company has consulting agreements with Dr. Vincent Fischetti, the principal founding scientist and Chief Scientific Advisor of the Company and a Professor and Co-Chairman of the Laboratory of Bacterial Pathogenesis and Immunology and Co-Director of the Protein Sequence/Biopolymer Facility at Rockefeller, and Dennis Hruby, a founding scientist of the Company and a Professor of Microbiology at Oregon State. In addition, the Company and CSO have entered into a consulting agreement under which CSO has agreed to provide certain business services to the Company, including business development, licensing, strategic alliances and administrative support. See "Certain Transactions."

The Company sponsors research and development activities in laboratories at Rockefeller, Emory and Oregon State and does not maintain its own research and

development facilities. The Company leases office space at 666 Third Avenue, New York, New York, 10017. See "Risk Factors--Lack of Research and Development Facilities."

Product Liability Insurance

The Company's business exposes it to potential liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. The Company does not have product liability insurance but intends to obtain such coverage if and when its drug candidates are tested in clinical trials. There can be no assurance, however, that the Company will be able to obtain insurance coverage at acceptable costs or in a sufficient amount, if at all, or that a product liability claim would not adversely affect the Company's business, operating results or financial condition. See "Risk Factors--Potential Product Liability and Availability of Insurance."

Legal Proceedings

The Company is not a party to any material legal proceedings.

#### MANAGEMENT

Directors, Executive Officers, Key Personnel and Consultants

The following table sets forth information concerning each of the directors, executive officers, key personnel and consultants of the Company.

Name Age Position

David H. de Weese Joshua D. Schein, Ph.D.

Judson A. Cooper Vincent A. Fischetti Dennis G. Hruby, Ph.D. Kevin F. Jones, Ph.D.

- 54 Chairman, President and Chief Executive Officer
- 36 Executive Vice President, Chief Financial Officer, Secretary and Director
- 37 Executive Vice President, Director
- 56 Consultant
- 45 Consultant
- 44 Director of Bacterial Research

All Directors hold office until the next annual meeting of stockholders and the election and qualification of their successors. Directors receive no cash compensation for serving on the Board of Directors other than reimbursement of reasonable expenses incurred in attending meetings. Officers are elected annually by the Board of Directors and serve at the discretion of the Board, subject to the provisions of certain employment agreements. See "Employment Agreements."

David H. de Weese has served as Chairman of the Board of Directors,

President and Chief Executive Officer of the Company since November 1996. Prior to joining the Company, Mr. de Weese served as a director and a consultant to Biovector Therapeutics, S.A., a developer of drug delivery technology based in France, and as an advisor to Paul Capital Partners, L.P., a private equity investment manager with whom he maintains a consulting relationship. From 1993 to 1995, Mr. de Weese was President, Chief Executive Officer and a Director of M6 Pharmaceuticals, Inc, a biopharmaceutical company. From 1986 to 1992, Mr. de Weese was the President, Chief Executive Officer, a Director and a founder of Cygnus Therapeutic Systems (now Cygnus, Inc.), a developer and manufacturer of transdermal drug delivery systems. Prior to that, Mr. de Weese co-founded Medical Innovations Corporation, a medical device business currently a division of Ballard Medical Products, Inc., and was Chairman of the Board, President and Chief Executive Officer of Machine Intelligence Corporation, a developer of computer software and hardware. Mr. de Weese received his M.B.A. from the Harvard University Graduate School of Business.

Joshua D. Schein, Ph.D. has served as an Executive Vice President of the

Company since December 1996 and Chief Financial Officer, Secretary and a Director of the Company since December 1995. Dr. Schein also serves as President and Director of Virologix Corporation, a private biotechnology company ("Virologix"). Additionally, Dr. Schein serves as Chief Financial Officer and a Director of Callisto Pharmaceuticals, Inc., a privately held, development stage, pharmaceutical company ("Callisto"). Dr. Schein devotes substantial amounts of his time to the Company, Virologix and Callisto on a substantially equal basis. Dr. Schein has served as a Director of DepoMed, Inc., a private biotechnology company, since January 1996. From October 1994 to December 1995, Dr. Schein served as a Vice President of Investment Banking at Josephthal, Lyon and Ross, Incorporated, an investment banking firm. From June 1991 to September 1994, Dr. Schein was a Vice President at D. Blech & Company, Incorporated, a merchant bank that invested in the biopharmaceutical industry. Dr. Schein received a Ph.D. in neuroscience from the Albert Einstein College of Medicine and an MBA from the Columbia Graduate School of Business. Dr. Schein is a principal of CSO Ventures LLC ("CSO"), a privately held limited liability company. See "Certain Transactions."

Judson A. Cooper has served as Executive Vice President of the Company since

November 1996 and a Director of the Company since December 1995 and served as President from December 1995 until November 1996. Mr. Cooper also serves as Chief Financial Officer and Director of Virologix. Additionally, Mr. Cooper serves as President and a Director of Callisto. Mr. Cooper devotes substantial amounts of his time to the Company, Virologix and Callisto on a substantially equal basis. Mr. Cooper

has also served as a Director of DepoMed, Inc. since November 1995. Mr. Cooper had been a private investor from September 1993 to December 1995. From 1991 to 1993, Mr. Cooper served as a Vice President of D. Blech & Company, Incorporated. Mr. Cooper is a graduate of the Kellogg School of Management. Mr. Cooper is a principal of CSO. See "Certain Transactions."

Vincent A. Fischetti, Ph.D. has served as a consultant to the Company since

January 1996. Dr. Fischetti is a Professor and Co-Chairman of the Laboratory of Bacterial Pathogenesis and Immunology and Co-Director of the Protein Sequence/Biopolymer Facility at Rockefeller. Dr. Fischetti specializes in the research of group A streptococcus and streptococcal diseases. Dr. Fischetti is the chairman of the Microbial Pathogenesis Division of the American Society of Microbiology and was recently elected a fellow of the American Academy of Microbiology. Dr. Fischetti is the editor-in-chief of Infection and Immunity, is an editor of the Journal of Immunology and serves on the editorial board of the Journal of Experimental Medicine. Dr. Fischetti has published approximately 100 research articles and is a contributing author to 60 textbooks. Dr. Fischetti received a Ph.D. in microbiology from New York University.

Dennis G. Hruby, Ph.D. has been a consultant to the Company since January

1996. From 1986 to the present, Dr. Hruby has been a Professor of Microbiology at Oregon State University, and from 1990 to 1993 was Director of the Molecular and Cellular Biology Graduate Program and Associate Director of the Center for Gene Research and Biotechnology at Oregon State University. From 1993 to 1995, Dr. Hruby served as Vice President of Research for M6 Pharmaceuticals, Inc. In addition, Dr. Hruby currently serves as Professor of Biochemistry and Biophysics at Oregon State University. Dr. Hruby is the author of numerous research and review articles, book chapters and published abstracts. Dr. Hruby received a Ph.D. in microbiology from the University of Colorado Medical Center and a B.S. in microbiology from Oregon State University.

Kevin F. Jones, Ph.D. has been the Company's Director of Bacterial Research

since January 1996. From 1992 to 1995, Dr. Jones served as Director of Bacterial Research for M6 Pharmaceuticals, Inc. From 1990 until joining the Company, Dr. Jones was a Senior Research Scientist at Lederle-Praxis Biologicals, Inc., a vaccine company and division of American Cyanamid. Dr. Jones has written numerous articles on the pathogenesis of group A streptococcal infection. Dr. Jones is currently Adjunct Professor at Rockefeller. Dr. Jones received a Ph.D. and an M.S. in immunology from Cornell University .

## Board of Directors

The number of directors on the Board of Directors is determined from time to time by the Board of Directors and is currently fixed at three. Directors are elected at each annual meeting of stockholders by the holders of the Common Stock and hold office until their successors have been duly elected and qualified or until their resignation, removal from office or death. Officers of the Company are appointed by and may be removed by the Board of Directors. Upon the consummation of the Offering, the Company plans to appoint three individuals not otherwise affiliated with the Company as directors.

# Committees of the Board of Directors

Upon the consummation of the Offering, the Company will form an Audit Committee and a Compensation Committee. The Audit Committee will be responsible for reviewing audit functions, including accounting and financial reporting practices of the Company, the adequacy of the Company's system of internal accounting control, the quality and integrity of the Company's financial statements and relations with its independent accountants. It is anticipated that the Audit Committee will consist of two non-employee directors. The Compensation Committee will be responsible for establishing the compensation of the Company's directors, officers and employees, including salaries, bonuses, commission, and benefit plans, administering the Plan, and other forms of or matters relating to compensation. It is anticipated that the Compensation Committee will consist of two non-employee directors.

## **Executive Compensation**

The following table sets forth certain information with respect to annual and long-term compensation paid by the Company to the Chief Executive Officer and to the other executive officers.

#### Summary Compensation Table

	Ar	Annual Compensation through 12/31/96				Long Term Compensation		
Name and Principal Position	Year	Salary	Bonuses	Other Annual Compensation	Stock Underlying Options/	All Other Compensation		
David H. de Weese, Chairman, President and Chief Executive Officer	1996	\$ 21,635(1)			477,683(2)			
Joshua D. Schein, Ph.D., Executive Vice President, Chief Financial Officer and Director	1996	\$153,116(3)		(5)	16,667			
Judson A. Cooper, Executive Vice President and Director	1996	\$153,116(4)		(5)	16,667			

- (1) Mr. de Weese became Chairman, President and Chief Executive Officer of the Company in November 1996. Mr. de Weese's annual salary is \$225,000. See "-Employment Agreements."
- (2) Includes the 461,016 de Weese Warrants and options to purchase 16,667 shares of Common Stock held by Mr. de Weese. See "-Employment Agreements."
- (3) Dr. Schein currently receives an annual salary of \$150,000. This amount does not include payments made to CSO. See "Certain Transactions."
- (4) Mr. Cooper currently receives an annual salary of \$150,000. This amount does not include payments made to CSO. See "Certain Transactions."
- (5) Aggregate amount does not exceed the lesser of \$50,000 or 10% of the total annual salary and bonus for the named officer.

The following table sets forth certain information concerning all stock option grants to the Company's executive officers to date.

## Option Grants

Name	Common Stock % Underlying Options Granted(1)	of Total Options Granted to Employees	Exercise Price Per Share	Expiration Date
David H. de Weese Joshua D. Schein Judson A. Cooper	16,667 16,667 16,667	33.3% 33.3% 33.3%	\$3.00 \$1.50 \$1.50	11/18/06 1/1/01 1/1/01

(1) All options were granted pursuant to the Plan.

The following table sets forth certain information concerning option exercises and option holdings under the Plan as of December 31, 1996 with respect to each of the Company's executive officers.

## Aggregated Option Exercises and Values as of 12/31/96

	Shares Acquired	Value	Number of Shares Underlying Unexer			Unexercised ney Options(1)
Name	on Exercise	Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
David H. de						
Weese(2)	<del>-</del> -		16,667		\$33,334	
Joshua D. Schein, Ph.D			16,667		\$58,335	
Judson A. Cooper			16,667		\$58,335	

(1) Based upon the assumed initial public offering price of \$5.00 per share.

(2) Excludes the 461,016 de Weese Warrants exercisable at \$3.00 per share.

Employment and Consulting Agreements

David H. de Weese, President and Chief Executive Officer of the Company, has an employment agreement with the Company which expires in November 1999 and is cancelable by the Company only for cause, as defined in the agreement. Mr. de Weese currently receives an annual base salary of \$225,000 and 16,667 stock options per year, exercisable at the fair market value on the date of grant, and is eligible to receive

additional stock options and bonuses at the discretion of the Board of Directors. In addition, Mr. de Weese will receive a cash payment equal to 1.5% of the total consideration received by the Company in a transaction resulting in a change of ownership of at least 50% of the outstanding Common Stock of the Company. In connection with Mr. de Weese's employment agreement, Mr. de Weese received warrants to purchase 461,016 shares of Common Stock at \$3.00 per share. Warrants to purchase 25% of such shares are currently exercisable and the remaining warrants become exercisable on a pro rata basis on the first, second and third anniversaries of the agreement.

Dr. Joshua Schein, an Executive Vice President and Chief Financial Officer of the Company, has an employment agreement with the Company which expires in December 1998 and is cancelable by the Company only for cause, as defined in the agreement. Dr. Schein currently receives an annual base salary of \$150,000 and 16,667 stock options per year, exercisable at the fair market value on the date of grant, and is eligible to receive additional stock options and bonuses at the discretion of the Board of Directors. In addition, Dr. Schein will receive a cash payment equal to 1.5% of the total consideration received by the Company in a transaction resulting in a change of ownership of at least 50% of the outstanding Common Stock of the Company.

Judson Cooper, an Executive Vice President of the Company, has an employment agreement with the Company which expires in December 1998 and is cancelable by the Company only for cause, as defined in the agreement. Mr. Cooper currently receives an annual base salary of \$150,000 and 16,667 stock options per year, exercisable at the fair market value on the date of grant, and is eligible to receive additional stock options and bonuses at the discretion of the Board of Directors. In addition, Mr. Cooper will receive a cash payment equal to 1.5% of the total consideration received by the Company in a transaction resulting in a change of ownership of at least 50% of the outstanding Common Stock of the Company.

Dr. Kevin F. Jones, Director of Bacterial Research of the Company, has an employment agreement with the Company which expires in December 1997 and is cancelable by the Company only for cause, as defined in the agreement. Dr. Jones currently receives an annual base salary of \$90,000 and is eligible to receive additional stock options and bonuses at the discretion of the Board of Directors.

Dr. Vincent A. Fischetti, the Chief Scientific Advisor of the Company, has entered into a consulting agreement with the Company under which Dr. Fischetti has agreed to provide certain research and development services to the Company. Pursuant to the terms of the agreement, Dr. Fischetti will receive an annual fee of \$75,000. The agreement expires December 31, 1998 and is cancelable by the Company only for cause as defined in the agreement.

Dr. Dennis Hruby, a part-time Senior Scientific Advisor of the Company, has a consulting agreement with the Company which shall be for a term of two (2) years commencing as of January 1, 1996, and shall be automatically renewed for up to three additional one (1) year periods unless either party notifies the other according to terms of the agreement. Dr. Hruby currently receives an annual consulting fee of \$50,000, and is eligible to receive additional stock options and bonuses at the discretion of the Board of Directors.

1996 Incentive and Non-Qualified Stock Option Plan

As of January 1, 1996, the Company adopted its 1996 Incentive and Non-Qualified Stock Option Plan (the "Plan"), pursuant to which stock options may be granted to key employees, consultants and outside directors.

Following the completion of the Offering, the Plan will be administered by a committee (the "Committee") comprised of disinterested directors. The Committee will determine persons to be granted stock options, the amount of stock options to be granted to each such person, and the terms and conditions of any stock options as permitted under the Plan. The members of the Committee have not yet been appointed.

Both Incentive Options and Nonqualified Options may be granted under the Plan. An Incentive Option is intended to qualify as an incentive stock option within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"). Any Incentive Option granted under the Plan will have an exercise price of not less than 100% of the fair market value of the shares on the date on which such option is granted.

With respect to an Incentive Option granted to an employee who owns more than 10% of the total combined voting stock of the Company or of any parent or Subsidiary of the Company, the exercise price for such option must be at least 110% of the fair market value of the shares subject to the option on the date the option is granted. A Nonqualified Option (i.e., an option to purchase Common Stock that does not meet the Code's requirements for Incentive Options) must have an exercise price of at least the fair market value of the stock at the date of grant.

The Plan provides for the granting of options to purchase 333,333 shares of Common Stock, of which 33,334 options are outstanding at an exercise price of \$1.50 per share and 16,667 options are outstanding at an exercise price of \$3.00 per share.

#### PRINCIPAL STOCKHOLDERS

The table below sets forth information as of the date of this Prospectus and, as adjusted, assumes the sale of all of the Common Stock offered pursuant to this Prospectus. The table also assumes, with respect to each individual stockholder, the exercise of all warrants, options or conversion of all convertible securities held by such stockholder. It does not assume the exercise or conversion of securities held by any other holder of securities. The table is based on information obtained from the persons named below with respect to the beneficial ownership of shares of Common Stock by (i) each person known by the Company to be the owner of more than 5% of the aggregate outstanding shares of Common Stock, (ii) each officer and director and (iii) all officers and directors as a group.

Names and addresses of Beneficial Owner(1)	Amount and Nature of Beneficial Ownership		nding
		Prior to Offering	
David H. de Weese(3)  Judson Cooper(4)  Joshua D. Schein, Ph.D.(5)  Steven M. Oliveira(6)  Richard B. Stone(7)  135 East 57th St., 11th FL	477,683 477,683 477,683 461,016	12.4% 14.1% 14.1% 13.7%	7.2% 7.2%
New York, NY 10022 Vincent Fischetti, Ph.D.(8) Nathan Low(9) 135 East 57th St., 11th FL	414,915 305,938	12.3% 8.7%	
New York, NY 10022	179,436 1,433,049	5.3% 37.0%	2.7%

- (1) Unless otherwise indicated the address of each beneficial owner identified is 666 Third Avenue, New York, NY 10017. Unless otherwise noted, the Company believes that all persons named in the table have sole voting and investment power with respect to all shares of Common Stock beneficially owned by them.
- (2) Excludes (i) 325,000 shares of Common Stock reserved for issuance upon exercise of the Underwriter's Warrants; (ii) 333,333 shares of Common Stock reserved for issuance under the Plan, pursuant to which options to purchase 50,001 of such reserved shares have been granted; and (iii) 711,016 shares of Common Stock issuable upon the exercise of the de Weese, Fischetti and Bridge Warrants.
- (3) Includes shares underlying the 461,016 de Weese Warrants and 16,667 options held by Mr. de Weese.
- (4) Includes shares underlying 16,667 options held by Mr. Cooper.
- (5) Includes shares underlying 16,667 options held by Dr. Schein.
- (6) Mr. Oliveira is an employee of Rickel & Associates, Inc. See "Certain Transactions."
- (7) Mr. Stone is a managing director of the Underwriter. See "Underwriting."
- (8) Includes shares underlying the 150,000 Fischetti Warrants.
- (9) Mr. Low is a principal of the Underwriter. See "Underwriting."

#### CERTAIN TRANSACTIONS

The Company and CSO have entered into a consulting agreement under which CSO has agreed to provide certain business services to the Company, including business development, licensing, strategic alliances and administrative support. Pursuant to the terms of the agreement, CSO receives an annual fee of \$120,000 and will be reimbursed for certain expenses. The agreement expires on January 15, 1998 and is cancelable by the Company only for cause as defined in the agreement. Mr. Cooper, Dr. Schein and Steven Oliveira are the members of CSO. Mr. Oliveira is also an employee of Rickel & Associates, Inc., which is acting as underwriter in connection with an initial public offering of securities of Virologix Corporation, a corporation in which CSO and Mr. Stone, a managing director of the Underwriter (See "Underwriting"), each own more than ten percent of the outstanding shares of common stock.

In March 1996, Dr. Fischetti and the Company entered into an agreement pursuant to which Dr. Fischetti was to receive options to purchase up to 150,000 shares of Common Stock upon the completion of collaborative agreements with certain pharmaceutical companies. On September 15, 1996, such agreement was cancelled and Dr. Fischetti received warrants to purchase 150,000 shares of Common Stock at \$1.50 per share as compensation for introducing the Company to certain potential collaborative pharmaceutical companies.

The Company believes that the terms of the transactions described above were no less favorable than the Company could have obtained from unaffiliated third parties. The Company has adopted a policy, effective following the consummation of this Offering, that all future transactions between the Company and its officers, directors and affiliates must (i) be approved by a majority of those members of the Company's Board of Directors that are not parties, directly or indirectly through affiliates, to such transactions and (ii) be on terms no less favorable to the Company than could be obtained from unrelated third parties.

#### DESCRIPTION OF SECURITIES

The Company is authorized to issue 25,000,000 shares of Common Stock, par value \$.0001 per share, and 10,000,000 shares of Preferred Stock, par value \$.0001 per share. As of the date of this Prospectus, there are 3,367,182 shares of Common Stock outstanding and no shares of Preferred Stock outstanding.

The following summary description of the Company's Common Stock and Preferred Stock is qualified in its entirety by reference to the Articles and Bylaws, copies of which are included as exhibits to the Registration Statement of which this Prospectus is a part.

# Common Stock

Holders of Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of Common Stock entitled to vote in any election of directors may elect all of the directors standing for election. Holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor, subject to any preferential dividend rights of any outstanding Preferred Stock. Upon the liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to receive ratably the net assets of the Company available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding Preferred Stock. Holders of Common Stock have no preemptive, subscription, redemption or conversion rights. The outstanding shares of Common Stock are, and the shares offered by the Company in this Offering will be, when issued and paid for, fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Preferred Stock which the Company may designate and issue in the future.

#### Preferred Stock

The Board of Directors has the authority, without further action of the stockholders of the Company, to issue up to an aggregate of 10,000,000 shares of Preferred Stock in one or more series and to fix or alter the designations, preferences, rights and any qualifications, limitations or restrictions of the shares of each such series thereof, including the dividend rights, dividend rates, conversion rights, voting rights, terms of redemption (including sinking fund provisions), redemption price or prices, liquidation preferences and the number of shares constituting any series or the designation of such series.

The Board of Directors, without stockholder approval, can issue Preferred Stock with voting and conversion rights that could adversely affect the voting power of holders of Common Stock. The issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company. The Company has no present plans to issue any shares of Preferred Stock.

## Transfer Agent

The Company's transfer agent and registrar for the Common Stock is American Stock Transfer & Trust Company.

#### Indemnification

The Certificate of Incorporation (the "Certificate") of the Company provides that, to the fullest extent permitted by applicable law, as amended from time to time, the Company will indemnify any person who was or is a party or is threatened to be made a party to an action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was director, officer, employee or agent of the Company or serves or served any other enterprise at the request of the Company.

In addition, the Certificate provides that a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of the director's fiduciary duty. However, the Certificate does not eliminate or limit the liability of a director for any of the following reasons: (i) a breach of the director's duty of loyalty to the Company or its stockholders; (ii) acts or omissions not in good faith or that involve intentional misconduct or knowing violation of law; or (iii) a transaction from which the director derived an improper personal benefit.

The Company will purchase and maintain Directors' and Officers' Insurance as soon as the Board of Directors determines practicable, in amounts which they consider appropriate, insuring the directors against any liability arising out of the director's status as a director of the Company regardless of whether the Company has the power to indemnify the director against such liability under applicable law.

The Company has been advised that it is the position of the Commission that insofar as the foregoing provisions may be invoked to disclaim liability for damages arising under the Securities Act, such provisions are against public policy as expressed in the Securities Act and are, therefore, unenforceable.

Certain Certificate of Incorporation and Bylaw Provisions

In addition, certain provisions of the Company's Certificate and Bylaws summarized in the following paragraphs may be deemed to have an anti-takeover effect and may delay, defer or prevent a tender offer or takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by stockholders.

Special Meeting of Stockholders

The Company's Bylaws provide that special meetings of stockholders of the Company may be called only by the President of the Company, the Board of Directors or holders of not less than 10% of the votes entitled to be cast at the special meeting.

#### Authorized But Unissued Shares

The authorized but unissued shares of Common Stock and Preferred Stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions, poison pills and employee benefit plans. The existence of authorized but unissued and unreserved Common Stock and Preferred Stock may enable the Board of Directors to issue shares to persons friendly to current management which could render more difficult or discourage an attempt to obtain control of the Company by means of a proxy contest, tender, offer, merger or otherwise, and thereby protect the continuity of the Company's management.

#### SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of this Offering, the Company will have outstanding 6,617,182 shares of Common Stock, without giving effect to shares of Common Stock issuable upon exercise of (i) the Underwriter's Warrants, (ii) options granted under the Plan, (iii) the de Weese Warrants, (iv) the Fischetti Warrants or (v) the Bridge Warrants. Of such 6,617,182 shares of Common Stock, the 3,250,000 shares to be sold by the Company in this Offering will be freely tradeable without restriction or further registration under the Act, except for any shares held by "affiliates" of the Company within the meaning of the Act which shares will be subject to the resale limitations of Rule 144 promulgated under the Act.

The remaining 3,367,182 Restricted Shares were issued by the Company in private transactions in reliance upon one or more exemptions contained in the Act. The 1,288,012 Private Shares were issued in connection with two private placement transactions completed in March and September 1996 and the 2,079,170 Founders' Shares were issued to the founders of the Company in December 1995. The Restricted Shares are deemed to be "restricted securities" within the meaning of Rule 144 promulgated pursuant to the Act and may be publicly sold only if registered under the Act or sold pursuant to exemptions therefrom. Because the Founders' Shares and 1,038,008 of the Private Shares acquired in the March 1996 private placement will have been held for more than one year as of the date of this Prospectus, such shares will be eligible for public sale in accordance with the requirements of Rule 144, as described below. In addition, the remaining 250,004 of the Private Shares will be eligible for public sale in September 1997. However, certain holders of the Private Shares and the holders of the Founders' Shares have agreed with the Underwriter not to sell or otherwise dispose of such shares for a period of six months and 24 months, respectively, after the date of the consummation of the Offering.

In general, under Rule 144, as amended effective April 21, 1997, subject to the satisfaction of certain other conditions, a person, including an affiliate of the Company (or persons whose shares are aggregated with an affiliate), who has owned restricted shares of Common Stock beneficially for at least one year is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of one per cent of the total number of outstanding shares of the same class or, if the common stock is quoted on Nasdaq, the average weekly trading volume during the four calendar weeks preceding the sale. A person who has not been an affiliate of the Company for at least three months immediately preceding the sale and who has beneficially owned shares of the Company for at least two years is entitled to sell such shares under Rule 144 without regard to any of the limitations described above.

The Company intends to file a registration statement under the Securities Act to register shares of Common Stock reserved for issuance under the Plan, thereby permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act. The Company has reserved up to 333,333 shares of Common Stock for issuance under the Plan. As of the date of this Prospectus, options to purchase 50,001 of such reserved shares of Common Stock were outstanding under the Plan. See "Management--1996 Incentive and Non-Qualified Stock Option Plan."

Prior to this Offering, there has been no public market for the Common Stock, and no predictions can be made as to the effect, if any, that sales of the Common Stock will have on the market price of such securities from time to time. Sales of substantial amounts of the Company's securities in the public market could have a significant adverse effect on prevailing market prices and could impair the Company's future ability

to raise capital through the sale of its equity securities. See "Risk Factors--Shares Eligible for Future Sale."

#### UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement between the Company and the Underwriter (the "Underwriting Agreement"), the Underwriter has agreed to use its best efforts to offer 3,250,000 shares of Common Stock to the public at a purchase price of \$5.00 per share. The shares of Common Stock are offered on a "best-efforts, all-or-none" The Underwriter has made no commitment to purchase or take down all or any part of the shares of Common Stock offered hereby. The Underwriter is offering the shares of Common Stock for a period of [90 days] expiring on [June 30, 1997], which may be extended by mutual agreement between the Company and the Underwriter for an additional [90 days] ending [September 30, 1997] (and an additional period of 10 business days thereafter to permit clearance of the funds in escrow). The Underwriter will promptly send to each subscriber confirmation of the subscriber's subscription with instructions to forward funds Bank. All proceeds will be held in an escrow to the order of Bank. If the 3,250,000 shares of Common Stock are account at not sold by [June 30, 1997] (or [September 30, 1997], if extended) and the offering is canceled, all funds held in the escrow account will be promptly returned to the subscribers without interest or deduction. During the escrow period, subscribers will not be entitled to a refund of their subscription. Upon completion of the sale of all 3,250,000 shares of Common Stock, all funds in the escrow account will be released to the Company. No affiliate of the Company will purchase any shares of Common Stock in this Offering.

The Underwriter proposes to offer the shares of Common Stock at the offering price set forth on the cover page. The Underwriter has advised the Company that the Underwriter does not intend to confirm sales to any accounts over which it exercises discretionary authority.

The Underwriting Agreement provides further that the Underwriter will receive from the Company a non-accountable expense allowance of three per cent of the gross proceeds of the Offering, of which \$45,000 has been paid by the Company to date. The Company has also agreed to pay all expenses in connection with qualifying the shares of Common Stock offered hereby for sale under the laws of such states as the Underwriter may designate, including expenses of counsel retained for such purpose by the Underwriter.

The Company has agreed to sell to the Underwriter, for nominal consideration, the Underwriter's Warrants to purchase 325,000 shares of Common Stock. The Underwriter's Warrants will be nonexercisable for one year after the date of this Prospectus. Thereafter, for a period of four years, the Underwriter's Warrants will be exercisable at an amount equal to 110% of the offering price of the Common Stock sold in this Offering. The Underwriter's Warrants are not transferable for a period of one year after the date of this Prospectus, except to officers and directors of the Underwriter, members of the selling group and their officers and partners. The Company has also granted certain demand and "piggyback" registration rights to the holders of the Underwriter's Warrants.

For the life of the Underwriter's Warrants, the holders thereof are given, at a nominal cost, the opportunity to profit from a rise in the market price of the Common Stock with a resulting dilution in the interest of other stockholders. Further, such holders may be expected to exercise the Underwriter's Warrants at a time the Company would in all likelihood be able to obtain equity capital on terms more favorable than those provided in the Underwriter's Warrants.

Nathan Low, President of the Underwriter, beneficially owns an aggregate of 179,436 shares of Common Stock (representing 5.3% of the outstanding Common Stock) of the Company. In addition, Richard Stone, a managing director of the Underwriter, beneficially owns an aggregate of 414,915 shares of Common Stock (representing 12.3% of the outstanding Common Stock) of the Company. As a result, this Offering is being conducted in accordance with the applicable provisions of Section 2720 of the NASD Rules of Conduct.

Accordingly, the initial public offering price can be no higher than that recommended by a "qualified independent underwriter" meeting certain standards.

\_\_\_\_\_ served as qualified independent underwriter in connection with this Offering.

\_\_\_\_\_ has assumed the responsibilities of acting as qualified

independent underwriter in pricing the Offering, has performed due diligence
with respect to the information contained herein and has participated in
preparing the Registration Statement. In its role as qualified independent
underwriter, will receive an aggregate fee from the
Underwriter of, of which has been paid and or
which is to be paid upon consummation of the Offering. In addition,
will be reimbursed by the Underwriter for up to for
certain expenses incurred in connection with its services, including its
independent counsel is not purchasing Common Stock in this
Offering, [but it will participate in the Offering as a selected dealer of not
more than 10% of the Common Stock offered hereby.]

The Underwriting Agreement provides for reciprocal indemnification between the Company and the Underwriter against liabilities in connection with the Offering, including liabilities under the Securities Act.

The initial public offering price of the shares of Common Stock offered hereby has been determined by negotiation between the Company and the Underwriter, and within the parameters set forth above, and does not necessarily bear any direct relationship to the Company's assets, earnings, book value per share or other generally accepted criteria of value. Factors considered in determining the offering price of the shares of Common Stock included the business in which the Company is engaged, the Company's financial condition, an assessment of the Company's management, the general condition of the securities markets and the demand for similar securities of comparable companies.

The foregoing includes a summary of the principal terms of the Underwriting Agreement and does not purport to be complete. Reference is made to the copy of the Underwriting Agreement filed as an exhibit to the Registration Statement of which this

Prospectus is a part.

#### LEGAL MATTERS

The validity of the securities offered by this Prospectus will be passed upon for the Company by Eilenberg & Zivian, New York, New York. Eilenberg & Zivian owns 3,334 shares of Common Stock and has from time to time represented CSO and its members. Squadron, Ellenoff, Plesent & Sheinfeld, LLP, New York, New York, has acted as counsel to the Underwriter with respect to certain legal matters related to this Offering.

## **EXPERTS**

The financial statements of the Company as of December 31, 1995 and 1996, for the period from inception (December 28, 1995) through December 31, 1995, for the year ended December 31, 1996, and for the period from inception through December 31, 1996 included in this Prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to such financial statements) of Price Waterhouse LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

## AVAILABLE INFORMATION

The Company has filed a Registration Statement on Form SB-2 under the Act with the Securities and Exchange Commission with respect to the Common Stock offered hereby. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits thereto: certain portions have been omitted pursuant to rules and regulations of the Commission. Statements contained in this Prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, reference is made to the copy of such contract or document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference. The Registration Statement, including the exhibits and schedules thereto, may be inspected without charge, at the Public Reference Facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, 1400 Citicorp Center, 500 West Madison, Chicago, Illinois 60661; and 7 World Trade Center, New York, New York 10048 and copies of all or any part thereof may be obtained upon payment of the fees prescribed by the Commission. Electronic registration statements made through the Electronic Data Gathering, Analysis and Retrieval System are publicly available through the Commissions's World Wide Web site at http://www.sec.gov.

ANTIBIOTIC. A substance, such as penicillin or streptomycin, produced by or derived from certain fungi, bacteria, and other organisms, that can destroy or inhibit the growth of other microorganisms. Antibiotics are widely used in the prevention and treatment of infectious diseases.

ANTIGEN. A substance that when introduced into the body stimulates the production of an antibody. Antigens include toxins, bacteria, foreign blood cells, and the cells of transplanted organs.

COMMENSAL. An organism participating in a symbiotic relationship in which one species derives some benefit while the other is unaffected.

EFFECTOR. A small molecule that when bound to the allosteric site of an enzyme causes either a decrease or an increase in the activity of the enzyme.

 ${\tt ENTEROCOCCUS.}\ {\tt A}$  usually nonpathogenic streptococcus that inhabits the intestine.

ENZYME. Any of numerous proteins or conjugated proteins produced by living organisms and functioning as biochemical catalysts.

FIBRIN. An elastic, insoluble, whitish protein produced by the action of thrombin on fibrinogen and forming an interlacing fibrous network in the coagulation of blood.

FLUOROQUINOLONE. Chemical analogs of nalidixic acid, fluoroquinolones exert their anti-microbial activity by inhibition of bacterial DNA gyrase (involved in DNA coiling) and, generally, have a wide spectrum of antibiotic activity.

HUMORAL IMMUNITY. The component of the immune response involving the transformation of B-lymphocytes into plasma cells that produce and secrete antibodies to a specific antigen.

IMMUNE RESPONSE. An integrated bodily response to an antigen, especially one mediated by lymphocytes and involving recognition of antigens by specific antibodies or previously sensitized lymphocytes.

IMMUNE SYSTEM. The integrated body system of organs, tissues, cells, and cell products such as antibodies that differentiates self from nonself and neutralizes potentially pathogenic organisms or substances.

IMMUNOGLOBULIN. Any of a group of large glycoproteins secreted by plasma cells in vertebrates that function as antibodies in the immune response by binding the specific antigens. Immunoglobulins are found along the respiratory and intestinal tracts, on mucosal surfaces, and in milk, saliva, tears, and blood serum.

IMMUNOSUPPRESSION. Suppression of the immune response, as by drugs or radiation, in order to prevent the rejection of grafts or transplants or control autoimmune diseases. Also called immunodepression.

LACTOFERRIN. An iron-binding glycoprotein found in mucosal secretions and blood neutrophils, which has antimicrobial activity.

LYMPHOCYTE. Any of the nearly colorless cells formed in lymphoid tissue, as in the lymph nodes, spleen, thymus, and tonsils, constituting between 22 and 28 percent of all white blood cells in the blood of a normal adult human being. Lymphocytes function in the development of immunity and include two specific types, B cells and T cells.

LYSOZYME. An enzyme occurring naturally in egg white, human tears, saliva, and other body fluids, capable of destroying the cell walls of certain bacteria and thereby acting as a mild antiseptic.

METHICILLIN. A synthetic antibiotic,  $C\17\19\N\2\0\6\NaS$ , related to penicillin and most commonly used in treatment of infections caused by penicillinase-producing staphylococci.

MUCOUS MEMBRANE. A membrane lining all body passages that communicate with the air, such as the respiratory and alimentary tracts, and having cells and associated glands that secrete mucus.

PATHOGEN. An agent that causes disease, especially a living microorganism such as a bacterium or fungus.

PENICILLIN. Any of a group of broad-spectrum antibiotic drugs obtained from penicillium molds or produced synthetically, most active against gram-positive bacteria and used in the treatment of various infections and diseases.

PEROXIDASE. Any of a group of enzymes that occur especially in plant cells and catalyze the oxidation of a substance by a peroxide.

PHARYNGITIS. Inflammation of the pharynx, the section of the alimentary canal that extends from the mouth and nasal cavities to the larynx, where it becomes continuous with the esophagus.

RHEUMATIC FEVER. A severe infectious disease occurring chiefly in children, characterized by fever and painful inflammation of the joints and frequently resulting in permanent damage to the valves of the heart.

SEROTYPE. A group of closely related microorganisms distinguished by a characteristic set of antigens.

SUBUNIT VACCINE. A vaccine consisting of purified or semi-purified components of an infectious organism for which protection is desired.

STREPTOCOCCUS. A round to ovoid, gram-positive, often pathogenic bacterium of the genus Streptococcus that occurs in pairs or chains, many species of which destroy red blood cells and cause various diseases in human beings, including erysipelas, scarlet fever, and septic sore throat.

 $\ensuremath{\mathsf{SYSTEMIC}}.$  Of, relating to, or affecting the entire body or an entire organism.

TETRACYCLINE. A yellow crystalline compound,  $C\2\\N\24\N\2\N\$  synthesized or derived from certain microorganisms of the genus Streptomyces and used as a broad-spectrum antibiotic.

TOXIN. A poisonous substance, especially a protein, that is produced by living cells or organisms and is capable of causing disease when introduced into the body tissues but is often also capable of inducing neutralizing antibodies or antitoxins.

VACCINE. A preparation of a weakened or killed pathogen, such as a bacterium or virus, or of a portion of the pathogen's structure that upon administration stimulates antibody production against the pathogen but is incapable of causing severe infection.

VANCOMYCIN. An antibiotic,  $C\66\H\75\C1\2\N\9\0\24\$ , produced by the actinomycete Streptomyces orientalis, found in Indonesian and Indian soil, and effective against staphylococci and spirochetes.

VIRUS. Any of various simple submicroscopic parasites of plants, animals, and bacteria that often cause disease and that consist essentially of a core of RNA or DNA surrounded by a protein coat. Unable to replicate without a host cell, viruses are typically not considered living organisms.

# INDEX TO FINANCIAL STATEMENTS

	Page
Report of Independent Accountants	F-2
Balance Sheet as of December 31, 1995 and 1996	F-3
Statement of Operations for the period from December 28, 1995 (inception) through December 31, 1995, for the year ended December 31, 1996 and for the period from inception through December 31, 1996	F-4
Statement of Changes in Stockholder's Equity for the period from inception through December 31, 1996	F-5
Statement of Cash Flows for the period from inception through December 31, 1995, for the year ended December 31, 1996 and for the period from inception through December 31, 1996	F-6
Notes to Financial Statements	F-7

#### REPORT OF INDEPENDENT ACCOUNTANTS

March 3, 1997

To the Board of Directors and Stockholders of SIGA Pharmaceuticals, Inc.

In our opinion, the accompanying balance sheet and related statements of operations, of cash flows and of changes in stockholders' equity present fairly, in all material respects, the financial position of SIGA Pharmaceuticals, Inc. (a development stage company) at December 31, 1995 and 1996, and the results of its operations for the period from inception (December 28, 1995) through December 31, 1995, for the year ended December 31, 1996 and for the period from inception through December 31, 1996, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for the opinion expressed above.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company is a development stage company and has suffered operating losses since inception. These and other factors, as discussed in Note 1, raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

# BALANCE SHEET

\_\_\_\_\_\_\_

	December 31, 1995	December 31, 1996
ASSETS		
Current assets Cash and cash equivalents Prepaid sponsored research (Note 7) Deferred offering costs (Note 2)	- - -	\$ 42,190 370,798 115,688
TOTAL CURRENT ASSETS	-	528,676
Prepaid sponsored research (Note 7) Equipment, net (Note 3) Other assets	\$ 6,937	30,208 21,425 609
TOTAL ASSETS	\$ 6,937 ======	\$ 580,918 =======
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities Accounts payable Accrued salaries Patent preparation fees payable (Note 7)	\$ 7,937 - -	\$ 92,241 22,260 66,437
TOTAL LIABILITIES	7,937	180,938
Commitments and contingencies (Notes 6, 7, 8 and 9)	-	-
Stockholders' equity Preferred stock (\$.0001 par value, 10,000,000 shares authorized, none issued and outstanding) Common stock (\$.0001 par value, 25,000,000 shares authorized, 2,079,170 and 3,367,182	-	-
shares issued and outstanding at December 31, 19 and 1996, respectively) (Notes 4 and 9) Additional paid-in capital Stock subscriptions outstanding Deficit accumulated during the development stage	208 1,040 (1,248) (1,000)	2,668,819 - (2,269,176)
TOTAL STOCKHOLDERS' EQUITY (DEFICIT)	(1,000)	399,980
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 6,937 ======	\$ 580,918 =======

The accompanying notes are an integral part of these financial statements.

	1995 (inception to December	Year ) Ended December 31, 1996	December 28, 1995 (inception) to December 31, 1996
Operating expenses General and administrative (including amounts to related parties of \$444,000 for the year ended December 31, 1996) Research and development (including amounts to related parties of \$75,000 for the year ended	\$ 1,000	\$ 787,817	\$ 788,817
December 31, 1996)	-	662,205	
Patent preparation fees	-	452,999	•
Stock option and warrant compensation	-	367,461	367,461
TOTAL OPERATING EXPENSES	1,000	2,270,482	2,271,482
Interest income		2,306	2,306
NET LOSS		\$(2,268,176) =======	\$(2,269,176) =======
NET LOSS PER COMMON SHARE		\$ (.66) ======	
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	2,498,581 ======	3,439,559	

The accompanying notes are an integral part of these financial statements

	COMMON	STOCK	ADDITIONAL	STOCK SUBSCRIP-	DEFICIT ACCUMULATED DURING THE DEVELOP-	TOTAL
			PAID-IN	TIONS	MENT	STOCKHOLDERS'
	SHARES	PAR VALUE	CAPITAL	OUTSTANDING	STAGE	EQUITY (DEFICIT)
Issuance of common stock at inception	2,079,170	\$ 208	\$ 1,040	\$(1,248)	-	-
Net loss	-	-	-	-	\$ (1,000)	\$ (1,000)
Balances at December 31, 1995	2,079,170	208	1,040	(1,248)	(1,000)	(1,000)
Net proceeds from issuance and sale of common stock	1,038,008	104	1,551,333	-	-	1,551,437
Net proceeds from issuance and sale of common stock	250,004	25	748,985	-	-	749,010
Receipt of stock subscription outstanding	ons -	-	-	1,248	-	1,248
Issuance of compensatory opt and warrants		-	367,461	-	-	367,461
Net loss	-	-	-	-	(2,268,176)	(2,268,176)
Balances at December 31, 1996	3,367,182	\$ 337 ======	\$2,668,819 =======	-	\$(2,269,176) =======	\$ 399,980 ======

The accompanying notes are an integral part of these financial statements.

- ------

	1995 ( TO 31	MBER 28, INCEPTION) DECEMBER , 1995	YEAR ENDED DECEMBER 31, 1996	DECEMBER 28, 1995 (INCEPTION) TO DECEMBER 31, 1996
Cash flows from operating activities: Net loss	\$	(1.000)	\$(2.268.176)	\$(2,269,176)
Adjustments to reconcile net loss to net cash used in operating activities:	*	(=/000)	4(=,=00,=:0)	<del>+</del> (=,===,=: =,
Depreciation Stock option and warrant compensation Changes in assets and liabilities:		-	7,249 367,461	7,249 367,461
Prepaid sponsored research Other assets Accounts payable and accrued		- (6,937)	(401,006) 6,328	
expenses		7,937	173,001	180,938
NET CASH USED IN OPERATING ACTIVITIES		-		
Cash flows from investing activities: Capital expenditures		-	(28,674)	(28,674)
NET CASH USED IN INVESTING ACTIVITIES		-	(28,674)	(28,674)
Cash flows from financing activities: Net proceeds from issuance of common				
Stock	n a	-		2,300,447
Receipt of stock subscriptions outstandi Deferred offering costs		- -	1,248 (115,688)	
NET CASH PROVIDED FROM FINANCING ACTIVITIES		-	2,186,007	2,186,007
Net increase in cash and cash equivalents Cash and cash equivalents, beginning of		-	42,190	42,190
period				
Cash and cash equivalents, end of period	==	- ======	\$ 42,190 ======	•

There were no cash payments for interest or income taxes for the periods ended December 31, 1995 and 1996.
The accompanying notes are an integral part of these financial statements.

#### 1. ORGANIZATION AND BASIS OF PRESENTATION

#### ORGANIZATION

SIGA Pharmaceuticals, Inc. (the "Company") was incorporated in the State of Delaware on December 28, 1995. The Company is engaged in the discovery, development and commercialization of vaccines, antibiotics, and novel anti-infectives for the prevention and treatment of infectious diseases. The Company's technologies are licensed from third parties and the Company depends on third parties to conduct research on its behalf pursuant to research and consulting agreements.

#### BASIS OF PRESENTATION

The Company's activities since inception have consisted primarily of sponsoring research and development, performing business and financial planning, preparing and filing patent applications, and raising capital. Accordingly, the Company is considered to be a development stage company and will require additional financing to achieve commercialization of its technologies.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. Since inception, the Company has incurred cumulative net operating losses of \$2,269,176 and expects to incur substantial additional losses to complete the commercialization of its technologies. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company's ability to continue as a going concern is dependent upon its ability to generate sufficient cash flow to meet its obligations as they come due. Management is actively pursuing various options which include securing additional equity financing through an initial public offering and believes that sufficient funding will be available to meet its planned business objectives. The Company has entered into a non-binding letter of intent with an underwriter to sell shares of the Company's common stock in an initial public offering (the "IPO") pursuant to the Securities Act of 1933. The financial statements do not include any adjustments relating to the recoverability of the carrying amount of recorded assets or the amount of liabilities that might result from the outcome of these uncertainties.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## CASH EQUIVALENTS

Cash equivalents consist of short term, highly liquid investments, with original maturities of less than three months when purchased and are stated at cost. Interest is accrued as earned.

## NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

#### **EQUIPMENT**

Equipment is stated at cost. Depreciation is provided on the straight-line method over the estimated useful lives of the respective assets, none of which exceeds three years.

#### DEFERRED OFFERING COSTS

In connection with the Company's proposed IPO, the Company has incurred certain costs which have been deferred. In the event the proposed IPO is not consummated the deferred offering costs will be expensed.

#### RESEARCH AND DEVELOPMENT

Research and development costs are expensed as incurred and include costs of third parties who conduct research and development, pursuant to development and consulting agreements, on behalf of the Company. Costs related to the acquisition of technology rights, for which development work is still in process, and that have no alternative future uses, are expensed as incurred and considered a component of research and development costs.

#### INCOME TAXES

Income taxes are accounted for under the asset and liability method prescribed by Statement of Financial Accounting Standard No. 109, "Accounting for Income Taxes." Deferred income taxes are recorded for temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities. Deferred tax assets and liabilities reflect the tax rates expected to be in effect for the years in which the differences are expected to reverse. A valuation allowance is provided if it is more likely than not that some or all of the deferred tax asset will not be realized.

# NET LOSS PER COMMON SHARE

Net loss per common share is computed using the weighted average number of common shares and common share equivalents assumed to be outstanding during the period. Common share equivalents consist of the Company's common shares issuable upon exercise of stock options and outstanding warrants. Pursuant to the requirements of the Securities and Exchange Commission, stock options, warrants and shares issued by the Company within one year of the date of the initial public offering at prices below the proposed offering price have been included in the calculation of weighted average shares outstanding as if they were outstanding for all periods presented using the treasury stock method.

# ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the  $\[$ 

#### NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

#### FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying value of cash and cash equivalents, and accounts payable and accrued expenses approximates fair value due to the relatively short maturity of these instruments.

# 3. EQUIPMENT

Equipment consisted of the following at December 31, 1996:

Computer equipment \$ 28,674
Less - Accumulated depreciation (7,249)
Equipment, net \$ 21,425

## 4. STOCKHOLDERS' EQUITY

In March 1996, the Company completed a private offering of 1,038,008 shares of its common stock at the price of \$1.50 per share, providing gross proceeds of \$1,557,000, and net proceeds, after deducting expenses, of \$1,551,437. In September 1996, the Company completed a second private offering of 250,004 shares of common stock at a price of \$3.00 per share providing gross proceeds of \$750,000 and net proceeds, after deducting expenses, of \$749,010.

#### REVERSE STOCK SPLIT

Effective December 1996, the Company implemented a one for six reverse stock split (without changing the par value thereof) applicable to all issued and outstanding shares of the Company's common stock. All fractional shares resulting from such stock split were rounded up to the next whole share. All common shares, stock options, warrants and related per share data, reflected in the accompanying financial statements and notes thereto, have been presented as if such change had occurred at December 28, 1995.

# STOCK OPTION PLAN AND WARRANTS

In January 1996, the Company implemented its 1996 Incentive and Non-Qualified Stock Option Plan (the "Plan") whereby options to purchase up to 333,333 shares of the Company's common stock may be granted to employees, consultants and outside directors of the

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

\_\_\_\_\_\_

Company. The exercise period for options granted under the Plan, except those granted to outside directors, is determined by a committee of the Board of Directors. Stock options granted to outside directors pursuant to the Plan must have an exercise price equal to or in excess of the fair market value of the Company's common stock at the date of grant and become exercisable over a period of three years with a third of the grant being exercisable at the completion of each year of service subsequent to the grant. The fair market value of the Company's common stock is determined by a committee of the Board of Directors. During the year ended December 31, 1996, the Company granted options under the Plan to employees to purchase 33,334 shares of its common stock at an exercise price of \$1.50 per share and options to purchase 16,667 shares at an exercise price of \$3.00 per share. All such grants were outstanding at December 31, 1996 and were eligible for exercise. There were no grants to outside directors during the year ended December 31, 1996.

In November 1996, the Company entered into an employment agreement with its President and Chief Executive Officer. Under the terms of the agreement, the employee received warrants to purchase 461,016 shares of common stock at \$3.00 per share. Warrants to purchase 25% of such shares were exercisable upon issuance and the remaining warrants are exercisable on a pro rata basis on the first, second and third anniversaries of the agreement (see Note 8).

The Company applies Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations in accounting for warrants issued to employees and stock options granted under the Plan. During the year ended December 31, 1996, compensation expense of \$57,627 has been recognized for warrants issued to employees and \$8,334 for options issued pursuant to its stock-based compensation plan calculated based upon the difference between the exercise price of the warrant or option and the fair market value of the Company's common stock on the date of grant. Had compensation cost for warrants issued and stock options granted been determined based upon the fair value at the grant date for awards consistent with the methodology prescribed under Statement of Financial Accounting Standards No. 123 ("FAS 123"), "Accounting for Stock-Based Compensation," the Company's net loss and loss per common share would have been increased by approximately \$73,000, or approximately \$.02 per share.

In March 1996, the Company entered into an agreement with a consultant, who is a stockholder, whereby the consultant would be granted options to purchase 150,000 shares of the Company's common stock, at an exercise price of \$1.50 per share, contingent upon completion of collaborative agreements with specified pharmaceutical companies. In September 1996, such agreement was terminated and the consultant was issued warrants to purchase 150,000 shares of its common stock, at an exercise price of \$1.50 per share. The warrants were exercisable upon issuance and expire on the twentieth anniversary of the date

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

of issuance. The Company has recognized non-cash compensation expense of \$301,500 for the year ended December 31, 1996, based upon the fair value of such warrants on the date of grant (see Note 6).

The fair value of the options and warrants granted to employees and the warrants issued to the consultant during 1996 ranged from \$.22 to \$2.01 on the date of the respective grant using the Black-Scholes option-pricing model assuming (a) no dividend yield, (b) a risk-free interest rate ranging from 5.26% to 6.26% based on the date of the respective grant, (c) no forfeitures, and (d) an expected life of three years. As permitted under the provisions of FAS 123, and based on the historical lack of a public market for the Company's common stock, no factor for volatility has been reflected in the option and warrant pricing calculation.

## 5. INCOME TAXES

The Company has incurred losses since inception which have generated net operating loss carryforwards of approximately \$1,901,000 for federal and state income tax purposes. These carryforwards are available to offset future taxable income and expire in 2011 for federal income tax purposes. These losses are subject to limitation on future years' utilization should certain ownership changes occur.

The net operating loss carryforwards and temporary differences, arising primarily from noncash compensation expense, result in a noncurrent deferred tax benefit at December 31, 1996 of approximately \$877,000. In consideration of the Company's accumulated losses and the uncertainty of its ability to utilize this deferred tax benefit in the future, the Company has recorded a valuation allowance of an equal amount on such date to fully offset the deferred tax benefit amount.

For the year ended December 31, 1996, the Company's effective tax rate differs from the federal statutory rate principally due to net operating losses and other temporary differences for which no benefit was recorded, state taxes and other permanent differences.

## 6. RELATED PARTIES

#### CONSULTING AGREEMENTS

The Company has entered into a consulting agreement, expiring January 1, 2000, with CSO Ventures LLC ("CSO") under which CSO provides the Company with business development, operations and other advisory services. Pursuant to the agreement CSO is paid an annual consulting fee of \$120,000. Two Executive Vice Presidents of the Company are principals of CSO. The agreement is only cancelable by the Company for cause, as defined in the

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

\_\_\_\_\_\_

agreement. During the year ended December 31, 1996, the Company incurred expense of \$120,000 pursuant to the agreement.

In connection with the development of its licensed technologies the Company has entered into a consulting agreement with the scientist who developed such technologies, under which the consultant serves as the Company's Chief Scientific Advisor. The scientist, who is a stockholder, shall be paid an annual consulting fee of \$75,000. The agreement, which commenced in January 1996 and is only cancelable by the Company for cause, as defined in the agreement, has an initial term of two years and provides for automatic renewals of three additional one year periods unless either party notifies the other of its intention not to renew. Research and development expense incurred under the agreement amounted to \$75,000 for the year ended December 31, 1996. During the year ended December 31, 1996, the scientist was issued warrants to purchase 150,000 shares of the Company's common stock at an exercise price of \$1.50 per share (see Note 4).

#### **EMPLOYMENT AGREEMENTS**

The Company has employment agreements, expiring in December 1998, with its two Executive Vice Presidents ("EVPS"), who are principal shareholders of the Company and principals of CSO, under which the EVPs are each to be paid minimum annual compensation of \$150,000. In addition, the Company granted each of the EVPs options to purchase 16,667 shares of the Company's common stock, at an exercise price of \$1.50 per share, upon execution of the respective agreements. During the term of the agreements the EVPs are each to receive annual stock option grants to purchase 16,667 common shares exercisable at the fair market value at the date of grant. Under the provisions of the agreements the EVPs will each receive a cash payment equal to 1.5% of the total consideration received by the Company in a transaction resulting in a greater than 50% change in ownership of the outstanding common stock of the Company. The Company incurred \$324,000 of expense for the year ended December 31, 1996 pursuant to these agreements.

# UNDERWRITING AGREEMENT

As discussed in Note 1, the Company has secured a nonbinding letter of intent with an underwriter to sell shares of the Company's common stock in an IPO. At December 31, 1996, employees of the underwriter hold 594,351 shares or approximately 18% of the Company's outstanding common stock.

# 7. LICENSE AND RESEARCH SUPPORT AGREEMENT

In January 1996, the Company entered into a license and research support agreement with third parties. Under the terms of the agreement, the Company has been granted an exclusive world-wide license to make, use and sell products derived from the licensed technologies. In

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

\_\_\_\_\_\_

consideration of the license grant the Company is obligated to pay royalties equal to a specified percentage of net sales of products incorporating the licensed technologies. In the event the Company sublicenses any technologies covered by the agreement the third parties would be entitled to a significant percentage of the sublicense revenue received by the Company. In addition, the Company is required to make milestone payments, up to \$225,000 per product, for each product developed from the licensed technologies.

The Company has agreed to sponsor further research by the third parties for the development of the licensed technologies for a period of two years from the date of the agreement, in return for a payment of \$725,000 to such third parties. The period of sponsored research will automatically be renewed for additional one-year periods unless terminated by the Company. Amortization of prepaid sponsored research under this agreement was \$332,292 for the year ended December 31, 1996. The Company also agreed to reimburse the third parties for costs associated with the preparation, filing and prosecution of patent rights for the licensed technologies incurred prior to the execution of the license and research support agreement. The agreement is only cancelable by the Company for cause, as defined in the agreement. The Company has expensed \$310,986 of reimbursable patent preparation costs pursuant to the agreement during the year ended December 31, 1996, of which \$66,437 remains accrued at December 31, 1996.

In January 1996, the Company entered into research agreements with third parties. Under the terms of the agreements, the Company has agreed to fund two years of research in return for annual payments of \$183,320. Research and development expense under these agreements amounted to \$175,024 for the year ended December 31, 1996.

## 8. COMMITMENTS AND CONTINGENCIES

#### **EMPLOYMENT AGREEMENT**

The Company has an employment agreement with its Director of Bacterial Research which expires in December 1997. Under the terms of the agreement, the employee is to receive minimum annual compensation of \$90,000. The agreement is only cancelable by the Company for cause, as defined in the agreement. During the year ended December 31, 1996, the Company incurred \$90,000 of expense pursuant to the agreement.

In November 1996, the Company entered into an employment agreement, expiring in November 1999, with its President and Chief Executive Officer. Under the terms of the agreement, the employee is to receive annual base compensation of \$225,000 and options to purchase 16,667 shares of the Company's common stock, exercisable at the fair market value on the date of grant. Upon execution of the agreement, the Company granted the employee options to purchase 16,667 shares of its common stock at an exercise price of \$3.00 per

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1995 AND 1996

share. In addition, the employee was issued warrants to purchase 461,016 shares of common stock at \$3.00 per share (see Note 4). Under the provisions of the agreement, the President will receive a cash payment equal to 1.5% of the total consideration received by the Company in a transaction resulting in a greater than 50% change in ownership of the outstanding common stock of the Company. During the year ended December 31, 1996, the Company incurred \$28,435 of expense pursuant to the agreement.

#### 9. SUBSEQUENT EVENTS

In January and February 1997, in contemplation of its proposed IPO, the Company issued bridge notes (the "Bridge Notes") in the principal amount of \$1,000,000, for which the Company received proceeds, net of offering costs, of approximately \$990,000. The Bridge Notes bear interest at 10% per annum and are due and payable together with accrued but unpaid interest, on the earlier of (a) the closing of an initial public offering of the Company's common stock, or (b) six months after the date of execution of the Bridge Notes. In conjunction with the issuance of the Bridge Notes, the Company entered into warrant agreements whereby the purchasers of the Bridge Notes will be issued warrants to purchase a number of shares of common stock determined by dividing (i) one-half of the gross proceeds of the Bridge Notes (\$500,000) by (ii) the IPO price per share. The warrants will provide for an exercise price per share equal to the IPO price per share and will not be exercisable for a period of one year subsequent to issuance. In the event that prior to the maturity date of the Bridge Notes (i) the Company's proposed IPO is not consummated, or (ii) the Company is acquired by another corporation, the holders of the Bridge Notes will receive warrants to purchase an aggregate of 100,000 shares of common stock at an exercise price of \$5.00 per share.

The offering costs, in the amount of approximately \$10,000, incurred by the Company in connection with the bridge financing, have been allocated to the Bridge Notes and recorded as deferred debt issuance costs and are being amortized over the six month term of the Bridge Notes. Upon completion of the Company's planned IPO and repayment of the Bridge Notes from the net proceeds of the offering, the unamortized portion of the debt discount will be immediately expensed.

#### PART II

#### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 24. Indemnification of Directors and Officers.

The Certificate of Incorporation (the "Certificate") of the Company provides that, to the fullest extent permitted by applicable law, as amended from time to time, the Company will indemnify any person who was or is a party or is threatened to be made a party to an action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was director, officer, employee or agent of the Company or serves or served any other enterprise at the request of the Company.

In addition, the Certificate provides that a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of the director's fiduciary duty. However, the Certificate does not eliminate or limit the liability of a director for any of the following reasons: (i) a breach of the director's duty of loyalty to the Company or its stockholders; (ii) acts or omissions not in good faith or that involve intentional misconduct or knowing violation of law; or (iii) a transaction from which the director derived an improper personal benefit.

The Company will purchase and maintain Directors' and Officers' Insurance as soon as the Board of Directors determines practicable, in amounts which they consider appropriate, insuring the directors against any liability arising out of the director's status as a director of the Company regardless of whether the Company has the power to indemnify the director against such liability under applicable law.

Item 25. Other Expenses of Issuance and Distribution.

•	SEC Registration Fee	\$	5	,61	8
	Nasdag-SCM Listing Fee			, 67	
	NASD Filing Fee			, 35	
,	Accounting Fees and Expenses*	\$	70	, 00	0
I	Printing and Engraving*	\$	60	, 00	0
-	Legal Fees and Expenses*	\$	75	, 00	0
I	Blue Sky Fees and Expenses	\$	46	, 00	0
•	Transfer Agent and Registrar Fees*	\$	2	, 00	0
1	Miscellaneous Expenses*	\$	10	, 35	3
					-
•	Total	\$2	280	, 00	0
		==	===	===	=

<sup>\*</sup> Estimated.

Item 26. Recent Sales of Unregistered Securities.

The following discussion gives retroactive effect to the one for 6 reverse stock split effected on December 6, 1996. Since its organization in December 1995, the Company has sold and issued the following unregistered securities:

In December 1995, the Company issued 2,079,170 shares of Common Stock to Judson A. Cooper, Steven M. Oliveira, Joshua D. Schein, Vincent A. Fischetti, Kevin F. Jones, Dennis Hruby and Richard Stone for nominal consideration in connection with the formation of the Company.

In March 1996, the Company sold 1,038,008 shares of Common Stock to eighteen accredited investors for gross proceeds of \$1,557,000 in cash.

In September 1996, the Company issued 250,004 shares of Common Stock to twelve accredited investors and two non-accredited investors for \$750,000 in cash.

In February 1997, the Company entered into warrant agreements to issue warrants to purchase an estimated 100,000 shares of common stock to eight accredited investors in connection with a \$1,000,000 bridge financing completed on February 28, 1997.

#### Item 27. Exhibits.

Exhibit Number	Description of Exhibits
1	UNDERWRITING AGREEMENT
1(a)	Form of Underwriting Agreement
1(b)	Form of Underwriter's Warrant
1(c)	Escrow Agreement by and among the Company, Sunrise Securities Corp. and United States Trust Company of New York, dated as of, 1997
1(d)	Form of Subscription Agreement to purchase shares of Common Stock of the Company
3	ARTICLES OF INCORPORATION AND BY-LAWS
3(a)	Articles of Incorporation of the Company, in effect as of the date hereof
3(b)	Bylaws of the Company, in effect as of the date hereof
4	INSTRUMENTS DEFINING THE RIGHTS OF HOLDERS
4(a)	Form of Common Stock Certificate
4(b) 4(c)	1996 Incentive and Non-Qualified Stock Option Plan(1) Warrant Agreement dated as of September 15, 1996 between the Company
4(0)	and Vincent A. Fischetti(1)
4(d)	Warrant Agreement dated as of November 18, 1996 between the Company and David de Weese(1)
4(e)	Form of Bridge Loan Letter Agreement for Bridge Investors
4(f)	Form of Promissory Note for Bridge Investors
4(g)	Form of Warrant Agreement for Bridge Investors
4(h)	Form of Registration Rights Agreement for Bridge Investors
5	OPINION RE: LEGALITY
5(a)	Opinion of Eilenberg & Zivian
10	MATERIAL CONTRACTS
10(a)	License and Research Support Agreement between the Company and The Rockefeller University, dated as of January 31, 1996; and
	Amendment to License and Research Support Agreement between the
	Company and The Rockefeller University, dated as of October 1,
	1996(2)
10(b)	Research Agreement between the Company and Emory University, dated
	as of January 31, 1996(2)
10(c)	Research Support Agreement between the Company and Oregon State
10(1)	University, dated as of January 31, 1996(2)
10(d)	Employment Agreement between the Company and Dr. Joshua D. Schein,
40(-)	dated as of January 1, 1996(1)
10(e)	Employment Agreement between the Company and Judson A. Cooper,
	dated as of January 1, 1996; and Amendment No. 1 to Employment Agreement between the Company and Judson A. Cooper, dated as of
	November 18, 1996(1)
10/5)	November 10, 1990(1)

- 10(f) Employment Agreement between the Company and Dr. Kevin F. Jones, dated as of January 1, 1996
- 10(g) Employment Agreement between the Company and David de Weese, dated as of November 18, 1996(1)
- 10(h) Consulting Agreement between the Company and CSO Ventures LLC, dated as of January 1, 1996
- 10(i) Consulting Agreement between the Company and Dr. Vincent A. Fischetti, dated as of January 1, 1996
- 10(j) Consulting Agreement between the Company and Dr. Dennis Hruby, dated as of January 1, 1996

- 10(k) Letter Agreement between the Company and Dr. Vincent A. Fischetti, dated as of March 1, 1996
- STATEMENT RE: COMPUTATION OF PER SHARE EARNINGS 11
- Statement re: Computation of per share earnings 11(a)
- CONSENTS OF EXPERTS AND COUNSEL 24 Consent of Eilenberg & Zivian 24(a)
- Consent of Price Waterhouse LLP 24(b)
- These agreements were entered into prior to the reverse split of the Company's Common Stock and, therefore, do not reflect such reverse split.
- Confidential information is omitted and identified by a  $^{\star}$  and filed separately with the SEC pursuant to a request for Confidential Treatment.

#### Item 28. Undertakings.

- The undersigned Registrant in all instances will provide to the

Underwriter at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

- Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the undersigned Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the undersigned Registrant of expenses incurred or paid by a director, officer or controlling person of the undersigned Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the undersigned Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of
  - The undersigned Registrant hereby undertakes that:
  - (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of a registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the undersigned Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of the registration statement as of the time it was declared effective; and
  - (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
  - The undersigned Registrant hereby undertakes that it will:
  - File, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:
    - (i) Include any prospectus required by Section 10(a)(3) of the Securities Act;
    - (ii) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the registration statement; and

- (iii)Include any additional or changed material information on the plan of distribution.
- (2) For determining liability under the Securities Act, treat each posteffective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.
- (3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

#### SIGNATURES

In accordance with the requirements of the Securities Act of 1933, the

undersigned Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form SB-2 and authorized this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, on the 10th day of March, 1997.

SIGA PHARMACEUTICALS, INC.

By: /s/ David H. de Weese

·

David H. de Weese

Chairman, President, Chief Executive Officer and

Director

By: /s/ Joshua D. Schein

-----

Dr. Joshua D. Schein

Principal Financial Officer, Secretary and Director

By: /s/ Judson A. Cooper

-----

Judson A. Cooper

Executive Vice President and Director

II-5

### INDEX TO EXHIBITS

Exhibit Number	Page	
1(a) 1(b) 1(c)	Form of Underwriting Agreement	E- 1 E-23
1(d)	Trust Company of New York, dated as of	E-42
1(d)	Form of Subscription Agreement to purchase shares of Common Stock of the Company	E-56
3(a)	Articles of Incorporation of the Company, in effect as of the date hereof	E-61
3(b)	Bylaws of the Company, in effect as of the date hereof	E-70
4(a)	Form of Common Stock Certificate	E-84
4(b)	1996 Incentive and Non-Qualified Stock Option Plan(1)	E-87
4(c)	Warrant Agreement dated as of September 15, 1996 between the	
( )	Company and Vincent A. Fischetti(1)	E-103
4(d)	Warrant Agreement dated as of November 18, 1996 between the	
( )	Company and David de Weese(1)	E-115
4(e)	Form of Bridge Loan Letter Agreement for Bridge Investors	
4(f)	Form of Promissory Note for Bridge Investors	
4(g)	Form of Warrant Agreement for Bridge Investors	
4(h)	Form of Registration Rights Agreement for Bridge Investors	
5(a)	Opinion of Eilenberg & Zivian	
10(a)	Rockefeller University, dated as of January 31, 1996; and	
( - ( )	Amendment to License and Research Support Agreement between	
	the Company and The Rockefeller University, dated as of	
	October 1, License and Research Support Agreement between	
	the Company and The 1996(2)	E-177
10(b)	Research Agreement between the Company and Emory University,	
	dated as of January 31, 1996(2)	E-201
10(c)	Research Support Agreement between the Company and Oregon	
	State University, dated as of January 31, 1996(2)	E-207
10(d)	Employment Agreement between the Company and Dr. Joshua.D.	
	Schein, dated as of January 1, 1996(1)	E-215
10(e)	dated as of January 1, 1996; and Amendment No. 1 to Employme	nt
	Agreement between the Company and Judson A. Cooper,	
	dated as of Employment Agreement between the Company and	E 004
10(f)	Judson A. Cooper, November 18, 1996(1)	E-221
10(f)	Employment Agreement between the Company and Dr. Kevin F. Jo dated as of January 1, 1996	
10(a)	Employment Agreement between the Company and David de	E-228
10(g)	Weese, dated as of November 18, 1996(1)	E-236
10(h)	Consulting Agreement between the Company and CSO Ventures	E-230
10(11)	LLC, dated as of January 1, 1996	E-244
10(i)	Consulting Agreement between the Company and Dr. Vincent A.	C-244
10(1)	Fischetti, dated as of January 1, 1996	E-248
10(i)	Consulting Agreement between the Company and Dr. Dennis	L-240
10(j)	Hruby, dated as of January 1, 1996	E-255
10(k)	Letter Agreement between the Company and Dr. Vincent A.	L-200
TO(K)	Fischetti, dated as of March 1, 1996	E-262
11(2)		E-265
11(a)	Statement re: Computation of per share earnings  Consent of Eilenberg & Zivian	E-265
24(a)	Consent of Price Waterhouse LLP	E-267
24(b)	CONSCIL OF PIECE WATERHOUSE LLP	E-∠09
1 Th	ese agreements were entered into prior to the reverse split o	f the

- These agreements were entered into prior to the reverse split of the Company's Common Stock and, therefore, do not reflect such reverse split.
- Confidential information is omitted and identified by a  $^{\star}$  and filed separately with the SEC pursuant to a request for Confidential Treatment.

#### FORM OF UNDERWRITING AGREEMENT

#### SIGA PHARMACEUTICALS, INC.

#### UNDERWRITING AGREEMENT

	1997
	T001

Sunrise Securities Corp. 135 E. 57th Street New York, New York 10022

Attention: Nathan Low, President

Gentlemen:

The undersigned, SIGA Pharmaceuticals, Inc., a Delaware corporation (the "Company"), hereby confirms its agreement with you (the "Underwriter") as follows:

### 1. INTRODUCTION.

-----

- (a) Subject to the terms and conditions contained herein, the Company proposes to issue and sell in the United States 3,250,000 shares (the "Shares") of common stock, without par value of the Company (the "Common Stock"), with an offering price per share of Common Stock of \$5.00.
- (b) The Company is retaining the Underwriter as its exclusive agent in the offering contemplated hereby (the "Offering") and understands that the Underwriter is acting on a "best efforts" basis in connection with the Offering and that the Shares will be sold on an "all or none" basis, such that no Shares will be sold unless all of the Shares are sold.
- (c) The Company hereby agrees to pay to the Underwriter a commission equal to 10.0% of the gross proceeds of the sale of the Shares in the Offering.
- (d) The Company hereby agrees to issue and sell to the Underwriter warrants (the "Underwriter's Warrants") to purchase a number of shares of Common Stock equal to 10% of the number of Shares sold to purchasers in the Offering (the "Warrant Stock") for a purchase price of \$.001 per warrant. The Underwriter's Warrants will be exercisable for the Warrant Stock for a period of four years, commencing one year after the effective date of the Registration Statement (as hereinafter defined) at an initial exercise price per share equal to 110% of the price per Share in the Offering. The Warrant Stock shall be identical to the Shares. The Underwriter's Warrants shall be substantially in the form filed as Exhibit 1(b) to the Registration Statement. The Underwriter's Warrants and the Warrant Stock are sometimes hereinafter referred to collectively as the "Underwriter's Securities." The Shares and the Underwriter's Securities are sometimes hereinafter referred to collectively as the "Securities."
- 2. REPRESENTATIONS AND WARRANTIES. The Company represents and warrants to, and agrees with, the Underwriter that:
  - (a) The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement, and may have filed one or more amendments thereto, on Form SB-2 (Registration No. 333-\_\_\_\_\_), including in such registration statement and each such amendment a related preliminary prospectus, for the registration of the Securities under the Securities Act of 1933, as amended (the "Act"). As used in this Agreement,

the term "Registration Statement" shall refer to such registration statement, as amended, on file with the Commission at the time such registration statement becomes effective under the Act (including the prospectus, financial statements, exhibits, and all other documents filed as a part thereof, or incorporated by reference directly or indirectly therein (such incorporated documents being herein referred to as the "Incorporated Documents")); provided, however, that such Registration Statement, at the time it becomes effective, may omit such information as is permitted to be omitted from such Registration Statement when it becomes effective under the Act pursuant to Rule 430A of the General Rules and Regulations under the Act (the "Regulations"), which information (the "Rule 430A Information") shall be deemed to be included in such Registration Statement when a final prospectus is filed with the Commission in accordance with Rules 430A and 424(b)(1) or (4) of the Regulations; the term "Preliminary Prospectus" shall refer to each prospectus included in the Registration Statement, or any amendments thereto, before the Registration Statement becomes effective under the Act, the form of prospectus omitting Rule 430A Information included in the Registration Statement when the Registration Statement becomes effective under the Act, if applicable (the "Rule 430A Prospectus"), and any prospectus filed by the Company with your consent pursuant to Rule 424(a) of the Regulations; and the term "Prospectus" shall refer to the final prospectus in the form first filed pursuant to Rule 424(b)(1) or (4) of the Regulations or, if no such filing is required, the form of final prospectus included in the Registration Statement. Any reference in this Agreement to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any documents filed after the effective date under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Commission thereunder that are deemed to be incorporated by reference therein.

When the Registration Statement becomes effective under the Act, and at all times subsequent thereto up to and including the Closing Date (as defined in Section 3), and during such longer period as the Prospectus may be required to be delivered in connection with sales by you, and during such longer period until any post-effective amendment thereto shall become effective under the Act, the Registration Statement (and any post-effective amendment thereto) and the Prospectus (as amended or as supplemented, if the Company shall have filed with the Commission any amendment or supplement to the Registration Statement or the Prospectus), respectively, will contain all statements which are required to be stated therein in accordance with the Act and the Regulations, will comply with the Act and the Regulations, and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and no event will have occurred which should have been set forth in an amendment or supplement to the Registration Statement or the Prospectus which has not then been set forth in such an amendment or supplement; if a Rule 430A Prospectus is included in the Registration Statement at the time it becomes effective under the Act, the Prospectus filed pursuant to Rules 430A and 424(b)(1) or (4) of the Regulations will contain all Rule 430A Information and all statements which are required to be stated therein in accordance with the Act or the Regulations, will comply with the Act and the Regulations, and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and each Preliminary Prospectus, as of the date filed with the Commission, did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; except that no representation or warranty is made in this Section 2(b) with respect to statements or omissions made in reliance upon and in conformity with written information furnished to the Company as stated in Section 8(b) with respect to the Underwriter by or on behalf of the Underwriter expressly for inclusion in the Registration Statement, any Preliminary Prospectus, or the Prospectus,

F-3

or any amendment or supplement thereto. Each of the Incorporated Documents complies in all material respects with the requirements of the Exchange Act and the rules and regulations thereunder.

- (c) Neither the Commission nor the "blue sky" or securities authority of any jurisdiction has issued an order (a "Stop Order") suspending the effectiveness of the Registration Statement, preventing or suspending the use of the Registration Statement, any Preliminary Prospectus, the Prospectus, or any amendment or supplement thereto, refusing to permit the effectiveness of the Registration Statement, or suspending the registration or qualification of the Securities, nor has any of such authorities instituted or, to the knowledge of the Company, threatened to institute any proceedings with respect to a Stop Order.
- (d) Any contract, agreement, instrument, lease, or license required to be described in the Registration Statement or the Prospectus has been properly and accurately described therein. Any contract, agreement, instrument, lease, or license required to be filed as an exhibit to the Registration Statement has been filed with the Commission as an exhibit to, or has been incorporated as an exhibit by reference into, the Registration Statement.
- (e) The Company has no subsidiary or subsidiaries (as defined in the Regulations). The Company is a corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction of its incorporation, with full power and authority, and all necessary consents, authorizations, approvals, orders, licenses, certificates, and permits of and from, and declarations and filings with, all federal, state, local, and other governmental authorities and all courts and other tribunals, to own, lease, license, and use its properties and assets and to conduct its business in the manner described in the Prospectus. The Company is duly qualified to do business as a foreign corporation and is in good standing as such in every jurisdiction in which its ownership, leasing, licensing, or use of property and assets or the conduct of its business makes such qualification necessary, except where the failure to be so qualified does not amount to a material liability or disability to the Company.
- (f) The authorized capital stock of the Company consists of 25,000,000 shares of Common Stock, of which 3,367,182 shares are outstanding without giving effect to the issuance of the Shares and 10,000,000 shares of Preferred Stock, par value \$.0001 per share, of which there are no outstanding shares. Except as disclosed in the Prospectus, each outstanding share of Common Stock is validly authorized and issued, fully paid, and nonassessable, without any personal liability attaching to the ownership thereof, has not been issued and is not owned or held in violation of any preemptive rights of stockholders. Except as may be Properly described in the Prospectus, or as is not required to be described in the Prospectus, there is no commitment, plan, or arrangement to issue, and no outstanding option, warrant, or other right calling for the issuance of, any share of capital stock of the Company or any security or other instrument which by its terms is convertible into, or exercisable or exchangeable for, capital stock of the Company. There is outstanding no security or other instrument which by its terms is convertible into, or exercisable or exchangeable for, capital stock of the Company, except as may be properly described in the Prospectus. The certificates evidencing the Common Stock are in proper form.
- (g) The financial statements of the Company included in the Registration Statement and the Prospectus fairly present, with respect to the Company, the balance sheets, the statements of stockholders' equity, the statements of operations, the statements of cash flows, and the other information purported to be shown therein at the respective dates and for the respective periods to which they apply. Such financial statements have been prepared in accordance with generally accepted accounting principles (except to the extent that certain footnote disclosures regarding any stub

period may have been omitted in accordance with the applicable rules of the Commission under the Exchange Act) consistently applied throughout the periods involved, are correct and complete in all material respects, and are in accordance with the books and records of the Company. Price Waterhouse LLP, the accountants whose report on the audited financial statements is filed with the Commission as a part of the Registration Statement, are, and during the periods covered by their report(s) included in the Registration Statement and the Prospectus were, independent certified public accountants with respect to the Company within the meaning of the Act and the Regulations. No other financial statements are required by Form SB-2 or otherwise to be included in the Registration Statement or the Prospectus. Since the date of the latest information set forth in the Registration Statement or the Prospectus, except as may be properly described in the Prospectus, there has at no time been a material adverse change in the financial condition, results of operations, business, properties, assets, liabilities or, to the best of its knowledge, future prospects of the Company.

- (h) There is no claim or litigation, arbitration, governmental or other proceeding (formal or informal), or investigation pending, threatened, or, to the best knowledge of the Company, in prospect (or any basis therefor) with respect to the Company or any of its operations, businesses, properties, or assets, except (i) as may be properly described in the Prospectus or (ii) such as individually or in the aggregate do not now have, and will not in the future have, a material adverse effect upon the operations, business, properties, or assets of the Company. The Company is not in violation of, or in default with respect to, any law, rule, regulation, order, judgment, or decree, except: (A) as may be properly described in the Prospectus or (B) such as in the aggregate do not now have, and will not in the future have, a material adverse effect upon the operations, business, properties, assets or net worth of the Company. The Company is not currently required to take any action in order to avoid any such violation or default.
- (i) The Company has good title to all properties and assets which the Prospectus indicates are owned by it, free and clear of all liens, security interests, pledges, charges, encumbrances and mortgages, except such as do not materially and adversely affect the value of such property and do not interfere with the use made or proposed to be made of such property by the Company (or except as may be properly described in the Prospectus). No real property leased, licensed, or used by the Company lies in an area which is, or to the knowledge of the Company will be, subject to zoning, use, or building code restrictions which would prohibit, and no state of facts relating to the actions or inactions of another person or entity or his or its ownership, leasing, licensing, or use of any real or personal property exists or will exist which would prevent, the continued effective leasing, licensing, or use of such real property in the business of the Company as presently conducted or as the Prospectus indicates the Company contemplates conducting, with such exceptions as are not material and do not interfere with the use made or proposed to be made of such property and buildings by the Company (or except as may be properly described in the Prospectus).
- (j) Neither the Company nor, to the knowledge of the Company, any other party, is now, or is expected by the Company to be, in violation or breach of, or in default with respect to, any material provision of any contract, agreement, instrument, lease, license, arrangement, or understanding which is material to the Company, and each such contract, agreement, instrument, lease, license, arrangement, and understanding is in full force and effect and is the legal, valid, and binding obligation of the parties thereto and is enforceable as to them in accordance with its terms, subject to applicable bankruptcy and insolvency laws. The Company enjoys peaceful and undisturbed possession under all leases and licenses under which it is operating. Except as described in the Prospectus, the Company is not a party to, or bound by, any contract, agreement,

F-5

instrument, lease, license, arrangement, or understanding, or subject to any charter or other restriction, which has had, or may reasonably be expected to have, a material adverse effect on the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company. The Company is not in violation or breach of, or in default with respect to, any term of its certificate of incorporation (or other charter document) or by-laws.

- (k) All United States and foreign patents, patent applications, trademarks, trademark applications, trade names, service marks, copyrights, franchises, and other intangible properties and assets (all of the foregoing being herein called "Intangibles") that the Company owns or has pending, or under which it is licensed, are in good standing and uncontested, except as may be properly described in the Prospectus. There is no right under any Intangible necessary to the business of the Company as presently conducted or as the Prospectus indicates it contemplates conducting, except as may be so designated in the Prospectus. The Company has not infringed, is not infringing, or has not received notice of (or knows of any basis for) a third party claim of infringement with respect to asserted Intangibles of others, except as may be properly described in the Prospectus. To the knowledge of the Company, there is no infringement by others of Intangibles of the Company. To the knowledge of the Company, there is no Intangible of others which has had, or may in the future have a material adverse effect on the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company, except as may be properly described in the Prospectus.
- (1) Neither the Company, nor any director, officer, agent, employee, or other person associated with the Company, in such capacity, or acting on behalf of, the Company has, directly or indirectly: used any corporate funds for unlawful contributions, gifts, entertainment, or other unlawful expenses relating to political activity; made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or made any bribe, rebate, payoff, influence payment, kickback, or other unlawful payment. The Company's internal accounting controls and procedures are sufficient to cause the Company to comply in all respects with the Foreign Corrupt Practices Act of 1977, as amended.
- (m) The Company has all requisite power and authority to execute, deliver, and perform this Agreement, the Escrow Agreement (as hereinafter defined), the Subscription Agreements (as hereinafter defined) and the Underwriter's Warrants. All necessary corporate proceedings of the Company have been duly taken effective the date hereof to authorize the execution, delivery and performance by the Company of this Agreement, the Escrow Agreement, the Subscription Agreements and the Underwriter's Warrants. Assuming due execution and delivery by the Underwriter, this Agreement has been duly authorized, executed, and delivered by the Company, is the legal, valid and binding obligation of the Company, and is enforceable against the Company in accordance with its terms. Assuming due execution and delivery by any other parties thereto, the Underwriter's Warrants, the Escrow Agreement, and the Subscription Agreements have been duly authorized by the Company and, when executed and delivered by the Company, will be the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms. No consent, authorization, approval, order, license, certificate, or permit of or from, or declaration or filing with, any federal, state, local, or other governmental authority or any court or other tribunal is required by the Company or the Subsidiary for the execution, delivery, or performance by the Company of this Agreement, the Escrow Agreement, the Subscription Agreements, or the Underwriter's Warrants (except such as have been obtained or filings under the Act which have been or will be made before the Closing Date, and consents, authorizations, approvals, orders, licenses, certificates, permits, declarations, or filings required under "blue sky" or securities

laws which have been obtained at or prior to the date of this Agreement). No consent of any party to any contract, agreement, instrument, lease, license, arrangement, or understanding to which the Company is a party, or to which any of their respective properties or assets are subject, is required for the execution, delivery, or performance of this Agreement, the Escrow Agreement, the Subscription Agreements, and the Underwriter's Warrants, except such consents as in the aggregate will not have a material adverse effect upon the operations, business, properties, assets or net worth of the Company. The execution, delivery, and performance of this Agreement, the Escrow Agreement, the Subscription Agreements, and the Underwriter's Warrants will not violate, result in a material breach of, conflict with, result in the creation or imposition of any lien, charge, or encumbrance upon any properties or assets of the Company pursuant to the terms of, or (with or without the giving of notice or the passage of time or both) entitle any party to terminate or call a default under, any such contract, agreement, instrument, lease, license, arrangement, or understanding, or violate, result in a breach of, or conflict with any term of the certificate of incorporation (or other charter document) or by-laws of the Company, or violate, result in a material breach of, or conflict with any law, rule, regulation, order, judgment or decree binding on the Company or to which any of its operations, businesses, properties or assets are subject.

- (n) Each Share to be delivered on the Closing Date is validly authorized and, when issued and delivered in accordance with this Agreement, will be validly issued, fully paid, and nonassessable, without any personal liability attaching to the ownership thereof, and will not be issued in violation of any preemptive or similar rights of stockholders, and each purchaser will, upon payment therefor, receive good title to the Shares purchased by it from the Company, free and clear of all liens, security interests, pledges, charges, encumbrances, stockholders' agreements, and voting trusts. The Warrant Stock is validly authorized and reserved for issuance and, when issued and delivered upon the exercise of the Underwriter's Warrants and payment therefor in accordance with the respective terms thereof, will be validly issued, fully-paid, and nonassessable, without any personal liability attaching to the ownership thereof, and will not be issued in violation of any preemptive or similar rights of stockholders. When issued, the Underwriter's Warrants will constitute legal, valid, and binding obligations of the Company to issue and sell, upon exercise thereof and payment therefor in accordance with the respective terms thereof, the number and type of securities of the Company called for thereby and the Underwriter's Warrants will be enforceable against the Company in accordance with their respective terms. The Underwriter will receive good title to the Underwriter's Warrants purchased by it, free and clear of all liens, security interests, pledges, charges, encumbrances, restrictions (other than restrictions under federal and any applicable state securities laws), stockholders' agreements, and voting trusts.
- (p) Subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, and except as may otherwise be properly described in the Prospectus, the Company has not (i) issued any securities or incurred any liability or obligation, primary or contingent, for borrowed money, (ii) entered into any transaction not in the ordinary course of business, (iii) declared or paid any dividend on its capital stock or (iv) experienced any adverse changes or any development which may materially adversely effect the condition (financial or otherwise), net assets or stockholders' equity, results of operations, business, key personnel, assets, or properties of the Company.

- (q) Neither the Company nor any of its officers, directors, or affiliates (as defined in the Regulations), has taken or will take, directly or indirectly, any action designed to stabilize or manipulate the price of any security of the Company, or which has caused or resulted in, or which might in the future reasonably be expected to cause or result in, stabilization or manipulation of the price of any security of the Company, to facilitate the sale or resale of any of the Shares.
- (r) The Company has obtained from each of the Company's stockholders owning in excess of one percent of the outstanding securities of any class of the Company as of the effectiveness of the Registration Statement under the Act (the "Beneficial Owners"), and each officer, director and founder of the Company, his or its enforceable written agreement, in form and substance satisfactory to counsel for the Underwriter, that for a period of (i) six months from the date on which the Registration Statement becomes effective under the Act, with respect to the Beneficial Owners, and (ii) 24 months from such date with respect to the directors, officers and founders of the Company, he or it will not, without the prior written consent of the Underwriter, issue, offer, sell, contract to sell, grant any option for the sale of, or otherwise dispose ("Dispose") of, directly or indirectly, any shares of Common Stock or other securities of the Company or any security or other instrument which by its terms is convertible into, exercisable for, or exchangeable for shares of Common Stock or any other securities of the Company, including, without limitation, any shares of Common Stock issuable under any employee stock options. Each such agreement is a legal, valid, and binding obligation of the director, officer, or securityholder executing the same, and is enforceable as to such director, officer, or securityholder in accordance with the terms thereof.
- (s) The Company is not, and does not intend to conduct its business in a manner in which it would become, an "investment company" as defined in Section 3(a) of the Investment Company Act of 1940, as amended.
- (t) No person or entity has the right to require registration of shares of Common Stock or other securities of the Company because of the filing or effectiveness of the Registration Statement, except as properly and accurately described in the Prospectus.
- (u) Except as may be set forth in the Prospectus, the Company has not incurred any liability for a fee, commission, or other compensation on account of the employment of a broker or finder in connection with the transactions contemplated by this Agreement.
- (v) Neither the Company nor any of its affiliates is presently doing business with the government of Cuba or with any person or affiliate located in Cuba. If, at any time after the date on which the Registration Statement is declared effective under the Act or with the Florida Department of Banking and Finance (the "Florida Department"), whichever is later, and prior to the end of the period referred to in the first clause of Section 2(b), the Company commences engaging in business with the government of Cuba or with any person or affiliate located in Cuba, the Company will so inform the Florida Department within 90 days after such commencement of business in Cuba, and, during the period referred to in Section 2(b), will inform the Florida Department within 90 days after any change occurs with respect to previously reported information.
- (w) Except as disclosed in the Prospectus, no officer or director of the Company has any affiliation or association with the National Association of Securities Dealers, Inc. (the "NASD") or any member thereof and upon inquiry of its stockholders beneficially owning five percent or more of the outstanding shares of Common Stock, the Company has been advised that no such stockholder has any such affiliation of association, except as disclosed in writing to the Underwriter.

- (x) Except as disclosed in the Prospectus, the Company has filed all necessary federal, state, local, and foreign income and franchise tax returns and other reports required to be filed and has paid all taxes shown as due thereon; and there is no tax deficiency which has been, or, to the knowledge of the Company, might be, asserted against the Company.
- (y) All requirements for the use by the Company of a registration statement on Form SB-2 with respect to the Offering have been satisfied.
- (z) The Common Stock is authorized for quotation on the Nasdaq SmallCap Market ("Nasdaq") and upon the Closing Date, all appropriate action will have been taken to include the Shares on Nasdaq.

- -----
- (a) On the basis of representations and warranties herein contained, but subject to the terms and conditions herein set forth, the Company hereby appoints you its sales agent and grants you the exclusive right to offer and sell the Shares during the Offering Period (as hereinafter defined) for the account and risk of the Company. You accept such appointment and agree to use your best efforts as sales agent, following written or telegraphic receipt of notice of the effective date of the Registration Statement, to offer and sell such number of Shares as contemplated by this Agreement at the price stated in the Prospectus.
- (b) Each prospective purchaser of Shares will be required to complete, execute, and deliver to the Company a subscription agreement in the form filed as an exhibit to the Registration Statement (the "Subscription Agreement"). Prior to or concurrently with the delivery to the Company of any Subscription Agreement by any purchaser, funds sufficient to purchase the Shares subscribed for shall be wired to an escrow account to be maintained pursuant to an escrow agreement among the Escrow Agent (as hereinafter defined), the Company, and the Underwriter in the form filed as an exhibit to the Registration Statement (the "Escrow Agreement"). Except as provided in the first sentence of subparagraph (c) below, the Company shall not be entitled to reject, without the Underwriter's consent, any Subscription Agreement tendered to it prior to the Termination Date (as hereinafter defined) unless (i) the Subscription Agreement is not properly completed after the Underwriter and the Company have given the subscriber an opportunity to cure the defect or payment in full for the Shares subscribed for is not made in accordance with such Subscription Agreement or (ii) the subscriber submitting such Subscription Agreement is a resident of a jurisdiction in which the offering is not registered, qualified, or exempt from such registration or qualification. The Company will forward to you copies of each Subscription Agreement accepted by it within three business days of receipt by the Company of such Subscription Agreement.
- (c) All subscriptions for Shares will be conditioned upon the acceptance by the Company of Subscription Agreements for all of the 3,250,000 Shares (the "Subscriptions") on or prior to 30 days after the effectiveness of the Registration Statement, which is the last date on which the offering of Shares may be made, except that such last offering date may be extended by the Underwriter, in its sole discretion, to a date not later than 60 days after the effective date of the Registration Statement (the last date on which the offering of Shares may be made is herein referred to as the "Termination Date" and the period during which the offering of Shares may be made is herein referred to as the "Offering Period"). If the Subscriptions are not tendered to and accepted by the Company by the Termination Date, this Agreement shall, subject to the provisions of Section 10 hereof, terminate. If at least the Subscriptions are tendered to and accepted by the Company on or before the Termination Date, a closing will be held at the offices of the Underwriter at a mutually agreed date (not later than five business days after the Termination Date) and time as soon as practicable after the delivery of the last of such subscriptions (the "Closing Date") and shall be subject to each of the conditions precedent to closing provided for in this Agreement.
- (d) On or prior to the Closing Date, all cash payments of purchasers received (unless and until returned to the purchasers pursuant hereto) will be placed in a segregated escrow account with United States Trust Company of New York (the "Escrow Agent") for the purchasers' benefit.
- (e) The purchase price paid by any prospective purchaser whose subscription is rejected, or is returned because the conditions to closing were not satisfied, shall be returned to such prospective purchaser, without any deduction therefrom or interest thereon.

- (f) If, prior to the Termination Date, subscriptions for more than 3,250,000 Shares are received, the Underwriter, in its sole and absolute discretion, may allocate the Shares among the subscribers as to whom a closing has not already been held in such manner as it shall see fit.
- (g) As soon as practicable after the Closing Date, the Company shall deliver or cause to be delivered by mail to each purchaser of Shares on such Closing Date (i) a copy of an executed Subscription Agreement which indicates thereon the number of Shares such purchaser has purchased and (ii) a stock certificate representing such Shares, registered in such purchaser's name.
- 4. OFFERING OF THE SHARES ON BEHALF OF THE COMPANY.
- (a) In offering the Shares for sale, you shall offer Shares as agent for the Company, and the Offering shall be made upon the terms and subject to the conditions set forth in the Registration Statement and Prospectus. The Underwriter shall commence offering the Shares for sale as agent for the Company as soon after the effective date of the Registration Statement as the Underwriter may deem advisable.
- 5. COVENANTS. The Company covenants that it will:
- (a) Use its best efforts to cause the Registration Statement to become effective under the Act as promptly as possible and notify you immediately, and confirm such notice in writing, (i) when the Registration Statement and any post-effective amendment thereto become effective under the Act, (ii) of the receipt of any comments from the Commission or the "blue sky" or securities authority of any jurisdiction regarding the Registration Statement, any post-effective amendment thereto, the Prospectus, or any amendment or supplement thereto, (iii) of the filing with the Commission of any supplement to the Prospectus and (iv) of the receipt of, or its otherwise becoming aware of, any notification with respect to a Stop Order or the initiation or threatening of any proceeding with respect to a Stop Order. The Company will use its best efforts to prevent the issuance of any Stop Order and, if any Stop Order is issued, to obtain the lifting thereof as promptly as possible. If the Registration Statement has become or becomes effective under the Act with a form of prospectus omitting Rule 430A Information, or filing of the Prospectus with the Commission is otherwise required under Rule 424(b) of the Regulations, the Company will file with the Commission the Prospectus, properly completed, pursuant to Rule 424(b) of the Regulations within the time period prescribed and will provide evidence satisfactory to you of such timely filing.
- (b) During the time when a prospectus relating to the Shares is required to be delivered hereunder or under the Act or the Regulations, comply with all requirements imposed upon it by the Act, as now existing and as hereafter amended, and by the Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Shares and in accordance with the provisions hereof and of the Prospectus. If, at any time when a prospectus relating to the Shares is required to be delivered hereunder or under the Act or the Regulations, any event shall have occurred as a result of which, in the reasonable opinion of counsel for the Company or counsel for the Underwriter, the Registration Statement or the Prospectus as then amended or supplemented contains any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading, or if, in the opinion of either of such counsel, it is necessary at any time to amend or supplement the Registration Statement or the Prospectus to comply with the Act or the Regulations, the Company will as promptly as practicable, and, in any event within one business day, notify you and promptly prepare and file with the Commission an appropriate amendment or supplement (in form and substance satisfactory to you) which will correct such statement or omission or which

will effect such compliance and will use its best efforts to have any such amendment declared effective under the Act as soon as possible.

- (c) Deliver without charge to you such number of copies of each Preliminary Prospectus as you may reasonably request and, as soon as the Registration Statement, or any amendment thereto, becomes effective under the Act or a supplement is filed with the Commission, deliver without charge to you or your counsel not less than two signed copies of the Registration Statement, including exhibits and Incorporated Documents, or such amendment thereto, as the case may be, and two copies of any supplement thereto, and deliver without charge to you such number of copies of the Prospectus, the Registration Statement, and amendments and supplements thereto, if any, without exhibits or Incorporated Documents, as you may request for the purposes contemplated by the Act.
- (d) Endeavor in good faith, in cooperation with you and your counsel, at or prior to the time the Registration Statement becomes effective under the Act, to qualify the Shares for offering and sale under the "blue sky" or securities laws of such jurisdictions as you may designate; provided, however, that no such qualification shall be required in any jurisdiction where, as a result thereof, the Company would be subject to service of general process or to taxation as a foreign corporation doing business in such jurisdiction to which it is not then subject. In each jurisdiction where such qualification shall be effected, the Company will, unless you agree in writing that such action is not at the time necessary or advisable, file and make such statements or reports at such times as are or may be required by the laws of such jurisdiction.
- (e) Make generally available (within the meaning of Section 11(a) of the Act and the Regulations) to its securityholders as soon as practicable, but not later than 45 days after the end of its fiscal quarter in which the first anniversary date of the Registration Statement occurs an earnings statement (which need not be certified by independent certified public accountants unless required by the Act or the Regulations, but which shall satisfy the provisions of Section 11(a) of the Act and the Regulations) covering a period of at least 12 months beginning after the effective date of the Registration Statement.
- (f) For a period of 12 months (or six months, in the case of any public offering under the Act) after the date hereof, not, without the prior written consent of the Underwriter, which shall not be unreasonably withheld or delayed, Dispose of any shares of Common Stock or other securities of the Company (or any security or other instrument which by its terms is convertible into, or exercisable or exchangeable for, shares of Common Stock or any other securities of the Company), except for (i) the Underwriter's Warrants and the Warrant Stock; (ii) the shares of Common Stock issuable upon the exercise of options or warrants outstanding on the date hereof, which may not be sold until the lock-ups referred to in Section 2(r) expire; (iii) the grant or exercise of options under the plans existing on the date hereof or pursuant to a plan adopted by the Company with the consent of the Board of Directors and the stockholders, in the case of grants to officers and directors, shall provide that the underlying shares are not saleable until the lock-ups referred to in Section 2(r) expire; (iv) securities Disposed of in connection with any strategic alliance with a pharmaceutical company or in connection with the hiring or retention of key employees, consultants or directors; and (v) securities Disposed of in connection with commitments existing as of the date hereof; provided further that the Company may extend the exercisibility of outstanding options and warrants or replace them upon their termination or expiration with a like number of options or warrants.
- (g) During the Offering Period, without the prior written consent of the Underwriter, which shall not be unreasonably withheld or delayed, not consummate any stock dividend, stock split, recapitalization,

reorganization, reclassification, combination or any other similar event affecting the capital stock of the Company.

- (h) For a period of three years after the effective date of the Registration Statement, furnish you without charge the following:
  - (i) within 90 days after the end of each fiscal year, three copies of financial statements certified by independent certified public accountants, including a balance sheet, statement of operations, and statement of cash flows of the Company and its then existing subsidiary or subsidiaries, with supporting schedules, prepared in accordance with generally accepted accounting principles, as at the end of such fiscal year and for the 12 months then ended, which may be on a consolidated basis;
  - (ii) as soon as practicable after they have been sent to stockholders of the Company or filed with, or furnished to, the Commission or the NASD, three copies of each annual and interim financial and other report or communication sent by the Company to its stockholders or filed with, or furnished to, the Commission or the NASD:
  - (iii) as soon as practicable, two copies of every press release and every material news item and article in respect of the Company or its affairs which was released by the Company; and
  - (iv) such additional documents and information with respect to the affairs of the Company and its then existing subsidiary or subsidiaries as you may from time to time reasonably request; provided, however, that such additional documents and information shall be received by you on a confidential basis, unless otherwise disclosed to the public, and shall not be used in violation of the Federal securities laws and the regulations promulgated thereunder.
- (i) Apply the net proceeds received by the Company from the Offering contemplated by this Agreement in the manner set forth under the heading "Use of Proceeds" in the Prospectus.
- (j) Furnish to you as early as practicable prior to the Closing Date, but no less than two full business days prior thereto, a copy of the latest available unaudited interim financial statements of the Company which have been read by the Company's independent certified public accountants, as stated in their letters to be furnished pursuant to Section 7(e).
- (k) File no amendment or supplement to the Registration Statement or Prospectus at any time, whether before or after the date on which the Registration Statement becomes effective under the Act, unless such filing shall comply with the Act and the Regulations and unless you shall previously have been advised of such filing and furnished with a copy thereof, and you and counsel for the Underwriter shall have approved such filing. Until the later of (i) the completion by you of the distribution of the Shares (but in no event more than nine months after the date on which the Registration Statement shall have become effective under the Act) and (ii) 25 days after the date on which the Registration Statement becomes effective under the Act, the Company will prepare and file with the Commission, promptly upon the Underwriter's request, any amendments or supplements to the Registration Statement or the Prospectus which, in the Underwriter's sole opinion, may be necessary or advisable in connection with the distribution of the Shares.
- (1) File timely with the Commission and the NASD a report on Form 10-C in accordance with the rules and regulations of the Commission under the Exchange Act.

- (m) Comply with all provisions of all undertakings contained in the Registration Statement.
- (n) Prior to the Closing Date issue no press release or other communication, directly or indirectly, and hold no press conference with respect to the Company or the financial condition, results of operations, business, properties, assets, liabilities of the Company, or the Offering, without the prior written consent of the Underwriter, (other than trade releases issued in the ordinary course of the Company's business or otherwise required by law, in which case deliver such release to the Underwriter for review prior to issuance).
- (o) Make all filings required, and otherwise use its reasonable best efforts, to maintain the inclusion of the Common Stock on Nasdaq for at least five years from the date of this Agreement.
- (p) On the Closing Date, sell to the Underwriter (or its designee), the Underwriter's Warrants at the price of \$.001 per option, entitling the holder thereof to purchase a number of shares of Common Stock equal to 10% of the number of Shares sold on such Closing Date for an exercise price equal to 110% of the price per Share in the Offering.
- (q) Until expiration of the Underwriter's Warrants, keep reserved sufficient shares of Common Stock for issuance upon exercise of the Underwriter's Warrants.
- (r) Deliver to the Underwriter, without charge, within a reasonable period after the Closing Date, three sets of bound volumes of the Registration Statement and all related materials to the individuals designated by you or counsel for the Underwriter.
- (s) For a period of three years after the effective date of the Registration Statement, provide, at its sole expense, to the Underwriter copies of the Company's daily transfer sheets, if so requested.
- (t) For a period of five years after the Closing Date, supply to the appropriate parties such information as may be necessary or desirable, and otherwise use its best efforts, so that during such five-year period the Company will be listed in one or more of the securities manuals published by Standard & Poor's Corporation and Moody's Investors Service, Inc. and that, at all times during such period, such listing will, at a minimum, contain the names of the Company's officers and directors, a balance sheet as of a date not more than 18 months prior to such time and a statement of operations for either the fiscal year preceding such date or the most recent fiscal year of operations.
- (u) Comply with all registration, filing and reporting requirements of the Exchange Act, which may from time to time be applicable to the Company.

(a) The Company hereby agrees to pay, whether or not the Offering is

### 6. PAYMENT OF EXPENSES.

Underwriter

consummated, all expenses (other than fees of counsel to the Underwriter, except as provided in Sections 6(a)(iii) and 6(b)) in connection with (i) the preparation, printing, filing, distribution, and mailing of the Registration Statement and the Prospectus and the printing, filing, distribution, and mailing of this Agreement, and related documents, including the cost of all copies thereof and of the Preliminary Prospectuses and of the Prospectus and any amendments or supplements thereto supplied to the Underwriter in quantities as hereinabove stated, (ii) the issuance, sale, transfer, and delivery of the Securities, including any transfer or other taxes payable thereon, (iii) the registration or qualification of the Securities under state or foreign "blue sky" or securities laws, including the costs of printing and mailing any "Blue

Sky Surveys" and the fees of counsel (in the amount of \$35,000) for the

E-14

and the disbursements in connection therewith, (iv) the filing fees payable to the Commission, the NASD, and the jurisdictions in which such qualification is sought, (v) any fees relating to the listing of the Securities on Nasdaq, (vi) the cost of printing certificates representing the Securities and (vii) the fees of the transfer agent for the Securities.

- (b) In addition, if the Offering is consummated, the Company hereby agrees to pay to the Underwriter on the Closing Date (i) a non-accountable expense allowance equal to 3.0% of the gross proceeds from the sale of the Shares on such Closing Date, \$45,000 of which has already been paid by the Company; and (ii) a commission equal to 10.0% of the gross proceeds from the sale of Shares on such Closing Date.
- (c) In the event that (i) this Agreement is terminated by the Underwriter pursuant to Section 10 hereof, or (ii) the Subscriptions are not received prior to the Termination Date, the Company hereby confirms that it will pay within 10 days following the date of termination of this Agreement (in the case of clause (i) above) and within 10 days following the Termination Date (in the case of clause (ii) above), the amount of all of your actual accountable out-of-pocket expenses, including, without limitation, the reasonable legal fees and expenses, marketing and due diligence expenses, and travel expenses incurred by you, but in no event to exceed the sum of \$100,000, less amounts previously paid to you in reimbursement for such expenses (including, without limitation, the sum of \$45,000 paid on or about July 23, 1996); and the Company will be responsible for the payment of all other expenses relating to this Agreement and the Offering, whether or not set forth in clauses (i) through (vii) of Section 6(a) hereof.
  - 7. CONDITIONS OF UNDERWRITER'S OBLIGATIONS. Your obligations hereunder,
    the right of the Company to obtain on the Closing Date the purchase price

and the right of the Company to obtain on the Closing Date the purchase price for Shares to be purchased on such Closing Date, shall be subject to the continued accuracy in all material respects, on the date hereof and on such Closing Date, of the representations, warranties and agreements of the Company and to the performance by the Company of its obligations hereunder to the following terms and conditions:

- (a) The Registration Statement shall have become effective under the Act not later than 6:00 p.m., New York City time, on the date of this Agreement or such later date and time as shall be consented to in writing by you; on or prior to the Closing Date, no Stop Order shall have been issued, and no proceeding shall have been initiated or threatened with respect to a Stop Order; and any request by the Commission for additional information shall have been complied with by the Company to the reasonable satisfaction of your counsel. If required, the Prospectus shall have been filed with the Commission in the manner and within the time period required by Rule 424(b) under the Regulations.
- (b) On the Closing Date, the Underwriter shall have received the opinions of Eilenberg & Zivian, counsel for the Company, dated the date of delivery, addressed to the Underwriter, and [ ], patent counsel for the Company, in form and substance satisfactory to counsel for the Underwriter.
- (c) On or prior to the Closing Date, the Underwriter shall have been furnished such information, documents, certificates, and opinions as they may reasonably require in order to evidence the accuracy, completeness, or satisfaction of any of the representations, warranties, covenants, agreements, or conditions herein contained, or as the Underwriter may reasonably request.
- (d) At the Closing Date, you shall have received a certificate of the chief executive officer and the chief financial officer of the Company, dated the Closing Date, to the effect that, (i) the conditions set forth in Section 7(a) have been satisfied, (ii) as of the date of this Agreement and as of the Closing Date, the representations and warranties of the Company contained herein were and are accurate and correct in all material respects, and (iii) as of the Closing Date, the obligations to be performed by the Company hereunder on or prior thereto have been fully performed in all material respects.

- (e) At the Closing Date, you shall have received a letter, dated the date of delivery, addressed to the Underwriter, from Price Waterhouse LLP, independent certified public accountants for the Company:
- (i) confirming that they are, and during the period covered by their report included in the Registration Statement and the Prospectus were, independent certified public accountants with respect to the Company within the meaning of the Act and the published Regulations;
- (ii) stating that, in their opinion, the consolidated financial statements of the Company included in the Registration Statement examined by them comply in form in all material respects with the applicable accounting requirements of the Act and the related published rules and regulations;
- (iii) stating that, on the basis of procedures (but not an examination made in accordance with generally accepted auditing standards) consisting of a reading of the latest available unaudited interim consolidated financial statements of the Company (with an indication of the date of the latest available unaudited consolidated interim financial statements), a reading of the latest available minutes of the stockholders and Board of Directors of the Company and committees of such Board of Directors, inquiries to certain officers and other employees of the Company responsible for financial and accounting matters, and other specified procedures and inquiries, nothing has come to their attention that caused them to believe that: (A) any unaudited financial statements of the Company included in the Registration Statement and Prospectus do not comply in form in all material respects with the applicable accounting requirements of the Act and the Exchange Act and the related published rules and regulations under the Act or the Exchange Act or are not fairly presented in conformity with generally accepted accounting principles (except to the extent that certain footnote disclosures regarding any stub period may have been omitted in accordance with the applicable rules of the Commission under the Exchange Act) applied on a basis consistent with that of the audited financial statements appearing therein; (B) there was any change in the capital stock or long-term debt of the Company or any decrease in the net current assets or stockholders' equity of the Company as of the date of the latest available monthly financial statements of the Company as of a specified date not more than five business days prior to the date of such letter, each as compared with the amounts shown in the latest balance sheet included in the Registration Statement and Prospectus, other than as properly described in the Registration Statement and Prospectus; or (C) there was any decrease in current assets or stockholders' equity or increase in net loss during the period from the date of such balance sheet to the date of the latest available monthly financial statements of the Company or to a specified date not more than five business days prior to the date of such letter, each as compared with the corresponding period in the preceding fiscal year, other than as properly described in the Registration Statement and Prospectus; and
- (iv) stating that they have compared specific numerical data and financial information pertaining to the Company set forth in the Registration Statement, which have been specified by you, to the extent that such data and information may be derived from the general accounting records of the Company, with the results obtained from the application of specified readings, inquiries, and other appropriate procedures (which procedures do not constitute an examination in accordance with generally accepted auditing standards) set forth in the letter, and found them to be in agreement.
- (f) All proceedings taken in connection with the issuance, sale, transfer, and delivery of the Securities shall be satisfactory in form and substance to you and to your counsel.
- (g) The NASD, upon review of the terms of the public offering of the Shares, shall not have objected to the Underwriter's participation in such offering upon the terms and conditions provided for herein.

- (h) Prior to the Closing Date, the Company shall have issued, in accordance with this Agreement, the Underwriter's Warrants to the Underwriter in the name or names and in such authorized denominations as the Underwriter may request.
- (i) The Subscriptions shall have been tendered to the Company in accordance with the terms hereof.  $\,$

Any certificate or other document signed by any officer of the Company and delivered to the Underwriter or to counsel for the Underwriter shall be deemed a representation and warranty by the Company hereunder to the Underwriter as to the statements made therein. If any condition to the Underwriter's obligations hereunder to be fulfilled prior to or at the Closing Date, is not so fulfilled, the Underwriter may terminate this Agreement or, if the Underwriter so elects, in writing waive any such conditions which have not been fulfilled or extend the time for their fulfillment.

If any of the conditions specified in this Section 7 shall not have been fulfilled or waived, this Agreement and all your obligations hereunder may be cancelled, prospectively, by you at, or at any time prior to, the Closing Date. Any such cancellation shall be without liability to you, and the obligations of the Company pursuant to Sections 6 and 8 hereof shall nevertheless survive and continue thereafter. Notice of such cancellation shall be given to the Company at the addresses specified in Section 11 hereof, in writing, or by telegraph or telephone confirmed in writing.

# 8. INDEMNIFICATION AND CONTRIBUTION.

(a) Subject to the conditions set forth below, the Company agrees to indemnify and hold harmless the Underwriter, its officers, directors, stockholders, employees, agents, and counsel, and each person, if any, who controls the Underwriter within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, against any and all loss, liability, claim, damage, and expense whatsoever (which shall include, for all purposes of this Section 8, but not be limited to, attorneys' fees and any and all expense whatsoever incurred in investigating, preparing, or defending against any litigation, commenced or threatened, or any claim whatsoever and any and all amounts paid in settlement of any claim or litigation) as and when incurred arising out of, based upon, or in connection with, (i) any untrue statement of a material fact or alleged untrue statement of a material fact contained in (A) the Registration Statement, any Preliminary Prospectus, or the Prospectus (as from time to time amended and supplemented), or any amendment or supplement thereto or (B) any application or other document or communication (for purposes of this Section 8, collectively referred to as an "application") executed by, or on behalf of, the Company or based upon written information furnished by, or on behalf of, the Company filed in any jurisdiction in order to qualify the Securities under the "blue sky" or securities laws thereof or filed with the Commission or any securities exchange; or any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, unless such statement or omission was made in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of the Underwriter as stated in Section 8(b) with respect to the Underwriter, expressly for inclusion in the Registration Statement, any Preliminary Prospectus, or the Prospectus, or any amendment or supplement thereto, or in any application, as the case may be, or (ii) any breach of any representation, warranty, covenant, or agreement of the Company contained in this Agreement. The foregoing agreement to indemnify shall be in addition to any liability the Company may otherwise have, including liabilities arising under this Agreement.

If any action is brought against the Underwriter or any of its officers, directors, stockholders, employees, agents, or counsel, or any person who controls the Underwriter within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act (an "indemnified party") in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph, such indemnified party or parties shall within three business days notify the Company

in writing of the institution of such action (but the failure so to notify, including within such three-day period, shall not relieve the Company from any liability it may have other than pursuant to this Section 8(a) and shall relieve the Company from liability pursuant to this Section 8(a) only to the extent the Company is materially prejudiced thereby), and the Company shall promptly assume the defense of such action, including the employment of counsel (satisfactory to such indemnified party or parties) and payment of expenses. Such indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless the employment of such counsel shall have been authorized in writing by the Company in connection with the defense of such action or the Company shall not have promptly employed counsel reasonably satisfactory to such indemnified party or parties to have charge of the defense of such action or such indemnified party or parties shall have reasonably concluded that there may be one or more legal defenses available to it or them or to other indemnified parties which are different from or additional to those available to the Company, in any of which events such fees and expenses shall be borne by the Company, and the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties. Anything in this paragraph to the contrary notwithstanding, the Company shall not be liable for any settlement of any such claim or action effected without its written consent, which shall not be unreasonably withheld. The Company shall not, without the prior written consent of each indemnified party that is not released as described in this sentence, settle or compromise any action, or permit a default or consent to the entry of judgment in or otherwise seek to terminate any pending or threatened action, in respect of which indemnity may be sought hereunder (whether or not any indemnified party is a party thereto), unless such settlement, compromise, consent, or termination includes an unconditional release of each indemnified party from all liability in respect of such action. The Company agrees promptly to notify the Underwriter of the commencement of any litigation or proceedings against the Company or any of its officers or directors in connection with the sale of the Shares, the Registration Statement, any Preliminary Prospectus, any Rule 430A Prospectus, or the Prospectus, or any amendment or supplement thereto, or any application.

(b) The Underwriter agrees to indemnify and hold harmless the Company, each director of the Company, each officer of the Company who shall have signed the Registration Statement, counsel of the Company and each other person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, to the same extent as the foregoing indemnity from the Company to the Underwriter in Section 8(a), but only with respect to statements or omissions, if any, made in the Registration Statement, any Preliminary Prospectus, or the Prospectus (as from time to time amended and supplemented), or any amendment or supplement thereto, or in any application in reliance upon, and in conformity with, written information furnished to the Company as stated in this Section 8(b) with respect to the Underwriter by or on behalf of the Underwriter expressly for inclusion in the Registration Statement, any Preliminary Prospectus, or the Prospectus, or any amendment or supplement thereto, or in any application, as the case may be; provided, however, that the obligation of the Underwriter to provide indemnity under the provisions of this Section 8(b) shall be limited to the gross amount of the commission received by the Underwriter of the Offering. For all purposes of this Agreement, the information relating to when the Underwriter registered and became a member of the NASD and the Underwriter's participation in prior offerings constitute the only information furnished in writing by the Underwriter expressly for inclusion in the Registration Statement, any Preliminary Prospectus, or the Prospectus (as from time to time amended or supplemented), or any amendment or supplement thereto, or in any application, as the case may be. If any action shall be brought against the Company, or any other person so indemnified based on the Registration Statement, any Preliminary Prospectus, or the Prospectus, or any amendment or supplement thereto, or on any application, and in respect of which

indemnity may be sought against the Underwriter pursuant to this Section 8(b), the Underwriter shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the indemnified parties, by the provisions of Section 8(a).

(c) To provide for just and equitable contribution, if (i) an indemnified party makes a claim for indemnification pursuant to Sections 8(a) or 8(b) (subject to the limitations thereof) but it is found in a final judicial determination, not subject to further appeal, that such indemnification may not be enforced in such case, even though this Agreement expressly provides for indemnification in such case or (ii) any indemnified or indemnifying party seeks contribution under the Act, the Exchange Act, or otherwise, then the Company (including for this purpose any contribution made by or on behalf of any director of the Company, any officer of the Company who signed the Registration Statement, any controlling person of the Company and counsel of the Company), as one entity and the Underwriter (including for this purpose any contribution by or on behalf of an indemnified party) as a second entity, shall contribute to the losses, liabilities, claims, damages, and expenses whatsoever to which any of them may be subject, in such proportions as are appropriate to reflect the relative benefits received by the Company and the Underwriter; provided, however, that if applicable law does not permit such allocation, then other relevant equitable considerations such as the relative fault of the Company and the Underwriter in connection with the facts which resulted in such losses, liabilities, claims, damages, and expenses shall also be considered. The relative benefits received by the Company and the Underwriter shall be deemed to be in the same proportion as (x) the total proceeds from the Offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company and (y) the underwriting discounts and commissions received by the Underwriter, in each case as set forth in the table on the cover page of the Prospectus and in the footnotes thereto. The relative fault, in the case of an untrue statement, alleged untrue statement, omission, or alleged omission, shall be determined by, among other things, whether such statement, alleged statement, omission, or alleged omission relates to information supplied by the Company or by the Underwriter, and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement, alleged statement, omission, or alleged omission. The Company and the Underwriter agree that it would be unjust and inequitable if the respective obligations of the Company and the Underwriter for contribution were determined by pro rata or per capita allocation of the aggregate losses, liabilities, claims, damages, and expenses (even if the Underwriter and the other indemnified parties were treated as one entity for such purpose) or by any other method of allocation that does not reflect the equitable considerations referred to in this Section 8(c). No person guilty of a fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who is not guilty of such fraudulent misrepresentation. For purposes of this Section 8(c), each person, if any, who controls the Underwriter within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act and each officer, director, stockholder, employee, agent, and counsel of the Underwriter shall have the same rights to contribution as the Underwriter and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, each officer of the Company who shall have signed the Registration Statement, each director of the Company and counsel of the Company shall have the same rights to contribution as the Company, subject in each case to the provisions of this Section 8(c). Anything in this Section 8(c) to the contrary

notwithstanding, no party shall be liable for contribution with respect to the settlement of any claim or action effected without its written consent. This Section 8(c) is intended to supersede any right to contribution under the Act, the Exchange Act, or otherwise.

# 9. REPRESENTATIONS AND AGREEMENTS TO SURVIVE DELIVERY. All

representations, warranties, covenants, and agreements contained in this Agreement shall be deemed to be representations, warranties, covenants, and agreements at the Closing Date, and such representations, warranties, covenants, and agreements of the Company, and the Underwriter, including the indemnity and contribution agreements contained in Section 8, shall remain operative and in full force and effect regardless of any investigation made by, or on behalf of, the Underwriter or any indemnified person, or by, or on behalf of, the Company, or any person or entity which is entitled to be indemnified under Section 8(b), and shall survive termination of this Agreement or the delivery of the Shares to the purchasers and the Underwriter's Option to the Underwriter. In addition, the provisions of Sections 5(a), 6, 8, 9, 10 and 12 shall survive termination of this Agreement, whether such termination occurs before or after the Closing Date.

## 10. EFFECTIVE DATE OF THIS AGREEMENT AND TERMINATION THEREOF.

(a) This Agreement shall become effective upon its execution except that you, at your option, may delay the effectiveness of this Agreement until the earlier of (i) 11:00 A.M. New York time on the first full business day following the day on which the Registration Statement becomes effective under the Act and (ii) the commencement of the public offering by you of the Stock. In addition to the right to terminate this Agreement pursuant to Section 7 hereof, you shall have the right to terminate this Agreement at any time prior to the Closing Date, by giving notice to the Company, (i) if any domestic or international event, act, or occurrence has materially disrupted, or, in your opinion, will in the immediate future materially disrupt, the securities markets; or (ii) if there shall have been a general suspension of, or a general limitation on prices for, trading in securities on the New York Stock Exchange, the American Stock Exchange or in the over-the-counter market; or (iii) if there shall have been an outbreak or increase in the level of major hostilities or other national or international calamity; or (iv) if a banking moratorium has been declared by a state or federal authority; or (v) if a moratorium in foreign exchange trading by major international banks or persons has been declared; or (vi) if there shall have been a material interruption in the mail service or other means of communication within the United States; or (vii) if the Company or the Subsidiary shall have sustained a material or substantial loss by fire, flood, accident, hurricane, earthquake, theft, sabotage, or other calamity or malicious act, whether or not such loss shall have been insured, or from any labor dispute or court or government action, order, or decree, which will, in your opinion, make it inadvisable to proceed with the offering, sale, or delivery of the Shares; or (viii) if any material governmental restrictions shall have been imposed on trading in securities in general, which restrictions are not in effect on the date hereof; or (ix) if there shall be passed by the Congress of the United States or any state legislature any act or measure, or adopted by any governmental body, authoritative accounting institute or board, or governmental executive any orders, rules, or regulations, which you believe likely to have a material adverse effect on the business, financial condition, or financial statements of the Company and the Subsidiary or the market for any of the Company's securities; or (x) if there shall have been a material adverse change

in the market for the Company's securities or securities in general or in political, financial, or economic conditions as in your judgment makes it inadvisable to proceed with the offering, sale, and delivery of the Shares on the terms contemplated by the Prospectus.

- (b) If you elect to prevent this Agreement from becoming effective, as provided in this Section 10, or to terminate this Agreement, you shall notify the Company promptly by telephone or telecopy, confirmed by letter.
- (c) Notwithstanding any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Sections 5(a), 6, 8, 9, 10 and 12 shall not be in any way affected by such termination or failure to carry out the terms of this Agreement or any part hereof.
- specifically provided herein, shall be in writing and shall be delivered personally, transmitted by facsimile transmission confirmed in writing within three business days thereafter, or sent by prepaid overnight air courier or registered or certified mail, postage prepaid, return receipt requested, if sent to you at 135 E. 57th Street, New York, New York 10022, Attention: Mr. Preston Tsao, Facsimile: (212) 421-5944, with a copy to Squadron, Ellenoff, Plesent & Sheinfeld, LLP, 551 Fifth Avenue, New York, New York 10176, Attention: Kenneth R. Koch, Esq., Facsimile: (212) 697-6686; or if sent to the Company, at 666 Third Avenue, New York, New York 10017, Attention: Joshua D. Schein, Chief Financial Officer, Facsimile: (212) 986-2399, with a copy to Eilenberg & Zivian, 666 Third Avenue, New York, New York 10017, Attention: Adam Eilenberg, Esq., Facsimile: (212) 986-2399. All notices hereunder shall be deemed to have been given (a) when delivered, if delivered personally, or sent by facsimile transmission and, in the case of facsimile transmission, confirmed in writing within three business days thereafter, or sent by prepaid overnight air courier or (b) three business days following the mailing thereof, if mailed by registered or certified mail, postage prepaid, return receipt requested, in any such case at the address set forth in this Section 11, or such other address or addresses as a party may have advised the other party in the manner provided in this Section 11.
- 12. PARTIES. This Agreement shall inure solely to the benefit of, and shall be binding upon, the Underwriter, the Company, and the persons and entities referred to in Section 8 who are entitled to indemnification or contribution, and their respective successors, legal representatives, and assigns (which shall not include any buyer, as such, of the Shares), and no other person shall have or be construed to have any legal or equitable right, remedy, or claim under or in respect of or by virtue of this Agreement or any provision herein contained.
- 13. CONSTRUCTION. THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH
  THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO CONFLICT OF LAWS.
  TIME IS OF THE ESSENCE IN THIS AGREEMENT.
- 14. CONSENT TO JURISDICTION. THE COMPANY IRREVOCABLY CONSENTS TO THE
  JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK AND OF ANY FEDERAL COURT
  LOCATED IN SUCH STATE IN CONNECTION WITH ANY ACTION OR PROCEEDING ARISING OUT
  OF, OR RELATING TO, THIS AGREEMENT, ANY DOCUMENT OR INSTRUMENT DELIVERED
  PURSUANT TO, IN CONNECTION WITH, OR SIMULTANEOUSLY WITH THIS AGREEMENT,
  INCLUDING, WITHOUT LIMITATION, THE ESCROW AGREEMENT OR ANY SUBSCRIPTION
  AGREEMENT, OR A BREACH OF

THIS AGREEMENT OR ANY SUCH DOCUMENT OR INSTRUMENT. IN ANY SUCH ACTION OR PROCEEDING, THE COMPANY WAIVES PERSONAL SERVICE OF ANY SUMMONS, COMPLAINT, OR OTHER PROCESS AND AGREES THAT SERVICE THEREOF MAY BE MADE IN ACCORDANCE WITH SECTION 11. WITHIN 30 DAYS AFTER SUCH SERVICE, OR SUCH OTHER TIME AS MAY BE MUTUALLY AGREED UPON IN WRITING BY THE ATTORNEYS FOR THE PARTIES TO SUCH ACTION OR PROCEEDING, THE COMPANY SHALL APPEAR OR ANSWER SUCH SUMMONS, COMPLAINT, OR OTHER PROCESS. SHOULD THE COMPANY FAIL TO APPEAR OR ANSWER WITHIN SUCH 30-DAY PERIOD OR SUCH EXTENDED PERIOD, AS THE CASE MAY BE, THE COMPANY SHALL BE DEEMED IN DEFAULT AND JUDGMENT MAY BE ENTERED AGAINST THE COMPANY FOR THE AMOUNT AS DEMANDED IN ANY SUMMONS, COMPLAINT, OR OTHER PROCESS SO SERVED.

If the foregoing correctly sets forth the understanding between you and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between us.

Very truly yours,

SIGA PHARMACEUTICALS, INC.

BY:				
	NAME: TITLE:	 	 	

ACCEPTED AS OF THE DATE FIRST ABOVE WRITTEN IN NEW YORK, NEW YORK

SUNRISE SECURITIES CORP.

BY:
NAME:
TITLE:

Warrant No. \_\_\_\_\_

Warrant to Purchase [ ] Shares

SHARE PURCHASE WARRANT

To Purchase Shares of Common Stock (par value \$0.0001)

of

SIGA PHARMAECUTICALS, INC. (Delaware corporation)

Expires [ ], 2002

E-24

Warrant	No.	

NEITHER THIS WARRANT NOR THE SHARES ISSUABLE UPON EXERCISE HEREOF MAY BE TRANSFERRED EXCEPT IN A TRANSACTION REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR WHICH IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THAT ACT.

VOID AFTER 5:00 P.M. NEW YORK TIME, ON [ ] 2002

SIGA PHARMAECUTICALS, INC.
Warrant to Purchase Shares of Common Stock

325,000 Shares

THIS CERTIFIES that, for good and valuable consideration received, Sunrise Securities Corp. (the "Holder"), is entitled to subscribe for and purchase from

SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), upon the

terms and conditions set forth herein, at any time or from time to time until 5:00 P.M. New York City time on [ ], 2002 (the "Expiration Date"), all

or any portion of 325,000 Shares of common stock of the Company, par value \$0.0001 per share, subject to adjustment as provided herein (the "Warrant

Shares"), at a price of 5.50 per share, subject to adjustment as provided herein (the "Exercise Price"). This Warrant shall not be redeemable by the

Company. The term "Shares" as used herein shall mean the Company's Shares of

Common Stock, par value \$0.0001 per share. This Warrant may be sold, transferred, assigned or hypothecated at any time and the term the "Holder" as

used herein shall include any transferee to whom this Warrant has been transferred.

1. Method of Exercise. This Warrant may be exercised at any time prior

to the Expiration Date, as to the whole or any lesser number of Warrant Shares, by the surrender of this Warrant (with the election at the end hereof duly executed) to the Company at its office at 666 Third Avenue, New York, New York 10017 or at such other place as may be designated in writing by the Company, together with a certified or bank cashier's check payable to the order of the Company in an amount equal to the Exercise Price multiplied by the number of Warrant Shares for which this Warrant is being exercised. In lieu of the payment of the Exercise Price, the Holder shall have the right (but not the obligation), during the Exercise Period, to require the Company to convert this Warrant, in whole or in part, into the Warrant Shares as provided for in this Section (the "Conversion Right"). Upon exercise of the Conversion Right, the Company shall deliver to the Holder (without payment by the Holder of the Exercise Price) that number of shares of Common Stock equal to (i) the number of Warrant Shares issuable upon exercise of the portion of the Warrant being converted, multiplied by (ii) the quotient obtained by dividing (x) the value of the Warrant (on a per Warrant Share basis) at the time the Conversion Right is exercised (determined by subtracting the Exercise Price from the Current Market Price (as determined pursuant to Section 5(e) below), for the shares of Common Stock issuable upon exercise of the Warrant immediately prior to the exercise of the Conversion Right) by (y) the Current Market Price of one share of Common Stock immediately prior to the exercise of the Conversion Right. The Conversion Rights provided under this Section may be exercised in whole or in part and at any time and from time to time while any Warrants remain outstanding. In order to exercise the Conversion Right, the Holder shall surrender to the Company, at its offices, this

Warrant accompanied by the form of Subscription Agreement duly filled in and signed and a duly completed Conversion Notice in the form attached hereto. The presentation and surrender shall be deemed a waiver of the Holder's obligation to pay all or any portion of the aggregate purchase price payable for the Warrant Shares being issued upon such exercise of this Warrant. This Warrant (or so much thereof as shall have been surrendered for conversion) shall be deemed to have been converted immediately prior to the close of business on the day of surrender of this Warrant for conversion in accordance with the foregoing provisions. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver to the Holder (I) a certificate or certificates representing the largest number of whole Warrant Shares which the Holder shall be entitled as a result of the conversion, and (ii) if such Warrant is being converted in part only, a new Warrant exercisable for the number of Warrant Shares equal to the unconverted portion of the Warrant. Upon any exercise (which term, as used herein, shall include any exercise of the Conversion Right) of this Warrant, in lieu of any fractional Warrant Shares to which the Holder shall be entitled, the Company shall pay to the Holder cash in accordance with the provisions of Section 5(d) hereof.

- 2. Issuance of Certificates. Upon each exercise of the Holder's rights
- to purchase Warrant Shares, the Holder shall, as of the close of business on such day, be deemed to be the holder of record of the Warrant Shares issuable upon such exercise, notwithstanding that the transfer books of the Company shall then be closed or certificates representing such Warrant Shares shall not then have been actually delivered to the Holder. As soon as practicable after each such exercise of this Warrant, the Company shall issue and deliver to the Holder a certificate or certificates for the Warrant Shares issuable upon such exercise, registered in the name of the Holder or its designee. If this Warrant should be exercised in part only, upon surrender of this Warrant for cancellation, the Company shall execute and deliver a new Warrant evidencing the right of the Holder to purchase the balance of the Warrant Shares (or portions thereof) subject to purchase hereunder.
  - 3. Recording of Transfer. Any warrants issued upon the transfer or

exercise in part of this Warrant shall be numbered and shall be registered in an Warrant Register as they are issued. The Company shall be entitled to treat the registered holder of any Warrant on the Warrant Register as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in such Warrant on the part of any other person, and shall not be liable for any registration or transfer of warrants which are registered or to be registered in the name of a fiduciary or the nominee of a fiduciary unless made with the actual knowledge that a fiduciary or nominee is committing a breach of trust in requesting such registration or transfer, or with the knowledge of such facts that its participation therein amounts to bad faith. This Warrant shall be transferable only on the books of the Company upon delivery thereof duly endorsed by the Holder or by his or its duly authorized attorney or representative, or accompanied by proper evidence of succession, assignment or authority to transfer. In all cases of transfer by an attorney, executor, administrator, guardian or other legal representative, duly authenticated evidence of his or its authority shall be produced. Upon any registration of transfer, the Company shall deliver a new warrant or warrants to the person entitled thereto. This Warrant may be exchanged, at the option of the Holder hereof, for another warrant, or other warrants of different denominations, of like tenor and representing in the aggregate the right to purchase a like number

of Warrant Shares (or portions thereof), upon surrender to the Company or its duly authorized agent. Notwithstanding the foregoing, the Company shall have no obligation to cause this Warrant to be transferred on its books to any person if counsel to the Company reasonably requests a legal opinion that such transfer does not violate the provisions of the Securities Act of 1933, as amended (the "Act"), and the rules and regulations thereunder, unless such opinion is ----- delivered.

- 4. Reservation of Shares. The Company shall at all times reserve and keep available out of its authorized and unissued Shares, solely for the purpose of providing for the exercise of the warrants, such number of shares of Shares as shall, from time to time, be sufficient therefor. The Company covenants that all shares of Shares issuable upon exercise of this Warrant, upon receipt by the Company of the full payment therefor, shall be validly issued, fully paid, nonassessable and free of preemptive rights.
- 5. Exercise Price Adjustments. Subject to the provisions of this Section 5, the Exercise Price in effect from time to time shall be subject to adjustment, as follows:
- (a) In case the Company shall at any time after the date hereof (I) declare a dividend or make a distribution on the outstanding Shares payable in shares of its capital stock or securities convertible into or exchangeable for capital stock, (ii) subdivide the outstanding Shares, (iii) combine the outstanding Shares into a smaller number of shares, or (iv) issue any shares by reclassification of the Shares (other than a change in par value, or from par value to no par value, or from no par value to par value), then, in each case,

the Exercise Price in effect, and the number of Shares issuable upon exercise of the warrants outstanding, at the time of the record date for such dividend or at the effective date of such subdivision, combination or reclassification, shall be proportionately adjusted so that the holders of the warrants after such time shall be entitled to receive upon exercise of the warrant the aggregate number and kind of shares which, if such warrants had been exercised immediately prior to such time, such holders would have owned upon such exercise and immediately thereafter been entitled to receive by virtue of such dividend, subdivision, combination or reclassification. Such adjustment shall be made successively whenever any event listed above shall occur.

(b) In case the Company shall distribute to all holders of Shares (including any such distribution made to the stockholders of the Company in connection with a consolidation or merger in which the Company is the surviving or continuing corporation) evidences of its indebtedness, cash, or assets (other than distributions and dividends payable as contemplated by Section 5(a) above), or rights, options, or warrants to subscribe for or purchase Shares or securities convertible into or exchangeable for Shares, then, in each case, the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to the record date for the determination of stockholders entitled to receive such distribution by a fraction, the numerator of which shall be the Current Market Price (as determined pursuant to Section 5(e) hereof) per Share on such record date, less the fair market value (as determined in good faith by the board of directors of the Company, whose determination shall be conclusive absent manifest error) of the portion of the evidences of indebtedness or assets so to be distributed, or of such rights, options, or warrants or convertible or exchangeable securities, or the amount of such cash, applicable

to one share, and the denominator of which shall be such Current Market Price per Share. Such adjustment shall become effective at the close of business on such record date.

- (c) Whenever there shall be an adjustment as provided in this Section 5, the Company shall within 15 days thereafter cause written notice thereof to be sent by registered mail, postage prepaid, to the Holder, at its address as it shall appear in the Warrant Register, which notice shall be accompanied by an officer's certificate setting forth the number of Warrant Shares issuable hereunder and the exercise price thereof after such adjustment and setting forth a brief statement of the facts requiring such adjustment and the computation thereof, which officer's certificate shall be conclusive evidence of the correctness of any such adjustment absent manifest error.
- (d) The Company shall not be required to issue fractions of Shares or other shares of the Company upon the exercise of this Warrant. If any fraction of a share would be issuable upon the exercise of this Warrant (or specified portions thereof), the Company may issue a whole share in lieu of such fraction or the Company may purchase such fraction for an amount in cash equal to the same fraction of the Current Market Price of such Shares on the date of exercise of this Warrant.
- (e) The Current Market Price per Share on any date shall be deemed to be the average of the daily closing prices for the five (5) consecutive trading days immediately preceding the date in question. The closing price for each day shall be the last reported sales price regular way or, in case no such reported sale takes place on such day, the closing bid price regular way, in either case on the principal national securities exchange on which the Common Stock is listed or admitted to trading or, if the Common Stock is not listed or admitted to trading on any national securities exchange, the highest reported bid price for the Common Stock as furnished by the National Association of Securities Dealers, Inc. through NASDAQ or a similar organization if NASDAQ is no longer reporting such information. If on any such date the Common Stock is not listed or admitted to trading on any national securities exchange and is not quoted by NASDAQ or any similar organization, the fair value of a share of Common Stock on such date, as determined in good faith by the Board of Directors of the Company, whose determination shall be conclusive absent manifest error, shall be used.
- (f) No adjustment in the Exercise Price shall be required if such adjustment is less than \$0.05; provided, however, that any adjustments which by reason of this Section 5 are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 5 shall be made to the nearest cent or to the nearest thousandth of a share, as the case may be.
- (g) Upon each adjustment of the Exercise Price as a result of the calculations made in this Section 5, the warrants shall thereafter evidence the right to purchase, at the adjusted Exercise Price, that number of Shares (calculated to the nearest hundredth) obtained by dividing (i) the product obtained by multiplying the number of Shares purchasable upon exercise of the warrants prior to adjustment of the number of Shares by the Exercise Price in effect prior to adjustment of the Exercise Price by (ii) the Exercise Price in effect after such adjustment of the Exercise Price.

(a) Consolidations and Mergers. In case of any consolidation with or

merger of the Company with or into another corporation (other than a merger or consolidation in which the Company is the surviving or continuing corporation and which does not result in any reclassification of the outstanding Shares or the conversion of such outstanding Shares into shares of other stock or other securities or property), or in case of any sale, lease or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety (such actions being hereinafter collectively referred to as "Reorganizations"), there shall thereafter be

deliverable upon exercise of this Warrant (in lieu of the number of Shares theretofore deliverable) the kind and amount of shares of stock or other securities, cash or other property which would otherwise have been deliverable to a holder of the number of Shares upon the exercise of this Warrant upon such Reorganization if this Warrant had been exercised in full immediately prior to such Reorganization. In case of any Reorganization, appropriate adjustment, as determined in good faith by the Board of Directors of the Company, shall be made in the application of the provisions herein set forth with respect to the rights and interests of the Holder so that the provisions set forth herein shall thereafter be applicable, as nearly as possible, in relation to any shares or other property thereafter deliverable upon exercise of this Warrant. Any such adjustment shall be made by and set forth in a supplemental agreement between the Company, or any successor thereto, and the Holder and shall for all purposes hereof conclusively be deemed to be an appropriate adjustment. The Company shall not effect any such Reorganization unless upon or prior to the consummation thereof the successor corporation, or if the Company shall be the surviving corporation in any such Reorganization and is not the issuer of the shares of stock or other securities or property to be delivered to holders of Shares outstanding at the effective time thereof, then such issuer, shall assume by written instrument the obligation to deliver to the Holder such shares of stock, securities, cash or other property as the Holder shall be entitled to purchase in accordance with the foregoing provisions.

- (b) In case of any reclassification or change of the Shares issuable upon exercise of this Warrant (other than a change in par value or from no par value to a specified par value, or as a result of a subdivision or combination, but including any change in the shares into two or more classes or series of shares), or in case of any consolidation or merger of another corporation into the Company in which the Company is the continuing corporation and in which there is a reclassification or change (including a change to the right to receive cash or other property) of the Shares (other than a change in par value, or from no par value to a specified par value, or as a result of a subdivision or combination, but including any change in the shares into two or more classes or series of shares), the Holder shall have the right thereafter to receive upon exercise of this Warrant solely the kind and amount of shares of stock and other securities, property, cash or any combination thereof receivable upon such reclassification, change, consolidation or merger by a holder of the number of Shares for which this Warrant might have been exercised immediately prior to such reclassification, change, consolidation or merger. Thereafter, appropriate provision shall be made for adjustments which shall be as nearly equivalent as practicable to the adjustments in Section 5.
- (c) The above provisions of this Section 6 shall similarly apply to successive reclassifications and changes of Shares and to successive consolidations, mergers, sales, leases, or conveyances.

7. Notice of Certain Events. In case at any time any of the

following occur:

- (a) The Company shall take a record of the holders of its Shares for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of current or retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company; or
- (b) The Company shall offer to all the holders of its Shares any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor; or
- (c) The Company shall take any action to effect any reclassification or change of outstanding Shares or any consolidation, merger, sale, lease or conveyance of property, described in Section 6; or
- (d) The Company shall take any action to effect any liquidation, dissolution or winding-up of the Company or a sale of all or substantially all of its property, assets and business;

then, and in any one or more of such cases, the Company shall give written

notice thereof, by registered mail, postage prepaid, to the Holder at the Holder's address as it shall appear in the Warrant Register, mailed at least fifteen (15) days prior to (i) the date as of which the holders of record of Shares to be entitled to receive any such dividend, distribution, rights, warrants or other securities are to be determined, (ii) the date on which any such offer to holders of Shares is made, or (iii) the date on which any such reclassification, change of outstanding Shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution or winding-up is expected to become effective and the date as of which it is expected that holders of record of Shares shall be entitled to exchange their shares for securities or other property, if any, deliverable upon such reclassification, change of outstanding shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution or winding-up. Nothing herein shall allow a Holder to delay or prevent any of the foregoing actions.

8. Registration Rights. (a) If, at any time during the seven-year period

commencing on the date hereof the Company shall file a registration statement (other than on Form S-4, Form S-8, or any successor form) with the Securities and Exchange Commission (the "Commission") while any Warrants or Warrant Shares are outstanding, the Company shall give all of the then holders of any Warrants (the "Eligible Holders") at least 45 days' prior written notice of the filing of such registration statement. If requested by any Eligible Holder in writing within 30 days after receipt of any such notice, the Company shall, at the Company's sole expense (other than the fees and disbursements of counsel for the Eligible Holders and the underwriting discounts, if any, payable in respect of the Warrant Shares sold by any Eligible Holder), register or qualify all or, at each Eligible Holder's option, any portion of the Warrant Shares of any Eligible Holders who shall have made such request, concurrently with the registration of such other securities, all to the extent requisite to permit the public offering and sale of the Warrant Shares through the facilities

of all appropriate securities exchanges and the over-the-counter market, and will use its best efforts through its officers, directors, auditors, and counsel to cause such registration statement to become effective as promptly as practicable. Notwithstanding the foregoing, if the managing underwriter of any such offering shall advise the Company in writing that, in its opinion, the distribution of all or a portion of the Warrant Shares requested to be included in the registration concurrently with the securities being registered by the Company would materially adversely affect the distribution of such securities by the Company for its own account, then any Eligible Holder who shall have requested registration of his or its Warrant Shares shall delay the offering and sale of such securities (or the portions thereof so designated by such managing underwriter) for such period, not to exceed 90 days, as the managing underwriter shall request (the "Delay Period"); provided that if any securities of the Company are included in such registration statement and are eligible for sale during the Delay Period shall also be included in such registration statement and shall be eligible for sale during the Delay Period.

- (b) If, on any two occasions during the seven-year period commencing on the date hereof, the Company shall receive a written request from Eligible Holders who in the aggregate own (or upon exercise of all Warrants then outstanding would own) a majority of the total number of shares of Common Stock then included (or upon such exercises would be included) in the Warrant Shares (the "Majority Holders"), to register the sale of all or part of the Warrant Shares, the Company shall, as promptly as practicable, prepare and file with the Commission a registration statement sufficient to permit the public offering and sale of the Warrant Shares (whether covered by such request from the Majority Holders or by any other written request from any Eligible Holder received within 30 days after such Eligible Holder's receipt of the Company's notice, as described in the last sentence of this Section 8(b)) through the facilities of all appropriate securities exchanges and the over-the-counter market, and will use its best efforts through its officers, directors, auditors, and counsel to cause such registration statement to become effective as promptly as practicable; provided, that the Company shall only be obligated to file one such registration statement for which all expenses incurred in connection with such registration (other than the fees and disbursements of counsel for the Eligible Holders and underwriting discounts, if any, payable in respect of the Warrant Shares sold by the Eligible Holders) shall be borne by the Company. Within three business days after receiving any request contemplated by this Section 8(b), the Company shall give written notice to all the other Eligible Holders, advising each of them that the Company is proceeding with such registration and offering to include therein all or any portion of any such other Eligible Holder's Warrant Shares, provided that the Company receives a written request to do so from such Eligible Holder within 30 days after receipt by him or it of the Company's notice.
- (c) Notwithstanding anything herein to the contrary, in addition to the registration rights under Sections 8(a) and 8(b) above, the Eligible Holder shall be entitled to the same registration rights and rights included therein as the purchasers of securities of the Company are entitled to pursuant to the Subscription Agreement, dated as of the date hereof, among the purchasers described therein and the Company as to the Warrant Shares.

- (d) In the event of a registration pursuant to the provisions of this Section 8, the Company shall use its best efforts to cause the Warrant Shares so registered to be registered or qualified for sale under the securities or blue sky laws of such jurisdictions as the Holder or such holders may reasonably request; provided, however, that the Company shall not be required to qualify to do business in any state by reason of this Section 8(d) in which it is not otherwise required to qualify to do business or otherwise subject itself to general service of process in any such state.
- (e) The Company shall keep effective any registration or qualification contemplated by this Section 8(a) or (b) and shall from time to time amend or supplement each applicable registration statement, preliminary prospectus, final prospectus, application, document and communication for such period of time as shall be required to permit the Eligible Holders to complete the offer and sale of the Warrant Shares covered thereby. The Company shall in no event be required to keep any such registration or qualification in effect for a period in excess of six months from the date on which the Eligible Holders are first free to sell such Warrant Shares; provided, however, that, if the Company is required to keep any such registration or qualification in effect with respect to securities other than the Warrant Shares beyond such period, the Company shall keep such registration or qualification in effect as it relates to the Warrant Shares for so long as such registration or qualification remains or is required to remain in effect in respect of such other securities.
- (f) In the event of a registration pursuant to the provisions of this Section 8, the Company shall furnish to each Eligible Holder such number of copies of the registration statement and of each amendment and supplement thereto (in each case, including all exhibits), such reasonable number of copies of each prospectus contained in such registration statement and each supplement or amendment thereto (including each preliminary prospectus), all of which shall conform to the requirements of the Act and the rules and regulations thereunder, and such other documents, as any Eligible Holder may reasonably request to facilitate the disposition of the Warrant Shares included in such registration.
- (g) In the event of a registration pursuant to the provisions of this Section 8, the Company shall furnish each Eligible Holder of any Warrant Shares so registered with an opinion of its counsel (reasonably acceptable to the Eligible Holders) to the effect that (I) the registration statement has become effective under the Act and no order suspending the effectiveness of the registration statement, preventing or suspending the use of the registration statement, any preliminary prospectus, any final prospectus or any amendment or supplement thereto has been issued, nor has the Commission or any securities or blue sky authority of any jurisdiction instituted or threatened to institute any proceedings with respect to such an order, (ii) the registration statement and each prospectus forming a part thereof (including each preliminary prospectus), and any amendment or supplement thereto, complies as to form with the Act and the rules and regulations thereunder, and (iii) such counsel has no knowledge of any material misstatement or omission in such registration statement or any prospectus, as amended or supplemented.
- (h) In the event of a registration pursuant to the provision of this Section 8, the Company shall enter into a cross-indemnity agreement and a contribution agreement, each in customary form, with each underwriter, if any, and, if requested, enter into an underwriting agreement containing conventional

representations, warranties, allocation of expenses and customary closing conditions, including, without limitation, opinions of counsel and accountants' cold comfort letters, with any underwriter who acquires any Warrant Shares.

- (i) The Company agrees that until all the Warrant Shares have been sold under a registration statement or pursuant to Rule 144 under the Act, it shall, so long as it is so required by applicable law, timely file all reports, statements and other materials required to be filed with the Commission to permit holders of the Warrant Shares to sell such securities under Rule 144, for a period of up to five years from the date hereof.
- (j) Until such time as the Warrant Shares shall become fully transferable under Rule 144 under the Act, the Company will not, without the written consent of the Majority Holders, grant to any persons the right to request the Company to register any securities of the Company, provided that the Company may grant such registration rights to other persons so long as such rights do not conflict with the rights of the Eligible Holders; provided, however, that pro rata rights resulting from "underwriter cutbacks" shall be deemed not to conflict with the rights of Eligible Holders.
- (k) The Company may delay any requested registration hereunder if the Company's Board of Directors determines in good faith that a registration at such time would be materially detrimental to the Company provided that any such delay shall not exceed 30 days and Company cannot provide this notice more than twice in any 12 month period.
- (1) Subject to the conditions set forth below, the Company agrees to indemnify and hold harmless each Eligible Holder, its officers, directors, partners, employees, agents and counsel, and each person, if any, who controls any such person within the meaning of Section 15 of the Act or Section 20(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), from and against any and all loss, liability, charge, claim, damage and expense whatsoever (which shall include, for all purposes of this Section 8, without limitation, reasonable attorneys' fees and any and all expense whatsoever incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, and any and all amounts paid in settlement of any claim or litigation), as and when incurred, arising out of, based upon, or in connection with (i) any untrue statement or alleged untrue statement of a material fact contained (A) in any registration statement, preliminary prospectus or final prospectus (as from time to time amended and supplemented), or any amendment or supplement thereto, relating to the sale of any of the Warrant Shares, or (B) in any application or other document or communication (in this Section 8 collectively called an "application") executed by or on behalf of the Company or based upon written information furnished by or on behalf of the Company filed in any jurisdiction in order to register or qualify any of the Warrant Shares under the securities or blue sky laws thereof or filed with the Commission or any securities exchange; or any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, unless such statement or omission was made in reliance upon and in conformity with written information furnished to the Company with respect to such Eligible Holder by or on behalf of such person expressly for inclusion in any registration statement, preliminary prospectus, or final prospectus, or any amendment or supplement thereto, or in any application, as the case may be, or (ii) any breach of any representation,

warranty, covenant or agreement of the Company contained in this Warrant. The foregoing agreement to indemnify shall be in addition to any liability the Company may otherwise have, including liabilities arising under this Warrant.

If any action is brought against any Eligible Holder or any of its officers, directors, partners, employees, agents or counsel, or any controlling persons of such person (an "indemnified party") in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph, such indemnified party or parties shall promptly notify the Company in writing of the institution of such action (but the failure so to notify shall not relieve the Company from any liability other than pursuant to this Section 8(m) and shall not relieve the Company from any liability pursuant to this Section 8(m) except to the extent the Company has been prejudiced in any material respect by such failure) and the Company shall promptly assume the defense of such action, including the employment of counsel (reasonably satisfactory to such indemnified party or parties) and payment of expenses. Such indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless the employment of such counsel shall have been authorized in writing by the Company in connection with the defense of such action or the Company shall not have promptly employed counsel reasonably satisfactory to such indemnified party or parties to have charge of the defense of such action or such indemnified party or parties shall have reasonably concluded that there may be one or more legal defenses available to it or them or to other indemnified parties which are different from or additional to those available to the Company, in any of which events such fees and expenses of one counsel shall be borne by the Company, and the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties. Anything in this Section 8 to the contrary notwithstanding, the Company shall not be liable for any settlement of any such claim or action effected without its written consent, which shall not be unreasonably withheld. The Company shall not, without the prior written consent (which shall not be unreasonably withheld) of each indemnified party that is not released as described in this sentence, settle or compromise any action, or permit a default or consent to the entry of judgment in or otherwise seek to terminate any pending or threatened action, in respect of which indemnity may be sought hereunder (whether or not any indemnified party is a party thereto), unless such settlement, compromise, consent or termination includes an unconditional release of each indemnified party from all liability in respect of such action. The Company agrees promptly to notify the Eligible Holders of the commencement of any litigation or proceedings against the Company or any of its officers or directors in connection with the sale of any Warrant Shares or any preliminary prospectus, prospectus, registration statement or amendment or supplement thereto, or any application relating to any sale of any Warrant Shares.

(m) Each of the Holder and any Eligible Holder agrees to indemnify and hold harmless the Company, each director of the Company, each officer of the Company who shall have signed any registration statement covering Warrant Shares held by the Holder and any Eligible Holder, each other person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, and its or their respective counsel, to the same extent as the foregoing indemnity from the Company to the Holder in Section 8(m), but only with respect to statements or omissions, if any, made in any registration statement or final prospectus, or any amendment or supplement

thereto, or in any application, in reliance upon and in conformity with written information furnished to the Company with respect to the Holder by or on behalf of the Holder or with respect to any Eligible Holder or by or on behalf of such Eligible Holder expressly for inclusion in any such registration statement or final prospectus, or any amendment or supplement thereto, or in any application, as the case may be; provided, however, that the Holder and each Eligible Holder shall be liable only for written information furnished to the Company by it or on its own behalf for inclusion in a registration statement; and provided, further, that no Eligible Holder shall be liable in an amount greater than the net proceeds received by such Eligible Holder in connection with the applicable registration. If any action shall be brought against the Company or any other person so indemnified based on any such registration statement or final prospectus, or any amendment or supplement thereto, or in any application, and in respect of which indemnity may be sought against the Holder pursuant to this Section 8(n), the Holder and each Eligible Holder, as the case may be, shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the indemnified parties, by the provisions of Section 8(m).

(n) To provide for just and equitable contribution, if (i) an indemnified party makes a claim for indemnification pursuant to Section 8(m) or 8(n) (subject to the limitations thereof) but it is found in a final judicial determination, not subject to further appeal, that such indemnification may not be enforced in such case, even though this Agreement expressly provides for indemnification in such case, or (ii) any indemnified or indemnifying party seeks contribution under the Act, the Exchange Act or otherwise, then the Company (including for this purpose any contribution made by or on behalf of any director of the Company, any officer of the Company who signed any such registration statement, any controlling person of the Company, and its or their respective counsel), as one entity, and the Eligible Holders of the Warrant Shares included in such registration in the aggregate (including for this purpose any contribution made by or on behalf of an indemnified party), as a second entity, shall contribute to the losses, liabilities, claims, damages and expenses whatsoever to which any of them may be subject, on the basis of relevant equitable considerations such as the relative fault of the Company and such Eligible Holders in connection with the facts which resulted in such losses, liabilities, claims, damages and expenses. The relative fault, in the case of an untrue statement, alleged untrue statement, omission or alleged omission, shall be determined by, among other things, whether such statement, alleged statement, omission or alleged omission relates to information supplied by the Company or by such Eligible Holders, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement, alleged statement, omission or alleged omission. The Company and the Holder agree that it would be unjust and inequitable if the respective obligations of the Company and the Eligible Holders for contribution were determined by pro rata or per capita allocation of the aggregate losses, liabilities, claims, damages and expenses (even if the Holder and the other indemnified parties were treated as one entity for such purpose) or by any other method of allocation that does not reflect the equitable considerations referred to in this Section 8(o). In no case shall any Eligible Holder be responsible for a portion of the contribution obligation imposed on all Eligible Holders in excess of its pro rata share based on the number of shares of Common Stock owned (or which would be owned upon exercise of all Warrants) by it and included in such registration as compared to the number of shares of Common Stock owned (or which would be owned

upon exercise of all Warrants) by all Eligible Holders and included in such registration nor shall any Eligible Holder be responsible for an amount greater than the net proceeds received by such Eligible Holder in connection with the applicable registration. No person guilty of a fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who is not guilty of such fraudulent misrepresentation. For purposes of this Section 8(0), each person, if any, who controls any Eligible Holder within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act and each officer, director, partner, employee, agent and counsel of each such Eligible Holder or control person shall have the same rights to contribution as such Eligible Holder or control person and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, each officer of the Company who shall have signed any such registration statement, each director of the Company and its or their respective counsel shall have the same rights to contribution as the Company, subject in each case to the provisions of this Section 8(o). Anything in this Section 8(o) to the contrary notwithstanding, no party shall be liable for contribution with respect to the settlement of any claim or action effected without its written consent. This Section 8(o) is intended to supersede any right to contribution under the Act, the Exchange Act or otherwise.

9. Taxes. The issuance of any shares or other securities upon the exercise

of this Warrant and the delivery of certificates or other instruments representing such shares or other securities shall be made without charge to the Holder for any tax or other charge in respect of such issuance. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder (except for any tax that is payable in respect of any such transfer and any related exercise of this Warrant and that would be payable pursuant to the first sentence of this Section 9 were such certificate to be issued in the name of the Holder) and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

10. Legend. Unless registered pursuant to the provisions of Section 8

hereof, the certificate or certificates evidencing the Warrant Shares, shall bear the following legend:

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR STATE SECURITIES LAWS, BUT HAVE BEEN ISSUED OR TRANSFERRED PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT. NO DISTRIBUTION, SALE, OFFER FOR SALE, TRANSFER, DELIVERY, PLEDGE, OR OTHER DISPOSITION OF THESE SECURITIES MAY BE EFFECTED EXCEPT IN COMPLIANCE WITH THE ACT, ANY APPLICABLE STATE LAWS, AND THE RULES AND REGULATIONS OF THE SECURITIES AND EXCHANGE COMMISSION AND STATE AGENCIES PROMULGATED THEREUNDER."

In addition, if, after the Warrant Shares are registered pursuant to Section 8(c) hereof, the Holder wishes to have the original legend removed, then, unless the Warrant Shares are registered pursuant to the provisions of Section 8(a) and (b) hereof, the certificate or certificates evidencing the Warrant Shares shall bear the following legend:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, PURSUANT TO A REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. HOWEVER, SUCH SHARES MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (I) A POST-EFFECTIVE AMENDMENT TO SUCH REGISTRATION STATEMENT, UNLESS COUNSEL OF COMPANY ADVISES IN WRITING THAT SUCH POST-EFFECTIVE AMENDMENT IS NOT REQUIRED, IN WHICH EVENT SUCH SHARES MAY BE OFFERED PURSUANT TO THE ORIGINAL REGISTRATION STATEMENT PURSUANT TO WHICH THESE SHARES HAVE BEEN REGISTERED, (ii) A SEPARATE REGISTRATION STATEMENT UNDER SUCH ACT, OR (iii) AN EXEMPTION FROM REGISTRATION UNDER SUCH ACT."

11. Replacement of Warrants. Upon receipt of evidence satisfactory to the

Company of the loss, theft, destruction or mutilation of any Warrant (and upon surrender of any Warrant if mutilated), and upon reimbursement of the Company's reasonable incidental expenses and execution of a reasonable lost security indemnification agreement, the Company shall execute and deliver to the Holder thereof a new Warrant of like date, tenor and denomination.

- 12. No Rights as Stockholder. The Holder of any Warrant shall not have, solely on account of such status, any rights of a stockholder of the Company, either at law or in equity, or to any notice of meetings of stockholders or of any other proceedings of the Company, except as provided in this Warrant.
- 13. Notices. All notices, requests, consents and other communications
  ----hereunder shall be in writing and shall be deemed to have been duly made when
  delivered, or mailed by registered or certified mail, return receipt requested:
- (a) If to the registered Holder of this Warrant, to the address of such Holder as shown on the books of the Company; or
- (b) If to the Company, to the address set forth on the first page of this Warrant or to such other address as the Company may designate by notice to the Holder.
- 14. Successors. All the covenants, agreements, representations and warranties contained in this Warrant shall bind the parties hereto and their respective heirs, executors, administrators, distributees, successors and assigns.

- 16. Governing Law. This Warrant shall be construed in accordance with the \_\_\_\_\_\_laws of the State of New York applicable to contracts made and performed within such State, without regard to principles of conflicts of law.
  - 17. Modification of Agreement. This Warrant shall not otherwise be modified,

supplemented or amended in any respect unless such modification, supplement or amendment is in writing and signed by the Company and the Holder of this Warrant and Holders of any portion of the Warrant subsequently assigned or transferred in accordance with the terms of this Warrant.

18. Consent to Jurisdiction. The Company and the Holder irrevocably consent

to the jurisdiction of the courts of the State of New York and of any federal court located in such State in connection with any action or proceeding arising out of or relating to this Warrant, any document or instrument delivered pursuant to, in connection with or simultaneously with this Warrant, or a breach of this Warrant or any such document or instrument. In any such action or proceeding, the Company waives personal service of any summons, complaint or other process and agrees that service thereof may be made in accordance with Section 13 hereof.

IN WITNESS WHEREOF, the undersigned has executed this instrument as of the date set forth below.

Dated:	L	], 1997	SIGA	PHARMACEUTICALS,	INC.
			Ву:		
				Name:	
				Title:	
			E 20		

## FORM OF ASSIGNMENT

(To be executed by the registhe attached Warrant.)	stered holder if such holder desires to transfe	r
FOR VALUE RECEIVED, transfers unto	hereby sells, assigns, and , having an address at , the attached Warrant to	the
extent of the right to purchas	se Shares of \$0.0001 par value per 6, INC. (the "Company"), together with all righ	•
as attorney	and does hereby irrevocably constitute and apport to transfer such Warrant on the books of the	int
Company, with full power of su	IDSTITUTION.	
Dated:,		
	Print name of holder of Warrant	
	By:	
	Title:	

NOTICE

The signature on the foregoing Assignment must correspond to the name as written upon the face of this Warrant in every particular, without alteration or enlargement or any change whatsoever.

To:

#### CASH EXERCISE FORM

Shares covered by the within Warrant of \$ in accordance with	ts rights to purchase Warrant and tenders payment herewith in the amount the terms thereof, and requests that issued in the name of, and delivered to:
	ress and Social Security tification Number)
covered by the within Warrant, that a	s shall not be all the Warrant Shares a new Warrant for the balance of the Warrant be registered in the name of, and delivered tated below.
Dated: Name:	:(Print)
	(Signature) (Signature must conform to the name of the Warrant Holder specified on the face of the Warrant)

Address:

To:

#### 

The undersigned hereby irrevocably elects to surrender its Warrant for the number of Warrant Shares as shall be issuable pursuant to the cashless exercise provisions of Section 1 of the within Warrant, in respect of \_\_\_\_\_\_ Warrant Shares underlying the within Warrant, and requests that certificates for such Warrant Shares be issued in the name of and delivered to:

(Print Name, Address and Social Security or Tax Identification Number)

and, if such number of Warrant Shares shall not be all the shares exchangeable or purchasable under the within Warrant, that a new Warrant for the balance of the Warrant Shares covered by the within Warrant be registered in the name of, and delivered to, the undersigned at the address stated below.

Date:		
Name:	(Print)	
Address:		
	(Signature)	
 Signature		

	<b>ESCROW</b>	AGREEME	ENT BY	AND AM	ONG THE	COMPANY	, SUNRISE	SECURITIES	CORP.	
AND	UNITED	STATES	TRUST	COMPAN	Y OF NE	W YORK,	DATED AS	OF		1997

SIGA PHARMACEUTICALS, INC.

SUNRISE SECURITIES CORP.

**ESCROW AGREEMENT** 

With

#### UNITED STATES TRUST COMPANY OF NEW YORK

ESCROW AGREEMENT, dated as of \_\_\_\_\_\_\_, 1997 by and among SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), SUNRISE SECURITIES CORP., a Delaware corporation (the "Underwriter"), and UNITED STATES TRUST COMPANY OF NEW YORK, a national banking institution incorporated under the laws of the United States of America (the "Escrow Agent").

WHEREAS, the Company proposes to sell 3,250,000 shares of its common stock (the "Shares"), without par value of the Company (the "Common Stock"), in an offering (the "Offering") registered pursuant to a Registration Statement (as amended, the "Registration Statement") filed by the Company with the Securities and Exchange Commission, with the offering price per share of Common Stock assumed to be \$5.00 per share;

WHEREAS, the Underwriter has agreed to offer the Shares as the agent of the Company on a "best efforts, all or none" basis;

WHEREAS, the Company needs to provide for the safekeeping and investment of the proceeds of the sale of the Shares until such time as the Company accepts subscriptions for 3,100,000 Shares and the proceeds of the sale of such Shares are deposited with the Escrow Agent or until such time as the Offering terminates and the Escrow Agent is required to return such proceeds to the subscribers as provided for herein; and

WHEREAS, with respect to all subscription payments received by subscribers, the Company proposes to establish an escrow account with the Escrow Agent at the office of its Escrow Administration, 114 West 47th Street, 15th Floor, New York, New York 10036.

NOW, THEREFORE, it is agreed as follows:

- 1. Establishment of Escrow. The Escrow Agent hereby agrees to receive and disburse the proceeds from the Offering and any interest earned thereon in accordance herewith. Proceeds from the Offering shall be invested in accordance with Rule 15c2-4 of the Rules and Regulations under the Securities Exchange Act of 1934.
- subscribers of Shares, and/or such subscribers shall from time to time cause to be wired to or deposited with the Escrow Agent funds or checks of the subscribers delivered in payment for Shares (the "Escrowed Property"). Any checks delivered

2. Deposit of Escrowed Property. The Underwriter, on behalf of the

to the Escrow Agent pursuant to the terms hereof shall be made payable to or endorsed to the order of "U.S. Trust Company of New York as escrow agent for SIGA Pharmaceuticals, Inc." The Escrow Agent upon receipt of such checks shall present such checks for payment to the drawee-bank under such checks. Any checks not honored by the drawee-bank thereunder after the first presentment for payment shall be returned to the Company in the same manner as notices are delivered pursuant to Section 4. Upon receipt of such funds or checks, the Escrow Agent shall credit such funds and the amount of such checks to an interest-bearing account (the "Escrow Account") held by the Escrow Agent. If, following the credit of the amount of any check to the Escrow Account, such check is dishonored, the Escrow Agent shall debit the Escrow Account for the amount of such dishonored check.

3. List of Subscribers. The Underwriter shall furnish or cause to be  $\ensuremath{\mathsf{S}}$ 

furnished to the Escrow Agent, at the time of each deposit by it of funds or checks pursuant to Section 2, a list, substantially in the form of Exhibit A hereto, containing the name of, the address of, number of Shares subscribed for by, the subscription amount delivered to the Escrow Agent on behalf of, and the social security number, if applicable, of, each subscriber whose funds are being deposited, for each listed subscriber. The Escrow Agent shall notify the Underwriter and the Company of any discrepancy between the subscription amounts set forth on any list delivered pursuant to this Section 3 and the subscription amounts received by the Escrow Agent and shall notify the Underwriter upon its receipt of funds or checks directly from any subscriber. The Escrow Agent is authorized to revise such list to reflect the actual subscription amounts received and the release of any subscription amounts pursuant to Section 2.

- 4. Disbursement of Funds. (a) If the Escrow Agent shall receive a notice,
- substantially in the form of Exhibit B hereto (an "Offering Termination Notice"), from the Company and the Underwriter, the Escrow Agent shall, promptly after receipt of such Offering Termination Notice and the clearance of all checks received by the Escrow Agent as Escrowed Property, (i) send to each subscriber listed on the list held by the Escrow Agent pursuant to Section 3 whose total subscription amount shall not have been released pursuant to paragraph (b) or (c) of this Section 4, in the manner set forth in paragraph (d) of this Section 4, a check to the order of such subscriber in the amount of the remaining subscription amount held by the Escrow Agent as set forth on such list held by the Escrow Agent, and (ii) pay to the Company the amount of any interest earned on the Escrowed Property.
- (b) In the event that (i) 3,250,000 Shares have been subscribed for and funds in respect thereof shall have been deposited with the Escrow Agent on or before the Termination Date and (ii) no Offering Termination Notice shall have been delivered to the Escrow Agent, the Company and the Underwriter from time to time may deliver to the Escrow Agent a joint notice, substantially in the form of Exhibit C hereto (a "Closing Notice"), designating the date on which Shares are to be sold and delivered to the subscribers thereof (a "Closing Date"), which date shall not be earlier than the clearance of any checks received by the Escrow Agent as Escrowed Property, the proceeds of which are to be distributed on such Closing Date, and identifying the subscribers and the number of the Shares to be sold to each thereof on such Closing Date, not less than two (2) nor more than seven (7) business days prior to such Closing Date. The Escrow Agent, after receipt of such Closing Notice and the clearance of such checks shall, pay to the Company or its designees on such Closing Date, in federal or other immediately

available funds, in the manner specified by the Company and the Underwriter in such Closing Notice, an amount equal to the aggregate of the subscription amounts paid by the subscribers identified in such Closing Notice for the Shares to be sold on such Closing Date as set forth on the list held by the Escrow Agent pursuant to Section 3, together with any and all interest on the Escrowed Property.

- (c) If at any time and from time to time prior to the release of any subscriber's total subscription amount pursuant to paragraph (a) or (b) of this Section 4 from escrow, the Company or the Underwriter shall deliver to the Escrow Agent a notice, substantially in the form of Exhibit D hereto (a "Subscription Termination Notice"), to the effect that any or all of the subscriptions of such subscriber have been rejected by the Company (a "Rejected Subscription"), the Escrow Agent shall, promptly after receipt of such Subscription Termination Notice and, if such subscriber delivered a check in payment of its Rejected Subscription, after the clearance of such check, send to such subscriber, in the manner set forth in paragraph (d) of this Section 4, a check to the order of such subscriber in the amount of such Rejected Subscription amount. Any and all interest on the amount of any Rejected Subscription shall be disbursed as provided in Section 3(b) or (c) above with respect to interest on the Escrowed Property.
- (d) For the purposes of this Section 4, any check that the Escrow Agent shall be required to send to any subscriber shall be sent to such subscriber by first class mail, postage prepaid, at such subscriber's address furnished to the Escrow Agent pursuant to Section 3.
  - 5. Notices. Any notice or other communication required or permitted to be

given hereunder shall be in writing and shall be (a) delivered by hand or (b) sent by mail, registered or certified, with proper postage prepaid, and addressed as follows:

If to the Company, to:

SIGA Pharmaceuticals, Inc.

666 Third Avenue

New York, New York 10017

Attention: David H. De Weese

President and Chief Executive Officer

Phone: 212-681-4970 Fax: 212-986-2399

If to the Underwriter, to:

Sunrise Securities Corp. 135 E. 57th Street New York, New York 10022 Attention: Mr. Preston Tsao

Phone: 212-421-1616 Fax: 212-421-5942

If to the Escrow Agent, to:

United States Trust Company of New York Corporate Trust Escrow Administration 114 West 47th Street, 15th Floor New York, New York 10036 Attention:

Phone: 212-852-1613 Fax: 212-852-1626

or to such other address as the person to whom notice is to be given may have previously furnished to the others in the above-referenced manner. All such notices and communications, if mailed, shall be effective when deposited in the mails, except that notices and communications to the Escrow Agent and notices of changes of address shall not be effective until received.

- 6. Concerning the Escrow Agent. To induce the Escrow Agent to act hereunder,
- it is further agreed by the Company and Underwriter that:
- (a) The Escrow Agent shall not be under any duty to give the Escrowed Property held by it hereunder any greater degree of care than it gives its own similar property and shall not be required to invest any funds held hereunder except as directed in this Escrow Agreement. Uninvested funds held hereunder shall not earn or accrue interest.
- (b) This Escrow Agreement expressly sets forth all the duties of the Escrow Agent with respect to any and all matters pertinent hereto. No implied duties or obligations shall be read into this Escrow Agreement against the Escrow Agent. The Escrow Agent shall not be bound by the provisions of any agreement among the other parties hereto except this Escrow Agreement.
- (c) The Escrow Agent shall not be liable, except for its own gross negligence or willful misconduct, and, except with respect to claims based upon such gross negligence or willful misconduct that are successfully asserted against the Escrow Agent, the other parties hereto shall jointly and severally indemnify and hold harmless the Escrow Agent (and any successor Escrow Agent) from and against any and all losses, liabilities, claims, actions, damages and expenses, including reasonable attorneys' fees and disbursements, arising out of and in connection with this Escrow Agreement. Without limiting the foregoing, the Escrow Agent shall in no event be liable in connection with its investment or reinvestment of any cash held by it hereunder in good faith, in accordance with the terms hereof, including without limitation any liability for any delays (not resulting from gross negligence or willful misconduct) in the investment or reinvestment of the Escrowed Property, or any loss of interest incident to any such delays.
- (d) The Escrow Agent shall be entitled to rely upon any order, judgment, certification, demand, notice, instrument or other writing delivered to it hereunder without being required to determine the authenticity or the correctness of any fact stated therein or the propriety or validity of the service thereof. The Escrow Agent may act in reliance upon any instrument or signature believed by it in good faith to be genuine and may assume, if in good faith, that any person purporting to give notice or receipt or advice or make any statement or execute any document in connection with the provisions hereof has been duly authorized to do so.

- (e) The Escrow Agent may act pursuant to the advice of counsel with respect to any matter relating to this Escrow Agreement and shall not be liable for any action taken or omitted in good faith and in accordance with such advice.
- (f) The Escrow Agent does not have any interest in the Escrowed Property deposited hereunder but is serving as escrow holder only. Any payments of income from the Escrow Account shall be subject to withholding regulations then in force with respect to United States taxes. The Company will provide the Escrow Agent with appropriate forms for tax I.D., number certification, or non-resident alien certifications.

This paragraph (f) and paragraph (c) of this Section 6 shall survive notwithstanding any termination of this Escrow Agreement or the resignation of the Escrow Agent.

- (g) The Escrow Agent makes no representation as to the validity, value, genuineness or the collectibility of any security or other documents or instrument held by or delivered to it.
- (h) The Escrow Agent shall not be called upon to advise any party as to the wisdom in selling or retaining or taking or refraining from any action with respect to any securities or other property deposited hereunder.
- (i) The Escrow Agent (and any successor escrow agent) at any time may be discharged from its duties and obligations hereunder by the delivery to it of notice of termination signed by both the Company and the Underwriter or at any time may resign by giving written notice to such effect to the Company and the Underwriter. Upon any such termination or resignation, the Escrow Agent shall deliver the Escrowed Property to any successor escrow agent jointly designated by the other parties hereto in writing, or to any court of competent jurisdiction if no such successor escrow agent is agreed upon, whereupon the Escrow Agent shall be discharged of and from any and all further obligations arising in connection with this Escrow Agreement. The termination or resignation of the Escrow Agent shall take effect on the earlier of (i) the appointment of a successor (including a court of competent jurisdiction) or (ii) the day that is 30 days after the date of delivery: (A) to the Escrow Agent of the other parties' notice of termination or (B) to the other parties hereto of the Escrow Agent's written notice of resignation. If at that time the Escrow Agent has not received a designation of a successor escrow agent, the Escrow Agent's sole responsibility after that time shall be to keep the Escrowed Property safe until receipt of a designation of successor escrow agent or a joint written disposition instruction by the other parties hereto or an enforceable order of a court of competent jurisdiction.
- (j) The Escrow Agent shall have no responsibility for the contents of any writing of any third party contemplated herein as a means to resolve disputes and may rely without any liability upon the contents thereof.
- (k) In the event of any disagreement among or between the other parties hereto and/or the subscribers of the Shares resulting in adverse claims or demands being made in connection with the Escrowed Property, or in the event that the Escrow Agent in good faith is in doubt as to what action it should take hereunder, the Escrow Agent shall be entitled to retain the Escrowed Property until the Escrow Agent shall have received (i) a final and non-appealable order

of a court of competent jurisdiction directing delivery of the Escrowed Property or (ii) a written agreement executed by the other parties hereto and consented to by the subscribers directing delivery of the Escrowed Property, in which event the Escrow Agent shall disburse the Escrowed Property in accordance with such order or agreement. Any court order referred to in (i) above shall be accompanied by a legal opinion by counsel for the presenting party satisfactory to the Escrow Agent to the effect that said court order is final and non-appealable. The Escrow Agent shall act on such court order and legal opinions without further question.

- (1) As consideration for its agreement to act as Escrow Agent as herein described, the Company, agrees to pay the Escrow Agent fees determined in accordance with the terms set forth on Exhibit E hereto (and made a part of this Escrow Agreement as if herein set forth). In addition, the Company agrees to reimburse the Escrow Agent for all reasonable expenses, disbursements and advances incurred or made by the Escrow Agent in performance of its duties hereunder (including reasonable fees, expenses and disbursements of its coursel)
- (m) The other parties hereto irrevocably (i) submit to the jurisdiction of any New York State or federal court sitting in New York City in any action or proceeding arising out of or relating to this Escrow Agreement, (ii) agree that all claims with respect to such action or proceeding shall be heard and determined in such New York State or federal court and (iii) waive, to the fullest extent possible, the defense of an inconvenient forum. The other parties hereby consent to and grant any such court jurisdiction over the persons of such parties and over the subject matter of any such dispute and agree that delivery or mailing of process or other papers in connection with any such action or proceeding in the manner provided hereinabove, or in such other manner as may be permitted by law, shall be valid and sufficient service thereof.
- (n) No printed or other matter in any language (including, without limitation, the Registration Statement, notices, reports and promotional material) which mentions the Escrow Agent's name or the rights, powers, or duties of the Escrow Agent shall be issued by the other parties hereto or on such parties' behalf unless the Escrow Agent shall first have given its specific written consent thereto. The Escrow Agent hereby consents to the use of its name and the reference to the escrow arrangement in the Registration Statement and to the filing of this Agreement and the subscription agreements with respect to the Shares as exhibits to the Registration Statement.
- 8. Miscellaneous. (a) This Escrow Agreement shall be binding upon and inure solely to the benefit of the parties hereto and their respective successors and assigns, heirs, administrators and representatives, and the subscribers of the Shares and shall not be enforceable by or inure to the benefit of any other third party except as provided in paragraph (i) of Section 6 with respect to the termination of, or resignation by, the Escrow Agent. No party may assign any of its rights or obligations under this Escrow Agreement without the written consent of the other parties.
- (b) This Escrow Agreement shall be construed in accordance with and governed by the internal law of the State of New York (without reference to its rules as to conflicts of law).

- (c) This Escrow Agreement may only be modified by a writing signed by all of the parties hereto and consented to by the subscribers of the Shares adversely affected by such modifications. No waiver hereunder shall be effective unless in a writing signed by the party to be charged.
- (d) This Escrow Agreement shall terminate upon the payment pursuant to Section 4 of all amounts held in the Escrow Account.
- (e) The section headings herein are for convenience only and shall not affect the construction thereof. Unless otherwise indicated, references to Sections are to Sections contained herein.
- (f) This Escrow Agreement may be executed in one or more counterparts but all such separate counterparts shall constitute but one and the same instrument; provided that, although executed in counterparts, the executed signature pages of each such counterpart may be affixed to a single copy of this Agreement which shall constitute an original.

IN WITNESS WHEREOF, the parties hereto have caused this Escrow Agreement to be executed as of the day and year first above written.

SIGA PHARMACEUTICALS, INC.
By: Name: Title:
SUNRISE SECURITIES CORP.
By: Name: Title:
UNITED STATES TRUST COMPANY OF NEW YORK
By: Name: Title:

## EXHIBIT A

# SUMMARY OF CASH RECEIVED NEW PARTICIPANT DEPOSIT Date\_\_\_\_\_

te\_\_\_\_\_\_ List Number\_\_\_\_\_ Page\_\_\_\_ of \_\_\_\_\_ Approved By\_\_\_\_\_ Deposit Date: Investment Date: Batch Number:

	For	Bank use only	JOB#:		TITLE:		
		NAME	DEPOSIT	SHARES	ADDRESS	TAX ID NUMBER	
     B 	 roker	Misc. I	i I 	 	Misc. II	Misc. III	
       B 	 roker	Misc. 1	 		Misc. II	Misc. III	
       B 	 roker	Misc. 1			Misc. II		

1			
	Misc. I	Misc. II	Misc. III
		EXHIBIT B	
	[Form of Offer	ring Termination Notice]	
United States Tru Corporate Trust Escrow Administra 114 West 47th Str New York, New Yor Attention:	eet, 15th Floor	York	
Dear	:		
1997 (the "Escrow Sunrise Securitie you of the termin the Escrow Agreem	Agreement") among s Corp. and you, t ation of the offer ent) and direct yo	ne Escrow Agreement dated as of	any"), notify ined in
		Very truly yours,	
		SIGA PHARMACEUTICALS, INC.	
		By: Name: Title:	
		SUNRISE SECURITIES CORP.	

By:		
-	Name:	
	Title:	

## EXHIBIT C

[Form of Closing Notice]

Jnited States Trust Company of New York
Corporate Trust
Escrow Administration
114 West 47th Street, 15th Floor
New York, New York 10036
Attention:

: Dear

Pursuant to Section 4(b) of the Escrow Agreement dated as of,
1997 (the "Escrow Agreement") among SIGA Pharmaceuticals, Inc. (the "Company"),
Sunrise Securities Corp. and you, the Company hereby certifies that
subscriptions for 3,250,000 Shares (as that term is defined in the Escrow
Agreement) have been received and the Company will sell and deliver [
Shares to the subscribers thereof at a closing to be held on [,
1997] (the "Closing Date"). The names of the subscribers concerned, the number
of Shares subscribed for by each of such subscribers and the related
subscription amounts are set forth on the schedule annexed hereto.

We hereby request that the aggregate subscription amount be paid to us as follows:

[To be inserted].

Very truly yours,

SIGA PHARMACEUTICALS, INC.

By:\_

Name: Title:

SUNRISE SECURITIES CORP.

By:\_ Name

Title:

#### EXHIBIT D

[Form of Subscription Termination Notice]

United States Trust Company of New York Corporate Trust Escrow Administration 114 West 47th Street, 15th Floor New York, New York 10036 Attention:

Dear :

\$

Very truly yours,

#### EXHIBIT E

- A. [INTENTIONALLY OMITTED]
- B. A fee equal to:
  - 10 Basis Points on the First \$5,000,000 or any part thereof,
  - 6 Basis Points on the next \$5,000,000,
  - 3 Basis Points on the next \$90,000,000,
- 1 1/2 Basis Points on amounts over \$100,000,000 of Escrow Property received by the Escrow Agent prior to the Closing Date pursuant to the terms of the offering; provided that the aggregate amount of fees pursuant to this Item B of Exhibit E shall not, in any event, exceed \$7,500. Fees will be calculated on the aggregate amount of Escrow Property received by the Escrow Agent pursuant to the Escrow Agreement to which this Exhibit is attached and Escrow Agreement I.
  - C. A fee for recordkeeping equal to the following:
    - (1) \$ 4.00 for each check issued by the Escrow Agent
    - (2) \$ 9.00 for each participant (hard copy input of subscriber information) and
    - (3) \$ 2.00 for each 1099 form issued
    - (4) \$ 5.00 for each interest calculation
    - (5) \$ 20.00 for each cancellation, correction or withdrawal of Escrowed Property made by the Escrow Agent pursuant to Section 5(d) of the Escrow Agreement to which this Exhibit is attached shall be paid when billed by the Escrow Agent.

Capitalized terms not otherwise defined shall have the meanings ascribed thereto in the Escrow Agreement to which this Exhibit is attached.

# FORM OF SUBSCRIPTION AGREEMENT TO PURCHASE SHARES OF COMMON STOCK OF THE COMPANY

#### SUBSCRIPTION AGREEMENT

SIGA Pharmaceuticals, Inc.
666 Third Avenue
New York, New York 10017
Phone Number (212) 681-4970
ATTN: David H. De Weese
President and Chief Executive Officer

Gentlemen:

The undersigned (the "Subscriber") hereby subscribes for and agrees to purchase shares of Common Stock, par value \$.0001 per share (the "Securities"), of SIGA Pharmaceuticals, Inc., a Delaware corporation (the "Company"), at a per share purchase price of \$5.00, in the amounts set forth on the Signature Page to this Subscription Agreement (the "Signature Page") and on the terms set forth in the Prospectus dated \_\_\_\_\_\_\_, 1997 (the "Prospectus"), which is part of Securities and Exchange Commission Registration Statement No. 333-\_\_\_\_\_ (the "Registration Statement"), and in this Subscription Agreement.

The Subscriber represents and warrants to the Company and covenants and agrees with it as follows:

1. Payment; Escrow. (a) The Company has entered into an Escrow Agreement (the "Escrow Agreement") with United States Trust Company of New York (the "Bank"), and the Bank has established an escrow account (the "Escrow Account"). The Subscriber shall forthwith cause the full amount of the subscription price to be paid by check, payable to "U.S. Trust Company of New York, as escrow agent for SIGA Pharmaceuticals, Inc.," or wire transferred to the Escrow Account as follows:

Chase NYC, ABA # 021000021
Credit United States Trust Company of New York
Account #:
Further Credit: SIGA Pharmaceuticals, Inc.
Account #:
Attn:
Subscriber Name: \_\_\_\_\_\_

If the subscription price is paid by wire transfer, the Subscriber shall (i) include the Subscriber's name in the wire transfer instructions; and (ii) request from the bank or other financial institution that is originating the transfer, the federal wire number with respect to the subscription and retain that number for future reference. The Subscriber shall cause this Agreement, appropriately executed and completed, to be mailed or otherwise delivered to the Company at its address set forth above. Upon payment of the Subscription Price, the Subscriber shall also send a copy of the completed signature page of this Agreement via facsimile to Sunrise Securities Corp., Attention: Mr. Preston Tsao, Facsimile No. 212-421-5924.

- \_\_, 1997, or such later date, not later than 1997, to which the offering contemplated by the Prospectus (the "Offering") may be extended by Sunrise Securities Corp., the underwriter for the Offering (the "Underwriter"), in its sole discretion, the proceeds of the sale of 3,250,000 shares of Common Stock have been deposited in the Escrow Account and the Escrow Agent has been notified by the Company and the Underwriter that the Company has accepted subscription agreements for 3,250,000 shares of Common Stock and that the other conditions for a closing of all or a portion of the shares subject to the Offering have been met, and from time to time thereafter after the Escrow Agent has been notified by the Company and the Underwriter that the Company has accepted additional subscription agreements for shares of Common Stock and that the other conditions for a closing of a portion of the shares subject to the Offering have been met, the Escrow Agent will release the purchase price of the Securities to the Company and the Company will, or will cause its transfer agent to, mail promptly a certificate therefor to the Subscriber at the address specified on the Signature Page or, if instructed to do so on the Signature Page, deliver such Securities pursuant to alternate delivery instructions. In any case, delivery will be effected physically and not via DTC. Otherwise, the Escrow Agent will return such funds to the Subscriber, without any deduction therefrom or interest thereon, by mailing a check or by making a wire transfer. Except as otherwise agreed between the Subscriber and the Company, certificates representing the Securities shall not bear any legends restricting transfer.
- 2. Irrevocable; Rejection or Acceptance of the Subscription by the Company. This Subscription Agreement is irrevocable by the Subscriber. The Company may, in its sole discretion, accept or reject this Subscription Agreement in whole or in part at any time. If the Company rejects the Subscription Agreement in whole, the Company will promptly cause the Escrow Agent to return the entire amount paid by the Subscriber in connection with this Subscription Agreement, without interest thereon, by mailing a check or by making a wire transfer. If the Company rejects the Subscription Agreement in part, the Company will promptly cause the Escrow Agent to return the amount paid by the Subscriber in connection with the portion of this Subscription Agreement that is rejected, without interest thereon, by mailing a check or by making a wire transfer. Unless and until the Company accepts this Subscription Agreement and the Company receives payment in full for the Securities upon release of the funds therefor from the Escrow Agent, the Subscriber will not become a holder of the Securities subscribed for hereunder and such Securities will not be considered issued or outstanding.
  - 3. Prospectus. The Subscriber has received and reviewed the Prospectus.
- 4. Subscriber's Representations. The Subscriber (and with respect to clause (a) below, each signatory executing this Subscription Agreement in a representative or fiduciary capacity on behalf of any Subscriber) represents and warrants that: (a) if such signatory is executing this Subscription Agreement in a representative or fiduciary capacity, such signatory has full power and authority to execute and deliver this Subscription Agreement in such capacity and on behalf of his principal; and (b) this Subscription Agreement constitutes a legal, valid and binding obligation of the Subscriber enforceable against the Subscriber in accordance with its terms.

5. Miscellaneous. This Subscription Agreement sets forth the entire agreement of the parties with respect to the subject matter hereof and it supersedes and discharges all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter. This Subscription Agreement may not be amended or terminated except by a writing signed by the party against whom any such amendment or terminations is sought. If the Subscriber is more than one person, the obligation of the Subscriber shall be joint and several. This Subscription Agreement is governed by the laws of the State of New York.

UPON PAYMENT OF THE SUBSCRIPTION PRICE, THIS PAGE SHOULD BE SENT VIA FACSIMILE
TO SUNRISE SECURITIES CORP., ATTENTION: MR. PRESTON TSAO, FACSIMILE NO. 212-4215924. PLEASE FOLLOW CAREFULLY ALL OF THE OTHER SUBSCRIPTION INSTRUCTIONS
CONTAINED IN PARAGRAPH 1 OF THIS AGREEMENT.

Number of shares subscribed for:\_\_\_\_\_\_ Total Amount of Payment: \$\_\_\_\_\_

Please note that delivery of certificates
will be effected physically and not via DTC.

SIGN AND DATE HERE:

will be effected p	hysically and not via DTC.	
SIGN A	ND DATE HERE:	
ADDRESS OF SUBSCRIBER:		
	(Print Name of Subscriber)	
	Bv:	
(Street)	By: (Signature)	
(City)	(Print Name of Signatory)	
(State) (Zip Code)	(Print Title of Signatory)	
(Taxpayer Identification Number) ALTERNATIVE DELIVERY INSTRUCTIONS:	(Date)	, 1997
ACCEPTED: Date:, SIGA PHARMACEUTICALS, INC.	1997	======
By:Authorized Officer	_	

# ARTICLES OF INCORPORATION OF THE COMPANY, IN EFFECT AS OF THE DATE HEREOF

#### CERTIFICATE OF INCORPORATION

0F

#### SIGA PHARMACEUTICALS, INC.

THE UNDERSIGNED, in order to form a corporation for the purpose hereinafter stated, under and pursuant to the provisions of the General Corporation Law of the State of Delaware, as amended from time to time (the "Law"), hereby certifies as follows:

ARTICLE (i) The name of the corporation is SIGA PHARMACEUTICALS, INC. (the "Corporation").

ARTICLE (ii) The address of the Corporation's registered office in the State of Delaware is 1013 Centre Road, Wilmington, County of New Castle 19805. The name of the registered agent of the Corporation at such address is The Prentice-Hall Corporation System, Inc.

ARTICLE (iii) The purpose of the Corporation is to engage in any lawful act or activity for which a Corporation may be organized under the Law.

ARTICLE (iv) The total number of shares of stock which the Corporation shall have authority to issue is twenty million (20,000,000), of which stock fifteen million (15,000,000) shares of the par value of One Cent (\$0.01) each, amounting in the aggregate to One Hundred Fifty Thousand Dollars (\$150,000), shall be Common Stock, and of which five million (5,000,000) shares of the par value of One Cent (\$0.01) each, amounting in the aggregate to Fifty Thousand Dollars (\$50,000), shall be Preferred Stock.

The Board of Directors shall have the authority to fix by Resolution the voting powers (full, limited, multiple, fractional or none), designations, preferences, qualifications, privileges, limitations, restrictions, options, conversion rights and other special or relative rights of the Preferred Stock or any class or series thereof prior to or concurrently with the issuance of such shares.

There shall be no cumulative voting rights for the Common Stock.

The holders of the Common Stock and the Preferred Stock shall be entitled to dividends, when, as and if declared by the Board of Directors of the Corporation, payable at such time or times as the Board of Directors may determine.

Subject to the determination of the Board of Directors with regard to the Preferred Stock, in the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, all

remaining assets and funds of the Corporation available for distribution to its stockholders shall be distributed in equal amounts per share and without preference or priority of one class of common stock over the other.

Any action may be taken by the stockholders of the Corporation by their written consent without a stockholders' meeting.

No stockholder of this Corporation shall by reason of his holding shares of any class have any preemptive or preferential right to purchase or subscribe to any shares of any class of this Corporation, now or hereafter to be authorized, or any notes, debentures, bonds, or other securities convertible into or carrying options or warrants to purchase shares of any class, now or hereafter to be authorized, whether or not the issuance of any such shares, or such notes, debentures, bonds or other securities, would adversely affect the dividend or voting rights of such stockholder, other than such rights, if any, as the board of directors, in its discretion from time to time may grant, and at such price as the Board of Directors in its discretion may fix; and the Board of Directors may issue shares of any class of this Corporation, or any notes, debentures, bonds, or other securities convertible into or carrying options or warrants to purchase shares of any class, without offering any such shares of any class, either in whole or in part, to the existing stockholders of any class.

ARTICLE (v) The name and mailing address of the Sole Incorporator is as follows:

William J. Ward 20 North Wacker Drive Suite 2200 Chicago, Illinois 60606

ARTICLE (vi) The number of directors of the Corporation shall be such as from time to time shall be fixed by, or in the manner provided in, the by-laws of the Corporation. No election of directors need be by ballot unless the by-laws so provide.

ARTICLE (vii) The Corporation hereby expressly elects not to be governed by Section 203 of the Law.

ARTICLE (viii) No director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided, however, that this provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Law, or (iv) from any transaction from which the director derived an improper personal benefit.

ARTICLE (ix) The Corporation shall indemnify, in accordance with and to the full extent now or hereafter permitted by law, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (including, without limitation, an action by

or in the right of the Corporation), by reason of his acting as a director of the Corporation (and the Corporation, in the discretion of the Board, may so indemnify a person by reason of the fact that he is or was an officer or employee of the Corporation or is or was serving at the request of the Corporation in any other capacity for or on behalf of the Corporation) against any liability or expense actually and reasonably incurred by such person in respect thereof; provided, however, that, the Corporation shall not be obligated to indemnify any such person (i) with respect to proceedings, claims or actions initiated or brought voluntarily by such person and not by way of defense, or (ii) for any amounts paid in settlement of an action effected without the prior written consent of the Corporation to such settlement. Such indemnification is not exclusive of any other right to indemnification provided by law, agreement or otherwise.

ARTICLE (x) No amendment to or repeal of Article 8 or Article 9 of this Certificate of InCorporation shall apply to or have any effect on the rights of any individual referred to in Article 8 or Article 9 for or with respect to acts or omissions of such individual occurring prior to such amendment or repeal.

ARTICLE (xi) Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

ARTICLE (xii) The Board of Directors shall have power without the assent or vote of the stockholders to make, alter, amend, change, add to or repeal the by-laws of the Corporation.

ARTICLE (xiii) The Corporation shall have perpetual existence.

IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of December, 1995.

CERTIFICATE OF AMENDMENT

TO THE

CERTIFICATE OF INCORPORATION

0F

SIGA PHARMACEUTICALS, INC.

(Original Certificate of Incorporation filed December 28, 1995)

 ${\tt SIGA\ PHARMACEUTICALS,\ INC.\ (the\ "Corporation"),\ a\ corporation}$ 

organized and existing under the General Corporation Law of the State of Delaware (as amended from time to time, the "Law"), does hereby certify:

I. That, by a written consent executed in accordance with Section 141(f) of the Law and effective December 28, 1995, the Board of Directors of the  $\frac{1}{2}$ 

Corporation adopted a resolution setting forth the Amendment to Certificate of Incorporation set forth below (referred to therein as the "Amendment"), declaring its advisability, and submitting it to the stockholders entitled to vote in respect thereof.

II. That, by written consent executed in accordance with Section 228 of the Law, the Stockholders of the Corporation have approved the adoption of the Certificate of Amendment to the Certificate of Incorporation set forth below.

RESOLVED, that Article 4 of the certificate of incorporation of the Corporation is hereby amended in its entirety to read as follows:

"ARTICLE 4. The total number of shares of stock which the Corporation shall have authority to issue is thirty-five million (35,000,000), of which twenty-five million (25,000,000) shares of the par value of One Cent (\$0.01) each, amounting in the aggregate to Two Hundred Fifty Thousand Dollars (\$250,000), shall be Common Stock, and of which ten million (10,000,000) shares of the par value of One Cent (\$0.01) each, amounting in the aggregate to One Hundred Thousand Dollars (\$100,000), shall be Preferred Stock.

The Board of Directors shall have the authority to fix by Resolution the voting powers (full, limited, multiple, fractional or none), designations, preferences, qualifications, privileges, limitations, restrictions, options, conversion rights and other special or relative rights of the Preferred Stock or any class or series thereof prior to or concurrently with the issuance of such shares.

There shall be no cumulative voting rights for the Common Stock.

The holders of the Common Stock and the Preferred Stock shall be entitled to dividends, when, as and if declared by the Board of Directors of

the Corporation, payable at such time or times as the Board of Directors may determine.

Subject to the determination of the Board of Directors with regard to the Preferred Stock, in the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, all remaining assets and funds of the Corporation available for distribution to its stockholders shall be distributed in equal amounts per share and without preference or priority of one class of common stock over the other.

Any action may be taken by the stockholders of the Corporation by their written consent without a stockholders' meeting.

No stockholder of this Corporation shall by reason of his holding shares of any class have any preemptive or preferential right to purchase or subscribe to any shares of any class of this Corporation, now or hereafter to be authorized, or any notes, debentures, bonds, or other securities convertible into or carrying options or warrants to purchase shares of any class, now or hereafter to be authorized, whether or not the issuance of any such shares, or such notes, debentures, bonds or other securities, would adversely affect the dividend or voting rights of such stockholder, other than such rights, if any, as the board of directors, in its discretion from time to time may grant, and at such price as the Board of Directors in its discretion may fix; and the Board of Directors may issue shares of any class of this Corporation, or any notes, debentures, bonds, or other securities convertible into or carrying options or warrants to purchase shares of any class, without offering any such shares of any class, either in whole or in part, to the existing stockholders of any class."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to Certificate of Incorporation to be signed by its Vice-President and Secretary on December 28, 1995.

 ${\sf SIGA}$  PHARMACEUTICALS, INC.

By: /s/ Joshua Schein

Joshua Schein, Vice-President and Secretary

#### CERTIFICATE OF CORRECTION OF

#### AMENDMENT TO CERTIFICATE OF INCORPORATION

SIGA PHARMACEUTICALS, INC.

It is hereby certified that:

- The name of the corporation is Siga Pharmaceuticals, Inc.
- The Amendment to Certificate of Incorporation, which was filed by the 2. Secretary of State of Delaware on December 28, 1995, is hereby corrected.
- The defect to be corrected in said instrument is found in Article 4. With the defect underlined, Article 4 as previously filed reads as follows:

"Article 4. The total number of shares of stock which the Corporation shall have the authority to issue is thirty-five million (35,000,000), of which twenty-five million (25,000,000) of the par value of One Cent

(\$0.01) each, amounting in the aggregate to Two Hundred Fifty Thousand Dollars (\$250,000.00), shall be Common Stock, and of which ten million (10,000,000) shares of the par value of One Cent (\$0.01) each,

amounting in the aggregate to One Hundred Thousand Dollars

(\$100,000.00), shall be Preferred Stock.

Article 4 in corrected form is as follows:

"Article 4. The total number of shares of stock which the Corporation shall have the authority to issue is thirty-five million (35,000,000), of which twenty-five million (25,000,000) of the par value of One Hundredth of One Cent (\$.0001) each, amounting in the aggregate to Two Thousand Five Hundred Dollars (\$2500.00), shall be Common Stock, and of which ten million (10,000,000) shares of the par value of One Hundredth of One Cent (\$.0001) each, amounting in the aggregate to One Thousand Dollars (\$1000.00), shall be Preferred Stock.

Signed on February 6, 1996

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua Schein Joshua Schein Vice President and Secretary

CERTIFICATE OF AMENDMENT

TO THE

CERTIFICATE OF INCORPORATION

0F

SIGA PHARMACEUTICALS, INC.

(Original Certificate of Incorporation filed December 28, 1995)

SIGA PHARMACEUTICALS, INC. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware (as amended from time to time, the "Law"), does hereby certify:

- I. That, by a written consent executed in accordance with Section 141(f) of the Law and effective December 6, 1996 the Board of Directors of the Corporation adopted a resolution setting forth the Amendment to Certificate of Incorporation set forth below (referred to therein as the "Amendment"), declaring its advisability, and submitting it to the stockholders entitled to vote in respect thereof.
- II. That, by written consent executed in accordance with Section 228 of the Law, the Stockholders of the Corporation have approved the adoption of the Certificate of Amendment to the Certificate of Incorporation set forth below.

The following paragraph shall be added to the end of Article 4 of the Certificate of Incorporation of the Corporation:

"As of December 6, 1996, each 6 shares of the Corporation's Common Stock outstanding on the record date set by the Board, shall be split and changed (without changing the par value thereof), into one share of the Corporation's Common Stock. Any fractional shares resulting from this reverse stock split will be rounded up to the next highest whole share."

IN WITNESS WHEREOF, the Corporation has caused this Amendment to the Certificate of Incorporation to be signed by its Vice President on December 6, 1996.

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua D. Schein

Joshua D. Schein, Vice President

BY-LAWS

0F

## SIGA PHARMACEUTICALS, INC.

## A DELAWARE CORPORATION

## ARTICLE I

## **OFFICES**

The registered office shall be in the City of Dover, County of Kent, State of Delaware.

The corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the corporation may require.

## ARTICLE II

## MEETINGS OF STOCKHOLDERS

- 2.1 All meetings of the stockholders for the election of directors shall be held in New York, NY, at such place as may be fixed from time to time by the board of directors, or at such other place either within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the notice of the meeting. Meetings of stockholders for any other purpose may be held at such time and place, within or without the State of Delaware, as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof.
- 2.2 ANNUAL MEETINGS. Annual meetings of stockholders, commencing with the year 1996, shall be held on the First Tuesday in November if not a legal holiday, and if a legal holiday, then on the next business day following, at 10:00 a.m., or at such other date and time as shall be designated from time to time by the board of directors and stated in the notice of the meeting, at which they shall elect by a plurality vote a board of directors, and transact such other business as may properly be brought before the meeting.
- 2.3 ANNUAL MEETING NOTICES. Written notice of the annual meeting stating the place, date and hour of the meeting shall be given to each stockholder entitled to vote at such meeting not less than ten or more than sixty days before the date of meeting.

- 2.4 VOTING LISTS. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of meeting during the whole time thereof, and may be inspected by any stockholder who is present.
- 2.5 SPECIAL MEETINGS. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the certificate of incorporation, may be called by the president and shall be called by the president or the secretary at the request in writing of a majority of the board of directors, or at the request in writing of stockholders owning capital stock of the corporation representing at least ten percent (10%) of the total votes entitled to be cast by stockholders of the corporation. Such request shall state the purpose or purposes of the proposed meeting.
- 2.6 SPECIAL MEETING NOTICES. Written notice of a special meeting stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called, shall be given not less than ten nor more than sixty days before the date of the meeting, to each stockholder entitled to vote at such meeting.
- 2.7 QUORUM. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any questions brought before such meeting, unless the question is one upon which by express provision of the statutes or of the certificate of incorporation, a different vote is required in which case such express provision shall govern and control the decision of such questions.

- 2.8 VOTING OF SHARES. Unless otherwise specifically provided by statute or the certificate of incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote for each share of the capital stock having voting power held by such stockholder.
- 2.9 PROXIES. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him or her by proxy, but no proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.
- 2.10 INFORMAL ACTION BY STOCKHOLDERS. Except as otherwise provided in the certificate of incorporation and subject to the requirements of statute, any action required or permitted to be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of any corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

## ARTICLE III

## **DIRECTORS**

- 3.1 NUMBER, TENURE AND QUALIFICATIONS. The number of directors which shall constitute the whole board shall be such number of members, not less than One (1) nor more than Seven (7), as the board of directors may from time to time determine by resolution. The directors shall be elected at the annual meeting of the stockholders, except as provided in section 3.2 of this Article, and each director elected shall hold office until his or her successor is elected and qualified, or until his or her earlier resignation or removal. Directors need not be stockholders.
- 3.2 VACANCIES. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and any director so chosen shall hold office until the next annual election and until his or her successor is duly elected and shall qualify, or until his or her earlier resignation or removal. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or newly created directorship, the directors then in office shall constitute less than a majority of the whole board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten per cent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

- 3.3 GENERAL POWERS. The business of the corporation shall be managed by its board of directors which may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by certificate of incorporation or by these by-laws directed or required to be exercised or done by the stockholders.
- 3.4 MEETINGS. The board of directors of the corporation may hold meetings, both regular and special, either within or without the State of Delaware.
- 3.5 FIRST MEETING. The first meeting of each newly elected board of directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, provided a quorum shall be present. In the event of the failure of the stockholders to fix that time or place of such first meeting of the newly elected board of directors, or in event such meeting is not held at the time and place so fixed by the stockholders, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the board of directors, or as shall be specified in a written waiver signed by all of the directors.
- $3.6\,$  REGULAR MEETINGS. Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board.
- 3.7 SPECIAL MEETINGS. Special meetings of the board of directors may be called by the president on two days' notice to each director, either personally or by mail or by telegram; special meetings shall be called by the president or the secretary in a like manner and on like notice on the written request of two directors.
- 3.8 QUORUM. At all meetings of the board a majority of the directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum shall not be present at any meeting of the board of directors the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.
- 3.9 INFORMAL ACTION BY DIRECTORS. Unless otherwise restricted by the certificate of incorporation or these by-laws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee.
- 3.10 PARTICIPATION BY CONFERENCE TELEPHONE. Unless otherwise restricted by the certificate of incorporation or these by-laws, members of the board of directors, or any committee designated by the board, may participate in a meeting of the board or such committee by means of

conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this section shall constitute presence in person at such meeting.

- 3.11 COMMITTEES. The board of directors may, by resolution passed by a majority of the whole board, designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee; provided, however, that, if the resolution of the board of directors so provides, in the absence or disqualification of any such member or alternate member of such committee or committees, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member or alternate member. Any such committee, to the extent provided in the resolution of the board of directors, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all the papers which may require it, but no such committee shall have the power or authority in reference to amending the certificate of incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution or amending the by-laws of the corporation; and, unless the resolution expressly so provides, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the board of directors.
- 3.12 MEETING MINUTES. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.
- 3.13 COMPENSATION OF DIRECTORS. The directors may be paid their expenses, if any, of attendance at each meeting of the board of directors and may be paid a fixed sum for attendance at each meeting of the board of directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allow like compensation for attending committee meetings.

## ARTICLE IV

## NOTICES

4.1 WRITTEN NOTICE. Whenever, under the provisions of the statutes or of the certificate of incorporation or of these by-laws, notice is required to be given to any director or stockholder, such notice shall be in writing and shall be given in person or by mail to such director or stockholder. If mailed, such notice shall be addressed to such director or

stockholder at his or her address as it appears on the records of the corporation, with postage thereon prepaid, and shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by telegram. If notice be given by telegram, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company.

4.2 WAIVER OF NOTICE. Whenever any notice is required to be given under the provisions of the statutes or of the certificate of incorporation or of these by-laws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

#### ARTICLE V

## **OFFICERS**

- 5.1 NUMBER. The officers of the corporation shall be chosen by the board of directors and shall be a president, a treasurer and a secretary. The board of directors may also choose vice-presidents, and one or more assistant treasurers and assistant secretaries. The board of directors may appoint such other officers and agents as it shall deem desirable who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the board. Any number of offices may be held by the same person, unless the certificate of incorporation or these by-laws otherwise provide.
- 5.2 ELECTION AND TERM OF OFFICE. The board of directors at its first meeting after each annual meeting of stockholders shall choose a president, a treasurer and a secretary. The officers of the corporation shall hold office until their successors are chosen and qualify.
- $5.3\,$  REMOVAL. Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the board of directors.
- $5.4\,$  VACANCIES. Any vacancy occurring in any office of the corporation shall be filled by the board of directors.
- $5.5\,$  SALARIES. The salaries of all officers of the corporation shall be fixed by the board of directors.
- 5.6 THE PRESIDENT. The president shall be the chief executive officer of the corporation, shall preside at all meetings of the stockholders and the board of directors, shall have general and active management of the business of the corporation and shall see that all orders and resolutions of the board of directors are carried into effect. The President shall execute bonds, mortgages, and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the board of directors to some other officer or agent of the corporation; the president shall vote all shares of stock of any other corporation standing in the name of this

corporation except where the voting thereof shall be expressly delegated by the board of directors to some other officer or agent of the corporation; and in general shall perform all duties incident to the office of the president and such other duties as may be prescribed by the board of directors from time to time

- 5.6 THE VICE-PRESIDENTS. In the absence of the president or in the event of his or her inability or refusal to act, the vice-president, if one shall be elected (or in the event there be more than one vice-president, the vice-presidents in the order designated, or in the absence of any designation, then in the order of their election) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The vice-presidents shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.
- 5.7 THE TREASURER. If required by the board of directors, the treasurer shall give a bond for the faithful discharge of his or her duties in such sum and with such surety or sureties as the board of directors shall determine. The treasurer shall: (a) have charge and custody of and be responsible for all funds and securities of the corporation; receive and give receipts for moneys due and payable to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositaries as shall be selected in accordance with the provisions of Article VII of these by-laws; (b) in general perform all the duties incident to the office of treasurer and such other duties as from time to time may be assigned to him or her by the president or by the board of directors.
- 5.8 THE SECRETARY. The secretary shall: (a) keep the minutes of the stockholders' and of the board of directors' meetings in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these by-laws or as required by law; (c) be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all certificates for shares prior to the issue thereof and to all documents, the execution of which on behalf of the corporation under its seal is duly authorized in accordance with the provisions of these by-laws; (d) keep a register of the post office address of each stockholder which shall be furnished to the secretary by such stockholder; (e) have general charge of the stock transfer books of the corporation; (f) in general perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to him or her by the president or by the board of directors.
- 5.9 THE ASSISTANT TREASURERS AND ASSISTANT SECRETARIES. The assistant treasurers shall respectively, if required by the board of directors, give bonds for the faithful discharge of their duties in such sums and with such surety or sureties as the board of directors shall determine. The assistant treasurers and assistant secretaries, in general, shall perform such duties as shall be assigned to them by the treasurer or the secretary, respectively, or by the president or the board of directors, and in the event of the absence, inability or refusal to act of the treasurer or the secretary, the assistant treasurers and assistant secretaries (in the order designated, or in the absence of any designation,

then in the order of their election) shall perform the duties of the treasurer or the secretary, respectively.

## ARTICLE VI

## INTERESTED DIRECTORS AND OFFICERS

No contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board of directors or a committee thereof which authorizes the contract or transaction, or solely because his, her or their votes are counted for such purpose, if:

- (a) The material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or
- (b) The material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders without counting the vote of any stockholder who is an interested director; or
- (c) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the board of directors, a committee thereof, or the stockholders.

The common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee which authorizes the contract or transaction.

## ARTICLE VII

## INDEMNIFICATION OF DIRECTORS AND OFFICERS

7.1 RIGHT TO INDEMNIFICATION. Each person who was or is made a party or is threatened to be made a party to or is involved in or called as a witness in any Proceeding because he or she is an Indemnified Person, shall be indemnified and held harmless by the corporation to the fullest extent permitted under the Delaware General Corporation Law (the "DGCL"), as the same now exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the corporation to

provide broader indemnification rights than the DGCL permitted the corporation to provide prior to such amendment). Such indemnification shall cover all expenses incurred by an Indemnified Person (including, but not limited to, attorneys' fees and other expenses of litigation) and all liabilities and losses (including, but not limited to, judgments, fines, ERISA or other excise taxes or penalties and amounts paid or to be paid in settlement) incurred by such person in connection therewith.

Notwithstanding the foregoing, except with respect to indemnification specified in section 7.3 of this Article, the corporation shall indemnify an Indemnified Person in connection with a Proceeding (or part thereof) initiated by such person only if such Proceeding (or part thereof) was authorized by the board of directors of the corporation.

For purposes of this Article:

- (a) a "Proceeding" is an action, suit or proceeding, whether civil, criminal, administrative or investigative, and any appeal therefrom;
- (b) an "Indemnified Person" is a person who is, was, or had agreed to become a director or an officer or a Delegate, as defined herein, of the corporation or the legal representative of any of the foregoing; and
- (c) a "Delegate" is a person serving at the request of the corporation or a subsidiary of the corporation as a director, trustee, fiduciary, or officer of such subsidiary or of another corporation, partnership, joint venture, trust or other enterprise.
- 7.2 EXPENSES. Expenses, including attorneys' fees, incurred by a person indemnified pursuant to section 7.1 of this Article in defending or otherwise being involved in a Proceeding shall be paid by the corporation in advance of the final disposition of such Proceeding, including any appeal therefrom, upon receipt of an undertaking (the "Undertaking") by or on behalf of such person to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the corporation; provided, that in connection with a Proceeding (or part thereof) initiated by such person, except a Proceeding authorized by section 7.3 of this Article, the corporation shall pay said expenses in advance of final disposition only if such Proceeding (or part thereof) was authorized by the board of directors. A person to whom expenses are advanced pursuant hereto shall not be obligated to repay pursuant to the Undertaking until the final determination of any pending Proceeding in a court of competent jurisdiction concerning the right of such person to be indemnified or the obligation of such person to repay pursuant to the Undertaking.
- 7.3 PROTECTION OF RIGHTS. If a claim under section 7.1 of this Article is not promptly paid in full by the corporation after a written claim has been received by the corporation or if expenses pursuant to section 7.2 of this Article have not been promptly advanced after a written request for such advancement accompanied by the Undertaking has been received by the corporation, the claimant may at any time thereafter bring

suit against the corporation to recover the unpaid amount of the claim or the advancement of expenses. If successful, in whole or in part, in such suit, such claimant shall also be entitled to be paid the reasonable expense thereof. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending any Proceeding in advance of its final disposition where the required Undertaking has been tendered to the corporation) that indemnification of the claimant is prohibited by law, but the burden of proving such defense shall be on the corporation. Neither the failure of the corporation (including its board of directors, independent legal counsel, or its stockholders) to have made a determination, if required, prior to the commencement of such action that indemnification of the claimant is proper in the circumstances, nor an actual determination by the corporation (including its board of directors, independent legal counsel, or its stockholders) that indemnification of the claimant is prohibited, shall be a defense to the action or create a presumption that indemnification of the claimant is prohibited.

## 7.4 MISCELLANEOUS.

- (a) Non-Exclusivity of Rights. The rights conferred on any person by this Article shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, by-law, agreement, vote of stockholders or disinterested directors or otherwise. The board of directors shall have the authority, by resolution, to provide for such indemnification of employees or agents of the corporation or others and for such other indemnification of directors, officers or Delegates as it shall deem appropriate.
- (b) Insurance, Contracts and Funding. The corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee, or agent of, or person serving in any other capacity with, the corporation or another corporation, partnership, joint venture, trust or other enterprise against any expenses, liabilities or losses, whether or not the corporation would have the power to indemnify such person against such expenses, liabilities or losses under the DGCL. The corporation may enter into contracts with any director, officer or Delegate of the corporation in furtherance of the provisions of this Article and may create a trust fund, grant a security interest or use other means (including, without limitation, a letter of credit) to ensure the payment of such amounts as may be necessary to effect the advancing of expenses and indemnification as provided in this Article.
- (c) Contractual Nature. The provisions of this Article shall be applicable to all Proceedings commenced or continuing after its adoption, whether such arise out of events, acts or omissions which occurred prior or subsequent to such adoption, and shall continue as to a person who has ceased to be a director, officer or Delegate and shall inure to the benefit of the heirs, executors and administrators of such person. This Article shall be deemed to be a contract between the corporation and each person who, at any time that this Article is in effect, serves or agrees to serve in any capacity which entitles him or her to indemnification hereunder and any repeal or other modification of this Article or any repeal or modification of the DGCL or any other applicable law shall not limit any Indemnified Person's entitlement to the advancement of expenses or

indemnification under this Article for Proceedings then existing or later arising out of events, acts or omissions occurring prior to such repeal or modification, including, without limitation, the right to indemnification for Proceedings commenced after such repeal or modification to enforce this Article with regard to Proceedings arising out of acts, omissions or events occurring prior to such repeal or modification.

(d) Severability. If this Article or any portion hereof shall be invalidated or held to be unenforceable on any ground by any court of competent jurisdiction, the decision of which shall not have been reversed on appeal, such invalidity or unenforceability shall not affect the other provisions hereof, and this Article shall be construed in all respects as if such invalid or unenforceable provisions had been omitted therefrom.

## ARTICLE VIII

## CERTIFICATES OF STOCK

- 8.1 CERTIFICATES OF STOCK. Every holder of stock in the corporation shall be entitled to have a certificate, signed by, or in the name of the corporation by the president or a vice-president and by the treasurer or an assistant treasurer or the secretary or an assistant secretary of the corporation, certifying the number of shares owned by him or her in the corporation. Any of or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or register who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.
- 8.2 LOST CERTIFICATES. The board of directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the board of directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his or her legal representative, to advertise the same in such manner it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificates alleged to have been lost, stolen or destroyed.
- 8.3 TRANSFERS OF STOCK. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its book.
- 8.4 FIXING RECORD DATE. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not be more than sixty nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.
- $8.5\,$  REGISTERED STOCKHOLDERS. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the

owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

## ARTICLE IX

## GENERAL PROVISIONS

- 9.1 DIVIDENDS. Dividends upon the capital stock of the corporation, subject to the provisions of the certificate of incorporation, if any, may be declared by the board of directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.
- 9.2 CHECKS. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the board of directors may from time to time designate.
- $9.3\,$  FISCAL YEAR. The fiscal year of the corporation shall end on the last day of December in each year.
- 9.4 SEAL. The corporate seal shall have inscribed thereon the name of the corporation and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

## ARTICLE X

## **AMENDMENTS**

These by-laws may be altered, amended or repealed and new by-laws may be adopted by the board of directors at any meeting of the board.

## FORM OF COMMON STOCK CERTIFICATE

[Front]

Number	Shares
***	* * *

INCORPORATED UNDER THE LAWS

OF THE STATE OF DELAWARE

SIGA PHARMACEUTICALS, INC.

PREFERRED STOCK 10,0000 SHARES PAR VALUE \$.01 (ONCE CENT EACH COMMON STOCK 25,000,000 SHARES PAR VALUE \$.0001 EACH)

This Certifies that \*\*\*\*\*\*\*\* is the owner of \*\*\*\*\*\*\* full paid and non-assessable  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

SHARES OF THE COMMON STOCK OF SIGA PHARMACEUTICALS, INC., transferable only on the books of the Corporation by the holder hereof in person or by duly authorized Attorney upon the surrender of this Certificate properly endorsed.

The corporation will furnish without charge to each shareholder who so requests, the powers, designations, preferences and relative, participating optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

IN WITNESS WHEREOF, the said Corporation has caused this Certificate to be signed by its duly authorized officers and to be sealed with the Seal of the Corporation, this \*\*\* day of \*\*\*\*\* A.D. 19\*\*.

## [Back]

For Value Received, he	ereby sell, assi	ign and transfer	unto
Shares represer	ited by the writ	tten Certificate,	and do hereby
irrevocably constitute and	d appoint	Attorney to	transfer the said
Shares on the books of the substitution in the premis		Corporation with	full power of
Dated In presence of	19		

THIS SPACE IS NOT TO BE COVERED IN ANY WAY

E-86

# SIGA PHARMACEUTICALS, INC. a Delaware corporation

1996	Ince	entive	and	Non-	-Qualif	ied	Stock	<b>Option</b>	Plar
				:					

19. Purpose. The purposes of this 1996 Incentive and Non-Qualified Stock

Option Plan are to attract and retain the best available personnel, to provide additional incentive to the Employees, Consultants and Outside Directors of Siga Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and to promote the success of the Company's business.

Options granted hereunder may, consistent with the terms of this Plan, be either Incentive Stock Options or Nonstatutory Stock Options, at the discretion of the Committee and as reflected in the terms of the written option agreement.

- 20. Definitions. As used in this Plan, the following definitions shall apply:
  - (a) "Board" means the Board of Directors of the Company.
- (b) "Code" means the Internal Revenue Code of 1986, as amended from time to ---time, and the rules and regulations promulgated thereunder.
- (c) "Commission" means the United States Securities and Exchange  $\hfill\Box$  Commission.

- (f) "Consultant" means any person who is engaged by the Company or any
  -----Parent or Subsidiary to render consulting services and is compensated for such consulting services; provided that the term Consultant shall not include

directors who are not compensated for their services or are paid only a director's fee by the Company.

(g) "Continuous Status as an Employee, Consultant or Outside Director"

means the absence of any interruption or termination of service as an Employee,
Consultant or Outside Director, as applicable. Continuous Status as an
Employee, Consultant or Outside Director shall not be considered interrupted in
the case of sick leave or military leave, any other leave provided pursuant to a
written policy of the Company in effect at the time of determination, or any
other leave of absence approved by the Board or the Committee; provided that

such leave is for a period of not more than the greatest of (i) 90 days, (ii) the date of the resumption of such

service upon the expiration of such leave which is guaranteed by contract or statute or is provided in a written policy of the Company which was in effect upon the commencement of such leave, or (iii) such period of leave as may be determined by the Board or the Committee in its sole discretion.

- (i) "Employee" means any person employed by the Company or any Parent or Subsidiary of the Company, including employees who are also officers or directors or both of the Company or any Parent or Subsidiary of the Company. The payment of a director's fee by the Company shall not be sufficient to constitute "employment" by the Company.
- (j) "Exchange Act" means the Securities Exchange Act of 1934, as amended \_\_\_\_\_\_
  from time to time, and the rules and regulations promulgated thereunder.
- (k) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, and the rules and regulations promulgated thereunder.
- (1) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option.
  - (m) "Option" means a stock option granted pursuant to this Plan.
  - (n) "Optioned Stock" means the Common Stock subject to an Option.
- (o) "Optionee" means an Employee, Consultant or Outside Director who  $\stackrel{-----}{\text{receives}}$  an Option.
- (q) "Parent" means a "parent corporation," whether now or hereafter -----existing, as defined in Section 424(e) of the Code.
- (r) "Plan" means this SIGA Corporation 1996 Stock Option Plan, as amended  $\stackrel{---}{\mbox{\ \ }}$  from time to time.
- (t) "Securities Act" means the Securities Act of 1933, as amended from time \_\_\_\_\_\_\_
  to time, and the rules and regulations promulgated thereunder.
- (u) "Share" means a share of the Common Stock, as adjusted in accordance with Section 10 of this Plan.
- (v) "Subsidiary" means a "subsidiary corporation," whether now or hereafter ------existing, as defined in Section 424(f) of the Code.

21. Scope of Plan. Subject to the provisions of Section 10 of this Plan,

and unless otherwise amended by the Board and approved by the stockholders of the Company as required by law, the maximum aggregate number of Shares issuable under this Plan is 2,000,000, and such Shares are hereby made available and shall be reserved for issuance under this Plan. The Shares may be authorized but unissued, or reacquired, Common Stock.

If an Option shall expire or become unexercisable for any reason without having been exercised in full, the unpurchased Shares subject thereto shall (unless this Plan shall have terminated) become available for grants of other Options under this Plan.

- 22. Administration of Plan.
- (a) Procedure. This Plan shall be administered by the Committee appointed

pursuant to this Section 4(a). The Committee shall consist of two or more Outside Directors appointed by the Board, but all Committee members must be Disinterested Persons. If the Board fails to appoint such persons, the Committee shall consist of all Outside Directors who are Disinterested Persons.

(b) Powers of Committee. Subject to Section 5(b) below and otherwise ect to the provisions of this Plan, the Committee shall have full and

subject to the provisions of this Plan, the Committee shall have full and final authority in its discretion to: (i) grant Incentive Stock Options and Nonstatutory Stock Options, (ii) determine, upon review of relevant information and in accordance with Section 7 below, the Fair Market Value of the Common Stock; (iii) determine the exercise price per share of Options to be granted, in accordance with this Plan, (iv) determine the Employees and Consultants to whom, and the time or times at which, Options shall be granted, and the number of shares to be represented by each Option; (v) cancel, with the consent of the Optionee, outstanding Options and grant new Options in substitution therefor; (vi) interpret this Plan; (vii) accelerate or defer (with the consent of Optionee) the exercise date of any Option; (viii) prescribe, amend and rescind rules and regulations relating to this Plan; (ix) determine the terms and provisions of each Option granted (which need not be identical) by which Options shall be evidenced and, with the consent of the holder thereof, modify or amend any provisions (including without limitation provisions relating to the exercise price and the obligation of any Optionee to sell purchased Shares to the Company upon specified terms and conditions) of any Option; (x) require withholding from or payment by an Optionee of any federal, state or local taxes; (xi) appoint and compensate agents, counsel, auditors or other specialists as the Committee deems necessary or advisable; (xii) correct any defect or supply any omission or reconcile any inconsistency in this Plan and any agreement relating to any Option, in such manner and to such extent the Committee determines to carry out the purposes of this Plan, and; (xiii) construe and interpret this Plan, any agreement relating to any Option, and make all other determinations deemed by the Committee to be necessary or advisable for the administration of this Plan.

A majority of the Committee shall constitute a quorum at any meeting, and the acts of a majority of the members present, or acts unanimously approved in writing by the entire Committee without a meeting, shall be the

acts of the Committee. A member of the Committee shall not participate in any decisions with respect to himself under this Plan.

- (c) Effect of Committee's Decision. All decisions, determinations and \_\_\_\_\_\_\_interpretations of the Committee shall be final and binding on all Optionees and any other holders of any Options granted under this Plan.
  - 23. Eligibility.
- (a) Options may be granted to any Employee, Consultant or Outside Director as the Committee may from time to time designate, provided that (i) Incentive

Stock Options may be granted only to Employees, and (ii) Options may be granted to Outside Directors only in accordance with the provisions of Section 5(b) below. In selecting the individuals to whom Options shall be granted, as well as in determining the number of Options granted, the Committee shall take into consideration such factors as it deems relevant in connection with accomplishing the purpose of this Plan. Subject to the provisions of Section 3 above, an Optionee may, if he or she is otherwise eligible, be granted an additional Option or Options if the Committee shall so determine.

- (b) All grants of Options to Outside Directors under this Plan shall be automatic and non-discretionary and shall be made strictly in accordance with the following provisions:
- (i) No person shall have any discretion to select which Outside Directors shall be granted options or to determine the number of Shares to be covered by options granted to Outside Directors; provided, that nothing in this Plan shall

be construed to prevent an Outside Director from declining to receive an Option under this Plan.

- (ii) The terms of each Option granted pursuant to this Section 5(b) shall be as follows:
  - (A) the term of the option shall be ten (10) years;
  - (B) the Option shall become exercisable cumulatively with respect to one-third of the Shares on each of the first, second and third anniversaries of the date of grant; provided, however, that in no event shall any option be exercisable prior to obtaining stockholder approval of this Plan; and
  - (C) the exercise price per share of Common Stock shall be 100% of the "Fair Market Value" (as defined in Section 7(b) below) on the date of grant of the Option.
- (c) Each Option granted pursuant to Section 5(b) above shall be a Nonstatutory Stock Option. Each other Option shall be designated in the written option agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. Notwithstanding such designations, if and to the extent that the aggregate Fair Market Value of the Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year (under all plans of the

Company) exceeds \$100,000, such options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(c), Options shall be taken into account in the order in which they are granted, and the Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

- (d) This Plan shall not confer upon any Optionee any right with respect to continuation of employment by or the rendition of services to the Company or any Parent or Subsidiary, nor shall it interfere in any way with his or her right or the right of the Company or any Parent or Subsidiary to terminate his or her employment or services at any time, with or without cause. The terms of this Plan or any Options granted hereunder shall not be construed to give any Optionee the right to any benefits not specifically provided by this Plan or in any manner modify the Company's right to modify, amend or terminate any of its pension or retirement plans.
  - 24. Term of Plan. This Plan shall become effective upon its adoption by

the Board of Directors of the Company subject to the approval thereof by vote of the holders of a majority of the outstanding shares of the Company present, or represented, and entitled to vote at a meeting to be duly held in accordance with the applicable laws of the State of Delaware. Such meeting shall be held within twelve months of the adoption of the Plan by the Board of Directors. The Plan shall terminate no later than January 1, 2006. No grants shall be made under this Plan after the date of termination of this Plan. Any termination, either partially or wholly, shall not affect any Options then outstanding under this Plan.

- ${\bf 25.} \quad {\bf Exercise} \ {\bf Price} \ {\bf and} \ {\bf Consideration}.$
- (a) Exercise Price. The per Share exercise price for the Shares to be \_\_\_\_\_\_issued pursuant to exercise of an Option shall be determined by the Committee as follows:
- (i) In the case of an Incentive Stock Option granted to any Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant, but if granted to an Employee who, at the time of the grant of such Incentive Stock Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.
- (ii) With respect to (i) above, the per Share exercise price is subject to adjustment as provided in Section 10 below. For purposes of this Section 7(a), if an Option is amended to reduce the exercise price, the date of grant of such option shall thereafter be considered to be the date of such amendment.
- (b) Fair Market Value. The "Fair Market Value" of the Common Stock shall
  be determined by the Committee in its discretion; provided, that if the Common

Stock is listed on a stock exchange, the Fair Market Value per Share shall be the closing price on such exchange on the date of grant of the Option as reported in the Wall Street Journal (or, (i) if not so reported, as otherwise reported by the exchange, and (ii) if not reported on

the date of grant, then on the last prior date on which a sale of the Common Stock was reported); or if not listed on an exchange but traded on the National Association of Securities Dealers Automated Quotation National Market System ("NASDAQ"), the Fair Market Value per Share shall be the closing price per share of the Common Stock for the date of grant, as reported in the Wall Street Journal (or, (i) if not so reported, as otherwise reported by NASDAQ, and (ii) if not reported on the date of grant, then on the last prior date on which a sale of the Common Stock was reported); or, if the Common Stock is otherwise publicly traded, the mean of the closing bid price and asked price for the last known sale.

(c) Consideration. The consideration to be paid for the Shares to be \_\_\_\_\_\_\_ issued upon exercise of an Option, including the method of payment, shall be determined by the Committee (and in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (i) cash; (ii) check; (iii) the Optionee's personal interest bearing full recourse promissory note with such terms and provisions as the Committee may authorize (provided

that no person who is not an Employee of the Company may purchase Shares with a promissory note); (iv) other Shares of Common Stock which (X) either have been owned by the Optionee for more than six (6) months on the date of surrender or were not acquired directly or indirectly from the Company, and (Y) have a Fair Market Value on the date of surrender (determined without regard to any limitations on transferability imposed by securities laws) equal to the aggregate exercise price of the Shares as to which said Option shall be exercised; (v) any combination of such methods of payment; or (vi) such other consideration and method of payment for the issuance of Shares to the extent permitted under applicable laws.

d) Withholding. No later than the date as of which an amount first becomes includable in the gross income of the Optionee for federal income tax purposes with respect to an option, the Optionee shall pay to the Company (or other entity identified by the Committee), or make arrangements satisfactory to the Company or other entity identified by the Committee regarding the payment of, any federal, state, local or foreign taxes of any kind required by law to be withheld with respect to such amount required in order for the Company to obtain a current deduction. Unless otherwise determined by the Committee, withholding obligations may be settled with Common Stock, including Common Stock underlying the subject option, provided that any applicable requirements under Section 16 of the Exchange Act are satisfied so as to avoid liability thereunder. The obligations of the Company under this Plan shall be conditional upon such payment or arrangements, and the Company shall, to the extent permitted by law, have the right to deduct any such taxes from any payment otherwise due to the Optionee.

- 26. Options.
- (a) Term of Option. The term of each Option granted (other than an Option

  Granted under Section 5(h) above) shall be for a period of no more than ten (10)

granted under Section 5(b) above) shall be for a period of no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Option agreement. However, in the case of an Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option

shall be five (5) years from the date of grant thereof or such shorter time as may be provided in the Option Agreement.

(b) Exercise of Options.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted

under this Plan (other than an Option granted pursuant to Section 5(b) above) shall be exercisable at such times and under such conditions as determined by the Committee, including performance criteria with respect to the Company and/or the Optionee, and as shall otherwise be permissible under the terms of this Plan.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and full payment for the Shares with respect to which the Option is exercised has been received by the Company. Full payment may, as authorized by the Committee, consist of any consideration and method of payment allowable under Section 7 of this Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such stock certificate promptly upon exercise of the Option. If the exercise of an Option is treated in part as the exercise of an Incentive Stock Option and in part as the exercise of a Nonstatutory Stock Option pursuant to Section 5(b) above, the Company shall issue a separate stock certificate evidencing the Shares treated as acquired upon exercise of an Incentive Stock Option and a separate stock certificate evidencing the Shares treated as acquired upon exercise of a Nonstatutory Stock Option and shall identify each such certificate accordingly in its stock transfer records. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 10 of this Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares which thereafter may be available, both for purposes of this Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Method of Exercise. An Optionee may exercise an Option, in whole or

in part, at any time during the option period by the Optionee's giving written notice of exercise on a form provided by the Committee (if available) to the Company specifying the number of shares of Common Stock subject to the Option to be purchased. Such notice shall be accompanied by payment in full of the purchase price by cash or check or such other form of payment as the Company may If approved by the Committee, payment in full or in part may also be accept. made (A) by delivering Common Stock already owned by the Optionee having a total Fair Market Value on the date of such delivery equal to the exercise price of the subject Option; (B) by the execution and delivery of a note or other evidence of indebtedness (and any security agreement thereunder) satisfactory to the Committee; (C) by authorizing the Company to retain shares of Common Stock which would otherwise be issuable upon exercise of the Option having a total Fair Market Value on the date of delivery equal to the exercise price of the subject Option; (D) by the delivery of cash by a broker-dealer to whom the Optionee has submitted an irrevocable notice of exercise (in accordance with Part 220, Chapter II, Title 12 of the Code of Federal Regulations, so-called "cashless" exercise); or (E) by any combination of the foregoing. In the case of an Incentive Stock Option, the right to make a payment in the form of already owned shares of Common Stock of the same class as the Common Stock subject to the Option may be authorized only at the time the Option is granted. No shares of Common Stock shall be issued until full payment therefor has been made. An Optionee shall have all of the rights of a

stockholder of the Company holding the class of Common Stock that is subject to such Option (including, if applicable, the right to vote the shares and the right to receive dividends), when the Optionee has given written notice of exercise, has paid in full for such shares and such shares have been recorded on the Company's official stockholder records as having been issued or transferred.

(iii) Termination of Status as an Employee, Consultant or Outside

Director. If an Optionee's Continuous Status as an Employee, Consultant or Outside Director (as the case may be) is terminated for any reason whatever, such Optionee may, but only within such period of time as provided in the Option agreement, after the date of such termination (but in no event later than the date of expiration of the term of such Option as set forth in the Option agreement and determined by the Committee), exercise the Option to the extent that such Employee, Consultant or Outside Director was entitled to exercise it at the date of such termination pursuant to the terms of the Option agreement. To the extent that such Employee, Consultant or Outside Director was not entitled to exercise the Option at the date of such termination, or if such Employee, Consultant or Outside Director does not exercise such Option (which such Employee, Consultant or Outside Director was entitled to exercise) within the time specified in the Option agreement, the Option shall terminate.

- - 28. Adjustments Upon Changes in Capitalization or Merger.
- the Company, the number of shares of Common Stock which have been authorized for issuance under this Plan but as to which no Options have yet been granted or which have been returned to this Plan upon cancellation or expiration of an Option, and the number of shares of Common Stock subject to each outstanding Option, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock of the Company or the payment of a stock dividend with respect to the Common Stock. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall

(a) Capitalization. Subject to any required action by the stockholders of

be made with respect to, the number or price of shares of Common Stock subject

to an Option.

- (b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, each Option will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Committee. The Committee may, in the exercise of its sole discretion in such instances, declare that any Option shall terminate as of a date fixed by the Committee and give each Optionee the right to exercise his or her Option as to all or any part of the Optioned Stock, including Shares as to which the Option would not otherwise be exercisable.
- "Sale" means: (i) sale (other than a sale by the (c) Sale or Merger. Company) of securities entitled to more than 75% of the voting power of the Company in a single transaction or a related series of transactions; or (ii) sale of substantially all of the assets of the Company; or (iii) approval by the stockholders of the Company of a reorganization, merger or consolidation of the Company, as a result of which the persons who were the stockholders of the Company immediately prior to such reorganization, merger or consolidation do not own securities immediately after the reorganization, merger or consolidation entitled to more than 50% of the voting power of the reorganized, merged or consolidated company. Immediately prior to a Sale, each Optionee may exercise his or her Option as to all Shares then subject to the Option, regardless of any vesting conditions otherwise expressed in the Option. Voting power, as used in this Section 10(c), shall refer to those securities entitled to vote generally in the election of directors, and securities of the Company not entitled to vote but which are convertible into, or exercisable for, securities of the Company entitled to vote generally in the election of directors shall be counted as if converted or exercised, and each unit of voting securities shall be counted in proportion to the number of votes such unit is entitled to cast.
- (d) Purchased Shares. No adjustment under this Section 10 shall apply to any purchased Shares already deemed issued at the time any adjustment would occur.
- (e) Notice of Adjustments. Whenever the purchase price or the number or kind of securities issuable upon the exercise of the Option shall be adjusted pursuant to Section 10, the Company shall give each Optionee written notice setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, and the method by which such adjustment was calculated.
- exercise an Option or any portion thereof (for purposes of this subsection (f) only, each such Option being referred to as a "Subject Option") or dispose of the Shares received upon the exercise thereof without loss or liability (other than a loss or liability for the exercise price, applicable withholding or any associated transactional cost), or if the Board determines that the Optionee may not be permitted to exercise the same rights or receive the same consideration with respect to the Sale of the Company as a stockholder of the Company with respect to any Subject Options or portion thereof or the Shares received upon the exercise thereof, then notwithstanding any other provision of this Plan and unless the Committee shall provide otherwise in an agreement with such Optionee with respect to

any Subject Options, such Optionee shall have the right, whether or not the Subject Option is fully exercisable or may be otherwise realized by the Optionee, by giving notice during the 60-day period from and after a Sale to the Company, to elect to surrender all or part of any Subject Options to the Company and to receive cash, within 30 days of such notice, in an amount equal to the amount by which the "Sale Price" (as defined herein) per share of Common Stock on the date of such election shall exceed the amount which the Optionee must pay to exercise the Subject Options per share of Common Stock under such Subject Options (the "Spread") multiplied by the number of shares of Common Stock granted under the Subject Options as to which the right granted hereunder shall be applicable and shall have been exercised; provided, however, that if the end of such 60-day period from and after a Sale is within six months of the date of grant of a Subject Option held by an Optionee (except an Optionee who has deceased during such six month period) who is an officer or director of the Company (within the meaning of Section 16(b) of the Exchange Act), such Subject Option shall be canceled in exchange for a payment to the Optionee, effective on the day which is six months and one day after the date of grant of such Subject Option, equal to the Spread multiplied by the number of shares of Common Stock granted under the Subject Option. With respect to any Optionee who is an officer or director of the Company (within the meaning of Section 16(b) of the Exchange Act), the 60-day period shall be extended, if necessary, to include the "window period" of Rule 16(b)-3 which first commences on or after the date of the Sale, and the Committee shall have sole discretion, if necessary, to approve the Optionee's exercise hereunder and the date on which the Spread is calculated may be adjusted, if necessary, to a later date if necessary to avoid liability to such Optionee under Section 16(b). For purposes of the Plan, "Sale Price" means the higher of (a) the highest reported sales price of a share of Common Stock in any transaction reported on the principal exchange on which such shares are listed or on NASDAQ during the 60-day period prior to and including the date of a Sale or (b) if the Sale is the result of a tender or exchange offer or a corporate transaction, the highest price per share of Common Stock paid in such tender or exchange offer or a corporate transaction, except that, in the case of Incentive Stock Options, such price shall be based only on the Fair Market Value of the Common Stock on the date such Incentive Stock Option is exercised. the extent that the consideration paid in any such transaction described above consists all or in part of securities or other non-cash consideration, the value of such securities or other non-cash consideration shall be determined in the sole discretion of the Committee.

# (g) Mitigation of Excise Tax. If any payment or right accruing to an $% \left\{ 1\right\} =\left\{ 1\right$

Optionee under this Plan (without the application of this Section), either alone or together with other payments or rights accruing to the Optionee from the Company or an affiliate ("Total Payments") would constitute a "parachute payment" (as defined in Section 280G of the Code and regulations thereunder), the Committee may in each particular instance determine to (i) reduce such payment or right to the largest amount or greatest right that will result in no portion of the amount payable or right accruing under the Plan being subject to an excise tax under Section 4999 of the Code or being disallowed as a deduction under Section 280G of the Code, or (ii) take such other actions, or make such other arrangements or payments with respect to any such payment or right as the Committee may determine in the circumstances. Any such determination shall be made by the Committee in

the exercise of its sole discretion, and such determination shall be conclusive and binding on the Optionee. The Optionee shall cooperate as may be requested by the Committee in connection with the Committee's determination, including providing the Committee with such information concerning such Optionee as the Committee may deem relevant to its determination.

- 29. Time of Granting Options. The date of grant of an Option shall, for all purposes, be the date on which the Committee makes the determination granting such Option. Notice of the determination shall be given to each Employee, Consultant or Outside Director to whom an Option is so granted within a reasonable time after the date of such grant. If the Committee cancels, with the consent of Optionee, any Option granted under this Plan, and a new Option is substituted therefor, the date that the canceled Option was originally granted shall be the date used to determine the earliest date for exercising the new substituted Option under Section 7 so that the Optionee may exercise the substituted Option at the same time as if the Optionee had held the substituted Option since the date the canceled Option was granted.
  - 30. Amendment and Termination of Plan.
- (a) Amendment and Termination. The Board or the Committee may amend, waive or terminate this Plan from time to time in such respects as it shall deem advisable; provided that, to the extent necessary to comply with Rule 16b-3 or

with Section 422 of the Code (or any other successor or applicable law or regulation), the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as is required by the applicable law, rule or regulation. Notwithstanding the foregoing, neither the provisions of Section 5(b) of this Plan, nor any other provisions pertaining to the automatic option grants to Outside Directors, shall be amended more than once every six months, other than to comport with changes in the Code or other applicable laws or any rules or regulations promulgated thereunder.

- (b) Effect of Amendment or Termination. Any such amendment or termination of this Plan shall not affect Options already granted and such Options shall remain in full force and effect as if this Plan had not been amended or terminated, unless mutually agreed otherwise between the Optionee and the Committee, which agreement must be in writing and signed by the Optionee and the Company.
- 31. Conditions Upon Issuance of Shares. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act, the Exchange Act, and the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the Shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment

and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned relevant provisions of law.

32. Restrictions on Shares. Shares of Common Stock issued upon exercise  $\ensuremath{\mathsf{S}}$ 

of an Option shall be subject to the terms and conditions specified herein and to such other terms, conditions and restrictions as the Committee in its discretion may determine or provide in the grant. The Company shall not be required to issue or deliver any certificates for shares of Common Stock, cash or other property prior to (a) the listing of such shares on any stock exchange (or other public market) on which the Common Stock may then be listed (or regularly traded), (b) the completion of any registration or qualification of such shares under federal or state law, or any ruling or regulation of any government body which the Committee determines to be necessary or advisable, and (c) the satisfaction of any applicable withholding obligation in order for the Company or an affiliate to obtain a deduction with respect to the exercise of an Option. The Company may cause any certificate for any share of Common Stock to be delivered to be properly marked with a legend or other notation reflecting the limitations on transfer of such Common Stock as provided in this Plan or as the Committee may otherwise require. The Committee may require any person exercising an Option to make such representations and furnish such information as it may consider appropriate in connection with the issuance or delivery of the shares of Common Stock in compliance with applicable law or otherwise. Fractional shares shall not be delivered, but shall be rounded to the next lower whole number of shares.

33. Stockholder Rights. No person shall have any rights of a stockholder

as to shares of Common Stock subject to an Option until, after proper exercise of the Option or other action required, such shares shall have been recorded on the Company's official stockholder records as having been issued or transferred. Subject to the preceding Section and upon exercise of the Option or any portion thereof, the Company will have thirty (30) days in which to issue the shares, and the Optionee will not be treated as a stockholder for any purpose whatsoever prior to such issuance. No adjustment shall be made for cash dividends or other rights for which the record date is prior to the date such shares are recorded as issued or transferred in the Company's official stockholder records, except as provided herein or in an agreement.

34. Best Efforts To Register. If there has been a public offering, the  $\,$ 

Company may register under the Securities Act the Common Stock delivered or deliverable pursuant to Options on Commission Form S-8 if available to the Company for this purpose (or any successor or alternate form that is substantially similar to that form to the extent available to effect such registration), in accordance with the rules and regulations governing such forms, as soon as such forms are available for registration to the Company for this purpose. The Company will, if it so determines, use its good faith efforts to cause the registration statement to become effective as soon as possible and will file such supplements and amendments to the registration statement as may be necessary to keep the registration statement in effect until the earliest of (a) one year following the expiration of the option period of the last Option outstanding, (b) the date the Company is no longer a reporting company under the Exchange Act and (c) the date all Optionees

have disposed of all shares delivered pursuant to any Option. The Company may delay the foregoing actions at any time and from time to time if the Committee determines in its discretion that any such registration would materially and adversely affect the Company's interests or if there is no material benefit to Optionees.

35. Reservation of Shares. The Company, during the term of this Plan,

will at all times reserve and keep available such number of Shares as shall be sufficient to permit the exercise of all Options outstanding under this Plan. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained for any reason.

- 36. Option Agreements. Options shall be evidenced by written Option agreements in such form as the Committee shall approve.
- 37. Information to Optionees. To the extent required by applicable law, the Company shall provide to each Optionee, during the period for which such Optionee has one or more Options outstanding, copies of all annual reports and other information which are provided to all stockholders of the Company. Except as otherwise noted in the foregoing sentence, the Company shall have no obligation or duty to affirmatively disclose to any Optionee, and no Optionee shall have any right to be advised of, any material information regarding the Company or any Parent or Subsidiary at any time prior to, upon or otherwise in connection with, the exercise of an Option.
- 38. Funding. Benefits payable under this Plan to any person shall be paid directly by the Company. The Company shall not be required to fund or otherwise segregate assets to be used for payment of benefits under this Plan.
- 39. Indemnification. In addition to such other rights of indemnification as they may have as directors or as members of the Committee, the members of the Committee shall be indemnified by the Company against the reasonable expenses, including attorneys' fees, actually and necessarily incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with this Plan or any option granted hereunder, and against all amounts paid by them in settlement thereof (provided such settlement is approved by independent legal counsel selected by the Company) or paid by them in satisfaction of a judgment in any such action, suit or proceeding; provided that within 60 days after institution of any such action, suit or proceeding a Committee member shall in writing offer the Company the opportunity, at its own expense, to handle and defend the same. The foregoing right of indemnification shall not be exclusive and shall be independent of any other rights of indemnification to which such persons may be entitled under the Company's Certificate of Incorporation or by-laws, by contract, as a matter of law, or otherwise.

40. Controlling Law. This Plan shall be governed by the laws of the State  $\,$ 

of Delaware applicable to contracts made and performed wholly in Delaware between Delaware residents.

E-102

## WARRANT AGREEMENT DATED AS OF SEPTEMBER 15, 1996 BETWEEN THE COMPANY AND VINCENT A. FISCHETTI

WARRANT AGREEMENT, dated as of September 15, 1996, between SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and DR. VINCENT A. FISCHETTI ("Holder").

WITNESSETH:

WHEREAS, Holder, in consideration for his work as on behalf of the Company in identifying potential joint venture partners shall be issued an aggregate of 900,000 twenty-year warrants to purchase shares of Common Stock of the Company ("Common Stock") at an exercise price of \$0.25 per share.

NOW, THEREFORE, in consideration of the premises herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Issue. The Company hereby issues to Holder a certificate (the "Warrant ----Certificate") dated as of the date hereof providing Holder with the right to purchase, at any time from the date hereof until 5:30 p.m., New York time, on the twentieth anniversary of the date hereof, 900,000 shares of Common Stock (the "Warrant Shares") (subject to adjustment as provided in Section 8 hereof)

2. Warrant Certificate. The Warrant Certificate to be delivered pursuant to this Agreement shall be in the form set forth in Exhibit X, attached hereto and made a part hereof, with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Agreement.

3. Exercise of Warrant. The Warrants, when initially exercisable, are

- 4. Issuance of Certificate. Upon the exercise of the Warrants, the \_\_\_\_\_issuance of a certificate for Warrant Shares or other securities, properties or rights underlying such Warrants shall be made forthwith (and in any event

within five (5) business days thereafter) without charge to the Holder thereof including, without limitation, any tax which may be payable in respect of the issuance thereof, and such certificate shall (subject to the provisions of Sections 5 and 7 hereof) be issued in the name of, or in such names as may be

directed by, the Holder thereof; provided, however, that the Company shall not

be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any such certificate in a name other than that of the Holder and the Company shall not be required to issue or deliver such certificate unless or until the person or persons requesting the issuance thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

The Warrant Certificate and the certificate representing the Warrant Shares (and/or other securities, property or rights issuable upon exercise of the Warrants) shall be executed on behalf of the Company by the manual or facsimile signature of the then present Chairman or Vice Chairman of the Board of Directors or President or any Vice President of the Company under its corporate seal reproduced thereon, attested to by the manual or facsimile signature of the then present Secretary or any Assistant Secretary of the Company. The Warrant Certificate shall be dated the date of execution by the Company upon initial issuance, division, exchange, substitution or transfer.

- 5. Transfer of Warrants. The Holder of the Warrant Certificate, by its acceptance thereof, covenants and agrees that the Warrants are being acquired as an investment and not with a view to the distribution thereof. The Warrants may be sold, transferred, assigned, hypothecated or otherwise disposed of, in whole or in part, without restriction, subject to compliance with applicable securities laws.
  - 6. Exercise Price.

7.

- (S)6.1 Initial and Adjusted Exercise Price. Except as otherwise provided in Section 8 hereof, the initial exercise price of each Warrant shall be the price set forth in Section 1 hereof per Warrant Share issued thereunder. The adjusted exercise price shall be the price which shall result from time to time from any and all adjustments of the initial exercise price in accordance with the provisions of Section 8 hereof.
- (S)6.2 Exercise Price. The term "Exercise Price" herein shall mean the initial exercise price or the adjusted exercise price, depending upon the context.
- Registration Under the Securities Act of 1933. The Warrants, the Warrant Shares and any of the other securities issuable upon exercise of the Warrants have not been registered under the Securities Act of 1933, as amended (the "Act"). Upon exercise, in whole or in part, of the Warrants, a certificate representing the Warrant Shares underlying the Warrants, and any of the other securities issuable upon exercise of the Warrants (collectively, the "Warrant Securities") shall bear the following legend unless such Warrant Shares previously have been registered under the Act in accordance with the terms hereof:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED ("ACT"), AND MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT, (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL TO THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

- 8. Adjustments to Exercise Price and Number of Securities.
- (S)8.1 Subdivision and Combination. In case the Company shall at any time subdivide or combine the outstanding shares of Common Stock, the Exercise Price shall forthwith be proportionately decreased in the case of subdivision or increased in the case of combination.
- (S)8.2 Adjustment in Number of Securities. Upon each adjustment of the Exercise Price pursuant to the provisions of this Section 8, the number of Exercise Shares issuable upon the exercise of each Warrant shall be adjusted to the nearest full amount by multiplying a number equal to the Exercise Price in effect immediately prior to such adjustment by the number of Warrant Shares

Company with, or merger of the Company with, or merger of the Company into, another corporation (other than a consolidation or merger which does not result in any reclassification or change of the outstanding Common Stock), the corporation formed by such consolidation or merger shall execute and deliver to the Holder a supplemental warrant agreement providing that the holder of each Warrant then outstanding or to be outstanding shall have the right thereafter (until the expiration of such Warrant) to receive, upon exercise of such Warrant, the kind and amount of shares of stock and other securities and property receivable upon such consolidation or merger, by a holder of the number of shares of Common Stock of the Company for which such Warrant might have been exercised immediately prior to such consolidation, merger, sale or transfer. Such supplemental warrant agreement shall provide for adjustments which shall be identical to the adjustments provided in this Section 8. The above provision of

this subsection shall similarly apply to successive consolidations or mergers.

- (S)8.4 No Adjustment of Exercise Price in Certain Cases. No adjustment of the Exercise Price shall be made:
  - (a) Upon the issuance or sale of the Warrants or the shares of Common Stock issuable upon the exercise of the Warrants.
  - (b) If the amount of said adjustment shall be less than two cents (2c) per Warrant Share, provided, however, that in such case any adjustment that would otherwise be required then to be made shall be

carried forward and shall be made at the time of and together with the next subsequent adjustment which, together with any adjustment so carried forward, shall amount to at least two cents (2c) per Warrant Share.

- (c) Upon the issuance or sale of Common Stock or warrants, options or convertible securities, to be issued and/or sold to employees, advisors, directors or officers of, or consultants to, the Company or any of its subsidiaries pursuant to a stock grant, stock option plan, stock purchase plan, pension or profit sharing plan or other stock agreement or arrangement currently existing or approved by the Company's Board of Directors.
- (d) Upon the issuance of shares of Common Stock, warrants, options and convertible securities pursuant to warrants, options and convertible securities outstanding as of the date hereof.
- (e) Upon the issuance of shares of Common Stock, warrants, options and convertible securities in connection with strategic partnerships or other business and/or product consolidations or joint ventures.
- 9. Exchange and Replacement of Warrant Certificate. The Warrant

Certificate is exchangeable without expense, upon the surrender thereof by the registered Holder at the principal executive office of the Company, for a new Warrant Certificate of like tenor and date representing in the aggregate the right to purchase the same number of Shares in such denominations as shall be designated by the Holder thereof at the time of such surrender.

Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of the Warrant Certificate, and, in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of the Warrants, if mutilated, the Company will make and deliver a new Warrant Certificate of like tenor, in lieu thereof.

- 10. Elimination of Fractional Interests. The Company shall not be required to issue certificates representing fractions of shares of Common Stock upon the exercise of the Warrants, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up to the nearest whole number of shares of Common Stock or other securities, properties or rights.
- 11. Reservation and Listing of Securities. The Company shall at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the exercise of the Warrants, such number of shares of Common Stock or other securities, properties or rights as shall be issuable upon the exercise thereof. The Company covenants and agrees that, upon exercise of the Warrants and payment of the Exercise Price therefor, all shares of Common Stock and other securities issuable upon such exercise shall be duly and validly issued, fully paid,

non-assessable and not subject to the preemptive rights of any stockholder. As long as the Warrants shall be outstanding, the Company shall use its best efforts to cause all shares of Common Stock issuable upon the exercise of the Warrants to be listed (subject to official notice of issuance) on all securities exchanges on which the Common Stock may then be listed and/or quoted on NASDAQ.

12. Notices to Warrant Holder. Nothing contained in this Agreement shall

be construed as conferring upon the Holder by virtue of his holding the Warrant the right to vote or to consent or to receive notice as a stockholder in respect of any meetings of stockholders for the election of directors or any other matter, or as having any rights whatsoever as a stockholder of the Company. If, however, at any time prior to the expiration of the Warrants and their exercise, any of the following events shall occur:

- (a) the Company shall take a record of the holders of its shares of Common Stock for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of current or retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company; or
- (b) the Company shall offer to all the holders of its Common Stock any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor; or
- (c) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or merger) or a sale of all or substantially all of its property, assets and business as an entirety shall be proposed;

then, in any one or more of said events, the Company shall give written notice of such event at least fifteen (15) days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, convertible or exchangeable securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale or any such earlier date that notice of such event is given to stockholders of the Company. Such notice shall specify such record date or the date of closing the transfer books, as the case may be. Failure to give such notice or any defect therein shall not affect the validity of any action taken in connection with the declaration or payment of any such dividend, or the issuance of any convertible or exchangeable securities, or subscription rights, options or warrants, or any proposed dissolution, liquidation, winding up or sale.

13. Notices.

All notices, requests, consents and other communications hereunder shall be in writing and shall be deemed to have been duly made and sent when delivered, or mailed by registered or certified mail, return receipt requested:

- (a) If to the registered Holder of the Warrants, to the address of such Holder as shown on the books of the Company; or
- (b) If to the Company, to the address set forth in Section 3 hereof or to such other address as the Company may designate by notice to the Holder.
- 14. Supplements and Amendments. The Company and Holder may from time to time supplement or amend this Agreement in order to cure any ambiguity, to correct or supplement any provision contained herein which may be defective or inconsistent with any provisions herein, or to make any other provisions in regard to matters or questions arising hereunder which the Company and Holder may deem necessary or desirable.
- 15. Successors. All the covenants and provisions of this Agreement shall be binding upon and inure to the benefit of the Company, the Holder and their respective successors and assigns hereunder.
- 16. Termination. This Agreement shall terminate at the close of business -----on the twentieth anniversary of the issuance of the Warrants.
- 17. Governing Law. This Agreement and the Warrant Certificate issued hereunder shall be deemed to be a contract made under the laws of the State of New York and for all purposes shall be construed in accordance with the laws of the State of New York without giving effect to the rules of the State of New York governing the conflicts of laws.
- 18. Entire Agreement; Modification. This Agreement contains the entire understanding between the parties hereto with respect to the subject matter hereof and may not be modified or amended except by a writing duly signed by the party against whom enforcement of the modification or amendment is sought.
- 19. Severability. If any provision of this Agreement shall be held to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision of this Agreement.
- 20. Captions. The caption headings of the Sections of this Agreement are -----for convenience of reference only and are not intended, nor should they be construed as, a part of this Agreement and shall be given no substantive effect.
- 21. Benefits of this Agreement. Nothing in this Agreement shall be construed to give to any person or corporation other than the Company and Holder any legal or equitable right, remedy or claim under this Agreement; and this Agreement shall be for the sole and exclusive benefit of the Company and Holder.

22. Counterparts. This Agreement may be executed in any number of

counterparts and each of such counterparts shall for all purposes be deemed to be an original, and such counterparts shall together constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed, as of the day and year first above written.

SIGA PHARMACEUTICALS, INC.

By:/s/ Joshua D. Schein

-----

Name: Joshua D. Schein

Title: Secretary and Chief Financial Officer

/s/ Vincent A. Fischetti\_

Dr. Vincent A. Fischetti

#### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

EXERCISABLE FROM SEPTEMBER 15, 1996 UNTIL 5:30 P.M., NEW YORK TIME, SEPTEMBER 15, 2016

No. W-96A-1 900,000 Warrants

### WARRANT CERTIFICATE

This Warrant Certificate certifies that Dr. Vincent A. Fischetti or his registered assigns, is the registered holder of 900,000 Warrants to purchase initially, at any time from September 15, 1996 until 5:30 p.m. New York time on September 15, 2016 ("Expiration Date"), up to 900,000 fully-paid and non-assessable shares of common stock, par value \$.0001 per share ("Common Stock") of SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the initial exercise price, subject to adjustment in certain events (the "Exercise Price"), equal to \$0.25 per share upon surrender of this Warrant Certificate and payment of the Exercise Price at an office or agency of the Company, but subject to the conditions set forth herein and in the Warrant Agreement dated as of September 15, 1996 between the Company and Dr. Vincent A. Fischetti (the "Warrant Agreement"). Payment of the Exercise Price shall be made by certified check or official bank check in New York Clearing House funds payable to the order of the Company.

No Warrant may be exercised after 5:30 p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the holder (the word "holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be

adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of September 15, 1996.

SIGA PHARMACEUTICALS, INC.

By:			

Name: Joshua D. Schein

Title: Secretary and Chief Financial Officer

# [FORM OF ELECTION TO PURCHASE]

represented by Common Stock a check or office order of SIGA with the terms 1996 between Sundersigned rename of	rsigned hereby irrevocably elects to exercise the right, y this Warrant Certificate, to purchase shares of and herewith tenders in payment for such securities a certified cial bank check payable in New York Clearing House Funds to the PHARMACEUTICALS, INC. in the amount of \$, all in accordance s of Section 3 of the Warrant Agreement dated as of September 15, Siga Pharmaceuticals, Inc. and Dr. Vincent A. Fischetti. The equests that a certificate for such securities be registered in the whose address is and that such e delivered to whose address is whose address is
Dated:	Signature  (Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Holder)

# [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

F unto	=0R	VALUE RECEIVED	hereby sells, assigns and transfers
and do	oes	ant Certificate, thereby irrevocably	rint name and address of transferee)  cogether with all right, title and interest therein, constitute and appoint Attorney, to cortificate on the books of the within-named
	ıy,	with full power of	
			(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
			(Insert Social Security or Other Identifying Number of Assignee)

#### WARRANT AGREEMENT DATED AS OF NOVEMBER 18, 1996 BETWEEN THE COMPANY AND DAVID DE WEESE

WARRANT AGREEMENT, dated as of November 18, 1996, between SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and DAVID DE WEESE ("Holder").

WITNESSETH:

WHEREAS, Holder, in consideration for his agreeing to join the Company as President, Chairman and Chief Executive Officer shall be issued an aggregate of 2,766,095 ten-year warrants (the "Warrants") to purchase shares of Common Stock of the Company ("Common Stock") at an exercise price of \$0.50 per share.

NOW, THEREFORE, in consideration of the premises herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Issue. The Company hereby issues to Holder certificates (the "Warrant -----: ificates"), dated as of the date hereof, providing Holder with the right to

Certificates"), dated as of the date hereof, providing Holder with the right to purchase an aggregate of 2,766,095 shares of Common Stock (the "Warrant Shares") (subject to adjustment as provided in Section 8 hereof) at an initial exercise

price (subject to adjustment as provided in Section 8 hereof) equal to \$0.50 per

share. Warrants to purchase 691,529 Warrant Shares shall be exercisable from the date hereof until 5:30 p.m., New York time, on the tenth anniversary of this Agreement. The remaining Warrants shall become exercisable on a pro rata basis on the first, second and third anniversaries of this Agreement, and shall be exercisable until 5:30 p.m., New York time, on the eleventh, twelfth and thirteenth anniversaries of this Agreement, respectively.

- 3. Exercise of Warrant. The Warrants, when initially exercisable, are exercisable at an aggregate initial exercise price per share set forth in

Section 6 hereof payable by certified check or official bank check in New York

Clearing House funds. Upon surrender of a Warrant Certificate with the annexed Form of Election to Purchase duly executed, together with payment of the Exercise Price (as hereinafter defined) for the Warrant Shares purchased, at the Company's principal offices in New York (presently located at 666 Third Avenue, 30th Floor, New York, NY 10017) Holder shall be entitled to receive a certificate for the Warrant Shares so purchased. The purchase rights represented by the Warrant Certificates are exercisable at the option of the Holder thereof, in whole or in part (but not as to fractional shares of the Common Stock underlying the Warrants). In the case of the purchase of less than all the Warrant Shares purchasable under the

Warrant Certificate, the Company shall cancel said Warrant Certificate upon the surrender thereof and shall execute and deliver a new Warrant Certificate of like tenor for the balance of the Warrant Shares purchasable thereunder.

4. Issuance of Certificate. Upon the exercise of the Warrants, the  $\,$ 

issuance of a certificate for Warrant Shares or other securities, properties or rights underlying such Warrants shall be made forthwith (and in any event within five (5) business days thereafter) without charge to the Holder thereof including, without limitation, any tax which may be payable in respect of the issuance thereof, and such certificate shall (subject to the provisions of Sections 5 and 7 hereof) be issued in the name of, or in such names as may be

directed by, the Holder thereof; provided, however, that the Company shall not

be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any such certificate in a name other than that of the Holder and the Company shall not be required to issue or deliver such certificate unless or until the person or persons requesting the issuance thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

The Warrant Certificates and the certificate representing the Warrant Shares (and/or other securities, property or rights issuable upon exercise of the Warrants) shall be executed on behalf of the Company by the manual or facsimile signature of the then present Chairman or Vice Chairman of the Board of Directors or President or any Vice President of the Company under its corporate seal reproduced thereon, attested to by the manual or facsimile signature of the then present Secretary or any Assistant Secretary of the Company. The Warrant Certificates shall be dated the date of execution by the Company upon initial issuance, division, exchange, substitution or transfer.

- 5. Transfer of Warrants. The Holder of the Warrant Certificates, by its acceptance thereof, covenants and agrees that the Warrants are being acquired as an investment and not with a view to the distribution thereof. The Warrants may be sold, transferred, assigned, hypothecated or otherwise disposed of, in whole or in part, without restriction, subject to compliance with applicable securities laws.
  - 6. Exercise Price.
- (S)6.2 Exercise Price. The term "Exercise Price" herein shall mean the initial exercise price or the adjusted exercise price, depending upon the context.
- 7. Registration Under the Securities Act of 1933. The Warrants, the Warrant Shares and any of the other securities issuable upon exercise of

the Warrants have not been registered under the Securities Act of 1933, as amended (the "Act"). Upon exercise, in whole or in part, of the Warrants, a certificate representing the Warrant Shares underlying the Warrants, and any of the other securities issuable upon exercise of the Warrants (collectively, the "Warrant Securities") shall bear the following legend unless such Warrant Shares previously have been registered under the Act in accordance with the terms hereof:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED ("ACT"), AND MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT, (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL TO THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

- 8. Adjustments to Exercise Price and Number of Securities.
- (S)8.1 Subdivision and Combination. In case the Company shall at any time subdivide or combine the outstanding shares of Common Stock, the Exercise Price shall forthwith be proportionately decreased in the case of subdivision or increased in the case of combination.
- (S)8.2 Adjustment in Number of Securities. Upon each adjustment of the Exercise Price pursuant to the provisions of this Section 8, the number of

Warrant Shares issuable upon the exercise of each Warrant shall be adjusted to the nearest full amount by multiplying a number equal to the Exercise Price in effect immediately prior to such adjustment by the number of Warrant Shares issuable upon exercise of the Warrants immediately prior to such adjustment and dividing the product so obtained by the adjusted Exercise Price.

(S)8.3 Merger or Consolidation. In case of any consolidation of the

Company with, or merger of the Company with, or merger of the Company into, another corporation (other than a consolidation or merger which does not result in any reclassification or change of the outstanding Common Stock), the corporation formed by such consolidation or merger shall execute and deliver to the Holder a supplemental warrant agreement providing that the holder of each Warrant then outstanding or to be outstanding shall have the right thereafter (until the expiration of such Warrant) to receive, upon exercise of such Warrant, the kind and amount of shares of stock and other securities and property receivable upon such consolidation or merger, by a holder of the number of shares of Common Stock of the Company for which such Warrant might have been exercised immediately prior to such consolidation, merger, sale or transfer. Such supplemental warrant agreement shall provide for adjustments which shall be identical to the adjustments provided in this Section 8. The above provision of

this subsection shall similarly apply to successive consolidations or mergers.

- (S)8.4 No Adjustment of Exercise Price in Certain Cases. No adjustment of the Exercise Price shall be made:
  - (a) Upon the issuance or sale of the Warrants or the shares of Common Stock issuable upon the exercise of the Warrants.
  - (b) If the amount of said adjustment shall be less than two cents(2c) per Warrant Share, provided, however, that in such case any adjustment

that would otherwise be required then to be made shall be carried forward and shall be made at the time of and together with the next subsequent adjustment which, together with any adjustment so carried forward, shall amount to at least two cents (2c) per Warrant Share.

- (c) Upon the issuance or sale of Common Stock or warrants, options or convertible securities, to be issued and/or sold to employees, advisors, directors or officers of, or consultants to, the Company or any of its subsidiaries pursuant to a stock grant, stock option plan, stock purchase plan, pension or profit sharing plan or other stock agreement or arrangement currently existing or approved by the Company's Board of Directors.
- (d) Upon the issuance of shares of Common Stock, warrants, options and convertible securities pursuant to warrants, options and convertible securities outstanding as of the date hereof.
- (e) Upon the issuance of shares of Common Stock, warrants, options and convertible securities in connection with strategic partnerships or other business and/or product consolidations or joint ventures.
- 9. Exchange and Replacement of Warrant Certificate. A Warrant Certificate is exchangeable without expense, upon the surrender thereof by the registered Holder at the principal executive office of the Company, for a new Warrant Certificate of like tenor and date representing in the aggregate the right to purchase the same number of Shares in such denominations as shall be designated by the Holder thereof at the time of such surrender.

Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of a Warrant Certificate, and, in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of the Warrants, if mutilated, the Company will make and deliver a new Warrant Certificate of like tenor, in lieu thereof.

10. Elimination of Fractional Interests. The Company shall not be required to issue certificates representing fractions of shares of Common Stock upon the exercise of the Warrants, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up to the nearest whole number of shares of Common Stock or other securities, properties or rights.

11. Reservation and Listing of Securities. The Company shall at all times

reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the exercise of the Warrants, such number of shares of Common Stock or other securities, properties or rights as shall be issuable upon the exercise thereof. The Company covenants and agrees that, upon exercise of the Warrants and payment of the Exercise Price therefor, all shares of Common Stock and other securities issuable upon such exercise shall be duly and validly issued, fully paid, non-assessable and not subject to the preemptive rights of any stockholder. As long as the Warrants shall be outstanding, the Company shall use its best efforts to cause all shares of Common Stock issuable upon the exercise of the Warrants to be listed (subject to official notice of issuance) on all securities exchanges on which the Common Stock may then be listed and/or quoted on NASDAQ.

- 12. Notices to Warrant Holder. Nothing contained in this Agreement shall
- be construed as conferring upon the Holder by virtue of his holding the Warrant the right to vote or to consent or to receive notice as a stockholder in respect of any meetings of stockholders for the election of directors or any other matter, or as having any rights whatsoever as a stockholder of the Company. If, however, at any time prior to the expiration of the Warrants and their exercise, any of the following events shall occur:
  - (a) the Company shall take a record of the holders of its shares of Common Stock for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of current or retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company; or
  - (b) the Company shall offer to all the holders of its Common Stock any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor; or
  - (c) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or merger) or a sale of all or substantially all of its property, assets and business as an entirety shall be proposed;

then, in any one or more of said events, the Company shall give written notice of such event at least fifteen (15) days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, convertible or exchangeable securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale or any such earlier date that notice of such event is given to stockholders of the Company. Such notice shall specify such record date or the date of closing the transfer books, as the case may be. Failure to give such notice or any defect therein shall not affect the validity of any action taken in connection with the declaration or payment of any such dividend, or the issuance of any convertible or exchangeable securities, or subscription

rights, options or warrants, or any proposed dissolution, liquidation, winding up or sale.

13. Notices.

All notices, requests, consents and other communications hereunder shall be in writing and shall be deemed to have been duly made and sent when delivered, or mailed by registered or certified mail, return receipt requested:

- (a) If to the registered Holder of the Warrants, to the address of such Holder as shown on the books of the Company; or
- (b) If to the Company, to the address set forth in Section 3 hereof or to such other address as the Company may designate by notice to the Holder.
- 14. Supplements and Amendments. The Company and Holder may from time to time supplement or amend this Agreement in order to cure any ambiguity, to correct or supplement any provision contained herein which may be defective or inconsistent with any provisions herein, or to make any other provisions in regard to matters or questions arising hereunder which the Company and Holder may deem necessary or desirable.
- 15. Successors. All the covenants and provisions of this Agreement shall be binding upon and inure to the benefit of the Company, the Holder and their respective successors and assigns hereunder.
- 16. Termination. This Agreement shall terminate at the close of business -----on the thirteenth anniversary of the date of this Agreement.
- 17. Governing Law. This Agreement and the Warrant Certificates issued hereunder shall be deemed to be a contract made under the laws of the State of New York and for all purposes shall be construed in accordance with the laws of the State of New York without giving effect to the rules of the State of New York governing the conflicts of laws.
- 18. Entire Agreement; Modification. This Agreement contains the entire understanding between the parties hereto with respect to the subject matter hereof and may not be modified or amended except by a writing duly signed by the party against whom enforcement of the modification or amendment is sought.
- 19. Severability. If any provision of this Agreement shall be held to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision of this Agreement.
- 20. Captions. The caption headings of the Sections of this Agreement are for convenience of reference only and are not intended, nor should they be construed as, a part of this Agreement and shall be given no substantive effect.
- 21. Benefits of this Agreement. Nothing in this Agreement shall be construed to give to any person or corporation other than the Company and

Holder any legal or equitable right, remedy or claim under this Agreement; and this Agreement shall be for the sole and exclusive benefit of the Company and Holder.

22. Counterparts. This Agreement may be executed in any number of

-----

counterparts and each of such counterparts shall for all purposes be deemed to be an original, and such counterparts shall together constitute but one and the same instrument.

SIGA PHARMACEUTICALS, INC.

By:/s/ Joshua D. Schein

-----

Name: Joshua D. Schein

Title: Secretary and Chief Financial Officer

/s/ David de Weese

David de Weese

#### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

EXERCISABLE FROM NOVEMBER 18, 1996 UNTIL 5:30 P.M., NEW YORK TIME, NOVEMBER 18, 2006

No. W-96B-1 691,529 Warrants

### WARRANT CERTIFICATE

This Warrant Certificate certifies that David de Weese or his registered assigns, is the registered holder of 691,529 Warrants to purchase initially, at any time from November 18, 1996 until 5:30 p.m. New York time on November 18, 2006 ("Expiration Date"), up to 691,529 fully-paid and non-assessable shares of common stock, par value \$.0001 per share ("Common Stock") of SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the initial exercise price, subject to adjustment in certain events (the "Exercise Price"), equal to \$0.50 per share upon surrender of this Warrant Certificate and payment of the Exercise Price at an office or agency of the Company, but subject to the conditions set forth herein and in the Warrant Agreement dated as of November 18, 1996 between the Company and David de Weese (the "Warrant Agreement"). Payment of the Exercise Price shall be made by certified check or official bank check in New York Clearing House funds payable to the order of the Company.

No Warrant may be exercised after 5:30~p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the holder (the word "holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be

adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of November 18, 1996.

SIGA PHARMACEUTICALS, INC.

By:								
-	 _	_	_					

Name: Joshua D. Schein Title: Secretary and CFO

# [FORM OF ELECTION TO PURCHASE]

represented by this Warrant Co Common Stock and herewith tend check or official bank check p order of SIGA PHARMACEUTICALS, with the terms of Section 3 of 1996 between Siga Pharmaceutic requests that a certificate for	rrevocably elects to exercise the right, ertificate, to purchase shares of ders in payment for such securities a certified payable in New York Clearing House Funds to the , INC. in the amount of \$, all in accordance f the Warrant Agreement dated as of November 18, cals, Inc. and David de Weese. The undersigned or such securities be registered in the name is and that such
	whose address is
Dated:	
	Signature
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Holder)

# [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

F( unto	OR V	ALUE	RECEI	VED _									,		ŭ				fers
this Wa and doo transfo Company	es h er t	ereby he wi	rtifi irre thin	vocab Warra	prin tog oly c	it na Jetha Sonst	ame a er wi Litut Lfica	ind a th a e an	ddre 11 i	ess d right	of t, nt .	tran:	sfe e a	ree	) inte	rest _ At	t	here.	
Dated:						Sig	gnatu	ıre:											
								t	o na	ame o	of		er	as	spec	ifie	d	responds on the	
								•				ial : Numl			-				

#### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

EXERCISABLE FROM NOVEMBER 18, 1997 UNTIL 5:30 P.M., NEW YORK TIME, NOVEMBER 18, 2007

No. W-97A-1 691,522 Warrants

### WARRANT CERTIFICATE

This Warrant Certificate certifies that David de Weese or his registered assigns, is the registered holder of 691,522 Warrants to purchase initially, at any time from November 18, 1997 until 5:30 p.m. New York time on November 18, 2007 ("Expiration Date"), up to 691,522 fully-paid and non-assessable shares of common stock, par value \$.0001 per share ("Common Stock") of SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the initial exercise price, subject to adjustment in certain events (the "Exercise Price"), equal to \$0.50 per share upon surrender of this Warrant Certificate and payment of the Exercise Price at an office or agency of the Company, but subject to the conditions set forth herein and in the Warrant Agreement dated as of November 18, 1996 between the Company and David de Weese (the "Warrant Agreement"). Payment of the Exercise Price shall be made by certified check or official bank check in New York Clearing House funds payable to the order of the Company.

No Warrant may be exercised after 5:30~p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the holder (the word "holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be

adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of November 18, 1996.

SIGA PHARMACEUTICALS, INC.

By:			
Nomo	Jachua D	Schoin	

Name: Joshua D. Schein Title: Secretary and CFO

# [FORM OF ELECTION TO PURCHASE]

	ably elects to exercise the right, cate, to purchase shares of
Common Stock and herewith tenders in	n payment for such securities a certified
	e in New York Clearing House Funds to the
•	in the amount of \$, all in accordance
	Warrant Agreement dated as of November 18, Inc. and David de Weese. The undersigned
	n securities be registered in the name
of whose address is	
Certificate be delivered to	
·	
Data da	
Dated: Signature	
Signature	
	(Signature must conform in all respects to
	name of holder as specified on the face of
	the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Holder)
	E-129

# [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

unto	hereby sells, assigns and transfers
this Warrant Certificate, together and does hereby irrevocably constit	e and address of transferee) with all right, title and interest therein, tute and appoint Attorney, to icate on the books of the within-named tution.
Dated: Sigr	nature:
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Assignee)
	E 100

#### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

EXERCISABLE FROM NOVEMBER 18, 1998 UNTIL 5:30 P.M., NEW YORK TIME, NOVEMBER 18, 2008

No. W-98A-1 691,522 Warrants

### WARRANT CERTIFICATE

This Warrant Certificate certifies that David de Weese or his registered assigns, is the registered holder of 691,522 Warrants to purchase initially, at any time from November 18, 1998 until 5:30 p.m. New York time on November 18, 2008 ("Expiration Date"), up to 691,522 fully-paid and non-assessable shares of common stock, par value \$.0001 per share ("Common Stock") of SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the initial exercise price, subject to adjustment in certain events (the "Exercise Price"), equal to \$0.50 per share upon surrender of this Warrant Certificate and payment of the Exercise Price at an office or agency of the Company, but subject to the conditions set forth herein and in the Warrant Agreement dated as of November 18, 1996 between the Company and David de Weese (the "Warrant Agreement"). Payment of the Exercise Price shall be made by certified check or official bank check in New York Clearing House funds payable to the order of the Company.

No Warrant may be exercised after 5:30~p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the holder (the word "holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be

adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of November 18, 1996.

SIGA PHARMACEUTICALS, INC.

By:			
-			

Name: Joshua D. Schein Title: Secretary and CFO

# [FORM OF ELECTION TO PURCHASE]

represented by this Warrant Co Common Stock and herewith tend check or official bank check porder of SIGA PHARMACEUTICALS, with the terms of Section 3 of 1996 between Siga Pharmaceutic requests that a certificate for	revocably elects to exercise the right, ertificate, to purchase shares of ders in payment for such securities a certified bayable in New York Clearing House Funds to the INC. in the amount of \$, all in accordance the Warrant Agreement dated as of November 18, eals, Inc. and David de Weese. The undersigned or such securities be registered in the name is and that such
	whose address is
certificate be delivered to _	whose address is
·	
Dated:	
Signature	
ŭ	
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Holder)

# [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

FOR VALUE RECEIVEDunto	hereby sells, assigns and transfers
this Warrant Certificate, tog and does hereby irrevocably c	t name and address of transferee) ether with all right, title and interest therein, onstitute and appoint Attorney, to ertificate on the books of the within-named ubstitution.
Dated:	Signature:
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
	(Insert Social Security or Other Identifying Number of Assignee)

#### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

EXERCISABLE FROM NOVEMBER 18, 1999 UNTIL 5:30 P.M., NEW YORK TIME, NOVEMBER 18, 2009

No. W-99A-1 691,522 Warrants

### WARRANT CERTIFICATE

This Warrant Certificate certifies that David de Weese or his registered assigns, is the registered holder of 691,522 Warrants to purchase initially, at any time from November 18, 1999 until 5:30 p.m. New York time on November 18, 2009 ("Expiration Date"), up to 691,522 fully-paid and non-assessable shares of common stock, par value \$.0001 per share ("Common Stock") of SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the initial exercise price, subject to adjustment in certain events (the "Exercise Price"), equal to \$0.50 per share upon surrender of this Warrant Certificate and payment of the Exercise Price at an office or agency of the Company, but subject to the conditions set forth herein and in the Warrant Agreement dated as of November 18, 1996 between the Company and David de Weese (the "Warrant Agreement"). Payment of the Exercise Price shall be made by certified check or official bank check in New York Clearing House funds payable to the order of the Company.

No Warrant may be exercised after 5:30 p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the holder (the word "holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be

adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of November 18, 1996.

SIGA PHARMACEUTICALS, INC.

Name: Joshua D. Schein Title: Secretary and CFO

# [FORM OF ELECTION TO PURCHASE]

represented by this Warrant Common Stock and herewith to check or official bank chec order of SIGA PHARMACEUTICA with the terms of Section 3 1996 between Siga Pharmaceu requests that a certificate of whose addre	y irrevocably elects to exercise the right, t Certificate, to purchase shares of tenders in payment for such securities a certified ck payable in New York Clearing House Funds to the ALS, INC. in the amount of \$, all in accordance 3 of the Warrant Agreement dated as of November 18, uticals, Inc. and David de Weese. The undersigned e for such securities be registered in the name ess is and that such o whose address is
Dated:	Signature
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
•	Insert Social Security or Other Identifying Number of

# [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

FOR VALUE RECEIVEDunto	hereby sells, assigns and transfers	
(Please print	name and address of transferee)	
and does hereby irrevocably con	her with all right, title and interest therein, stitute and appoint Attorney, to tificate on the books of the within-named stitution.	
Dated:	Signature:	
(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)		
	Insert Social Security or Other Identifying umber of Assignee)	
	E-138	

As of [ ], 1997

To: Bridge Loan Investors Listed on Schedule I

#### Ladies and Gentlemen:

This letter confirms our agreement that you will make an investment for the amount listed next to your name on Schedule I to purchase up to 40 units ("Units") of securities of SIGA Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"). Each Unit consists of (i) a senior sub-ordinated non-negotiable promissory note in the principal amount of \$25,000 (individually, a "Bridge Note" and collectively, the "Bridge Notes") bearing interest at the rate of 10% per annum due and payable on the earlier of (a) the closing of an initial public offering of the Issuer's common stock, par value \$.0001 per share (the "Common Stock"), pursuant to the Securities Act of 1933, as amended (the "Act"), or (b) [6 MONTHS AFTER DATE OF EXECUTION], 1997, and (ii) warrants to purchase the number of shares of Common Stock which equals \$12,500 divided by the initial public offering price of the Common Stock (the "IPO Price"), at an exercise price equal to the IPO Price (the "Warrants"). Partial Units may be offered and sold at the discretion of the Issuer. Your investment is part of an offering (the "Offering") of the Issuer with one or more closings to occur on or before February 28, 1997 (the "Closing"). You, together with the other purchasers of the Units in the Offering, shall be collectively referred to herein as the "Investors."

The Bridge Notes included in the Units will constitute a general obligation of the Issuer, senior to all indebtedness. The Bridge Notes will provide, among other things, for interest payable monthly in arrears at the rate of 10% per annum and for prepayment, without penalty, on any interest date at the sole option of the Issuer. The Bridge Notes will also provide that the entire principal amount, and any accrued and unpaid interest thereon, will be payable on the earlier of (a) the closing of an initial public offering of the Common Stock, pursuant to the Act, or (b) [6 MONTHS AFTER DATE OF EXECUTION], 1997 (the "Maturity Date").

The Warrants will contain, among other things, provisions permitting cashless exercise and "piggyback" registration rights provisions pursuant to the Registration Rights Agreement of even date for the shares of Common Stock issuable upon the exercise thereof.

The Issuer represents and warrants to you that (i) it has the requisite organizational authority to enter into this transaction and has taken all required actions necessary to effectuate the transactions contemplated herein, and (ii) as of the date hereof, and as of the date of the Closing of the Offering, it has, and will have, no other existing debt obligations, other than trade payables arising in the ordinary course of business.

The undersigned Investor understands and acknowledges that:

- (i) The offering of Units to the Investor has not been registered under the Act, or any state securities laws or regulations, and the Units will be restricted securities which must be held for an indefinite period of time unless they are subsequently so registered or an exemption from such registration is available.
- (ii) The Units are being offered and sold without registration under the Act in reliance upon applicable exemptions under the Act and similar exemptions under state securities laws for private offerings. The availability of the aforesaid exemptions depends in part upon the accuracy of certain of the representations, declarations and warranties which are made by the Investor herein and in any other information furnished by the Investor to the Issuer, and the same may be relied upon in determining the suitability of the Investor to invest in the securities of the Issuer.
- (iii) There is no established market for the Units and it is not likely that any public market for the Units will develop.

The undersigned Investor represents and warrants to the Issuer that:

- (i) The Investor is an "accredited investor", as such term is defined in the Act, Rule 501(a), and has sufficient available financial resources to provide adequately for the Investor's current needs, including possible personal contingencies, and can bear the economic risk of a complete loss of the Investor's investment hereunder without materially affecting the Investor's financial condition.
- (ii) The Investor has been furnished with all materials relating to the Issuer and its activities which the Investor has requested and has been afforded the opportunity to obtain any additional information necessary to verify the accuracy of any representations or information relating to the Investor and its activities.
- (iii) The Issuer has answered all inquiries made by the Investor concerning the Issuer and its activities, or any other matters relating to the Offering and sale of Units and the operations of the Issuer.
- (iv) The Investor has not been furnished any offering literature other than any materials and/or information made available to the Investor by the Issuer as described in subparagraphs (ii) and (iii) above, and the Investor has relied only on such materials and/or information. Furthermore, as set forth above, no representations or warranties have been made to the Investor by the Issuer, or by its members or officers or employees with respect to the intended business of the Issuer, the financial condition, prospects, profitability, operations and/or potential of the Issuer, and/or the economic or any other aspects of the consequences of an investment in Units, and the Investor has not relied upon any information concerning the offering, written or oral, other than information contained in this Agreement or provided by the Issuer at the Investor's request.
- (v) The Investor is acquiring the Units for which the Investor hereby subscribes for the Investor's own account, as principal, for investment and not with a view to the resale or distribution of all or any part of such Units.

- (vi) The Investor, if a corporation, partnership, or other form of business entity, is authorized and otherwise duly qualified to purchase and hold Units, and such entity has not been formed for the specific purpose of acquiring Units.
- (vii) If the Investor is more than one person, the obligations of the Investor shall be joint and several and the representations and warranties herein contained shall be deemed to be made by and be binding upon each such person and his heirs, executors, administrators, successors and assigns.

This letter represents the entire agreement between the Issuer and you with respect to the purchase of the Units and supersedes all prior agreements, whether written or oral. This agreement may only be modified by a letter duly signed by each of the parties hereto and shall be governed by the laws of the State of New York.

This agreement may be executed in two or more counterparts which together shall form a single agreement.

If the foregoing accurately reflects our agreement, kindly sign this letter where indicated and return the same to us at your earliest convenience.

	Very truly yours,
	SIGA PHARMACEUTICALS, INC.
	By:Authorized Officer
то:	

E-142

ACCEPTED AND AGREED

NO. OF UNITS OF SUBSCRIPTION: \_

Name: Address:

INVESTOR:

SIGA PHARMACEUTICALS, INC. SCHEDULE I

Name of Investor Address

Aggregate Amount Invested

#### FORM OF PROMISSORY NOTE FOR BRIDGE INVESTORS

THIS NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"), OR UNDER THE PROVISIONS OF ANY APPLICABLE STATE SECURITIES LAWS, BUT HAS BEEN ACQUIRED BY THE REGISTERED HOLDER HEREOF FOR PURPOSES OF INVESTMENT AND IN RELIANCE OF STATUTORY EXEMPTIONS UNDER THE 1933 ACT, AND UNDER ANY APPLICABLE STATE SECURITIES LAWS. THIS NOTE MAY NOT BE SOLD, PLEDGED, TRANSFERRED OR ASSIGNED EXCEPT IN A TRANSACTION WHICH IS EXEMPT UNDER PROVISIONS OF THE 1933 ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT; AND IN THE CASE OF AN EXEMPTION, ONLY IF THE MAKER HAS RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE MAKER THAT SUCH TRANSACTION DOES NOT REQUIRE REGISTRATION OF THIS NOTE UNDER THE 1933 ACT OR APPLICABLE STATE SECURITIES LAWS.

SIGA PHARMACEUTICALS, INC.

[ ], 1997 NEW YORK, NEW YORK NO. PN-SIGA-97-[ ] \$[ ]

#### 10% SENIOR SUBORDINATED PROMISSORY NOTE

SIGA PHARMACEUTICALS, INC., a Delaware corporation with an address at 666 Third Avenue, 30th Floor, New York, NY 10017 (the "Maker"), for value received, hereby promises to pay to [NAME OF HOLDER] or [HIS/HER] registered assigns (the "Holder") on the earlier of (i) the closing of an initial public offering of the Issuer's common stock, par value \$.0001 per share (the "Common Stock"), pursuant to the Securities Act of 1933, as amended (the "Act"), or (b) [6 MONTHS AFTER DATE OF PROMISSORY NOTE], 1997, the principal sum of [\$ in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts, and to pay interest (computed on the basis of a 360 day year of twelve months) on the outstanding principal sum hereof at the rate of 10% per annum from the date hereof until the Maker's obligation with respect to the payment of such principal sum shall be discharged as herein provided. The earliest date is hereinafter referred to as the "Maturity Date." Principal and interest shall be payable on the Maturity Date in like coin or currency to the Holder hereof at the office of the Maker as hereinafter set forth. The Holder is also simultaneously herewith receiving warrants to purchase the number of shares of Common Stock which equals [50% OF PRINCIPAL SUM] divided by the initial public offering price of the Common Stock (the "IPO Price"), at an exercise price equal to the IPO Price. This Note is one of a series of senior promissory notes of the Maker in the aggregate principal amount of \$1,000,000 issued or to be issued in connection with a private placement (the "Private Placement") of the Maker of up to 40 units of its securities ("Units"), each Unit consisting of Notes in denominations of \$25,000 per Note (the "Notes") and warrants to purchase the number of shares of Common Stock which equals \$25,000 divided by the initial public offering price of the Common Stock, at an exercise price equal to the IPO Price (the "Warrants"). This Note shall rank pari passu with all of the other

Notes.

# 1. TRANSFERS OF NOTE TO COMPLY WITH THE 1933 ACT

The Holder agrees that this Note may not be sold, transferred, pledged, hypothecated or otherwise disposed of except as follows: (1) to a person whom the Note may legally be transferred without registration and without delivery of a current prospectus under the 1933 Act with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 1 with respect to any resale or other disposition of the Note; or (2) to any person upon delivery of a prospectus then meeting the requirements of the 1933 Act relating to such securities and the offering thereof for such sale or disposition, and thereafter to all successive assignees.

## 2. PAYMENT AND PREPAYMENT

-----

All payments on this Note shall be applied first to the payment of accrued interest, and, after all such interest has been paid, any remainder shall be applied to reduction of the principal balance.

Maker may prepay all or any part of the principal sum from time to time without penalty at its sole discretion on a date that interest payments hereunder become due and payable, provided that any such principal prepayment shall be accompanied by all interest then accrued and shall be made on a pro rata basis with all of the other Notes then outstanding.

# SUBORDINATION

-----

The indebtedness evidenced by this Note is hereby expressly subordinated, to the extent and in the manner hereinafter set forth, in right of payment to the prior payment in full of all the Maker's "Senior Indebtedness" (as hereafter defined).

- (a) SENIOR INDEBTEDNESS. As used in this Note, the term "Senior Indebtedness" shall mean the principal of and unpaid accrued interest on all indebtedness of the Maker to banks or other institutional lenders and any indebtedness to refinance the outstanding balance thereof.
- (b) DEFAULT ON NOTE OR SENIOR INDEBTEDNESS. If this Note shall be declared due and payable upon the occurrence of an "Event of Default" as defined hereinafter, then: (i) no amount shall be paid by the Maker in respect of the principal of or interest on this Note at the time outstanding, unless and until any payment defaults, if any, under any of the Senior Indebtedness then outstanding shall be fully cured, and (ii) no claim or proof of claim shall be filed with the Maker by or on behalf of the Holder of this Note that shall assert any right to receive any payments in respect of the principal of and interest on this Note, except subject to the curing of any and all payment defaults in regard to any of the Senior Indebtedness then outstanding. If there occurs an event of default relating to the payment of principal and interest that has been declared in writing with respect to any Senior Indebtedness, or in the instrument under which any Senior Indebtedness is outstanding, permitting the holder of such Senior Indebtedness to accelerate the maturity thereof, then, unless and until such event of default relating to the payment of principal and interest shall have been cured or waived or shall have ceased to exist, or all Senior

Indebtedness shall have been paid in full, no payment shall be made in respect of the principal of this Note, unless within six (6) months after the happening of such event of default, the maturity of such Senior Indebtedness shall not have been accelerated by the holder of such Senior Indebtedness. In the event of any such default on the Senior Indebtedness, Maker hereby undertake to notify the Holder within ten days of such default.

- (c) EFFECT OF SUBORDINATION. Nothing contained in this Section 3 shall impair, as between the Maker, on the one hand, and the Holder, on the other hand, the obligation of the Maker, subject to the terms and conditions hereof, to pay to the Holder the principal hereof and interest hereon as and when the same become due and payable or shall prevent the Holder of this Note, upon default hereunder, from exercising all rights, powers and remedies otherwise provided herein or by applicable law. In the event the principal of this Note is not paid as a result of the provisions of this Section 3, interest on this Note will accrue at the rate of 12% per annum until the principal of an accrued interest on this Note shall be paid in full.
- (d) UNDERTAKING. By its acceptance of this Note, the Holder agrees at the expense of the Maker to execute and deliver such documents as may be reasonably requested from time to time by the Maker or the lender of any Senior Indebtedness in order to implement the foregoing provisions of this Section 3.

### 4. EVENTS OF DEFAULT AND REMEDIES

At the option of Holder, but subject to Section 3, the entire unpaid principal sum and all accrued interest shall become immediately due and payable, without notice or demand, upon the occurrence of any one or more of the following events of default ("Events of Default"):

- (a) Maker shall fail to make payment of principal or interest hereunder, under any of the other Notes of Maker in aggregate principal amount of \$750,000 outstanding as of the date hereof for a period of five days from the date due;
- (b) Maker shall be unable, or admit in writing its inability, to pay its debts, or shall not pay its debts generally as they come due, or shall make any assignment for the benefit of creditors;
- (c) Maker shall take action to liquidate or dissolve or shall sell all or substantially all of its assets, by means of an asset sale, merger or issuance of capital stock resulting in a change of control (except that any liquidation, dissolution or sale of assets that occurs solely in connection with Maker's currently anticipated change in organizational structure from a limited liability company to a corporation, shall not constitute a default hereunder);
- (d) Maker shall commence, or there shall be commenced against Maker, any case, proceeding, or other action seeking to have an order for relief entered with respect to Maker, or to adjudicate Maker as a bankrupt or insolvent; or

(e) Maker shall breach any of its covenants or agreements hereunder and such breach shall not be cured within 15 days after the occurrence thereof.

## 5. MISCELLANEOUS

No delay on the part of Holder in exercising any option, power or right shall constitute a waiver thereof.

In the event this Note is turned over to an attorney for collection, Maker agrees to pay all costs of collection, including reasonable attorneys' fees, which amounts may, at Holder's option, be added to the principal hereof.

No recourse under or upon any obligation, covenant or agreement of this Note, or for any claim based thereon or otherwise in respect thereof, shall be had against any principal, or against any past, present, or future member, manager, or economic interest holder as such, of Maker or of any incorporator, stockholder, officer or director of any successor corporation, either directly or through Maker; it being expressly agreed that this Note

and the obligations hereunder are solely organizational obligations of Maker and any successor corporation.

This Note shall be governed as to validity, interpretation, construction, effect and in all other respects by the laws and decisions of the State of New York. Maker, and any endorsers, sureties and guarantors, agree that the state courts located in the State of New York shall have subject matter jurisdiction to entertain any action brought to enforce or collect upon this Note and, by execution hereof, voluntarily submit to personal jurisdiction of such courts; provided, however such jurisdiction shall not be exclusive and, at its option, Holder may commence such action in any other court which otherwise has jurisdiction.

Maker waives demand for payment, presentment for payment, notice of nonpayment or dishonor, protest and notice of protest, and agrees to any extension of time of payment and partial payments before, at, or after maturity. No renewal or extension of this Note, no release or surrender of any security for this Note, no release of any person liable hereon, no delay in the enforcement hereof, and no delay or omission in exercising any right or power hereunder, shall affect the liability of Maker. No delay or omission by Holder in exercising any power or right hereunder shall impair such right or power or be construed to be a waiver of any default, nor shall any single or partial exercise of any power or right hereunder preclude any or full exercise thereof or the exercise of any other right or power. Each legal holder hereof shall have and may exercise all the rights and powers given to Holder herein.

[Balance of Page Intentionally Left Blank]

This Note may not be changed or terminated orally.

IN WITNESS WHEREOF, Maker has duly executed this Note on the date first above written.

SIGA PHARMACEUTICALS, INC.

By:\_\_\_\_\_\_Authorized Officer

SIGA BRIDGE INVESTORS

#### WARRANT AGREEMENT

WARRANT AGREEMENT, dated as of [ ], 1997, between SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and the persons whose names and addresses are set forth on Schedule I annexed hereto (the "Holders").

# WITNESSETH:

WHEREAS, pursuant to a letter agreement of even date hereof between the Company and the Holders, Holders shall be issued an aggregate of up to 40 units of the Company's securities ("Units"), each Unit consisting of (i) a senior subordinated non-negotiable promissory note in the principal amount of \$25,000 (individually, a "Bridge Note" and collectively, the "Bridge Notes"), and (ii) warrants to purchase the number of shares of the Company's common stock, par value \$.0001 per share ("Common Stock"; shares of Common Stock shall be referred as "Common Shares"), which equals \$12,500 divided by the initial public offering price of the Common Stock (the "IPO Price"), at an exercise price equal to the IPO Price (the "Warrants").

NOW THEREFORE, in consideration of the premises herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

- 1. Issue. Subject to Section 4 hereof, the Company shall issue to each

  Holder a certificate (the "Warrant Certificate") dated as of the date hereof
  providing each such Holder with the right to purchase, at any time, from [
  ], 1998, until 5:30 p.m., New York time, on [
  ], 2002, the number of
  Common Shares listed next to the name of each such Holder on Exhibit I (the
  "Warrant Shares") (subject to adjustment as provided in Section 8 hereof), at an
  exercise price (subject to adjustment as provided in Section 8 hereof) equal to
  the IPO Price per Common Share.
- 2. Warrant Certificate. The Warrant Certificate to be delivered pursuant to this Agreement shall be in the form set forth in Exhibit X, attached hereto and made a part hereof, with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Agreement.
- 3. Exercisability of Warrants. The Warrants shall be exercisable at any time from [ ], 1998, until 5:30 p.m., New York time, on [ ]
- 4. Number of Warrants and Exercise Price if No Initial Public Offering or
  in Event of Acquistion. In the event that (i) there is no initial public
  offering of the Common Stock prior to [ ], 1997, the maturity date
  of the Bridge Notes (the "Maturity Date"), or (ii) the Company is acquired by

another corporation prior to the Maturity Date, whether by merger, consolidation, sale of the Company's assets or otherwise, then the number of Warrants issued with each Unit shall be 2,500 Warrants to purchase 2,500 shares of Common Stock, and the exercise price shall be \$5.00 per share.

5. Procedure for Exercise of Warrants.

5.1 Cash Exercise. The Warrants are exercisable at an aggregate initial

exercise price per Common Share set forth in Section 8 hereof payable by

certified check or official bank check in New York Clearing House funds. Upon surrender of a Warrant Certificate with the annexed Form of Election to Purchase duly executed, together with payment of the Exercise Price (as hereinafter defined) for the Warrant Shares purchased, at the Company's principal offices in New York (presently located at 666 Third Avenue, 30th Floor, New York, NY 10017) the registered holder of a Warrant Certificate (individually a "Holder" and sometimes collectively the "Holders") shall be entitled to receive a certificate for the Warrant Shares so purchased. The purchase rights represented by the Warrant Certificate are exercisable at the option of the Holder thereof, in whole or in part (but not as to fractional Common Shares underlying the Warrants). In the case of the purchase of less than all the Warrant Shares purchasable under the Warrant Certificate, the Company shall cancel said Warrant Certificate upon the surrender thereof and shall execute and deliver a new Warrant Certificate of like tenor for the balance of the Warrant Shares purchasable thereunder.

5.2 Cashless Exercise. In addition to the exercise of all or a portion of

the Warrants by the payment of the Exercise Price in cash or check as set forth in Section 5.1 above, and in lieu of any such payment, the Holder has the right

to exercise the Warrants, in full or in part, by surrendering the Warrant Certificate with the annexed Form of Election to Purchase duly executed, in exchange for the number of Common Shares equal to the product of (x) the number of Common Shares as to which the Warrants are being exercised multiplied by (y) a fraction, the numerator of which is the Current Market Price of the Common Shares (as defined below) less the Exercise Price then in effect and the denominator of which is the Current Market Price.

6. Issuance of Certificate. Upon the exercise of the Warrants, the

issuance of a certificate for Warrant Shares (or Other Securities) shall be made forthwith (and in any event within five (5) business days thereafter) without charge to the Holder thereof including, without limitation, any tax which may be payable in respect of the issuance thereof, and such certificate shall (subject to the provisions of Sections 7 and 9 hereof) be issued in the name of, or in

such names as may be directed by, the Holder thereof; provided, however, that

the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any such certificate in a name other than that of the Holder and the Company shall not be required to issue or deliver such certificate unless or until the person or persons requesting the issuance thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

The Warrant Certificate and the certificate representing the Warrant Shares (or Other Securities) shall be executed on behalf of the Company by the manual or facsimile signature of the then present Chairman or Vice Chairman of the Board of Directors or President or any Vice President of the Company under its corporate seal reproduced thereon, attested to by the manual or facsimile signature of the then present Secretary or any Assistant Secretary of the Company. The Warrant Certificate shall be dated the date of execution by the Company upon initial issuance, division, exchange, substitution or transfer.

- 7. Transfer of Warrants. The Holder of the Warrant Certificate, by its acceptance thereof, covenants and agrees that the Warrants are being acquired as an investment and not with a view to the distribution thereof. The Warrants may be sold, transferred, assigned, hypothecated or otherwise disposed of, in whole or in part, without restriction, subject to compliance with applicable securities laws.
  - 8. Exercise Price.
- 8.1 Initial and Adjusted Exercise Price. Except as otherwise provided in
  Section 8 hereof, the initial exercise price of each Warrant shall be the price
  set forth in Section 1 hereof per Warrant Shares issued thereunder. The
  adjusted exercise price shall be the price which shall result from time to time
  from any and all adjustments of the initial exercise price in accordance with
  the provisions of Section 10 hereof.
- 9. Registration Under the Securities Act of 1933. The Warrants, the
  Warrant Shares and any of the Other Securities issuable upon exercise of the
  Warrants have not been registered under the Securities Act of 1933, as amended
  (the "Act"). Upon exercise, in whole or in part, of the Warrants, a certificate
  representing the Warrant Shares underlying the Warrants, and any of the Other
  Securities issuable upon exercise of the Warrants (collectively, the "Warrant
  Securities") shall bear the following legend unless such Warrant Shares
  previously have been registered under the Act in accordance with the terms
  hereof:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED ("ACT"), AND MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT, (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL TO THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

10. Adjustments to Exercise Price and Number of Securities. The Exercise
Price and, in some cases, the number of Warrant Shares purchasable

upon the exercise of the Warrants, shall be subject to adjustment from time to time upon the occurrence of certain events described in this Section 10.

-----

10.1 Subdivision or Combination of Common Shares and Common Share

Dividend. In case the Company shall at any time subdivide its outstanding Common Shares into a greater number of Common Shares or declare a dividend upon its Common Shares payable solely in Common Shares, the Exercise Price in effect immediately prior to such subdivision or declaration shall be proportionately reduced, and the number of Warrant Shares issuable upon exercise of the Warrants shall be proportionately increased. Conversely, in case the outstanding Common Shares of the Company shall be combined into a smaller number of Common Shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased, and the number of Warrant Shares issuable upon exercise of the Warrants shall be proportionately reduced.

10.2 Notice of Adjustment. Promptly after adjustment of the Exercise  ${\bf P}$ 

Price or any increase or decrease in the number of Warrant Shares purchasable upon the exercise of this Warrant, the Company shall give written notice thereof, by first class mail, postage prepaid, addressed to the registered holder of this Warrant at the address of such holder as shown on the books of the Company. The notice shall be signed by the Company's chief financial officer and shall state (i) the effective date of the adjustment and the Exercise Price resulting from such adjustment and (ii) the increase or decrease, if any, in the number of Common Shares purchasable at such price upon the exercise of this Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based.

- 10.3 Other Notices. If at any time:
- (a) the Company shall declare any cash dividend upon its Common Shares:
- (b) the Company shall declare any dividend upon its Common Shares payable in securities (other than a dividend payable solely in Common Shares) or make any special dividend or other distribution to the holders of its Common Shares;
- (c) there shall be any consolidation or merger of the Company with another corporation, or a sale of all or substantially all of the Company's assets to another corporation; or
- (d) there shall be a voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, in any one or more of said cases, the Company shall give, by certified or registered mail, postage prepaid, addressed to the registered holder of this Warrant at the address of such holder as shown on the books of the Company, (i) at least 15 days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such dissolution, liquidation or winding-up; (ii) at least 10

days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger or sale, and (iii) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, at least 15 days' written notice of the date when the same shall take place. Any notice given in accordance with clause (i) above shall also specify, in the case of any such dividend, distribution or option rights, the date on which the holders of Common Shares shall be entitled thereto. Any notice given in accordance with clause (iii) above shall also specify the date on which the holders of Common Shares shall be entitled to exchange their Common Shares for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, as the case may be. If the Holder of the Warrant does not exercise this Warrant prior to the occurrence of an event described above, except as provided in Sections 10.1 and 10.4, the

Holder shall not be entitled to receive the benefits accruing to existing holders of the Common Shares in such event.

10.4 Changes in Common Shares. In case at any time the Company shall be a party to any transaction (including, without limitation, a merger, consolidation, sale of all or substantially all of the Company's assets or recapitalization of the Common Shares) in which the previously outstanding Common Shares shall be changed into or exchanged for different securities of the Company or common stock or other securities of another corporation or interests in a non-corporate entity or other property (including cash) or any combination of any of the foregoing (each such transaction being herein called the "Transaction" and the date of consummation of the Transaction being herein called the "Consummation Date"), then, as a condition of the consummation of the Transaction, lawful and adequate provisions shall be made so that each Holder, upon the exercise hereof at any time on or after the Consummation Date, shall be entitled to receive, and this Warrant shall thereafter represent the right to receive, in lieu of the Common Shares issuable upon such exercise prior to the Consummation Date, the highest amount of securities or other property to which such Holder would actually have been entitled as a holder of an Common Share upon the consummation of the Transaction if such Holder had exercised such

similarly apply to successive Transactions.

11. Exchange and Replacement of Warrant Certificate. The Warrant

Warrant immediately prior thereto. The provisions of this Section 10.4 shall

Certificate is exchangeable without expense, upon the surrender thereof by the registered Holder at the principal executive office of the Company, for a new Warrant Certificate of like tenor and date representing in the aggregate the right to purchase the same number of Warrant Shares in such denominations as shall be designated by the Holder thereof at the time of such surrender.

Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of the Warrant Certificate, and, in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of the Warrants, if mutilated, the Company will make and deliver a new Warrant Certificate of like tenor, in lieu thereof.

- 12. Elimination of Fractional Interests. The Company shall not be required to issue certificates representing fractions of Common Shares upon the exercise of the Warrants, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up to the nearest whole number of Common Shares or Other Securities.
- 13. Reservation of Securities. The Company shall at all times reserve and keep available out of its authorized Common Shares, solely for the purpose of issuance upon the exercise of the Warrants, such number of Common Shares or Other Securities as shall be issuable upon the exercise thereof. The Company covenants and agrees that, upon exercise of the Warrants and payment of the Exercise Price therefor, all Common Shares or Other Securities issuable upon such exercise shall be duly and validly issued, fully paid, non-assessable and not subject to the preemptive rights of any holder of Common Shares.
- 14. Notices to Warrant Holder. Except as otherwise provided in Section
  19.4, nothing contained in this Agreement shall be construed as conferring upon
  the Holder by virtue of his holding the Warrant the right to vote or to consent or to receive notice as a holder of an Common Share in respect of any meetings of such holders for the election of directors or any other matter, or as having any rights whatsoever as such a holder of the Company.
  - 15. Notices.

All notices, requests, consents and other communications hereunder shall be in writing and shall be deemed to have been duly made and sent when delivered, or mailed by registered or certified mail, return receipt requested:

- (a) If to the registered Holder of the Warrants, to the address of such Holder as shown on the books of the Company; or
- (b) If to the Company, to the address set forth in Section 5 hereof or to such other address as the Company may designate by notice to the Holder.
- 16. Supplements and Amendments. The Company and Holder may from time to time supplement or amend this Agreement in order to cure any ambiguity, to correct or supplement any provision contained herein which may be defective or inconsistent with any provisions herein, or to make any other provisions in regard to matters or questions arising hereunder which the Company and Holder may deem necessary or desirable.
- 17. Successors. All the covenants and provisions of this Agreement shall be binding upon and inure to the benefit of the Company, the Holder and their respective successors and assigns hereunder. Any reference herein to the "Company" shall include any corporation which is a successor to the limited liability company structure currently used by the Company.
- 18. Termination. This Agreement shall terminate at the close of business  $\cdots$  on the tenth anniversary of the issuance of the Warrants.

19. Governing Law. This Agreement and the Warrant Certificate issued
hereunder shall be deemed to be a contract made under the laws of the State of New York and for all purposes shall be construed in accordance with the laws of the State of New York without giving effect to the rules of the State of New York governing the conflicts of laws.
20. Entire Agreement; Modification. This Agreement contains the entire
understanding between the parties hereto with respect to the subject matter hereof and may not be modified or amended except by a writing duly signed by the party against whom enforcement of the modification or amendment is sought.
21. Severability. If any provision of this Agreement shall be held to be
invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision of this Agreement.
22. Captions. The caption headings of the Sections of this Agreement are
for convenience of reference only and are not intended, nor should they be construed as, a part of this Agreement and shall be given no substantive effect.
23. Benefits of this Agreement. Nothing in this Agreement shall be
construed to give to any person or corporation other than the Company and Holder any legal or equitable right, remedy or claim under this Agreement; and this Agreement shall be for the sole and exclusive benefit of the Company and Holder.
24. Counterparts. This Agreement may be executed in any number of
counterparts and each of such counterparts shall for all purposes be deemed to be an original, and such counterparts shall together constitute but one and the same instrument.
IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be duly executed, as of the day and year first above written.
Very truly yours,
SIGA PHARMACEUTICALS, INC.
By: Authorized Officer
ACCEPTED AND AGREED TO:
INVESTOR:

E-157

Name:

Address:
NO. OF UNITS OF SUBSCRIPTION:\_\_\_\_\_

### [FORM OF WARRANT CERTIFICATE]

THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND THE OTHER SECURITIES ISSUABLE UPON EXERCISE THEREOF MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO (i) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") (ii) TO THE EXTENT APPLICABLE, RULE 144 UNDER THE ACT (OR ANY SIMILAR RULE UNDER THE ACT RELATING TO THE DISPOSITION OF SECURITIES), OR (iii) AN OPINION OF COUNSEL, IF SUCH OPINION SHALL BE REASONABLY SATISFACTORY TO COUNSEL FOR THE ISSUER, THAT AN EXEMPTION FROM REGISTRATION UNDER THE ACT IS AVAILABLE.

### WARRANT CERTIFICATE

the Warrant Agreement.

No Warrant may be exercised after 5:30~p.m., New York time, on the Expiration Date, at which time all Warrants evidenced hereby, unless exercised prior thereto, shall thereafter be void.

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants issued pursuant to the Warrant Agreement, which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Company and the Holder (the word "Holder" meaning the registered holder) of the Warrants.

The Warrant Agreement provides that upon the occurrence of certain events the Exercise Price and the type and/or number of the Company's securities issuable thereupon may, subject to certain conditions, be adjusted. In such event, the Company will, at the request of the holder, issue a new Warrant Certificate evidencing the adjustment in the Exercise Price and the number and/or type of securities issuable upon the exercise of the Warrants; provided, however, that the failure of the Company to issue such new Warrant Certificate shall not in any way change, alter, or otherwise impair, the rights of the holder as set forth in the Warrant Agreement.

Upon due presentment for registration of transfer of this Warrant Certificate at an office or agency of the Company, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided herein and in the Warrant Agreement, without any charge except for any tax or other governmental charge imposed in connection with such transfer.

Upon the exercise of less than all of the Warrants evidenced by this Certificate, the Company shall forthwith issue to the holder hereof a new Warrant Certificate representing such number of unexercised Warrants.

The Company may deem and treat the registered holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, and of any distribution to the holder(s) hereof, and for all other purposes, and the Company shall not be affected by any notice to the contrary.

All terms used in this Warrant Certificate which are defined in the Warrant Agreement shall have the meanings assigned to them in the Warrant Agreement.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed.

Dated as of [	], 1997
	SIGA PHARMACEUTICALS, INC.
	By:Authorized Officer

### [FORM OF ELECTION TO PURCHASE]

The undersigned hereby irrevocably elects to exercise the right,

represented by this Warı	ant Certificate, to purchase	Common
	ders in payment for such securition	
	able in New York Clearing House Fo	
	IC. in the amount of \$, all	
	ne Warrant Agreement dated as of	
	CCALS, INC. and the undersigned (	
ů .	at a certificate for such securit:	ies be registered in the
name of		
whose add	ess is and	d that such Certificate
be delivered to	whose address is	
Dated:		
Sigı	nature	
	(Signature must conform in	•
	holder as specified on the	tace of the Warrant
	Certificate.)	
(Tne	sert Social Security or Other Ide	ntifving Number of
Holo		rear yaring indimber of
	,	

### [FORM OF ASSIGNMENT]

(To be executed by the registered holder if such holder desires to transfer the Warrant Certificate.)

FOR VALUE RECEIVEDunto	hereby sells, assigns and transfers
(Please print name	and address of transferee)
and does hereby irrevocably constitu	with all right, title and interest therein, ate and appoint Attorney, to eate on the books of the within-named attion.
Dated: Signature:	
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)
(Insert Soci Assignee)	al Security or Other Identifying Number of

SIGA PHARMACEUTICALS, INC. SCHEDULE I

Name of Investor Address

Aggregate Amount Invested

THIS REGISTRATION AGREEMENT (the "Agreement") dated as of [ ], 1997 is made by and among SIGA PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and the persons listed on Schedule I hereto (collectively, the "Holders", each a "Holder").

#### **RECITALS**

- A. In connection with the purchase by the Holders of certain units ("Units") of the Company's securities, each Unit consists of (i) a senior subordinated non-negotiable promissory note in the principal amount of \$25,000 (individually, a "Bridge Note" and collectively, the "Bridge Notes"), and (ii) warrants to purchase the number of shares of the Company's common stock, par value \$.0001 per share ("Common Stock;" shares of Common Stock shall be referred as "Common Shares"), which equals \$12,500 divided by the initial public offering price of the Common Stock (the "IPO Price"), at an exercise price equal to the IPO Price (the "Warrants").
- B. The Company has agreed to grant to the Holders certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "Securities Act") with respect to the Common Shares issuable upon exercise of the Warrants (the "Warrant Shares"). This Agreement sets forth the terms and conditions of such undertaking.

#### **AGREEMENTS**

The Company and the Holders covenant and agree as follows:

- 1. DEFINITIONS. For purposes of this Agreement:
- (a) The terms "register", "registered" and "registration" refer to a registration effected by preparing and filing a registration statement or statements or similar documents in compliance with the Securities Act and pursuant to Rule 415 under the Securities Act or any successor rule providing for offering securities on a continuous basis ("Rule 415"), and the declaration or ordering of the effectiveness of such registration statement or document by the Securities and Exchange Commission (the "SEC");
- (b) The term "Registrable Securities" means (i) the Warrant Shares and (ii) any Common Shares issued as (or issuable upon the conversion or exercise of any convertible security, warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of such Warrant Shares, excluding in all cases, however, any Registrable Securities sold by a Holder in a transaction in which its registration rights under this Agreement are not assigned.

- 2. REGISTRATION.
- (a) Demand Registration. Subject to the limitations set forth in

Section 2(c) below, the Company shall, upon the written request of Holders holding a majority of the sum of (x) the outstanding Registrable Securities and (y) the then outstanding and unexercised Warrants, use its best efforts to cause the Registrable Securities specified in such request to be registered under the Securities Act (a "Demand Registration"). In the event that the Company shall receive a written request under this Section 2(a), the Company shall give prompt written notice thereof to any Holder which did not join in such written request. If requested in writing by any of such other Holders within fifteen days after the Company gives the notice described in the preceding sentence, the Company shall include among the Registrable Securities that it endeavors to register under this Section 2(a) such Registrable Securities as shall be specified in the request of such other Holders.

(b) Notice of Demand Registration. Each request delivered pursuant to Section 2(a) shall: (i) specify the amount of Registrable Securities intended to be offered and sold by each of the Holders joining in the request; (ii) express the present intent to offer such Registrable Securities for distribution; (iii) describe the nature or method of the proposed offer and said of the Registrable Securities; and (iv) contain the undertaking of the Holders

(ii) express the present intent to offer such Registrable Securities for distribution; (iii) describe the nature or method of the proposed offer and sale of the Registrable Securities; and (iv) contain the undertaking of the Holders to provide all such information and materials and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the Securities Act, the Registrable Securities and state securities and "blue sky" laws, and to obtain acceleration of the effective date of the Registration Statement (as defined below).

- (c) Limitations on Demand Registrations. Notwithstanding anything
  herein to the contrary, the obligations of the Company to cause any Registrable
  Securities to be registered pursuant to Section 2(a) are subject to each of the
  following limitations, conditions and qualifications:
- (i) The Holders may only request that the Company make any Demand Registration subsequent to the earlier of 180 days following (i) the effective date of the registration statement for the initial public offering of the Company's securities or (ii) any class of securities otherwise becoming subject to the registration requirements of Section 12 of the Securities Exchange Act of 1934, as amended.
- (ii) Any request for Demand Registration made by the Sellers pursuant to Section 2(a), to be effective, shall request the registration of the offering and sale or other distribution by the Holders of not less than one-half of the Registrable Securities.
- (iii) In the event the Holders request Demand Registration pursuant to Section 2(a) and the related offering is to be underwritten, the managing underwriter shall be a nationally recognized investment banking firm approved by the Company in the reasonable exercise of its discretion.

- (iv) The Company shall be required to effect only one Demand Registration pursuant to Section 2(a).
  - (d) Incidental Registration. Subject to the limitations set forth in

Section 2(f), at any time that the Company shall propose the registration under the Securities Act of an offering of any of its securities on a registration form which can be used for registration of the Registrable Securities, the Company shall give written notice as promptly as possible of such proposed registration to the Holders, and shall include in the offering such amount of Registrable Securities as the Holders shall request to be included by written notice to the Company received within fifteen days after receipt of the Company's notice, upon the same terms (including the method of distribution) as the securities being sold by the Company pursuant to any such offering (an "Incidental Registration").

(e) Notice of Incidental Registration. Each request delivered

pursuant to Section 2(d) shall: (i) specify the amount of Registrable Securities intended to be offered and sold by each of the Holders; and (ii) contain the undertaking of the Holders to provide all such information and materials and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the Securities Act, the SEC and state securities and "blue sky" laws and to obtain acceleration of the effective date of the Registration Statement.

(f) Limitations on Incidental Registrations. Notwithstanding

anything contained herein to the contrary, the obligations of the Company to cause Registrable Securities to be registered pursuant to Section 2(d) are subject to each of the following limitations, conditions and qualifications:

- (i) The Company shall not be required to give notice or include Registrable Securities in any registration pursuant to Section 2(d) if the proposed registration is primarily: (A) a registration of a stock option, thrift, employee benefit or compensation plan or of securities issued or issuable pursuant to any such plan; (B) a registration of securities proposed to be issued in connection with a dividend reinvestment and stock purchase plan or customer stock purchase plan; (C) a registration of securities proposed to be issued in exchange for securities or assets of, or in connection with a merger or consolidation with, another corporation or other entity; or (D) a registration of securities which is solely a combination of any of the above.
- (ii) If the Company is advised in writing by the managing underwriter (or its investment banking firm if the offering is not underwritten) that the inclusion of Registrable Securities may, in the opinion of such underwriter or investment banking firm, as the case may be, interfere with the orderly sale and distribution of the securities proposed to be offered by the Company or adversely affect the price at which such securities may be sold, the number of shares of Registrable Securities to be included in the offering shall be reduced or eliminated to the extent necessary as shall be reasonably determined by such underwriter or investment banker, as the case may be, in good faith.

- (iii) In the event the Holders request registration pursuant to Section 2(d) and the related offering is to be underwritten, the Holders will enter into an underwriting agreement containing representations, warranties and agreements not substantially different from those customarily made by an issuer and a selling shareholder in underwriting agreements with respect to secondary distributions.
- (iv) The Company may, in its sole discretion, without the consent of the Holders and without liability to any Holder for such action, withdraw such registration statement and abandon the proposed offering in which the Holder had requested to participate at any time.
- (v) The Company shall only be required to effect one Incidental Registration pursuant to Section 2(d).
- 3. OBLIGATIONS OF THE COMPANY. When required under the Agreement to effect the registration of the Registrable Securities, the Company shall, as expeditiously as reasonably possible:
- (a) Registration Statements. Prepare and file with the SEC a registration statement or statements or similar documents (the "Registration Statement") with respect to all Registrable Securities, other than any Registrable Securities excluded by Holders pursuant to Sections 2(a) and 2(d), and use its best efforts to cause the Registration Statement to become effective and maintain the effectiveness of the Registration Statement until the earlier of (i) the date all such registered Registrable Securities are sold and any prospectus delivery requirements under the Securities Act shall have lapsed, and (ii) (A) six months (in the case of a registration statement on Form S-1 or comparable long-form registration statement) or (B) six months following the latest expiration date of the Warrants (in the case of a registration statement on Form S-3 or comparable short-form registration statement).
- (b) Amendments. Prepare and file with the SEC such amendments
  -----(including post-effective amendments) and supplements to the Registration
  Statement and the prospectus used in connection with the Registration Statement
  as may be necessary to comply with the provisions of the Securities Act with
  respect to the disposition of all securities covered by the Registration
  Statement.
- (c) Prospectuses. Furnish promptly to each Holders such numbers of copies of a prospectus, including a preliminary prospectus, and all amendments and supplements thereto, in conformity with the requirements of the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate the disposition of Registrable Securities.
- (d) Blue Sky. Use its best efforts to register and qualify the securities covered by the Registration Statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, and to prepare and file in those jurisdictions such amendments (including post-effective amendments) and supplements and to take such other actions necessary or advisable to maintain such registration and

qualifications in effect, and to take all other actions necessary or advisable to enable the disposition of such securities in such jurisdictions, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions or to provide any undertaking or make any change in its charter or bylaws which the Board of Directors determines to be contrary to the best interest of the Company and its stockholders.

(e) Underwriting Arrangements. Enter into and perform its obligations under an underwriting agreement, in usual and customary form,

including, without limitation, customary indemnification and contribution obligations, with the managing underwriter of such offering. The Holders shall also enter into and perform their customary obligations under any such agreement including, without limitation, customary indemnification and contribution obligations.

- (f) Notification of Changes. Notify the Holders, at any time when a prospectus relating to Registrable Securities covered by the Registration Statement is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus including in the Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing. The Company shall promptly amend or supplement the Registration Statement to correct any such untrue statement or omission.
- (g) Notification of Stop Orders. Notify the Holders of the issuance by the SEC of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose. The Company will make every reasonable effort to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible time.
- (h) Review by Counsel. Permit a single firm of counsel designated as selling stockholders' counsel by the holders of a majority in interest of the Registrable Securities to review (at the expense of such selling stockholders) the Registration Statement and all amendments and supplements thereto a reasonable period of time prior to their filing, and shall not file any document in a form to which counsel reasonably objects.
- (i) Opinions. At the request of the Holders, use its best efforts to furnish on the date that Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Agreement (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters and (ii) a letter dated such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to

underwriters in an underwritten public offering, addressed to the underwriters.

- (j) Due Diligence. Make available for inspection by the Holders, any underwriters participating in the offering pursuant to the registration and the counsel, accountants or other agents retained by the Holders or any such underwriter, all pertinent financial and other records, corporate documents and properties of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by the Holders or any such underwriters in connection with the registration.
- (k) Listing. If the class of the Company's securities is then listed on a national securities exchange, use its best efforts to cause the Registrable Securities to be listed on such exchange. If the Company's securities are not then listed on a national securities exchange, use its best efforts to facilitate the reporting of the Registrable Securities on NASDAQ.
- (1) Further Actions. Take all other reasonable actions necessary to expedite and facilitate disposition by the Holders of the Registrable Securities pursuant to the Registration Statement.
- 4. FURNISH INFORMATION. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Agreement with respect to each Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be reasonably required to effect the registration of the Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request.
- 5. EXPENSES OF REGISTRATION. All expenses other than the underwriting discounts and commissions incurred in connection with registration, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing, filing and qualification fees, printing and accounting fees, the fees and disbursements of counsel for the Company (but excluding the fees and disbursements of any counsel for the Holders) shall be borne by the Company.
- 6. INDEMNIFICATION. In the event any Registrable Securities are included in a Registration Statement under this Agreement:
- (a) By Company. To the extent permitted by law, the Company will indemnify and hold harmless each Holder, the directors, if any, of such Holder, the officers, if any, of such Holder who sign the Registration Statement, each person, if any, who controls such Holder, any underwriter (as defined in the Securities Act) for the Holders and each person, if any, who controls any such underwriter within the meaning of the Securities Act or the Securities Act of 1934, as amended (the "1934 Act"), against any losses, claims, damages, expenses or liabilities (joint or several) to which any of them may become subject under the Securities Act, the 1934 Act or otherwise, insofar as such losses, claims, damages, expenses or liabilities (or actions

or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstance in which they are made, not misleading or (iii) any violation or alleged violation by the Company of the Securities Act, the 1934 Act, any state securities law or any rule or regulation promulgated under the Securities Act, the 1934 Act, any state securities law; and the Company will reimburse the Holders and each such underwriter or controlling person, promptly as such expenses are incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability action or proceeding; provided, however, that the indemnity agreement contained in this

Section 6(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable in any such case for any such loss, claim, damage, liability or action to the extent that it aries out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by the Holders or any such underwriter or controlling person, as the case may be. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Holders or any such underwriter or controlling person and shall survive the transfer of the Registrable Securities by Holders.

(b) By Holders. To the extent permitted by law, each Holder,

severally and not jointly, will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Registration Statement, each person, if any, who controls the Company within the meaning of the Securities Act or the 1934 Act, any underwriter and any other stockholder selling securities pursuant to the Registration Statement or any of its directors or officers or any person who controls such holder or underwriter, against any losses, claims, damages or liabilities (joint or several) to which any of them may become subject, under the Securities Act, the 1934 Act or other federal state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration, and such Holder will reimburse any legal or other expenses reasonably incurred by any of them in connection with investigating or defending any such loss, claim, damage liability or action; provided, however, that the indemnity agreement contained in this subsection 6(b) shall not apply to amounts paid in settlement of such loss, claim, damage, liability or action if such settlement is effected without the consent of such Holder, which consent shall not be unreasonably withheld; and provided further, that the Holder shall be liable under this paragraph for only that

amount of losses, claims, damages and liabilities as does not exceed the proceeds to such Holder as a result of the sale of Registrable Securities pursuant to such registration.

(c) Procedure for Indemnification. Promptly after receipt by an

indemnified party under this Section 6 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party shall have the right to retain its own counsel, with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel for the indemnifying party, representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 6 only to the extent prejudicial to its ability to defend such action, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party other than under this Section 6. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, promptly as such expense, loss, damage or liability is incurred.

(d) Contribution. To the extent any indemnification by an  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it otherwise would be liable under this Section 6 to the extent permitted by law, provided that (i) no contribution shall be made under the circumstances where the maker would not have been liable for indemnification under the fault standards set forth in this Section 6, (ii) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of such fraudulent misrepresentation and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities.

7. REPORTS UNDER SECURITIES EXCHANGE ACT OF 1934. With a view to making available to the Holders the benefits of SEC Rule 144 promulgated under the Securities Act and any other rule or regulation of the SEC that may at any time permit the Holders to sell securities of the Company to the public without registration, the Company agrees, following the initial public offer of the Company's securities, to:

- (i) make and keep public information available, as those terms are understood and defined in SEC Rule 144;
- (ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the 1934 Act; and
- (iii) furnish to each Holder, so long as such Holder owns any Registrable Securities, forthwith upon request (A) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144, the Securities Act and the 1934 Act, (B) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (C) such other information as may be reasonably requested in availing the Holders of any rule or regulation of the SEC which permits the selling of any securities without registration.
- 8. ASSIGNMENT OF REGISTRATION RIGHTS. The rights to have the Company register Registrable Securities pursuant to this Agreement may be assigned by the Holders to transferees or assignees of such securities provided the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; provided, further, that such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Securities Act. The term "Holders" as used in this Agreement shall include permitted assignees.
  - 9. MISCELLANEOUS.
  - (a) Notices. Notices required or permitted to be given hereunder

shall be in writing and shall be deemed to be sufficiently given when personally delivered or sent by registered mail, return receipt requested, addressed (i) if to the Company, at 666 Third Avenue, 30th Floor, New York, NY 10017 (with a copy to: Eilenberg & Zivian, 666 Third Avenue, 30th Floor, New York, NY 10017; Attention: Adam D. Eilenberg, Esq.) and (ii) if to a Holder at the address set forth in Schedule I, or at such other address as each such party furnishes by notice given in accordance with this Section 9(a).

- (b) Waiver. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, will not operate as a waiver thereof. No waiver will be effective unless and until it is in writing and signed by the party giving the waiver.
- (c) Governing Law. This Agreement shall be enforced, governed and construed in all respects in accordance with the laws of the State of New York, as such laws are applied by New York courts to agreements entered into and to be performed in New York by and between residents of New York. In the event that any provision of this Agreement is invalid or unenforceable under any applicable statute or rule of law, then such provision

shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute of rule of law. Any provision hereof which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision hereof.

(d) Entire Agreement. This Agreement constitutes the entire agreement  $% \left( 1\right) =\left( 1\right) \left( 1$ 

between the parties hereto with respect to the subject matter hereof and may be amended only be a writing executed by the Company and the holders of a majority in interest of the sum of (x) the Registrable Securities and (y) the then outstanding and unexercised Warrants.

SIGA PHARMACEUTICALS, INC.

By:
Authorized Officer
HOLDER:
Name: Title:
NO. OF UNITS OF SUBSCRIPTION:

SIGA PHARMACEUTICALS, INC. SCHEDULE I

Name of Investor Address

Aggregate Amount Invested

March \_\_\_, 1997

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017

Ladies and Gentlemen:

We have examined the Registration Statement on Form SB-2 (the "Registration Statement") to be filed by you with the Securities and Exchange Commission in connection with an offering (the "Public Offering") of 3,100,000 shares of common stock, par value \$.0001 per share (the "Common Stock"), of SIGA Pharmaceuticals, Inc. (the "Company"), and up to 310,000 shares of the Company's Common Stock issuable upon exercise of a certain Underwriter's Warrant (the "Warrant Shares"; the Offering shares and the Warrant Shares collectively referred to as the "Shares"). As your counsel in connection with the Public Offering and the offer and sale of the Common Stock, we have examined the originals, or photostatic or certified copies, of such records of the Company, certificates of the Company and of public officials and such other matters and documents as we have deemed necessary or relevant as a basis for this opinion.

Based on these examinations, it is our opinion that the Shares, when issued upon payment therefor, will be validly issued, fully paid and non-assessable shares of Common Stock of the Company.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the reference to this firm under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement.

Very truly yours,

/s/ Eilenberg & Zivian ------EILENBERG & ZIVIAN

# LICENSE AND RESEARCH SUPPORT AGREEMENT BETWEEN THE COMPANY AND THE ROCKEFELLER UNIVERSITY

#### LICENSE AND RESEARCH SUPPORT AGREEMENT

AGREEMENT made as of the 31st day of January, 1996 by and between SIGA PHARMACEUTICALS, INC. ("LICENSEE"), a corporation organized and existing under the laws of the State of Delaware, having an office at 666 Third Avenue, 30th Floor, New York, New York, 10017 and THE ROCKEFELLER UNIVERSITY ("UNIVERSITY"), a nonprofit education corporation organized and existing under the laws of the State of New York, having an office at 1230 York Avenue, New York, New York 10021.

### WITNESETH:

WHEREAS, DR. VINCENT A. FISCHETTI and his colleagues at the UNIVERSITY together with colleagues at Emory University and Oregon State University, have developed certain technology relating to vaccines and the development of antibiotics, which technology is more fully described in the patents, and patent applications listed in Exhibits "A-1" and "A-2" of this Agreement ("Core Technology");

WHEREAS, LICENSEE wishes to obtain the exclusive license rights from the UNIVERSITY to exploit the patents and patent applications covering the Core Technology of which the UNIVERSITY is the sole owner (said patents and applications being listed on Exhibit "A-1") and the exclusive grant from the UNIVERSITY of its licensing rights to the patents and patent applications covering the Core Technology of which the University is the co-owner (said co-owned patents and applications being listed on Exhibit "A-2" attached);

WHEREAS, LICENSEE further wishes to sponsor continuing research by DR. FISCHETTI and his colleagues at the UNIVERSITY in the area of the Core Technology;

WHEREAS, the UNIVERSITY is willing to grant such license rights as provided for herein in return for the research support, patent reimbursements and LICENSEE'S other undertakings herein provided, all in the manner described herein: and

WHEREAS, the research support herein described is of the essence of this Agreement and any default in the prompt and full payment thereof in accordance with the payment schedule herein provided shall be deemed a material breach of this Agreement;

NOW, THEREFORE, in consideration of the mutual benefits to be derived hereunder, the parties hereto agree as follows:

### DEFINITIONS

-----

The following terms will have the meanings assigned to them below when used in this Agreement:

- 1.1 "Affiliate" means, as to any person or entity, any other person or entity which directly or indirectly controls, is controlled by, or is under common control with such person or entity. For purposes of the preceding definition, "control" means the right to control, or actual control of, the management of such other entity, whether by ownership of voting securities, by agreement, or otherwise.
- 1.2 "Combination Product" means any product that is comprised in part of a Product and in part of one or more other biologically active diagnostic, preventive or therapeutic agents which are not themselves Products (the "Other Agents"). "Other Agents" excludes diluents and vehicles of Products.

- 1.3 "Commercial Sale" means any transfer to another person or entity (including a distributor, wholesaler or sales agent), for value, after which transfer the seller has no right, power or authority to determine the transferee's resale price, if any. A transfer by LICENSEE to an Affiliate or Sublicensee, or a transfer among or between Affiliates and/or Sublicensees, shall not constitute a Commercial Sale. "Commercial Sale" does not include distribution of free promotional samples of any Product or Combination Product by LICENSEE or any of its Affiliates or Sublicensees in amounts determined to be commercially reasonable by LICENSEE in the exercise of its reasonable discretion.
- 1.4 "Party" shall mean either LICENSEE or UNIVERSITY and "Parties" shall mean both LICENSEE and UNIVERSITY.
  - 1.5 "Licensed Patent Rights" shall mean
- (a) the patent(s), patent application(s) and invention disclosures set forth in Exhibits "A-1" and "A-2" attached hereto and all patents which may issue thereon, Exhibit "A-1" being those exclusively owned by the UNIVERSITY and Exhibit "A-2" being those co-owned by the UNIVERSITY and Oregon State University, in one instance, and by the UNIVERSITY and Emory University, in another instance;
- (b) any patent(s) and/or patent application(s) covering any Invention or Improvement (as defined below) made in the course of research sponsored by LICENSEE pursuant to Paragraph 5 hereof; and
- (c) all patent applications and/or patents (including patents which may be issued) which are divisionals, continuations, continuations-in-part, reissues, renewals, reexaminations, substitutions, foreign counterparts, extensions or additions of or to the patents and/or applications or are based upon the invention disclosures described in (a) and (b) of this Paragraph 1.5.
- 1.6 "Core Technology" shall mean the technology described in the patents, patent application(s) and invention disclosures set forth in Exhibits "A-1" and "A-2", as the same may be expanded by Invention(s) or Improvement(s) added thereto by operation of this Agreement.
- 1.7 "Invention(s)" or "Improvement(s)" shall mean any and all discoveries, methods, processes, compositions of matter and uses, whether or not patentable, made by DR. VINCENT FISCHETTI and/or his laboratory colleagues, conceived and reduced to practice during the two-year term of research which is sponsored by LICENSEE pursuant to the provisions of Paragraph 5 of this Agreement, or any extension of such term of research sponsored by LICENSEE, which is agreed to by the Parties.
- 1.8 "Technical Information" shall mean any and all technical data, information, materials, trade secrets, methods, protocols, procedures, formulations, arts and know-how, whether or not patentable, owned by or subject to the rights of the University relating to the Core Technology during the term of this Agreement which are determined by LICENSEE to be useful in the practice of Licensed Patent Rights.
- 1.9 "Product(s)" means any product that is covered by a Valid Claim of the Licensed Patent Rights. "Valid Claim", with respect to each country, means an issued claim of any unexpired patent, or a claim of any pending patent application that has not been held unenforceable, unpatentable or invalid by a decision of a court or governmental body of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, which has not been rendered unenforceable through disclaimer or otherwise, and which has not been lost through an interference proceeding, in such country.

- 1.10 "Net Sales" means:
- (a) with respect to Products, the gross sales price actually charged by LICENSEE or an Affiliate or Sublicensee in the Commercial Sale of such Licensed Product, less:
- (i) trade, prompt payment, quantity or cash discounts, rebates, and non-affiliated brokers' or agents' commissions, each as actually and customarily allowed and taken;
- (ii) amounts actually repaid or credited to customers on account of rejections or returns of specified products on which Royalties have been paid hereunder or on account of retroactive price reductions affecting such products;
- (iii) customary freight and other transportation costs, including insurance charges, and duties, tariffs, sales, use and excise taxes and other governmental charges based directly on sales, turnover or delivery of the specified products and actually paid or allowed by LICENSEE, an Affiliate of LICENSEE or a Sublicensee; and
- (iv) commercially reasonable allowances for bad debts incurred with respect to the Products during the first full year of Commercial Sales of any such Product, provided that such bad debt reserve shall be deemed extinguished
- within 180 days of the end of such first full year, and any amount of such reserve not actually debited in accordance with commercially reasonable practices during that period shall be deemed to be receipts of Net Sales for all purposes of this Agreement; and
- (b) with respect to Combination Products, the gross sales price actually charged by LICENSEE or an Affiliate or Sublicensee in the Commercial Sale of such Combination Product, less the deductions set forth in subsections (a)(i) -(iv) above, multiplied by a fraction having (i) a numerator of the gross sales price of the Product(s) included in such Combination Product as if sold separately or, if such sales price is not available, the fair market value of such Product(s), and (ii) a denominator of the gross sales price of such Combination Product, or if such sales price is not available, the sum of the fair market values of the Other Agents and the Product(s) contained in such Combination Product. The "fair market value" for any Product or Other Agent shall be determined for a quantity comparable to that included in the Combination Product and of substantially comparable class, purity and potency, and shall be mutually agreed to by UNIVERSITY and LICENSEE. When no fair market value is available, the fraction set forth above shall be changed to a fraction having (x) a numerator of the cost to LICENSEE, its Affiliates or Sublicensees, of the Product(s) included in such Combination Product, and (y) a denominator of the sum of such cost plus the cost to LICENSEE, its Affiliates or Sublicensees of the Other Agents contained in such Combination Product, provided that in no

event shall the fraction be less than (A) one-half (1/2), if only one Other Agent is included with a Product(s) in such Combination Product, (B) one-third (1/3), if two Other Agents are included with a Product(s) in such Combination Product, and (C) one-quarter (1/4), if three or more Other Agents are included with a Product(s) in such Combination Product. "Cost" as used above means the actual cost paid by LICENSEE, and/or it Affiliates or Sublicensees in an arm's length transaction, if purchased, or if not purchased but actually manufactured by any such entity, the sum of the direct manufacturing cost as determined by such entity's internal cost accounting system consistently applied.

1.11 "Royalty" means for any given fiscal year of LICENSEE any sum payable to the UNIVERSITY with respect to Net Sales in such fiscal year of Products or Combination Products by LICENSEE, its Affiliates or Sublicensees, and shall exclude without limitation any research or development support payments, marketing or licensing fees received by LICENSEE or any Affiliate from any third party, any equity investments received from any person or entity whatsoever, and all other reimbursements, advances, prepayments or

other payments received from third parties not specifically made with respect to sales of Products or Combination Products.

- 1.12 "Sublicense" means any agreement pursuant to which LICENSEE or an Affiliate of LICENSEE expressly grants to any third party the right to practise the Inventions or Improvements included within the Licensed Patent Rights for the purpose of manufacturing a Product which has not been produced by LICENSEE or any of its Affiliates or provided to such third party by LICENSEE or any of its Affiliates, and specifically excludes any marketing, sales, distribution or similar arrangement with a third party; "SUBLICENSEE" means any person or entity which is not an Affiliate of LICENSEE and to whom a Sublicense has been granted.
- 1.13 "Streptococcal A/Commensal Vaccine" means any product combining both (a) the technology set forth in the UNIVERSITY'S patent application titled "THE DELIVERY AND EXPRESSION OF A HYBRID SURFACE PROTEIN ON THE SURFACE OF GRAM POSITIVE BACTERIA" and (b) the technology described in any one or more of the following: (i) the UNIVERSITY'S patent titled "PRODUCTION OF STREPTOCOCCAL M PROTEIN IMMUNOGENS"; (ii) the UNIVERSITY'S patent application titled "RECOMBINANT POXVIRUS AND STREPTOCOCCAL M. PROTEIN VACCINE"; or (iii) the UNIVERSITY'S patent application titled "SYNTHETIC PEPTIDES FROM STREPTOCOCCAL M PROTEIN AND VACCINES PREPARED THEREFROM".
  - 1.14 "Territory" shall mean the entire world.
  - 2. LICENSED RIGHTS GRANTED
- 2.1 The UNIVERSITY hereby grants to LICENSEE and its Affiliates a sole and exclusive license, including the right to grant Royalty bearing Sublicenses under terms consistent with this Agreement, subject only to the UNIVERSITY's prior approval of Sublicensee selected by LICENSEE which approval shall not be unreasonably withheld or delayed, under Licensed Patent Rights and Technical Information, to make, have made, use, have used, sell, have sold and import Products and Combination Products in the Territory, and to enter into marketing, sales, distribution and similar agreements with third parties, except to the extent that the UNIVERSITY'S right to do so may be limited
  - (a) under the provisions of 35 United States Code, Section 201, et seq., and regulations and rules promulgated thereunder -- --- and implementing agreements thereof, or
  - (b) because the UNIVERSITY is only a co-owner of the the patents and applications listed on Exhibit "A-2."
- 2.2 The UNIVERSITY agrees that any Invention(s) or Improvement(s) made in the course of the research sponsored by LICENSEE, pursuant to Paragraph 5 hereof, shall be disclosed promptly to LICENSEE. The UNIVERSITY agrees that Dr. Fischetti shall provide LICENSEE with a quarterly research progress report within thirty (30) days of the end of each calendar quarter after the date hereof, which reports shall disclose any such Invention(s) or Improvement(s) to LICENSEE, and a final research report containing customary detail and summaries within sixty (60) days following the end of the research. Any such Invention(s) or Improvement(s) shall automatically be added to LICENSEE'S existing license grant under Section 2.1 hereof without the payment of any additional consideration. The existing license shall automatically be expanded to cover the new Invention(s) or Improvement(s) without any further action by either of the Parties hereto, and said Invention(s) or Improvement(s) shall thereupon be deemed an addition to the Core Technology under this Agreement.

#### 2.3 If LICENSEE

(a) chooses not to practice any Licensed Patent Rights licensed to it hereunder, or

(b) notifies the UNIVERSITY of its intent not to add a particular new Invention or Improvement to the existing license, the UNIVERSITY shall be free to license the same to a third party or parties of its choosing.

LICENSEE agrees to give the UNIVERSITY prompt Notice of any decision not to practice Licensed Patent Rights or not to add a new Invention or Improvement to the existing license.

- 2.4 The UNIVERSITY agrees to provide LICENSEE with Technical Information developed in DR. FISCHETTI'S laboratory at the UNIVERSITY from time to time during the term of this Agreement. LICENSEE shall be entitled to use (and shall be entitled to allow its Affiliates and Sublicensees to use) such Technical Information internally in support of development, discovery, manufacturing and marketing efforts for sales of Licensed Products. The UNIVERSITY further agrees to use its good faith efforts to cause Dr. Fischetti to promptly deliver clones or copies of the molecules, compounds, reagents or other materials in his possession included in the Core Technology to LICENSEE promptly from time to time upon LICENSEE'S request.
  - ROYALTIES AND OTHER LICENSE CONSIDERATION
- $3.1\,$  As further consideration for the license grant provided in Paragraph 2.1, Licensee agrees to pay the UNIVERSITY the following amounts in the nature of Royalties:
  - (a) Royalties on Net Sales of Products, as follows:
    - For Products or Combination Products sold, leased or otherwise disposed of by LICENSEE or any of its Affiliates, Royalties equal to the following:
      - (A) For Streptococcal A/Commensal Vaccine: (i) \*\*\*\*\*/1/ of Net Sales up to \*\*\*\*\*/1/; (ii) \*\*\*\*\*/1/ of Net Sales above \*\*\*\*/1/ but (ii) less than \*\*\*\*\*/1/; and (iii) \*\*\*\*\*/1/ of Net Sales above \*\*\*\*\*/1/.
      - (B) For all other Products:
        - (i)
        - \*\*\*\*\*/1/ of Net Sales up to \*\*\*\*\*/1/;
          \*\*\*\*\*/1/ of Net Sales above \*\*\*\*\*/1/, but (ii) less than \*\*\*\*\*/1/;
        - (iii) \*\*\*\*\*/1/ of Net Sales above \*\*\*\*/1/, but less than \*\*\*\*/1/; and
        - (iv) \*\*\*\*/1/ of Net Sales above \*\*\*\*/1/.
    - (II) For Products or Combination Products sold, leased or otherwise disposed of pursuant to a Sublicense by the Sublicensee, the Royalty received by the UNIVERSITY shall be equal to \*\*\*\*\*/1/ of the Royalty received by LICENSEE from such Sublicensee, but in no event shall the amount of such Royalty be greater than the amount the UNIVERSITY would otherwise be entitled to receive if such transaction were not a Sublicense, in which case the University's

Confidential information is omitted and identified by a \* and filed separately with the SEC pursuant to a request for Confidential Treatment.

Royalty would be a calculated as a percentage of Net Sales of the Sublicensee as determined in Section 3.1(a)(I) above. In addition, UNIVERSITY shall receive \*\*\*\*\*/1/ of any non-royalty consideration received by LICENSEE for sublicensing of technology licensed hereunder.

The obligation to pay Royalties hereunder is imposed only once with respect to the sale, lease or disposition of any Product or Combination Product regardless of the number of Valid Claims which cover such Product or Combination Product. Additionally, there shall be no obligation to pay Royalties on the sale, lease or disposition of Products by LICENSEE or its Affiliates to any Sublicensees for resale, but in such instances, the obligation to pay Royalties shall arise upon the sale by any such Sublicensee to unrelated third parties.

- (b) Milestone payments (which shall be paid only once per Product) as follows:
  - (i) \*\*\*\*\*/1/ Dollars within sixty (60) days of the first approved submission of an IND in any country of the Territory on a Product,
  - (ii) \*\*\*\*\*/1/ Dollars within sixty (60) days of the start of a Phase II clinical trial in any country of the Territory,
- 3.2 Upon commencement of Net Sales of Products or Combination Products which generate a Royalty to the UNIVERSITY pursuant to this Agreement, LICENSEE shall, within sixty (60) days of the close of the calendar quarter in which such Net Sales begin, make quarterly reports to the UNIVERSITY indicating the total Net Sales of Products and Combination Products in the quarter and the calculation of Royalties due thereon. Any Royalty then due and payable shall be included with such report.

LICENSEE'S records shall be open to inspection by the UNIVERSITY or a certified public accountant designated by the UNIVERSITY, at reasonable times, and from time to time, for the sole purpose of verifying the accuracy of the reports and the Royalty payments. The UNIVERSITY shall bear the reasonable costs of such inspection unless the inspection establishes an error in the UNIVERSITY'S favor of \*\*\*\*/1/ or more of the amount payable for the period of inspection. The UNIVERSITY shall keep all reports, information, documents and other materials received from LICENSEE under this Agreement, including the reports made pursuant to the preceeding paragraph, confidential and the use of such reports and information by the UNIVERSITY is strictly limited to the enforcement of the UNIVERSITY'S rights under this Agreement.

## 4. PATENTS

-----

4.1 Prior Patent Expenses: Within five (5) business days following the execution of this Agreement, LICENSEE shall reimburse the UNIVERSITY for all unreimbursed out-of-pocket amounts expended by the UNIVERSITY, Emory University and Oregon State University prior to the date hereof for the preparation, filing, prosecution and maintenance of Licensed Patent Rights being licensed to LICENSEE pursuant to Paragraph 2.1 of this

Confidential information is omitted and identified by a \* and filed separately with the SEC pursuant to a request for Confidential Treatment.

Agreement, said amount being \$\*\*\*\*\*/1/. The UNIVERSITY will promptly reimburse Emory University and Oregon State University for such amount that was expended by Emory University and Oregon State University, and LICENSEE shall have no responsibility for any amounts owed to such institutes for prior patent expenses.

4.2 Future Patent Expenses: LICENSEE shall select qualified independent patent counsel reasonably satisfactory to the UNIVERSITY to file, prosecute and maintain all patent applications included in Licensed Patent

Rights, at the expense of LICENSEE, including divisionals, continuations, continuations-in-part, reissues, renewals, foreign counterparts or extensions. LICENSEE shall be entitled to determine the countries in which it wishes to obtain and maintain patent protection under this Agreement and shall be free, at any time and at its sole option and upon Notice to the UNIVERSITY, to abandon patent prosecution or maintenance in any country of the Territory.

4.3 Should Licensee decide not to finance the preparation, filing, prosecution, or maintenance of any patent application or patent licensed hereunder, LICENSEE will give Notice to the UNIVERSITY of such decision in writing in adequate time to allow the UNIVERSITY, at its own cost, to effectuate such preparation, filing, prosecution, or maintenance if it desires to do so.

Nothing herein is intended or shall be construed as obligating the UNIVERSITY to file or maintain any U.S. or foreign patents at its own expense, or to defend, enforce, or support any patent or patent applications which may be included in Licensed Patents Rights to which it has granted license rights to LICENSEE; provided, however, that the UNIVERSITY will cooperate with LICENSEE in its activity in applying for U.S. or foreign patents or in the defense or enforcement of Licensed Patent Rights.

Nothing herein is intended or shall be construed as obligating LICENSEE to maintain its license with respect to any patent or application licensed hereunder and to finance the preparation, filing, prosecution or maintenance of any patent application in any country or jurisdiction in which it believes it is not in the best business interest of LICENSEE to do so.

4.4 LICENSEE, or any Affiliate or Sublicensee of LICENSEE, shall have the right but not the obligation to institute patent infringement proceedings against third parties based on any Licensed Patent Rights licensed hereunder. The UNIVERSITY agrees to give Notice to LICENSEE promptly, in writing, of each infringement of Licensed Patent Rights of which the UNIVERSITY is or becomes aware during the term of this Agreement. If LICENSEE does not institute infringement proceedings against such third parties, the UNIVERSITY shall have the right, but not the obligation, to institute such proceedings within thirty (30) days after Notice of its intention to commence such proceedings shall have been given to LICENSEE, in writing, and provided that Licensee does not, within such thirty (30) day period, institute its own proceedings. The expenses of such proceedings, including lawyers' fees, shall be borne by the Party instituting suit. The Party instituting suit shall have the right to select counsel to conduct the suit. Each Party shall execute all necessary and proper documents and take all other appropriate action, including but not limited to being named as a participating party, to allow the other Party to institute and prosecute such proceedings. Any award paid by third parties as a result of such proceedings (whether by way of settlement or otherwise) shall first be applied toward reimbursement for the legal fees and expenses incurred, and the excess, if any, shall be shared on a pro rata basis based on the expenses incurred by

each Party.

Confidential information is omitted and identified by a \* and filed separately with the SEC pursuant to a request for Confidential Treatment.

#### 5. SPONSORED RESEARCH

-----

LICENSEE agrees to sponsor further research on the Core Technology by DR. VINCENT A. FISCHETTI and his colleagues at the UNIVERSITY for a minimum period of two (2) years at the budget level provided for in

Exhibit "B", attached hereto. Sponsorship at this level shall continue for a third and subsequent years thereafter unless LICENSEE gives the University a minimum of six (6) months' notice that it does not wish to fund research for such third or subsequent years.

LICENSEE shall pay the budgeted amounts to the UNIVERSITY in advance for a two (2) year period of guaranteed support, the total payment therefor, in the amount of \$\*\*\*\*\*/1/, being payable upon within five (5) business days following the execution of this Agreement.

### 6. ACADEMIC FREEDOM

-----

The Parties recognize the traditional freedom of all scientists to publish and present promptly the results of their research. The Parties also recognize that patent rights can be jeopardized by public disclosure prior to the filing of suitable patent applications. Therefore, the UNIVERSITY will assure that each proposed publication concerning any technology described in Licensed Patent Rights or Technical Information or which may constitute an Invention or Improvement hereunder, before submission to a publisher, will be submitted to LICENSEE for review in connection with preservation of patent rights. LICENSEE shall have thirty (30) days in which to review the publication, which may be extended for an additional thirty (30) days when LICENSEE provides substantial and reasonable need for such extension. By mutual agreement, this period may be further extended for not more than an additional three (3) months. LICENSEE will allow for simultaneous submission of the publication to the publisher and LICENSEE, where appropriate. Scientists acting on behalf of both the UNIVERSITY and LICENSEE will be expected to treat matters of authorship in a proper collaborative spirit, giving credit where it is due and proceeding in a manner which fosters cooperation and communication.

# 7. Publicity

LICENSEE will not use the UNIVERSITY'S name or the name of any member of its faculty or its staff for any public, commercial or advertising purposes without the prior written approval of the UNIVERSITY and faculty or staff member involved; provided, however, that it is expressly agreed that LICENSEE may reveal or identify the UNIVERSITY or any member of its faculty or staff as the inventor, source or origin of any Core Technology, Technical Information or any Product or Process for the purpose of soliciting third parties to invest or enter into other commercial arrangements with LICENSEE, or to acquire a Sublicense, assignment or other transfer of rights in such Core Technology from LICENSEE and provided further that LICENSEE may use and disclose the UNIVERSITY'S name and the name of any member of its faculty or its staff in its internal communications or, upon prior disclosure and consultation with the UNIVERSITY, in making any required governmental reports and filings.

It is recognized by the Parties that at some future date, a public offering of securities may be contemplated by LICENSEE. The UNIVERSITY intends to cooperate with LICENSEE in expeditiously reviewing any LICENSEE registration statements and/or prospectuses, but wishes to reserve its rights with respect to how its name will be used.

Confidential information is omitted and identified by a \* and filed separately with the SEC pursuant to a request for Confidential Treatment.

### 8. PRODUCT LIABILITY

LICENSEE agrees to indemnify and hold harmless the UNIVERSITY (and the UNIVERSITY'S co-owners of the Licensed Patent Rights described on Exhibit "A-2" if Licensee obtains license right from such co-owners) and its trustees, officers, agents, faculty, employees, and students from any and all liability arising from injury or damage to person or property resulting directly or indirectly from LICENSEE'S use, manufacture, or sale of any product covered by any Licensed Patent Rights or Technical Information. This obligation may be delegated by the LICENSEE to assignees and/or Sublicensees of the LICENSEE'S rights under this Agreement and may be satisfied by THE LICENSEE'S and/or its Sublicensees or assignees obtaining and maintaining until the expiration of all licenses granted hereunder, appropriate and available product liability insurance for a conventional amount of coverage generally deemed appropriate in the biotechnology or pharmaceutical industry, under which insurance the UNIVERSITY is named as an additional insured.

The UNIVERSITY shall promptly give the LICENSEE Notice of any claim asserted or threatened on the basis of which the Party giving such Notice intends to seek indemnification from LICENSEE as herein provided.

# 9. TERMINATION

- 9.1 The licenses herein granted shall continue for the full term of any patents licensed hereunder as the same or the effectiveness thereof may be extended by any governmental authority, rule or regulation applicable thereto; it being understood, however, that the LICENSEE'S right to continue the practice of then existing Technical Information shall continue as a fully paid, perpetual license.
- 9.2 The LICENSEE shall have the right to terminate any license granted herein at any time upon ninety (90) days' prior written notice to the UNIVERSITY.
- 9.3 Either Party may terminate this Agreement in the event of a material breach by the other Party, provided only that the breaching Party is given Notice of the breach and a reasonable time, not to exceed thirty (30) days, in which to cure such breach.
- 9.4 The UNIVERSITY agrees that in the event of the termination of this Agreement and of any option and/or license granted hereunder it will continue any applicable Sublicense on the terms and conditions of such Sublicense in effect at the time of any such termination.

#### 10. DISCLAIMER

------

EXCEPT AS EXPRESSLY SET FORTH HEREIN AND WITH RESPECT TO THE OWNERSHIP OF THE LICENSED PATENT RIGHTS, INVENTIONS, IMPROVEMENTS, AND TECHNICAL INFORMATION, THE UNIVERSITY MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN RESPECT OF THE CORE TECHNOLOGY, TECHNICAL INFORMATION, LICENSED PATENT RIGHT, PRODUCT OR PROCESSES AND SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

# 11. NOTICES

-----

Any Notice required to be given pursuant to this Agreement shall be made by personal delivery or, if by mail, then by registered or certified mail, return receipt requested, with postage and fees prepaid, by one Party to the other Party at the addresses noted below, or to such other address as such Party may designate in writing from time to time to the other Party.

In the case of the LICENSEE, Notice should be sent to:

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017

In the case of THE ROCKEFELLER UNIVERSITY, Notice should be sent to:

The Rockefeller University 1230 York Avenue New York, New York 10021 Attention: Office of the General Counsel

### 12. REPRESENTATION AND WARRANTIES

The UNIVERSITY hereby represents and warrants to the LICENSEE that

- (i) the UNIVERSITY has the right to grant the license herein provided under the terms and conditions set forth herein;
- (ii) there are no encumbrances or restrictions not set forth herein on its right to grant the licenses herein provided; and
- (iii) this Agreement does not conflict with or breach any other agreement or understanding to which the UNIVERSITY is a party.

LICENSEE hereby represents and warrants to the UNIVERSITY that

- (i) LICENSEE is a corporation duly organized and validly existing under the laws of the State of Delaware, and
- (ii) LICENSEE will deliver to the UNIVERSITY, on an on-going confidential basis, any reports or other materials provided to its shareholders.

# 13. ASSIGNMENT

-----

No Party hereto may assign any of its rights or obligations under this Agreement to any third party, without the express prior written consent of the other Party to this Agreement, which consent will not be unreasonably withheld or delayed; provided, however, that no consent shall be necessary in the event of (i) the sale, merger, acquisition or other business combination, or sale of substantially all the assets, of LICENSEE or (ii) the sale of all of LICENSEE'S rights with respect to any Product line or lines.

#### 14. GOVERNING LAW

-----

 $\,$  This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

### 15. FURTHER ACTION

-----

At any time and from time to time, each Party agrees, without further consideration, to take such actions and to execute and deliver such documents as may be reasonable necessary to effectuate the purposes of this Agreement.

### 16. WAIVER

----

Any Waiver by any Party of a breach of any provision of this Agreement shall not operate as or be construed to be a waiver of any other

breach of this provision or of any breach of any other provision of this Agreement. The failure of a Party to insist upon strict adherence to any term of this Agreement on one or more occasions shall not be considered a waiver or deprive that party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement.

# 17. SEVERABILITY

If any provision of this Agreement is invalid, illegal, or unenforceable, the balance of this Agreement shall remain in effect, and if any provision is inapplicable to any person or circumstance, it shall nevertheless remain applicable to all other persons and circumstances.

# 18. COUNTERPARTS

-----

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

# 19. FORCE MAJEURE

-----

The Parties shall not be liable in any manner for failure or delay in fulfillment of all or part of this Agreement, directly or indirectly caused by acts of God, governmental order or restrictions, war, war-like condition, revolution, riot, looting, strike, lockout, fire, flood or other similar or dissimilar causes or circumstances beyond the non-performing Party's control. The non-performing Party shall promptly notify the other Party of the cause or circumstance and shall recommence its performance of its obligations as soon as practicable after the cause or circumstance ceases.

### 20. ARBITRATION.

-----

In the event of any dispute under this Agreement, such dispute shall be submitted to arbitration in accordance with the terms of this Section. The party who is alleging that a dispute exists shall send a notice of such dispute to all other parties, which notice shall set forth in detail the dispute, the parties involved and the position of such party with respect thereto. Within ten (10) business days after the delivery of such a notice, counsel for the parties shall mutually select as an arbitrator an attorney practicing in New York, New York, who is experienced in commercial arbitration. If counsel for the parties are unable to agree upon the selection of the arbitrator, an arbitrator residing in or about New York, New York shall be selected by the New York office of the American Arbitration Association. The arbitrator so selected shall schedule a hearing in New York, New York on the disputed issues within forty-five (45) days after his/her appointment and the arbitrator shall render a decision after the hearing, in writing, as expeditiously as is possible, which shall be delivered to the parties. The arbitrator shall render a decision based on written materials supplied by the parties to the arbitration in support of their respective oral presentations at the hearing, and no party shall be entitled to discovery in such matter. The parties shall supply a copy of any written materials to be submitted to the arbitrator at least fifteen (15) days prior to the scheduled hearing. A default judgment may be entered against a party who fails to appear at the arbitration hearing. Such decision and determination shall be final and unappealable and shall be filed as a judgment of record in any jurisdiction designated by the successful party. The parties to this Agreement agree that this paragraph has been included to rapidly and inexpensively resolve any disputes between them with respect to the matters described above, and that this paragraph shall be grounds for dismissal of any court action commenced by any party with respect to a dispute arising out of such matters. For purposes of this Section, Licensors may participate in any arbitration either jointly or severally, in their sole discretion.

### 21. ENTIRE UNDERSTANDING

This Agreement, together with the Exhibits hereto and the concurrently executed Agreement constitute the entire agreement between the Parties with respect to the subject matter hereof, supersedes all prior understanding and agreement by the Parties with respect to the subject matter hereof and may be modified only by written instrument duly executed by each Party.

# 22. HEADING

The headings contained herein are for the purpose of convenience only and are not intended to define or limit the contents of such sections.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first above written.

SIGA PHARMACEUTICALS, INC.

By: /s/ Judson Cooper
\_\_\_\_\_\_\_
Its: President

THE ROCKEFELLER UNIVERSITY

By: /s/ Frederick M. Bohm
\_\_\_\_\_\_
Its: Executive Vice President

The undersigned, STATE OF OREGON, acting by and through the State Board of Higher Education on behalf of OREGON STATE UNIVERSITY, to the extent that it may have rights in Licensed Patent Rights as defined in the attached Agreement between THE ROCKEFELLER UNIVERSITY and the LICENSEE therein named, hereby consents and joins in the license grant to the LICENSEE and agrees to be bound by the term of such license grant with respect to its interest in the Licensed Patent Rights described in Exhibit "A-2" attached to said Agreement, subject only to the agreement of THE ROCKEFELLER UNIVERSITY to pay to the undersigned \*\*\*\*\*/1/ of the net monies received by THE ROCKEFELLER UNIVERSITY pursuant to Paragraph 3 thereof.

January 8, 1996

/s/ George H. Keller

Vice Provost for Research

Date

& Int'l Programs

THE ROCKEFELLER UNIVERSITY will promptly reimburse OREGON STATE UNIVERSITY its share of the patent expenses paid to THE ROCKEFELLER UNIVERSITY pursuant to paragraph 4.1 hereof. Additionally, and in consideration of OREGON STATE UNIVERSITY'S joining in the license grant as above provided, THE ROCKEFELLER UNIVERSITY agrees to pay to OREGON STATE UNIVERSITY \*\*\*\*\*/1/ of the net monies received by THE ROCKEFELLER UNIVERSITY pursuant to Paragraph 3 thereof.

THE ROCKEFELLER UNIVERSITY

By /s/ Frederick M. Bohm Executive Vice President

Confidential information is omitted and identified by a  $^{\star}$  and filed separately with the SEC pursuant to a request for Confidential Treatment.

The undersigned, EMORY UNIVERSITY, to the extent that it may have rights in the attached Agreement between THE ROCKEFELLER UNIVERSITY and the LICENSEE therein named, hereby consents and joins in the license grant to the LICENSEE and agrees to be bound by the terms of the license grant with respect to its interest in the Licensed Patent Rights described in Exhibit "A-2" attached to said Agreement subject only to the agreement of THE ROCKEFELLER UNIVERSITY to pay to the undersigned \*\*\*\*\*/1/ of the net monies received by THE ROCKEFELLER UNIVERSITY pursuant to Paragraph 3 thereof.

**EMORY UNIVERSITY** 

By /s/ John L. Singer

January 31, 1996 -----Date

THE ROCKEFELLER UNIVERSITY will promptly reimburse EMORY UNIVERSITY its share of the patent expenses paid to THE ROCKEFELLER UNIVERSITY pursuant to Paragraph 4.1 hereof. Additionally, and in consideration of EMORY UNIVERSITY'S joining in the license grant as above provided, THE ROCKEFELLER UNIVERSITY agrees to pay to EMORY UNIVERSITY \*\*\*\*\*/1/ of the net monies received by THE ROCKEFELLER UNIVERSITY pursuant to Paragraph 3 thereof.

THE ROCKEFELLER UNIVERSITY

By /s/ Frederick M. Bohm
----Executive Vice President

Confidential information is omitted and identified by a \* and filed separately with the SEC pursuant to a request for Confidential Treatment.

### EXHIBIT A-1

The Rockefeller University's Docket: 102
Title: "SYNTHETIC PEPTIDES FROM STREPTOCOCCAL M PROTEIN AND VACCINES PREPARED Title:

THEREFROM" -----

U.S. Patent No.: Issue Date:

Serial No.: 08/369,295

Filing Date: January 6, 1995 Corresponding patent applications and patents in:

Australia Canada Japan

Europe: Austria

Belgium

Switzerland/Liechtenstein

Germany France Great Britain Luxembourg Netherlands Sweden

The Rockefeller University's Docket: 129
Title: "RECOMBINANT POXVIRUS AND STREPTOCOCCAL M. PROTEIN VACCINE"

U.S. Patent No.:

Issue Date:

Serial No.: 08/205,348 Filing Date: March 3, 1994 Corresponding patent applications and patents in:

Australia Canada Japan

Europe: Austria Belgium

Switzerland/Liechtenstein

Denmark Germany France **Great Britain** 

Italy Luxembourg Netherlands Spain Sweden

The Rockefeller University's Docket: 180 CIP
Title: "THE DELIVERY AND EXPRESSION OF A HYBRID SURFACE PROTEIN ON THE

SURFACE OF GRAM POSITIVE BACTERIA"

U.S. Patent No.:

Issue Date:

Serial No.: Filing Date:

08/302,756 March 7, 1995 PCT Application No. PCT/US93/02355 Foreign Filing:

The Rockefeller University's Docket: 180 U.S. Patent No.: "A POLYPEPTIDE OF A HYBRID SURFACE PROTEIN"

Issue Date:

08/280,390 Serial No.: Filing Date: July 26, 1994

No Foreign Filing

The Rockefeller University's Docket: 234

Title: "MULTIFUNCTIONAL SURFACE PROTEIN OF STREPTOCOCCI

Serial No.: 08/217,008
Filing Date: March 23, 1994
Foreign Filing: PCT Application No. PCT/US93/00082

The Rockefeller University's Docket: 266

"SURFACE PROTEIN OF STAPHYLOCOCCUS AUREUS"

Filing Date: 08/254,968 Serial No. 08/254,968
Filing Date: June 7, 1994
Foreign Filing: PCT Application No. PCT/US95/07100

The Rockefeller University's Docket: 267

"REGULATION OF EXOPROTEIN IN STAPHYLOCOCCUS AUREUS" 08/248.505 Title:

Serial No.: 08/248,505 Filing Date: May 24, 1994

No Foreign Filing

The Rockefeller University's Docket: 299

"ENZYME FOR CLEAVAGE OF THE ANCHOR REGION OF SURFACE

PROTEINS FROM THE SURFACE OF GRAM-POSITIVE BACTERIA"

Serial No.: 08/319,540 October 7, 1994 Filing Date:

Foreign Filing: PCT Application pending

The Rockefeller University's Docket 264
Title: "GENE SERUM OPACITY FACTOR"

U.S. Patent No:

Serial No: 08/115,227
Filing Date: September 1, 1993
Foreign Filing: PCT/ US94/09926

The Rockefeller University's Docket: RU 326

Title: "A BACTERIAL PLASMIN BINDING PROTEIN AND METHODS OF USE THEREOF"

Serial Number: Not Assigned

Filing Date: September 17, 1996

EXHIBIT A-2

The Rockefeller University's Docket: 29

Title: "PRODUCTION OF STREPTOCOCCAL M PROTEIN IMMUNOGENS" U.S. Patent No.: 4,784, 948

November 15, 1994 Issue Date:

Serial No.: 821,716 Filing Date: June 18, 1984

Corresponding patent applications and patents in:

Australia Canada Japan

Europe: Austria

Belgium

Switzerland/Liechtenstein

Denmark Germany France Great Britain Luxembourg Netherlands Sweden

Divisional applications Nos. 08/200,914 filed February 22, 1994

#### EXHIBIT B

#### VINCENT A. FISCHETTI LABORATORY:

The following is a brief outline of some of the research that is in progress in my lab and their future directions based on these outgoing studies.

#### CURRENT AND FUTURE PROJECTS:

1. STREPTOCOCCAL VACCINE: Having made a construction in which the Streptococcus gordonii expresses the conserved region of the M protein on its surface, we are performing safety studies to determine if cross-reactive antibodies are generated to this region. So far we found that there are no cross-reactive antibodies produced in serum and saliva of rabbits or mice colonized with these recombinant organisms, while antigen-specific antibodies are present in both compartments. We are now preparing purified protein of the conserved region from our clone to immunize rabbits with adjuvant to determine if cross-reactive antibodies are produced by this route.

FUTURE: Using our mouse challenge model, we will test our current construct for protection against streptococcal colonization. In preliminary experiments with a small number of animals we observed protection to the same levels as were seen with the vaccinia virus vector system. We are planning similar experiments using a larger number of animals.

2. COMMENSAL VECTOR: We are in the process of preparing a new construct for the streptococcal vaccine (second generation). This construct consists of multiple repeats of the C-repeat region to see if it increases immunogenicity. We have completed part of the construct in collaboration with Dr. Hruby at OSU and it will take a few more months to complete.

FUTURE: Once the construct is complete in Dr. Hruby's laboratory, we will test it in our lab using our streptococcal challenge assay in mice. We also plan to prepare other constructs in S. Gordonii to validate our patent claims. These will include enzymes as well as molecules that have had their anchors modified for secretion. The former will be tested for enzyme activity and the later in an animal model for tolerance. We have also (in collaboration with group in France) created vectors for vaginal delivery of antigens. Lactobacillus and lactococci have now been engineered to deliver foreign antigens to this site. We will now expand this to develop the system for the delivery of vaginal-specific antigens (GP120/160 and gonococcal antigens). In addition, we will determine if more that one antigen may be delivered and expressed on the gordonii surface. We will engineer regions on the chromosome of the gordonii to express both the M protein and the SDH molecule.

3. STAPHYLOCOCCAL FIBRINOGEN BINDING PROTEIN: We are currently in the process of purifying the fibrinogen binding protein from our E. coli clone.

FUTURE: Once purified and sufficient quantities have been obtained, we will prepare monoclonal and polyclonal antibodies and perform blocking experiments both in vitro and in vivo. Since this protein is important in staphylococcal colonization of implanted medical devices and catheters, this information will allow us to evaluate its potential as a staphylococcal vaccine.

4. NEW ANTIBIOTIC TARGET FOR GRAM-POSITIVE BACTERIA: Studies to find a new antibiotic against a Gram-positive bacteria, based on our identification of a new target, is poised and ready to begin. We have isolated the enzyme responsible for this attachment and have developed a rapid assay to test for inhibitors. The chance of success will depend on the number of compounds that can be screened. Contractual arrangements will need to be made with pharmaceutical or independent companies to supply the compounds to be screened.

FUTURE: We will purify the enzyme to determine its sequence in order to clone its gene. This will enable us to perform computer docking experiments to identify compounds by rational drug design. Our long-term goal is to further identify the complete attachment mechanism for surface proteins in hopes to uncover other targets.

5. SERUM OPACITY FACTOR: The serum opacity factor (SOF) is a group A

streptococcal protein that induces opacity of mammalian serum. Our studies have shown that the molecule is a surface enzyme that has the specificity to cleave apolipoprotein A1 (ApoA1) of HDL. We have cloned and sequenced the molecule and have prepared ApoA1 knockout mice for our future studies.

FUTURE: Because SOF may be used as an diagnostic assay for HDL, studies to localize its activity will help in the development of the assay. Purified SOF will be used to cleave ApoA1 and the cleavage products examined by physical and chemical techniques to determine the site of cleavage. We will try to establish the biological importance of SOF in mice by injecting them with purified SOF and examining its effects. Since serum from ApoA1 knockout mice does not become opaque after treatment with SOF, these animals will serve as controls.

# AMENDMENT TO LICENSE AND RESEARCH SUPPORT AGREEMENT BETWEEN THE COMPANY AND ROCKEFELLER UNIVERSITY

# AMENDMENT

THIS AMENDMENT is effective as of October 1, 1996 by and between SIGA PHARMACEUTICALS, INC. ("SIGA") and THE ROCKEFELLER UNIVERSITY ("ROCKEFELLER").

WHEREAS, SIGA and ROCKEFELLER have entered into a License Agreement (the "Agreement") dated February 1, 1996; and

WHEREAS, the Parties desire to further amend the Agreement to add a technology relating to Bacterial Plasmin Binding Protein.

NOW THEREFORE, in consideration of the foregoing premises and other good and valuable consideration, the Parties hereby agree as follows:

 Exhibit A-1 to the Agreement shall be amended to add the following patent application:

The Rockefeller University's Docket: RU-326

Title: "A Bacterial Plasmin Binding Protein and

Methods of Use Thereof"

Serial No.: Not Assigned

Filing Date: September 17, 1996

2. In all other aspects, the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the Parties have executed this amendment to the  $\ensuremath{\mathsf{Agreement}}\xspace.$ 

THE ROCKEFELLER UNIVERSITY SIGA PHARMACEUTICALS, INC.

By:/s/ William H. Griesar By:/s/ Joshua D. Schein

Name: William H. Griesar, Name: Joshua D. Schein,

Vice President & General Vice President & Chief Counsel Financial Officer

Date: September 27, 1996 Date: October 15, 1996

# RESEARCH AGREEMENT

RESEARCH GRANT made as of the 31st day of January, 1996 by and between SIGA

Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware, having an office at 666 Third Avenue, 30th Floor, New York, New York 10017 ("Grantor") and Emory University, a nonprofit corporation organized and existing under the laws of the State of Georgia with principal offices located at 1380 South Oxford Road, Atlanta, Georgia 30322 ("Emory").

# WITNESSETH

-----

WHEREAS, Dr. June R. Scott, a member of the faculty of Emory, and her laboratory colleagues are engaged in microbiology research particularly as it relates to the control of infectious diseases; and

WHEREAS, Grantor wishes to provide funding for this research in return for a right of first refusal to acquire commercial rights to any technology arising from such research sponsored hereunder.

NOW, THEREFORE, in consideration of the mutual benefits to be derived, the parties agree as follows:

- 1. DEFINITIONS. The following terms shall have the meaning assigned to them below when used in this Agreement:
- below when used in this Agreement.
- 1.1 "Party" shall mean either Emory or Grantor and "Parties" shall mean both Emory and Grantor.
- 1.2 "Sponsored Research Invention" shall mean any and all discoveries, whether patentable or not made by Dr. June R. Scott and/or her laboratory colleagues who are employees or otherwise under the control of Emory pursuant to research funded by Grantor.
- 1.3 "Field" shall mean any aspect of microbiological research particularly as it relates to the control of infectious diseases which Dr. Scott selects as research to be sponsored by Grantor including, but not limited to recombinant DNA Technology, immunological techniques and vaccines.
- 2. SPONSORED RESEARCH GRANT.

-----

- 2.1 Grantor agrees to provide Emory with funding to sponsor research in the Field in the total amount of \*\*\*\*\*/1/ dollars.
- 2.2 Payment shall be made in semi-annual installments of \*\*\*\*\*/1/ dollars with the initial payment made upon execution of this Agreement.
  - 2.3 Payments shall be sent to:

Susan Eckert Department Administrator Emory University Microbiology/Immunology Department 1510 Clifton Road, Ste. 3001 Atlanta, Georgia 30322

 $2.4\,$  Emory shall retain title to any equipment purchased with funds provided by Grantor under this Agreement.

<sup>1</sup> Confidential information is omitted and identified by a \*\*\*\*\* and filed separately with the SEC pursuant to a request for Confidential Treatment.

3. RIGHTS TO SPONSORED RESEARCH INVENTIONS. Subject to Grantor's compliance

with all the terms of this Agreement, Emory hereby grants Grantor a right of first refusal to acquire an exclusive license for the manufacture, sale and use of any invention disclosed to Grantor hereunder. The license shall include terms which require Grantor to reimburse Emory for all expenses incurred in obtaining patent prosecution for any licensed technology and shall further require Grantor to defend, hold harmless, and indemnify Emory against all claims or damages arising from the commercial exploitation of any licensed technology, provided that such requirement may be satisfied by obtaining appropriate liability insurance for a conventional amount of coverage under which insurance Emory is made an insured or co-insured. The license agreement shall include reasonable fees and royalty payments in accordance with industry standards. The license shall further include terms and conditions typically found in license agreements entered into between universities and biotechnology or pharmaceutical companies involving similar technology. All such remaining terms and conditions shall be negotiated in good faith by Emory and Grantor. The term of Grantor's right of first refusal respecting any disclosed invention shall commence upon the date of this Agreement and terminate six (6) months after such invention is disclosed to Grantor.

- 4. PUBLICITY. Neither party shall use the name of the other in any form of
- advertising or promotion without the prior written approval of the other; provided, however, that it is expressly agreed that Grantor may reveal or identify the Emory or any member of its faculty or staff as the inventor, source or origin of any technology, technical information or any product or process arising from the Research for the purpose of soliciting third parties to invest or enter into other commercial arrangements with Grantor, or to acquire a sublicense, assignment or other transfer of rights in such technology from Grantor and provided that Grantor may use and disclose Emory's name and the name of any member of its faculty or its staff in its internal communications or, upon prior disclosure and consultation with Emory, in making any required governmental reports and filings. In addition, the parties may acknowledge Grantor's support for, and the nature of, the investigations being pursued under this Agreement. In any such statement, the relationship of the parties shall be accurately and appropriately described.
- 5. ACADEMIC FREEDOM. Emory and Grantor recognize the traditional freedom of

all scientists to publish and present promptly the results of their research. Emory and Grantor also recognize that patent rights can be jeopardized by public disclosure prior to the filing of suitable patent applications. Therefore, Emory will assure that each proposed publication, before submission to a publisher, will be submitted to Grantor for review in connection with preservation of patent rights. Grantor shall have thirty (30) days in which to review the publication, which may be extended for an additional thirty (30) days when Grantor provides substantial and reasonable need for such extension. This period may be further extended by mutual agreement for not more than an additional three (3) months. Grantor will allow for simultaneous submission of the publication to the publisher and Grantor where appropriate.

- 6. TECHNICAL REPRESENTATIVES. Grantor's Technical Representatives shall be
- Joshua D. Schein, Ph.D., or other such representative as Grantor my subsequently designate in writing.
- 7. CONSULTATION WITH GRANTOR'S REPRESENTATIVES. During the period of this

Agreement, Grantor's Technical Representative and other representatives will have reasonable access to visit and consult informally with Dr. Scott regarding the sponsored research both personally and by telephone. Access to work carried on in Emory laboratories in the course of the sponsored research shall be entirely under the control of Emory personnel; Grantor's representatives shall be permitted to visit such laboratories only during usual hours of operation as is mutually agreeable.

#### 8. CONFIDENTIALITY.

- 8.1 During the term of this Agreement, Grantor my provide Emory with information and materials to be used in the performance of sponsored research hereunder; including but not limited to, data, drawings, models, processes, trade secrets and devices which Grantor requires its employees to hole in confidence (hereinafter referred to as "Proprietary Information").
- 8.2 Emory shall use reasonable care to hold in confidence, Grantor Proprietary Information, if such information is provided to Emory in writing and marked as proprietary or confidential. If it is not feasible for Grantor to initially disclose such information in writing, Grantor shall reduce such information to writing and provide Emory with a copy of it, marked as proprietary and confidential, within thirty (30) days of the initial disclosure. Emory shall not disclose any Proprietary Information to any third party, nor use the same for its own benefit, nor permit its use for the benefit of others without the prior written consent of Grantor.
- 8.3 The obligations of confidentiality assumed by Emory hereunder shall not apply to any information: (i) that was known by Emory before disclosure to Emory by Grantor as evidenced by prior written records, (ii) which becomes part of the public domain through no fault of Emory, (iii) which was obtained by Emory from a third party under no obligation to Grantor not to disclose the information, (iv) which is developed by Emory independently of disclosures made hereunder, and (v) which is required to be disclosed by law;
- $8.4\,$  Emory's obligations of confidentiality with respect to Proprietary Information shall continue for a period of three (3) years from the date of this Agreement.

# 9. SPONSORED RESEARCH INVENTIONS.

- 9.1 All right and title to Sponsored Research Inventions shall belong to Emory and shall be subject of the terms and conditions of this Agreement.
- 9.2 Emory shall promptly and fully disclose to Grantor any Sponsored Research Inventions conceived or made during the sponsored research. Within sixty (60) days of such disclosure, Grantor shall notify Emory in writing if it wants Emory to pursue patent protection for such Sponsored Research Inventions. Emory shall promptly prepare, file, and prosecute any U.S. or foreign applications requested by Grantor to protect such Sponsor's Research Inventions. Grantor shall bear all costs incurred in connection with such preparation, filing, prosecution, and maintenance of U.S. foreign application(s). Grantor shall cooperate with Emory to assure that such application(s) will cover, to the best of Grantor's knowledge, all items of commercial interest and importance. Emory shall be primarily responsible for making decisions regarding the scope and content of such patent application(s) and the prosecution thereof. Grantor shall be given an opportunity to review and comment upon such patent application(s). Emory shall keep Grantor advised as to all developments with respect to such application(s) and shall promptly supply Grantor with copies of all papers received and filed in connection with the prosecution thereof in sufficient time for Grantor to comment thereon.
- 9.3 If Grantor elects not to request that Emory prepare and file a patent application covering any Sponsored Research Inventions disclosed to Grantor or if Grantor decides to discontinue the financial support of the prosecution or maintenance of any patent applications on patents covering such disclosed Sponsored Research Inventions, Emory shall be free to file, prosecute or maintain any patents covering such Sponsored Research Inventions and such Sponsored Research Inventions shall not be subject to Section 3 hereof.

10. DATA AND RESULTS OF RESEARCH. Emory shall retain ownership of any data

which results from this study. Emory shall, within the bounds of legal requirements, make such data available for review and copying by Grantor.

#### TERM AND TERMINATION.

-----

- 11.1 This Agreement shall become effective upon the date first hereinabove written and, except for the provisions of Section 3,4,8,9 and 13, shall continue in effect for two calendar years unless sooner terminated in accordance with the provisions of this Section 9.
- 11.2 If either Party commits any breach or defaults upon any of the terms or conditions of this Agreement, and fails to remedy such default or breach within ninety (90) days after receipt of Notice thereof from the other Party, the Party giving Notice may, at its option and in addition to any other remedies which it may have at law or in equity, terminate this Agreement by sending such effect, and such termination shall be effective as of the date of the receipt of such Notice.
- 12. INDEPENDENT CONTRACTOR. In the performance of all services hereunder:
- 12.1 Emory shall be deemed to be and shall be an independent contractor, and as such, Emory shall not be entitled to any benefits applicable to employees of Grantor;
- 12.2 Neither Party is authorized or empowered to act as agent for the other for any purpose and shall not on behalf of the other into any contract, warranty, or representation as to any matter.
- 12.3 Neither Party shall be bound by the acts or conduct of the other party.
- 13. GOVERNING LAW. This Agreement shall be governed and construed in accordance with the laws of the State of Georgia.
- 14. REPORTS. Dr. Scott shall provide Grantor with semi-annual oral reports and a written annual report summarizing the research conducted pursuant to this Grant.
- 15. NOTICES. Any Notice required under this Agreement shall be given by -----certified mail, return receipt requested, to the Parties at the addresses shown below, or to such other addresses as to which the Parties shall, hereinafter, give Notice as provided herein.

Grantor: SIGA Pharmaceuticals, Inc.

-----

c/o CSO Ventures LLC 666 Third Avenue 30th Floor New York, NY 10017

Emory: Susan Eckert

- - - -

Department Administrator 3001 Rollins Research Building 1510 Clifton Road, N.E. Atlanta, GA 30322

with copy to:
-----Vincent La Terza
Director of Licensing and Patent Counsel
2009 Ridgewood Drive
Atlanta, GA 30322

16. AGREEMENT MODIFICATION. Any agreement to change the terms of this

agreement in any way, shall be valid only if the change is made in a written document, signed by authorized representatives of the parties.

17. ASSIGNMENT: This Agreement may not be assigned by either Party without the prior written approval of the other Party.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed as of the day and year first above written.

EMORY UNIVERSITY By: /s/ Joseuif U. Choeks Name: Joseuif U. Choeks Title: V.P. & General Counsel Date: 2/13/96

SIGA PHARMACEUTICALS, INC. By: /s/ Joshua D. Schein Name: Joshua D. Schein Title: Chief Financial Officer

Date: 1/31/96

#### RESEARCH SUPPORT AGREEMENT

This AGREEMENT (this "Agreement") is made as of the 31st day of January, 1996 by and between SIGA PHARMACEUTICALS, INC. ("Sponsor"), a corporation organized and existing under the laws of the State of Delaware, having an office at 666 Third Avenue, 30th Floor, New York, New York, 10017 and the STATE OF OREGON, Acting by and through the STATE BOARD OF HIGHER EDUCATION on behalf of OREGON STATE UNIVERSITY, an institution of higher education in the State of Oregon located at Corvallis, Oregon ("University").

# I. Scope of Work

Sponsor grants to University and University accepts support for basic research investigations under the direction of Dennis Hruby, Ph.D. as described in the attached Statement of Work (Attachment A) and Budget (Attachment B).

## II. Compensation

. . . . . . . . . . . . . . . .

In consideration of University's exerting its good faith efforts to carry out the research described in Attachment A ("Research"), pursuant to the budget described in Attachment B, Sponsor will pay University \*\*\*\*\*/1/ dollars. Sponsor will pay University one-quarter of the amount for the first year upon the execution of this Agreement, and the remaining payments will be made at three-month intervals in advance. Checks should be made payable to "Oregon State University" and should identify the Sponsor and the Principal Investigator and be sent to the address set forth for University in Paragraph 16. University shall not be obligated to expend funds (except with respect to general overhead and administration, which expenses University shall bear), and Sponsor shall not be obligated to reimburse University for funds in excess of those provided under this Agreement to conduct the Research.

### III. Period of Performance

-----

Unless sooner terminated under Paragraph 21, research under this Agreement will be performed during the two-year period beginning on the date of this Agreement. Sponsorship shall continue at the same level as set forth in Paragraph 2 for a third and subsequent years thereafter unless Sponsor gives the University a minimum of six (6) months notice that it does not wish to fund research for such third and subsequent years.

#### IV. Technical Representatives

-----

Sponsor's Technical Representative shall be Joshua D. Schein, Ph.D., or other such representative as Sponsor may subsequently designate in writing. University's Principal Investigator shall be Dennis Hruby, Ph.D., who shall be responsible for the direction and conduct of the Research.

### V. Consultation with Sponsor's Representatives

-----

During the period of this Agreement, Sponsor's Technical Representative and other representatives will have reasonable access to visit and consult informally with University's Principal Investigator regarding the Research both personally and by telephone. Access to work carried on in University laboratories in the course of the Research shall be entirely under the control of University personnel; Sponsor's representatives shall be permitted to visit such laboratories only during usual hours of operation as is mutually agreeable.

<sup>1</sup> Confidential information is omitted and identified by a \*\*\*\*\* and filed separately with the SEC pursuant to a request for Confidential Treatment.

# VI. Technical Reports

-----

The Principal Investigator shall make quarterly oral reports and a detailed, written annual report regarding the Research to Sponsor's Technical Representative. Within sixty (60) days after the expiration of this Agreement, the Principal Investigator shall submit a comprehensive written final report to Sponsor.

# VII. Publicity

Neither party shall use the name of the other in any form of advertising or promotion without the prior written approval of the other; provided, however, that it is expressly agreed that Sponsor may reveal or identify the University or any member of its faculty or staff as the inventor, source or origin of any technology, technical information or any product or process arising from the Research for the purpose of soliciting third parties to invest or enter into other commercial arrangements with Sponsor, or to acquire a sublicense, assignment or other transfer of rights in such technology from Sponsor and provided further that Sponsor may use and disclose the University's name and the name of any member of its faculty or its staff in its internal communications or, upon prior disclosure and consultation with the University, in making any required governmental reports and filings. In addition, the parties may acknowledge Sponsor's support for, and the nature of, the investigations being pursued under this Agreement. In any such statement, the relationship of the parties shall be accurately and appropriately described.

# VIII. Publication

The Parties recognize the traditional freedom of all scientists to publish and present promptly the results of their research. The Parties also recognize that patent rights can be jeopardized by public disclosure prior to the filing of suitable patent applications. Therefore, the University will assure that each proposed publication concerning the Research, whether oral or written, before submission to a publisher (or other entity), will be submitted to Sponsor for review in connection with preservation of patent rights. Sponsor shall have thirty (30) days in which to review the publication, which may be extended for an additional thirty (30) days when Sponsor provides University with a reasonable need for such extension. By mutual agreement, this period may be further extended for not more than an additional three (3) months. Sponsor will allow for simultaneous submission of the publication to the publisher (or other entity) and Sponsor, where appropriate. All employees of the University and persons otherwise acting on behalf of both the University and Sponsor will be expected to treat matters of authorship in a proper collaborative spirit, giving credit where it is due and proceeding in a manner which fosters cooperation and communication.

# $\ensuremath{\mathsf{IX}}.$ Intellectual Property and Patent Rights

All rights in inventions, discoveries, biological material or software created in the course of the Research (collectively, the "Inventions") shall be assigned to and the property of the University. University agrees to license any such Inventions to Sponsor according to the terms set forth in Paragraph 10. University shall promptly report in writing to Sponsor the existence and nature of any Inventions. Sponsor shall select qualified independent patent counsel, subject to the approval of the University, file, prosecute and maintain all patent applications arising from the Research, at the expense of Sponsor, including divisionals, continuations. continuations-in-part, reissues, renewals, foreign counterparts or extensions. Sponsor shall be entitled to determine the countries in which it wishes to obtain and maintain patent protection under this Agreement, if any, and shall be free, at any time and at its sole option and upon notice to the University, to abandon patent prosecution or maintenance in any country. Should Sponsor decide not to finance the preparation, filing, prosecution, or maintenance of any patent application Sponsor will give notice to the University of such decision in writing in adequate time to allow the University, at its own cost, to effectuate such preparation, filing, prosecution, or maintenance if it desires to do so. University agrees to cooperate with Sponsor in its activity in applying for U.S. or foreign patents or in the defense or enforcement of any patent rights, and will cause University's employees to execute and deliver to Sponsor such documents and instruments as Sponsor may request in order to assist Sponsor in the preparation, filing, prosecution or maintenance of any patent application. Nothing herein is intended or shall be construed as obligating Sponsor to finance the preparation, filing, prosecution or maintenance of any patent application in any country or jurisdiction in which it believes it is not in the best business interest of Sponsor to do SO.

### X. Royalties

As consideration for the license of rights to Inventions provided in Paragraph 9, for any Invention which is not related to the "Core Technology," as defined in the License and Research Support Agreement between Sponsor and The Rockefeller University (the "Rockefeller Agreement"), Sponsor agrees to pay the University royalties on the same basis and at the same rates as royalties are paid under Paragraph 3 of the Rockefeller Agreement; provided, however, that the aggregate amount of

royalties paid by Sponsor shall not be greater than the amount of royalties Sponsor is obligated to pay under Paragraph 3 of the Rockefeller Agreement. For any Invention related to the Core Technology, Sponsor shall pay royalties as set forth in Paragraph 3 of the Rockefeller Agreement.

### XI. Confidentiality

-----

Subject only to publication rights set forth in Paragraph 8 and to the limitations and conditions of the Oregon Public Records Law, University represents that University and its employees, faculty and students are obligated to keep all information concerning the Research confidential and agrees that University and its employees, faculty and students will not disclose any information related to the Research to any third party without the express written consent of Sponsor.

# XII. Product Liability

-----

Sponsor agrees to indemnify and hold harmless the University and its trustees, officers, agents, faculty, employees, and students from any and all liability arising from injury or damage to person or property resulting directly or indirectly from any product liability claims relating to products based on the Research unless such claim is due solely to the negligence of University. This obligation may be delegated by the Sponsor to assignees of the Sponsor's rights under this Agreement and may be satisfied by the Sponsor's or its assignees

obtaining and maintaining appropriate and available product liability insurance for a conventional amount of coverage generally deemed appropriate in the biotechnology or pharmaceutical industry, under which insurance the University is named as an additional insured. The University shall promptly give the Sponsor notice of any claim asserted or threatened on the basis of which the party giving such notice intends to seek indemnification from Sponsor as herein provided.

# XIII. Warranties

UNIVERSITY MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE CONDITION, ORIGINALITY OR ACCURACY OF THE RESEARCH OR ANY INVENTION(S) OR PRODUCT(S), WHETHER TANGIBLE OR INTANGIBLE, CONCEIVED, DISCOVERED, OR DEVELOPED UNDER THIS AGREEMENT; OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR ANY SUCH INVENTION OR PRODUCT. UNIVERSITY SHALL NOT BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL, OR OTHER DAMAGES SUFFERED BY SPONSOR, ANY LICENSEE, OR ANY OTHERS RESULTING FROM THE USE OF THE RESEARCH OR ANY SUCH INVENTION OR PRODUCT.

# XIV. Independent Contractor

-----

For the purposes of this Agreement and all services to be provided hereunder, each party shall be, and shall be deemed to be, an independent contractor and not an agent or employee of the other party. Neither party shall have authority to make any statements, representations or commitments or any kind, or to take any action, which shall be binding on the other party, except as may be explicitly provided for herein or authorized by the other party in writing.

### XV. Assignment

-----

Neither party may assign this Agreement without the prior written consent of the other party. Any and all assignments not made in accordance with this section shall be void.

#### XVI. Notices

\_\_\_\_

Any notice required to be given pursuant to this Agreement shall be made by personal delivery or, if by mail, then by registered or certified mail, return receipt requested, with postage and fees prepaid, by one party to the other party at the addresses noted below, or to such other address as such party may designate in writing from time to time to the other party.

In the case of Sponsor, notice should be sent to:
 SIGA Pharmaceuticals, Inc.
 666 Third Avenue, 30th Floor
 New York, NY 10017
 Attention: Joshua D. Schein

In the case of University, notice should be sent to:

Oregon State University Contract Administration 306 Administrative Services Bldg. Corvallis, OR 97331-2147 Attn: 97331-2147

# XVII. No Oral Modification

-----

No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by duly authorized representatives of the parties hereto.

### XVIII. Paragraph Headings

The section headings are provided for convenience and are not to be used in construing this Agreement.

#### XIX. Survivorship

The provisions of Paragraphs 7, 9, 11, 12, 14, 19, 20 and 21 shall survive any expiration or termination of this Agreement.

#### Term and Termination

This Agreement shall expire the date which is two years from the date of this Agreement, unless extended by the mutual agreement of the parties or sooner terminated in accordance with the provisions of this Paragraph. In the event University's Principal Investigator is unavailable or unable to continue direction of the Research for a period of thirty (30) days, Sponsor may immediately terminate this Agreement. Either party may terminate this Agreement in the event of a material breach by the other party, provided only that the breaching party is given notice of the breach and a reasonable time, not to exceed thirty (30) days, in which to cure such breach. Termination or expiration of this Agreement for reasons other than an unremedied failure to meet the material obligations under this Agreement shall not affect the rights and obligations of the parties accrued prior to termination.

#### XXI. Entire Agreement

This instrument contains the entire Agreement between parties hereto. No verbal agreement, conversation or representation between any officers, agents, or employees of the parties hereto either before or after the execution of this Agreement, shall affect or modify any of the terms or obligations herein contained.

#### XXII. Counterparts

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date first set forth above.

SIGA PHARMACEUTICALS, INC.

Bv: Joshua D. Schein \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Its: Chief Financial Officer

STATE OF OREGON, Acting by and through the STATE BOARD OF HIGHER EDUCATION on behalf of OREGON STATE UNIVERSITY

By: /s/

Contract Officer, Oregon State

University

# EXHIBIT A

The funds received from SIGA PHARMACEUTICALS, INC. will be used to support basic research activities in the laboratory of Dennis E. Hruby at Oregon State University. Specifically, Dr. Hruby will conduct experiments designed to continue the development of gram positive commensal bacteria for use as expression vetors. This will involve testing new methods and sites for inserting immunogenicity of foreign proteins, and constructing prototype vaccine formulation for use in animal efficacy studies.

# Exhibit B - Budget

YEAR 1

Personnel	Salary	Benefits	Total	
Christine A. Franke Senior Research Assistant	****/1/	*****/1/	****/1/	
Lab helper (half-time)	****/1/	****/1/	****/1/	
Supplies & Services				
Consumable supplies (media, plates, enzymes, etc.) Contract Services (oligonucleotide synthesis, DNA sequencing, etc.)				****/1/ ****/1/
Travel				
P.J. to/from New York on a quarterly basis				****/1/
		Tota	l direct costs	****/1/
	OSU ind	irect costs	, 96-97 (41.5%)	****/1/
			Total costs	****/1/
YEAR 2				

Same as Year 1 with a 4% increase in direct costs to cover inflation, and an increase in indirect cost rate to 42.5% in accordance with agreement currently in place with DHHS.

-----

Total direct costs \*\*\*\*\*/1/
OSU indirect costs, 97-98 (42.5%) \*\*\*\*\*/1/
Total costs \*\*\*\*\*/1/

TOTAL REQUESTED TWO YEAR BUDGET \*\*\*\*\*/1/

Confidential information is omitted and identified by a \*\*\*\*\* and filed separately with the SEC pursuant to a request for Confidential Treatment.

### **EMPLOYMENT AGREEMENT**

Employment Agreement effective as of January 1, 1996 between SIGA PHARMACEUTICALS, INC., a Delaware corporation (with its successors and assigns, referred to as the "Corporation"), and Dr. Joshua D. Schein (referred to as "Schein").

#### PRELIMINARY STATEMENT

Schein is now employed as the Vice President and Chief Financial Officer of the Corporation.

The Corporation desires to continue to employ Schein, and Schein wishes to continue to be employed by the Corporation, upon the terms and subject to the conditions set forth in this Agreement. The Corporation and Schein also wish to enter into the other agreements set forth in this Agreement, all of which are related to Schein's employment under this Agreement.

### **AGREEMENT**

Schein and the Corporation therefore agree as follows:

- 1. EMPLOYMENT FOR TERM. The Corporation hereby employs Schein and Schein hereby accepts employment with the Corporation for the period (the "Term") beginning on the date of this Agreement and ending on December 31, 1997, or upon the earlier termination of the Term pursuant to Section 6. The Term will automatically be extended for an additional year upon the completion of additional private financing(s) of at least an aggregate of \$500,000 following the completion of the Corporation's initial private financing. The termination of the Term for any reason shall end Schein's employment under this Agreement, but shall not terminate Schein's or the Corporation's other agreements in this Agreement.
- 2. POSITION AND DUTIES. During the Term, Schein shall serve as the Vice President and Chief Financial Officer of the Corporation. During the Term, Schein shall also hold such additional positions and titles as the Board of Directors of the Corporation (the "Board") may determine from time to time. During the Term, Schein shall devote as much time as necessary to satisfactorily perform his duties as an employee of the Corporation.

# COMPENSATION.

- (A) BASE SALARY AND STOCK. The Corporation shall pay Schein a base salary, beginning on the first day of the Term and ending on the last day of the Term, of not less than \$150,000 per annum, payable at least monthly on the Corporation's regular pay cycle for professional employees. Additionally, the Corporation shall pay Schein \$6,000 as a one time payment in consideration for certain work on behalf of the Corporation. The Corporation shall grant to Schein 100,000 options to purchase Common Stock of the Corporation at an exercise price of \$0.25. The Corporation shall thereafter grant 100,000 stock options per annum to Schein exercisable at the then current market price. The Corporation shall pay Schein a monthly car allowance of \$500.
- (B) OTHER AND ADDITIONAL COMPENSATION. Section 3 establishes the minimum compensation during the Term and shall not preclude the Board from awarding Schein a higher salary or any bonuses or stock options in the discretion of the Board during the Term at any time.

- 4. EMPLOYEE BENEFITS. During the Term, Schein shall be entitled to the employee benefits, including vacation, health and other insurance benefits made available by the Corporation to any other officers or key employees of the Corporation.
- 5. EXPENSES. The Corporation shall reimburse Schein for actual outof-pocket expenses incurred by him in the performance of his services for the Corporation upon the receipt of appropriate documentation of such expenses.

### 6. TERMINATION.

- (a) GENERAL. The Term shall end immediately upon Schein's death, and upon a change of ownership of at least fifty percent (50%) of the outstanding Common Stock of the Corporation (on a fully converted basis) by sale, merger, consolidation or other means (a "Change in Ownership"). The Term may also end for Cause or Disability, as defined in Section 7.
- (b) NOTICE OF TERMINATION. Promptly after it ends the Term, the Corporation shall give Schein notice of the termination, including a statement of whether the termination was for Cause or Disability (as defined in Section 7 and 7(b) below). The Corporation's failure to give notice under this Section 6 shall not, however, affect the validity of the Corporation's termination of the Term.
- (c) TERMINATION UPON CHANGE IN OWNERSHIP. Upon a Change in Ownership of the Corporation, the Term shall end and all compensation due Schein under this Agreement will become immediately due and payable.

# 7. SEVERANCE BENEFITS.

- (a) "CAUSE" DEFINED. "Cause" means (i) willful malfeasance or willful misconduct by Schein in connection with his employment; (ii) Schein's gross negligence in performing any of his duties under this Agreement; (iii) Schein's conviction of, or entry of a plea of guilty to, or entry of a plea of nolo contendere with respect to, any crime other than a traffic violation or infraction which is a misdemeanor; (iv) Schein's material breach of any written policy applicable to all employees adopted by the Corporation; or (v) material breach by Schein of any of his agreements in this Agreement.
- (b) DISABILITY DEFINED. "Disability" shall mean Schein's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). During a period of Disability, Schein shall continue to receive his base salary hereunder, provided that if the Corporation provides Schein with disability insurance coverage, payments of Schein's base salary shall be reduced by the amount of any disability insurance payments received by Schein due to such coverage. The Corporation shall give Schein written notice of termination which shall take effect thirty (30) days after the date it is sent to Schein unless Schein shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).

# 8. CONFIDENTIALITY.

- (a) "CORPORATION INFORMATION" DEFINED. "CORPORATION INFORMATION" means all information, knowledge or data of or pertaining to (i) the Corporation, its employees and all work undertaken on behalf of the Corporation, and (ii) any other person, firm, corporation or business organization with which the Corporation may do business during the Term, that is not in the public domain (and whether relating to methods, processes, techniques, discoveries, pricing, marketing or any other matters).
- (b) CONFIDENTIALITY. Schein hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Corporation not in the public domain disclosed by the Corporation in the

course of his employment with the Corporation is attributable substantially to the fact that such confidential information is maintained by the Corporation in strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Schein therefore, except as provided in the next two sentences, covenants and agrees that all Corporation Information shall be kept secret and confidential at all times during and after the end of the Term and shall not be used or divulged by him outside the scope of his employment as contemplated by this Agreement, except as the Corporation may otherwise expressly authorize by action of the Board. In the event that Schein is requested in a judicial, administrative or governmental proceeding to disclose any of the Corporation Information, Schein will promptly so notify the Corporation so that the Corporation may seek a protective order or other appropriate remedy and/or waive compliance with this Agreement. If disclosure of any of the Corporation Information is required, Schein may furnish the material so required to be furnished, but Schein will furnish only that portion of the Corporation Information that legally is required.

# 9. SUCCESSORS AND ASSIGNS.

- (a) SCHEIN. This Agreement is a personal contract, and the rights and interests that the Agreement accords to Schein may not be sold, transferred, assigned, pledged, encumbered, or hypothecated by him. All rights and benefits of Schein shall be for the sole personal benefit of Schein, and no other person shall acquire any right, title or interest under this Agreement by reason of any sale, assignment, transfer, claim or judgment or bankruptcy proceedings against Schein. Except as so provided, this Agreement shall inure to the benefit of and be binding upon Schein and his personal representatives, distributees and legatees.
- (b) THE CORPORATION. Subject to Section 6(c), this Agreement shall be binding upon the Corporation and inure to the benefit of the Corporation and of its successors and assigns.
- 10. SUCCESS FEE. Upon the successful completion of a transaction resulting in a Change in Ownership of the Corporation, the Corporation shall pay to Schein, in consideration of his work on behalf of the Corporation, a one time cash payment equal to one and one-half percent (1.5%) of the total consideration received by the Corporation.
- 11. ENTIRE AGREEMENT. This Agreement represents the entire agreement between the parties concerning Schein's employment with the Corporation and supersedes all prior negotiations, discussions, understandings and agreements, whether written or oral, between Schein and the Corporation relating to the subject matter of this Agreement.
- 12. AMENDMENT OR MODIFICATION, WAIVER. No provision of this Agreement may be amended or waived unless such amendment or waiver is agreed to in writing signed by Schein and by a duly authorized officer of the Corporation. No waiver by any party to this Agreement of any breach by another party of any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of a similar or dissimilar condition or provision at the same time, any prior time or any subsequent time.
- 13. NOTICES. Any notice to be given under this Agreement shall be in writing and delivered personally or sent by overnight courier or registered or certified mail, postage prepaid, return receipt requested, addressed to the party concerned at the address indicated below, or to such other address of which such party subsequently may give notice in writing:

If to Schein:

Dr. Joshua D. Schein 666 Third Avenue 30th Floor New York, NY 10017

If to the Corporation: SIGA PHARMACEUTICALS, INC.

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Dr. Joshua D. Schein

with a copy to: Fitzpatrick Eilenberg & Zivian

666 Third Avenue

New York, NY 10017

Attention: Jeffrey D. Abbey, Esq.

Any notice delivered personally or by overnight courier shall be deemed given on the date delivered and any notice sent by registered or certified mail, postage prepaid, return receipt requested, shall be deemed given on the date mailed.

- 14. SEVERABILITY. If any provision of this Agreement or the application of any such provision to any party or circumstances shall be determined by any court of competent jurisdiction to be invalid and unenforceable to any extent, the remainder of this Agreement or the application of such provision to such person or circumstances other than those to which it is so determined to be invalid and unenforceable shall not be affected, and each provision of this Agreement shall be validated and shall be enforced to the fullest extent permitted by law. If for any reason any provision of this Agreement containing restrictions is held to cover an area or to be for a length of time that is unreasonable or in any other way is construed to be too broad or to any extent invalid, such provision shall not be determined to be entirely null, void and of no effect; instead, it is the intention and desire of both the Corporation and Schein that, to the extent that the provision is or would be valid or enforceable under applicable law, any court of competent jurisdiction shall construe and interpret or reform this Agreement to provide for a restriction having the maximum enforceable area, time period and such other constraints or conditions (although not greater than those contained currently contained in this Agreement) as shall be valid and enforceable under the applicable law.
- 15. SURVIVORSHIP. The respective rights and obligations of the parties hereunder shall survive any termination of this Agreement to the extent necessary to the intended preservation of such rights and obligations.
- 16. HEADINGS. All descriptive headings of sections and paragraphs in this Agreement are intended solely for convenience of reference, and no provision of this Agreement is to be construed by reference to the heading of any section or paragraph.
- 17. WITHHOLDING TAXES. All salary, benefits, reimbursements and any other payments to Schein under this Agreement shall be subject to all applicable payroll and withholding taxes and deductions required by any law, rule or regulation of and federal, state or local authority.
- 18. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together constitute one and same instrument.
- 19. APPLICABLE LAW: JURISDICTION. The laws of the State of New York shall govern the interpretation, validity and performance of the terms of this Agreement, without reference to rules relating to conflicts of law. Any suit, action or proceeding against Schein with respect to this Agreement, or any judgment entered by any court in respect thereof, may be brought in any court of competent jurisdiction in the State of New York, as the Corporation may elect in its sole discretion, and Schein hereby submits to the nonexclusive

jurisdiction of such courts for the purpose of any such suit, action, proceeding or judgment.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

/s/ Joshua D. Schein Dr. Joshua D. Schein

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua A. Cooper

Judson A. Cooper, President

### **EMPLOYMENT AGREEMENT**

Employment Agreement effective as of January 1, 1996 between SIGA PHARMACEUTICALS, INC., a Delaware corporation (with its successors and assigns, referred to as the "Corporation"), and Judson A. Cooper (referred to as "Cooper").

### PRELIMINARY STATEMENT

Cooper is now employed as the President of the Corporation.

The Corporation desires to continue to employ Cooper, and Cooper wishes to continue to be employed by the Corporation, upon the terms and subject to the conditions set forth in this Agreement. The Corporation and Cooper also wish to enter into the other agreements set forth in this Agreement, all of which are related to Cooper's employment under this Agreement.

#### AGREEMENT

Cooper and the Corporation therefore agree as follows:

- 1. EMPLOYMENT FOR TERM. The Corporation hereby employs Cooper and Cooper hereby accepts employment with the Corporation for the period (the "Term") beginning on the date of this Agreement and ending on December 31, 1997, or upon the earlier termination of the Term pursuant to Section 6. The Term will automatically be extended for an additional year upon the completion of additional private financing(s) of at least an aggregate of \$500,000 following the completion of the Corporation's initial private financing. The termination of the Term for any reason shall end Cooper's employment under this Agreement, but shall not terminate Cooper's or the Corporation's other agreements in this Agreement.
- 2. POSITION AND DUTIES. During the Term, Cooper shall serve as the President of the Corporation. During the Term, Cooper shall also hold such additional positions and titles as the Board of Directors of the Corporation (the "Board") may determine from time to time. During the Term, Cooper shall devote as much time as necessary to satisfactorily perform his duties as an employee of the Corporation.

# 3. COMPENSATION.

- (a) BASE SALARY AND STOCK. The Corporation shall pay Cooper a base salary, beginning on the first day of the Term and ending on the last day of the Term, of not less than \$150,000 per annum, payable at least monthly on the Corporation's regular pay cycle for professional employees. Additionally, the Corporation shall pay Cooper \$6,000 as a one time payment in consideration for certain work on behalf of the Corporation. The Corporation shall grant to Cooper 100,000 options to purchase Common Stock of the Corporation at an exercise price of \$0.25. The Corporation shall thereafter grant 100,000 stock options per annum to Cooper exercisable at the then current market price. The Corporation shall pay Cooper a monthly car allowance of \$500.
- (b) OTHER AND ADDITIONAL COMPENSATION. Section 3 establishes the minimum compensation during the Term and shall not preclude the Board from awarding Cooper a higher salary or any bonuses or stock options in the discretion of the Board during the Term at any time.
- 4. EMPLOYEE BENEFITS. During the Term, Cooper shall be entitled to the employee benefits, including vacation, health and other insurance benefits

made available by the Corporation to any other officers or key employees of the Corporation.

5. EXPENSES. The Corporation shall reimburse Cooper for actual outof-pocket expenses incurred by him in the performance of his services for the Corporation upon the receipt of appropriate documentation of such expenses.

# 6. TERMINATION.

- (a) GENERAL. The Term shall end immediately upon Cooper's death, and upon a change of ownership of at least fifty percent (50%) of the outstanding Common Stock of the Corporation (on a fully converted basis) by sale, merger, consolidation or other means (a "Change in Ownership"). The Term may also end for Cause or Disability, as defined in Section 7.
- (b) NOTICE OF TERMINATION. Promptly after it ends the Term, the Corporation shall give Cooper notice of the termination, including a statement of whether the termination was for Cause or Disability (as defined in Section 7 and 7(b) below). The Corporation's failure to give notice under this Section 6 shall not, however, affect the validity of the Corporation's termination of the Term.
- (c) TERMINATION UPON CHANGE IN OWNERSHIP. Upon a Change in Ownership of the Corporation, the Term shall end and all compensation due Cooper under this Agreement will become immediately due and payable.

### 7. SEVERANCE BENEFITS.

- (a) "CAUSE" DEFINED. "Cause" means (i) willful malfeasance or willful misconduct by Cooper in connection with his employment; (ii) Cooper's gross negligence in performing any of his duties under this Agreement; (iii) Cooper's conviction of, or entry of a plea of guilty to, or entry of a plea of nolo contendere with respect to, any crime other than a traffic violation or infraction which is a misdemeanor; (iv) Cooper's material breach of any written policy applicable to all employees adopted by the Corporation; or (v) material breach by Cooper of any of his agreements in this Agreement.
- (b) DISABILITY DEFINED. "Disability" shall mean Cooper's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). During a period of Disability, Cooper shall continue to receive his base salary hereunder, provided that if the Corporation provides Cooper with disability insurance coverage, payments of Cooper's base salary shall be reduced by the amount of any disability insurance payments received by Cooper due to such coverage. The Corporation shall give Cooper written notice of termination which shall take effect thirty (30) days after the date it is sent to Cooper unless Cooper shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).

# 8. CONFIDENTIALITY.

- (a) "CORPORATION INFORMATION" DEFINED. "CORPORATION INFORMATION" means all information, knowledge or data of or pertaining to (i) the Corporation, its employees and all work undertaken on behalf of the Corporation, and (ii) any other person, firm, corporation or business organization with which the Corporation may do business during the Term, that is not in the public domain (and whether relating to methods, processes, techniques, discoveries, pricing, marketing or any other matters).
- (b) CONFIDENTIALITY. Cooper hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Corporation not in the public domain disclosed by the Corporation in the course of his employment with the Corporation is attributable substantially to the fact that such confidential information is maintained by the Corporation

in strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Cooper therefore, except as provided in the next two sentences, covenants and agrees that all Corporation Information shall be kept secret and confidential at all times during and after the end of the Term and shall not be used or divulged by him outside the scope of his employment as contemplated by this Agreement, except as the Corporation may otherwise expressly authorize by action of the Board. In the event that Cooper is requested in a judicial, administrative or governmental proceeding to disclose any of the Corporation Information, Cooper will promptly so notify the Corporation so that the Corporation may seek a protective order or other appropriate remedy and/or waive compliance with this Agreement. If disclosure of any of the Corporation Information is required, Cooper may furnish the material so required to be furnished, but Cooper will furnish only that portion of the Corporation Information that legally is required.

# 9. SUCCESSORS AND ASSIGNS.

- (a) COOPER. This Agreement is a personal contract, and the rights and interests that the Agreement accords to Cooper may not be sold, transferred, assigned, pledged, encumbered, or hypothecated by him. All rights and benefits of Cooper shall be for the sole personal benefit of Cooper, and no other person shall acquire any right, title or interest under this Agreement by reason of any sale, assignment, transfer, claim or judgment or bankruptcy proceedings against Cooper. Except as so provided, this Agreement shall inure to the benefit of and be binding upon Cooper and his personal representatives, distributees and legatees.
- (b) THE CORPORATION. Subject to Section 6(c), this Agreement shall be binding upon the Corporation and inure to the benefit of the Corporation and of its successors and assigns.
- 10. SUCCESS FEE. Upon the successful completion of a transaction resulting in a Change in Ownership of the Corporation, the Corporation shall pay to Cooper, in consideration of his work on behalf of the Corporation, a one time cash payment equal to one and one-half percent (1.5%) of the total consideration received by the Corporation.
- 11. ENTIRE AGREEMENT. This Agreement represents the entire agreement between the parties concerning Cooper's employment with the Corporation and supersedes all prior negotiations, discussions, understandings and agreements, whether written or oral, between Cooper and the Corporation relating to the subject matter of this Agreement.
- 12. AMENDMENT OR MODIFICATION, WAIVER. No provision of this Agreement may be amended or waived unless such amendment or waiver is agreed to in writing signed by Cooper and by a duly authorized officer of the Corporation. No waiver by any party to this Agreement of any breach by another party of any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of a similar or dissimilar condition or provision at the same time, any prior time or any subsequent time.
- 13. NOTICES. Any notice to be given under this Agreement shall be in writing and delivered personally or sent by overnight courier or registered or certified mail, postage prepaid, return receipt requested, addressed to the party concerned at the address indicated below, or to such other address of which such party subsequently may give notice in writing:

If to Cooper:

Judson A. Cooper 666 Third Avenue 30th Floor New York, NY 10017 If to the Corporation: SIGA PHARMACEUTICALS, INC.

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Joshua D. Schein

with a copy to: Fitzpatrick Eilenberg & Zivian

666 Third Avenue

New York, NY 10017

Attention: Jeffrey D. Abbey, Esq.

Any notice delivered personally or by overnight courier shall be deemed given on the date delivered and any notice sent by registered or certified mail, postage prepaid, return receipt requested, shall be deemed given on the date mailed.

- 14. SEVERABILITY. If any provision of this Agreement or the application of any such provision to any party or circumstances shall be determined by any court of competent jurisdiction to be invalid and unenforceable to any extent, the remainder of this Agreement or the application of such provision to such person or circumstances other than those to which it is so determined to be invalid and unenforceable shall not be affected, and each provision of this Agreement shall be validated and shall be enforced to the fullest extent permitted by law. If for any reason any provision of this Agreement containing restrictions is held to cover an area or to be for a length of time that is unreasonable or in any other way is construed to be too broad or to any extent invalid, such provision shall not be determined to be entirely null, void and of no effect; instead, it is the intention and desire of both the Corporation and Cooper that, to the extent that the provision is or would be valid or enforceable under applicable law, any court of competent jurisdiction shall construe and interpret or reform this Agreement to provide for a restriction having the maximum enforceable area, time period and such other constraints or conditions (although not greater than those contained currently contained in this Agreement) as shall be valid and enforceable under the applicable law.
- 15. SURVIVORSHIP. The respective rights and obligations of the parties hereunder shall survive any termination of this Agreement to the extent necessary to the intended preservation of such rights and obligations.
- 16. HEADINGS. All descriptive headings of sections and paragraphs in this Agreement are intended solely for convenience of reference, and no provision of this Agreement is to be construed by reference to the heading of any section or paragraph.
- 17. WITHHOLDING TAXES. All salary, benefits, reimbursements and any other payments to Cooper under this Agreement shall be subject to all applicable payroll and withholding taxes and deductions required by any law, rule or regulation of and federal, state or local authority.
- 18. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together constitute one and same instrument.
- 19. APPLICABLE LAW: JURISDICTION. The laws of the State of New York shall govern the interpretation, validity and performance of the terms of this Agreement, without reference to rules relating to conflicts of law. Any suit, action or proceeding against Cooper with respect to this Agreement, or any judgment entered by any court in respect thereof, may be brought in any court of competent jurisdiction in the State of New York, as the Corporation may elect in its sole discretion, and Cooper hereby submits to the nonexclusive

jurisdiction of such courts for the purpose of any such suit, action, proceeding or judgment.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

/s/ Judson A. Cooper Judson A. Cooper

SIGA PHARMACEUTICALS

By: /s/ Joshua D. Schein

Joshua D. Schein, Vice President

# AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT

This AMENDMENT, dated as of November 18, 1996, is between SIGA PHARMACEUTICALS, INC., a Delaware corporation (with its successors and assigns, referred to as the "Corporation"), and Judson A. Cooper (referred to as "Cooper")

The Employment Agreement between the Corporation and Cooper, dated as of January 1, 1996 (the "Agreement"), is hereby amended as follows:

1. The first sentence of the Preliminary Statement shall be replaced with the following sentence:

"Cooper is now employed as an Executive Vice President of the Corporation."

2. The first sentence of SECTION 2 of the Agreement shall be replaced with the following sentence:

"During the Term, Cooper shall serve as an Executive President of the Corporation."  $\label{eq:condition} % \begin{center} \b$ 

The Agreement shall remain the same in all other respects.

IN WITNESS WHEREOF, the parties hereto have executed this AMENDMENT as of the date first written above.

/s/ Judson A. Cooper -----Judson A. Cooper

SIGA PHARMACEUTICALS

By: /s/ Joshua D. Schein
Joshua D. Schein, Vice President

### EMPLOYMENT AGREEMENT

Employment Agreement effective as of January 1, 1996 between SIGA PHARMACEUTICALS, INC., a Delaware corporation (with its successors and assigns, referred to as the "Corporation"), and Dr. Kevin F. Jones (referred to as "Jones").

### PRELIMINARY STATEMENT

Jones is now employed as the Director of Bacterial Research of the Corporation.

The Corporation desires to continue to employ Jones, and Jones wishes to continue to be employed by the Corporation, upon the terms and subject to the conditions set forth in this Agreement. The Corporation and Jones also wish to enter into the other agreements set forth in this Agreement, all of which are related to Jones's employment under this Agreement.

#### AGREEMENT

Jones and the Corporation therefore agree as follows:

- 1. EMPLOYMENT FOR TERM. The Corporation hereby employs Jones and Jones hereby accepts employment with the Corporation for the period (the "Term") beginning on the date of this Agreement and ending on December 31, 1997, or upon the earlier termination of the Term pursuant to Section 6. The end of the Term for any reason shall end Jones's employment under this Agreement, but shall not terminate Jones's or the Corporation's other agreements in this Agreement.
- 2. POSITION AND DUTIES. During the Term, Jones shall serve as the Director of Bacterial Research of the Corporation. During the Term, Jones shall also hold such additional positions and titles as the Board of Directors of the Corporation (the "Board") may determine from time to time. During the Term, Jones shall devote all of his business time and best efforts to his duties as an employee of the Corporation.

# 3. COMPENSATION.

- (a) BASE SALARY AND STOCK. The Corporation shall pay Jones a base salary, beginning on the first day of the Term and ending on the last day of the Term, of not less than \$90,000 per annum, payable at least monthly on the Corporation's regular pay cycle for professional employees.
- (b) OTHER AND ADDITIONAL COMPENSATION. Section 3 establishes the minimum compensation during the Term and shall not preclude the Board from awarding Jones a higher salary or any bonuses or stock options in the discretion of the Board during the Term at any time.
- 4. EMPLOYEE BENEFITS. During the Term, Jones shall be entitled to the employee benefits, including vacation, health and other insurance benefits made available by the Corporation to any other employee of the Corporation.
- 5. EXPENSES. The Corporation shall reimburse Jones for actual out-of-pocket expenses incurred by him in the performance of his services for the Corporation upon the receipt of appropriate documentation of such expenses.

#### TERMINATION.

- (a) GENERAL. The Term shall end immediately upon Jones's death. The Term may also end for Cause or Disability, as defined in Section 7.
- (b) NOTICE OF TERMINATION. Promptly after it ends the Term, the Corporation shall give Jones notice of the termination, including a statement of whether the termination was for Cause or Disability (as defined in Section 7 and 7(b) below). The Corporation's failure to give notice under this Section 6 shall not, however, affect the validity of the Corporation's termination of the Term.

# 7. SEVERANCE BENEFITS.

- (a) "CAUSE" DEFINED. "Cause" means (i) willful malfeasance or willful misconduct by Jones in connection with his employment; (ii) Jones's gross negligence in performing any of his duties under this Agreement; (iii) Jones's conviction of, or entry of a plea of guilty to, or entry of a plea of nolo contendere with respect to, any crime other than a traffic violation or infraction which is a misdemeanor; (iv) Jones's material breach of any written policy applicable to all employees adopted by the Corporation; or (v) material breach by Jones of any of his agreements in this Agreement.
- (b) DISABILITY DEFINED. "Disability" shall mean Jones's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). During a period of Disability, Jones shall continue to receive his base salary hereunder, provided that if the Corporation provides Jones with disability insurance coverage, payments of Jones's base salary shall be reduced by the amount of any disability insurance payments received by Jones due to such coverage. The Corporation shall give Jones written notice of termination which shall take effect thirty (30) days after the date it is sent to Jones unless Jones shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).
- (c) TERMINATION. If the Corporation ends the Term for Cause or Disability, or if Jones resigns as an employee of the Corporation, or if Jones dies, then the Corporation shall have no obligation to pay Jones any amount, whether for salary, benefits, bonuses, or other compensation or expense reimbursements of any kind, accruing after the end of the Term, and such rights shall, except as otherwise required by law, be forfeited immediately upon the end of the Term.

# 8. CONFIDENTIALITY, OWNERSHIP, AND COVENANTS.

- (a) "CORPORATION INFORMATION" AND "INVENTIONS" DEFINED. "CORPORATION INFORMATION" means all information, knowledge or data of or pertaining to (i) the Corporation, its employees and all work undertaken on behalf of the Corporation, and (ii) any other person, firm, corporation or business organization with which the Corporation may do business during the Term, that is not in the public domain (and whether relating to methods, processes, techniques, discoveries, pricing, marketing or any other matters). "INVENTIONS" collectively refers to any and all inventions, trade secrets, ideas, processes, formulas, source and object codes, data, programs, other works of authorship, know-how, improvements, research, discoveries, developments, designs, and techniques regarding any of the foregoing.
- (b) CONFIDENTIALITY. (i) Jones hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Corporation not in the public domain disclosed by the Corporation in the course of his employment with the Corporation is attributable substantially to the fact that such confidential information is maintained by the Corporation in strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort

or money. Jones therefore, except as provided in the next two sentences, covenants and agrees that all Corporation Information shall be kept secret and confidential at all times during and after the end of the Term and shall not be used or divulged by him outside the scope of his employment as contemplated by this Agreement, except as the Corporation may otherwise expressly authorize by action of the Board. In the event that Jones is requested in a judicial, administrative or governmental proceeding to disclose any of the Corporation Information, Jones will promptly so notify the Corporation so that the Corporation may seek a protective order or other appropriate remedy and/or waive compliance with this Agreement. If disclosure of any of the Corporation Information is required, Jones may furnish the material so required to be furnished, but Jones will furnish only that portion of the Corporation Information that legally is required.

- $\mbox{(ii)}$  Jones also hereby agrees to keep the terms of this Agreement confidential.
- (c) OWNERSHIP. Jones hereby assigns to the Corporation all of Jones's right (including patent rights, copyrights, trade secret rights, and all other rights throughout the world), title and interest in and to Inventions, whether or not patentable or registrable under copyright or similar statutes, made or conceived or reduced to practice or learned by Jones, either alone or jointly with others, during the course of the performance of services for the Corporation. Jones shall also assign to, or as directed by, the Corporation, all of Jones's right, title and interest in and to any and all Inventions, the full title to which is required to be in the United States government by a contract between the Corporation and the United States government or any of its agencies. The Corporation shall have all right, title and interest in all research and work product produced by Jones as an employee of the Corporation, including, but not limited to, all research materials and lab books. The provisions of Sections 8(a), 8(b) and this Section 8(c) are not intended to supersede or limit the effect of any prior confidentiality or proprietary rights agreements previously executed by Jones.
- (d) NON-COMPETITION PERIOD DEFINED. "Non-Competition Period" means the period beginning at the end of the Term and ending one (1) year after the end of the Term.
- (e) COVENANTS REGARDING THE TERM AND NON-COMPETITION PERIOD. Jones acknowledges and agrees that his services pursuant to this Agreement are unique and extraordinary; that the Corporation will be dependent upon Jones for the research and development of antibiotics, vaccines and anti-infectives; and that he will have access to and control of confidential information of the Corporation. Jones further acknowledges that the business of the Corporation is national in scope and cannot be confined to any particular geographic area of the United States. For the foregoing reasons and to induce the Corporation to enter this Agreement, Jones covenants and agrees that during the Term and the Non-Competition Period Jones shall not unless with written consent of the Corporation:
  - (i) engage in the business of research and development of the Core Technology, as defined in the License and Research Support Agreement between the Corporation and The Rockefeller University, or any other products or processes in which the Corporation is engaged in during the Term or in any other business conducted by the Corporation during the Term (collectively the "Prohibited Activity") in the United States or elsewhere for his own account;
  - (ii) become interested in any individual, corporation, partnership or other business entity (a "Person") engaged in any Prohibited Activity in the United States, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, employee, trustee, consultant or in any other relationship or capacity; provided, however, that Jones may own directly or indirectly, solely as an investment,

securities of any Person which are traded on any national securities exchange if Jones (x) is not a controlling person of, or a member of a group which controls, such person or (y) does not, directly or indirectly, own 5% or more of any class of securities of such person;

- (iii) directly or indirectly hire, engage or retain any person which at any time during the Term or Non-Competition Period was a supplier, client or customer of the Corporation, or directly or indirectly solicit, entice or induce any such person to become, a supplier, client or customer of any other person engaged in any Prohibited Activity; or
- (iv) directly or indirectly hire, employ or retain any person who at any time was an employee of the Corporation or directly or indirectly solicit, entice, induce or encourage any such person to become employed by any other person.
- (f) REMEDIES. Jones hereby acknowledges that the covenants and agreements contained in Section 8 are reasonable and valid in all respects and that the Corporation is entering into this Agreement, inter alia, on such

acknowledgment. If Jones breaches, or threatens to commit a breach, of any of the Restrictive Covenants, the Corporation shall have the following rights and remedies, each of which rights and remedies shall be independent of the other and severally enforceable, and all of which rights and remedies shall be in addition to, and not in lieu of, any other rights and remedies available to the Corporation under law or in equity: (i) the right and remedy to have the Restrictive Covenants specifically enforced by any court having equity jurisdiction, it being acknowledged and agreed that any such breach or threatened breach will cause irreparable injury to the Corporation and that money damages will not provide an adequate remedy to the Corporation; (ii) the right and remedy to require Jones to account for and pay over to the Corporation all compensation, profits, monies, accruals, increments or other benefits (collectively, "Benefits") derived or received by Jones as the result of any transactions constituting a breach of any of the Restrictive Covenants, and Jones shall account for and pay over such Benefits to the Corporation; (iii) if any court determines that any of the Restrictive Covenants, or any part thereof, is invalid or unenforceable, the remainder of the Restrictive Covenants shall not thereby be affected and shall be given full effect, without regard to the invalid portions; and (iv) if any court construes any of the Restrictive Covenants, or any part thereof, to be unenforceable because of the duration of such provision or the area covered thereby, such court shall have the power to reduce the duration or area of such provision and, in its reduced form, such provision shall then be enforceable and shall be enforced.

(g) JURISDICTION. The parties intend to and hereby confer jurisdiction to enforce the Restrictive Covenants upon the courts of any jurisdiction within the geographical scope of such Covenants. If the courts of any one or more such jurisdictions hold the Restrictive Covenants wholly unenforceable by reason of the breadth of such scope or otherwise, it is the intention of the parties that such determination not bar or in any way affect the Corporation's right to the relief provided above in the courts of any other jurisdiction, within the geographical scope of such Covenants, as to breaches of such Covenants in such other respective jurisdictions such Covenants as they relate to each jurisdiction being, for this purpose, severable into diverse and independent covenants.

# 9. SUCCESSORS AND ASSIGNS.

(a) JONES. This Agreement is a personal contract, and the rights and interests that the Agreement accords to Jones may not be sold, transferred, assigned, pledged, encumbered, or hypothecated by him. All rights and benefits of Jones shall be for the sole personal benefit of Jones, and no other person shall acquire any right, title or interest under this Agreement by reason of any sale, assignment, transfer, claim or judgment or

bankruptcy proceedings against Jones. Except as so provided, this Agreement shall inure to the benefit of and be binding upon Jones and his personal representatives, distributees and legatees.

- (b) THE CORPORATION. This Agreement shall be binding upon the Corporation and inure to the benefit of the Corporation and of its successors and assigns, including (but not limited to) any corporation that may acquire all or substantially all of the Corporation's assets or business or into or with which the Corporation may be consolidated or merged. This Agreement shall continue in full force and effect in the event that the Corporation sells all or substantially all of its assets, merges or consolidates, otherwise combines or affiliates with another business, dissolves and liquidates, or otherwise sells or disposes of substantially all of its assets. The Corporation's obligations under this Agreement shall cease, however, if the successor to, the purchaser or acquiror either of the Corporation or of all or substantially all of its assets, or the entity with which the Corporation has affiliated, shall assume in writing the Corporation's obligations under this Agreement (and deliver an executed copy of such assumption to Jones), in which case such successor or purchaser, but not the Corporation, shall thereafter be the only party obligated to perform the obligations that remain to be performed on the part of the Corporation under this Agreement.
- 10. ENTIRE AGREEMENT. This Agreement represents the entire agreement between the parties concerning Jones's employment with the Corporation and supersedes all prior negotiations, discussions, understandings and agreements, whether written or oral, between Jones and the Corporation relating to the subject matter of this Agreement.
- 11. AMENDMENT OR MODIFICATION, WAIVER. No provision of this Agreement may be amended or waived unless such amendment or waiver is agreed to in writing signed by Jones and by a duly authorized officer of the Corporation. No waiver by any party to this Agreement of any breach by another party of any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of a similar or dissimilar condition or provision at the same time, any prior time or any subsequent time.
- 12. NOTICES. Any notice to be given under this Agreement shall be in writing and delivered personally or sent by overnight courier or registered or certified mail, postage prepaid, return receipt requested, addressed to the party concerned at the address indicated below, or to such other address of which such party subsequently may give notice in writing:

If to Jones: Dr. Kevin F. Jones

610 West 110th Street

Apt. 12C

New York, NY 10025

If to the Corporation: SIGA PHARMACEUTICALS, INC.

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Dr. Joshua D. Schein

with a copy to: Fitzpatrick Eilenberg & Zivian

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Jeffrey D, Abbey, Esq.

Any notice delivered personally or by overnight courier shall be deemed given on the date delivered and any notice sent by registered or certified mail,  $\[$ 

postage prepaid, return receipt requested, shall be deemed given on the date mailed.

- 13. SEVERABILITY. If any provision of this Agreement or the application of any such provision to any party or circumstances shall be determined by any court of competent jurisdiction to be invalid and unenforceable to any extent, the remainder of this Agreement or the application of such provision to such person or circumstances other than those to which it is so determined to be invalid and unenforceable shall not be affected, and each provision of this Agreement shall be validated and shall be enforced to the fullest extent permitted by law. If for any reason any provision of this Agreement containing restrictions is held to cover an area or to be for a length of time that is unreasonable or in any other way is construed to be too broad or to any extent invalid, such provision shall not be determined to be entirely null, void and of no effect; instead, it is the intention and desire of both the Corporation and Jones that, to the extent that the provision is or would be valid or enforceable under applicable law, any court of competent jurisdiction shall construe and interpret or reform this Agreement to provide for a restriction having the maximum enforceable area, time period and such other constraints or conditions (although not greater than those contained currently contained in this Agreement) as shall be valid and enforceable under the applicable law.
- 14. SURVIVORSHIP. The respective rights and obligations of the parties hereunder shall survive any termination of this Agreement to the extent necessary to the intended preservation of such rights and obligations.
- 15. HEADINGS. All descriptive headings of sections and paragraphs in this Agreement are intended solely for convenience of reference, and no provision of this Agreement is to be construed by reference to the heading of any section or paragraph.
- 16. WITHHOLDING TAXES. All salary, benefits, reimbursements and any other payments to Jones under this Agreement shall be subject to all applicable payroll and withholding taxes and deductions required by any law, rule or regulation of and federal, state or local authority.
- 17. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together constitute one and same instrument.
- 18. APPLICABLE LAW: JURISDICTION. The laws of the State of New York shall govern the interpretation, validity and performance of the terms of this Agreement, without reference to rules relating to conflicts of law. Any suit, action or proceeding against Jones with respect to this Agreement, or any judgment entered by any court in respect thereof, may be brought in any court of competent jurisdiction in the State of New York, as the Corporation may elect in its sole discretion, and Jones hereby submits to the nonexclusive jurisdiction of such courts for the purpose of any such suit, action, proceeding or judgment.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.  $\,$ 

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua Schein
Joshua Schein, Chief Financial Officer

/s/ Kevin F. Jones
\_\_\_\_\_
Dr. Kevin F. Jones

### **EMPLOYMENT AGREEMENT**

Employment Agreement effective as of November 18, 1996 between SIGA PHARMACEUTICALS, INC., a Delaware corporation (with its successors and assigns, referred to as the "Corporation"), and David de Weese ("Employee").

### PRELIMINARY STATEMENT

The Corporation desires to employ Employee, and Employee wishes to continue to be employed by the Corporation, upon the terms and subject to the conditions set forth in this Agreement. The Corporation and Employee also wish to enter into the other agreements set forth in this Agreement, all of which are related to Employee's employment under this Agreement.

# **AGREEMENT**

Employee and the Corporation therefore agree as follows:

- 1. EMPLOYMENT FOR TERM. The Corporation hereby employs Employee and Employee hereby accepts employment with the Corporation for the three-year period beginning on the date of this Agreement (the "Term"), or upon the earlier termination of the Term pursuant to Section 6. The termination of the Term for any reason shall end Employee's employment under this Agreement, but shall not terminate Employee's or the Corporation's other agreements in this Agreement.
- 2. POSITION AND DUTIES. During the Term, Employee shall serve as President, Chairman and Chief Executive Officer of the Corporation and shall be responsible for developing and presenting the Corporation's strategies and potential products or technologies, negotiating licensing and sublicensing agreements, and directing product research and overall corporate direction. During the Term, Employee shall also perform such other duties as the Board of Directors of the Corporation (the "Board") may reasonably determine from time to time. During the Term, Employee shall devote as much time as necessary to satisfactorily perform his duties as an employee of the Corporation.

# COMPENSATION.

- (a) BASE SALARY AND STOCK OPTIONS. The Corporation shall pay Employee a base salary of \$225,000 per annum, as increased pursuant to Sections 3(b) and 3(c) ("Base Salary"), payable at least monthly on the Corporation's regular pay cycle for professional employees. The Corporation shall also pay Employee a monthly car allowance of \$500. In addition, the Corporation shall grant to Employee 100,000 currently exerciseable options to purchase Common Stock of the Corporation at an exercise price of \$0.50 per share. The Corporation shall thereafter grant 100,000 stock options per annum to Employee exercisable when granted at the then current market price. The options may be exercised at any time up to 10 years after their issuance.
- (b) ANNUAL INCREASES. The Base Salary shall be increased at the end of each year of service by the greater of (i) 5% or (ii) a percentage equal to the increase, if any, in the United States Department of Labor Consumer Price Index (or comparable index, if unavailable) for the New York metropolitan area over the previous 12 months.
- (c) OTHER AND ADDITIONAL COMPENSATION. Sections 3 and 3(b) establishe the minimum compensation during the Term and shall not preclude the

Board from awarding Employee a higher salary or any bonuses or additional stock options in the discretion of the Board during the Term at any time.

- (d) WARRANTS. Upon the execution of this Agreement, Corporation shall issue to Employee ten-year warrants to purchase 2,766,095 shares of the Corporation's Common Stock at an exercise price of \$.50 per share. Warrants to purchase 25% of such shares shall be immediately exerciseable and the remaining warrants shall become exerciseable on a pro rata basis on the first, second and third anniversaries of this Agreement.
- 4. EMPLOYEE BENEFITS. During the Term, Employee shall be entitled to the employee benefits, including vacation, health and other insurance benefits made available by the Corporation to any other officers or key employees of the Corporation.
- 5. EXPENSES. The Corporation shall reimburse Employee for actual out-of-pocket expenses incurred by him in the performance of his services for the Corporation upon the receipt of appropriate documentation of such expenses.

# 6. TERMINATION.

- (a) GENERAL. The Term shall end immediately upon Employee's death, and upon a change of ownership of at least fifty percent (50%) of the outstanding Common Stock of the Corporation (on a fully converted basis) by sale, merger, consolidation or other means (a "Change in Ownership"). The Term may also end for Cause or Disability, as defined in Section 7.
- (b) NOTICE OF TERMINATION. Promptly after it ends the Term, the Corporation shall give Employee notice of the termination, including a statement of whether the termination was for Cause or Disability (as defined in Section 7 and 7(b) below). The Corporation's failure to give notice under this Section 6 shall not, however, affect the validity of the Corporation's termination of the Term.
- (c) TERMINATION UPON CHANGE IN OWNERSHIP. Upon a Change in Ownership of the Corporation, the Term shall end and all compensation due Employee under this Agreement will become immediately due and payable and all stock, warrants and options of Employee in the Corporation shall immediately become vested.
- (d) In the event this Agreement is terminated by the Corporation without Cause, all compensation due Employee under this Agreement will become immediately due and payable and all stock, warrants and options of Employee in the Corporation shall immediately become vested.

# 7. SEVERANCE BENEFITS.

- (a) "CAUSE" DEFINED. "Cause" means (i) willful malfeasance or willful misconduct by Employee in connection with his employment; (ii) Employee's gross negligence in performing any of his duties under this Agreement; (iii) Employee's conviction of, or entry of a plea of guilty to, or entry of a plea of nolo contendere with respect to, any crime other than a traffic violation or infraction which is a misdemeanor; (iv) Employee's material breach of any written policy applicable to all employees adopted by the Corporation; or (v) material breach by Employee of any of his agreements in this Agreement.
- (b) DISABILITY DEFINED. "Disability" shall mean Employee's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). During a period of Disability, Employee shall continue to receive his base salary hereunder, provided that if the Corporation provides Employee with disability insurance coverage, payments of Employee's base salary shall be reduced by the amount of any disability insurance payments received by Employee due to such coverage. The Corporation

shall give Employee written notice of termination which shall take effect thirty (30) days after the date it is sent to Employee unless Employee shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).

### 8. CONFIDENTIALITY.

- (a) "CORPORATION INFORMATION" DEFINED. "CORPORATION INFORMATION" means all information, knowledge or data of or pertaining to (i) the Corporation, its employees and all work undertaken on behalf of the Corporation, and (ii) any other person, firm, corporation or business organization with which the Corporation may do business during the Term, that is not in the public domain (and whether relating to methods, processes, techniques, discoveries, pricing, marketing or any other matters).
- (b) CONFIDENTIALITY. Employee hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Corporation not in the public domain disclosed by the Corporation in the course of his employment with the Corporation is attributable substantially to the fact that such confidential information is maintained by the Corporation in strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Employee therefore, except as provided in the next two sentences, covenants and agrees that all Corporation Information shall be kept secret and confidential at all times during and after the end of the Term and shall not be used or divulged by him outside the scope of his employment as contemplated by this Agreement, except as the Corporation may otherwise expressly authorize by action of the Board. In the event that Employee is requested in a judicial, administrative or governmental proceeding to disclose any of the Corporation Information, Employee will promptly so notify the Corporation so that the Corporation may seek a protective order or other appropriate remedy and/or waive compliance with this Agreement. If disclosure of any of the Corporation Information is required, Employee may furnish the material so required to be furnished, but Employee will furnish only that portion of the Corporation Information that legally is required.

# 9. COVENANT.

- (a) NON-COMPETITION PERIOD DEFINED. "Non-Competition Period" means the period beginning at the end of the Term and ending one year following the date of termination of Employee's employment.
- (b) COVENANTS REGARDING THE TERM AND NON-COMPETITION PERIOD. Employee acknowledges and agrees that his services pursuant to this Agreement are unique and extraordinary; that the Corporation will be dependent upon Employee for developing and presenting the Corporation's strategies and potential products or technologies and directing product research and overall corporate direction; and that he will have access to and control of confidential information of the Corporation. Employee further acknowledges that the business of the Corporation is national in scope and cannot be confined to any particular geographic area of the United States. For the foregoing reasons and to induce the Corporation to enter this Agreement, Employee covenants and agrees that during the Term and the Non-Competition Period Employee shall not unless with written consent of the Corporation:
  - (i) engage in any business in which the Corporation had been engaged in during the Term ("Prohibited Activity") in the United States or elsewhere for his own account;
  - (ii) directly or indirectly, enter the employ of, or render any services, including but not limited to consultations, to any individual, corporation, partnership or other business entity (a "Person") engaged in any Prohibited Activity in the United States or elsewhere; or

- (iii) become interested in any Person engaged in any Prohibited Activity in the United States, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, employee, trustee, consultant or in any other relationship or capacity; provided, however, that Employee may own directly or indirectly, solely as an investment, securities of any Person which are traded on any national securities exchange if Employee (x) is not a controlling person of, or a member of a group which controls, such person or (y) does not, directly or indirectly, own 5% or more of any class of securities of such person;
- (iv) directly or indirectly hire, engage or retain any person which at any time during the Term or Non-Competition Period was a supplier, client or customer of the Corporation, or directly or indirectly solicit, entice or induce any such person to become, a supplier, client or customer of any other person engaged in any Prohibited Activity; or
- (v) directly or indirectly hire, employ or retain any person who at any time was an employee of the Corporation or directly or indirectly solicit, entice, induce or encourage any such person to become employed by any other person.
- (c) EXCEPTION. Sections 9(a) and (b) above shall not apply to (i) any consulting arrangement which Employee may have or (ii) any stock, other securities, Board of directors seat, or other interest which Employee may hold as of November 17, 1996.
- (d) REMEDIES. Employee hereby acknowledges that the covenants and agreements contained in Section 8 are reasonable and valid in all respects and that the Corporation is entering into this Agreement, inter alia, on such
- acknowledgment. If Employee breaches, or threatens to commit a breach, of this Section 9, the Corporation shall have the following rights and remedies, each of which rights and remedies shall be independent of the other and severally enforceable, and all of which rights and remedies shall be in addition to, and not in lieu of, any other rights and remedies available to the Corporation under law or in equity: (i) the right and remedy to have this Section 9 specifically enforced by any court having equity jurisdiction, it being acknowledged and agreed that any such breach or threatened breach will cause irreparable injury to the Corporation and that money damages will not provide an adequate remedy to the Corporation; (ii) the right and remedy to require Employee to account for and pay over to the Corporation all compensation, profits, monies, accruals, increments or other benefits (collectively, "Benefits") derived or received by Employee as the result of any transactions constituting a breach of this Section 9, and Employee shall account for and pay over such Benefits to the Corporation; (iii) if any court determines that any of the Restrictive Covenants, or any part thereof, is invalid or unenforceable, the remainder of this Section 9 shall not thereby be affected and shall be given full effect, without regard to the invalid portions; and (iv) if any court construes any of this Section 9, or any part thereof, to be unenforceable because of the duration of such provision or the area covered thereby, such court shall have the power to reduce the duration or area of such provision and, in its reduced form, such provision shall then be enforceable and shall be enforced.
- (e) JURISDICTION. The parties intend to and hereby confer jurisdiction to enforce this Section 9 upon the courts of any jurisdiction within the geographical scope of such Covenants. If the courts of any one or more such jurisdictions hold this Section 9 wholly unenforceable by reason of the breadth of such scope or otherwise, it is the intention of the parties that such determination not bar or in any way affect the Corporation's right to the relief provided above in the courts of any other jurisdiction, within the geographical scope of such Covenants, as to breaches of such Covenants in such other respective jurisdictions such Covenants as they relate to each jurisdiction being, for this purpose, severable into diverse and independent covenants.

# 10. SUCCESSORS AND ASSIGNS.

- (a) EMPLOYEE. This Agreement is a personal contract, and the rights and interests that the Agreement accords to Employee may not be sold, transferred, assigned, pledged, encumbered, or hypothecated by him. All rights and benefits of Employee shall be for the sole personal benefit of Employee, and no other person shall acquire any right, title or interest under this Agreement by reason of any sale, assignment, transfer, claim or judgment or bankruptcy proceedings against Employee. Except as so provided, this Agreement shall inure to the benefit of and be binding upon Employee and his personal representatives, distributees and legatees.
- (b) THE CORPORATION. Subject to Section 6(c), this Agreement shall be binding upon the Corporation and inure to the benefit of the Corporation and of its successors and assigns.
- 10. SUCCESS FEE. Upon the successful completion of a transaction resulting in a Change in Ownership of the Corporation, the Corporation shall pay to Employee, in consideration of his work on behalf of the Corporation, a one time cash payment equal to one and one-half percent (1.5%) of the total consideration received by the Corporation.
- 11. ENTIRE AGREEMENT. This Agreement represents the entire agreement between the parties concerning Employee's employment with the Corporation and supersedes all prior negotiations, discussions, understandings and agreements, whether written or oral, between Employee and the Corporation relating to the subject matter of this Agreement.
- 12. AMENDMENT OR MODIFICATION, WAIVER. No provision of this Agreement may be amended or waived unless such amendment or waiver is agreed to in writing signed by Employee and by a duly authorized officer of the Corporation. No waiver by any party to this Agreement of any breach by another party of any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of a similar or dissimilar condition or provision at the same time, any prior time or any subsequent time.
- 13. NOTICES. Any notice to be given under this Agreement shall be in writing and delivered personally or sent by overnight courier or registered or certified mail, postage prepaid, return receipt requested, addressed to the party concerned at the address indicated below, or to such other address of which such party subsequently may give notice in writing:

If to Employee: David de Weese

666 Third Avenue

30th Floor

New York, NY 10017

If to the Corporation: SIGA PHARMACEUTICALS, INC.

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Dr. Joshua D. Schein

with a copy to: Fitzpatrick Eilenberg & Zivian

666 Third Avenue

30th Floor

New York, NY 10017

Attention: Jeffrey D. Abbey, Esq.

Any notice delivered personally or by overnight courier shall be deemed given on the date delivered and any notice sent by registered or certified mail,

postage prepaid, return receipt requested, shall be deemed given on the date mailed.

- 14. SEVERABILITY. If any provision of this Agreement or the application of any such provision to any party or circumstances shall be determined by any court of competent jurisdiction to be invalid and unenforceable to any extent, the remainder of this Agreement or the application of such provision to such person or circumstances other than those to which it is so determined to be invalid and unenforceable shall not be affected, and each provision of this Agreement shall be validated and shall be enforced to the fullest extent permitted by law. If for any reason any provision of this Agreement containing restrictions is held to cover an area or to be for a length of time that is unreasonable or in any other way is construed to be too broad or to any extent invalid, such provision shall not be determined to be entirely null, void and of no effect; instead, it is the intention and desire of both the Corporation and Employee that, to the extent that the provision is or would be valid or enforceable under applicable law, any court of competent jurisdiction shall construe and interpret or reform this Agreement to provide for a restriction having the maximum enforceable area, time period and such other constraints or conditions (although not greater than those contained currently contained in this Agreement) as shall be valid and enforceable under the applicable law.
- 15. SURVIVORSHIP. The respective rights and obligations of the parties hereunder shall survive any termination of this Agreement to the extent necessary to the intended preservation of such rights and obligations.
- 16. HEADINGS. All descriptive headings of sections and paragraphs in this Agreement are intended solely for convenience of reference, and no provision of this Agreement is to be construed by reference to the heading of any section or paragraph.
- 17. WITHHOLDING TAXES. All salary, benefits, reimbursements and any other payments to Employee under this Agreement shall be subject to all applicable payroll and withholding taxes and deductions required by any law, rule or regulation of and federal, state or local authority.
- 18. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together constitute one and same instrument.
- 19. APPLICABLE LAW: JURISDICTION. The laws of the State of New York shall govern the interpretation, validity and performance of the terms of this Agreement, without reference to rules relating to conflicts of law. Any suit, action or proceeding against Employee with respect to this Agreement, or any judgment entered by any court in respect thereof, may be brought in any court of competent jurisdiction in the State of New York, as the Corporation may elect in its sole discretion, and Employee hereby submits to the nonexclusive jurisdiction of such courts for the purpose of any such suit, action, proceeding or judgment.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.  $\,$ 

/s/ David de Weese -----David de Weese

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua D. Schein

Joshua D. Schein

### CONSULTING AGREEMENT

CONSULTING AGREEMENT ("Agreement"), dated as of January 1, 1996, between SIGA Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and CSO Ventures LLC (the "Consultant").

WHEREAS, the Company desires to retain Consultant, and Consultant desires to be retained pursuant to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants herein contained, it is agreed as follows:

- 1. DUTIES. The Company hereby retains the Consultant to provide business development, operations and other advisory services, and the Consultant hereby accepts such retention and shall perform for the Company the duties described herein, faithfully and to the best of its ability.
- 2. TERM. The Consultant's retention hereunder shall commence upon the initial funding of the company and shall terminate on January 15, 1998, unless within 90 days of that date, the parties elect by signed agreement to renew or extend the term.

### 3. COMPENSATION AND EXPENSES.

- (a) In consideration for Consultant's performing the Consulting Services for the Company, the Company shall pay to Consultant a consulting fee of \$120,000 per year, payable monthly.
- (b) In addition to its consulting fees, Consultant may also be paid annual bonuses, and other compensation, including stock options, as may be determined by the Board of Directors of the Company.
- (c) The Company will reimburse Consultant for actual out-of-pocket expenses incurred in connection with the performance of the Consulting Services, provided that Consultant submits receipts or other expense records to the Company in accordance with the Company's general reimbursement policy then in effect.
- 4. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and inures to the benefit of the Company and its affiliates, successors and assigns and is binding upon and inures to the benefit of Consultant and its successors and assigns; provided that in no event shall Consultant's obligations to perform the Consulting Services be delegated or transferred by Consultant without the prior written consent of the Company.

# TERMINATION.

- (a) This Agreement may only be terminated by the Company for Cause.
- (b) The Company shall have "Cause" to terminate this Agreement upon any material breach by Consultant of any provision of this Agreement.
- (c) In the event of a termination of this Agreement for Cause, Consultant shall receive consulting fees only to the Date of Termination. If the Company shall terminate Consultant other than for Cause, the Company shall be obligated to pay Consultant the full amount of compensation due Consultant hereunder through the completion of the term.

#### CONFIDENTIALITY.

Consultant hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Company not in the public domain ("Confidential Information") disclosed by the Company in the course of performing Consulting Services with the Company is attributable substantially to the fact that such Confidential Information is maintained by the Company in the strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Consultant, therefore, covenants and agrees to keep strictly secret and confidential the Confidential Information of the Company in accordance with the following provisions of this Section 6. Consultant covenants and agrees to safeguard the Confidential Information of the Company disclosed to or otherwise acquired by Consultant in the course of performing Consulting Services and to prevent the disclosure or other dissemination thereof to any third party, or the use thereof by any competitor. In implementation of the foregoing, Consultant shall not disclose any of the Confidential Information of the Company to any employee or consultant except those for whom disclosure is necessary for the effective performance of their responsibilities as employees or consultants and, in each case, only to the extent required for such effective performance of responsibilities by employees or consultants to whom such disclosure is made pursuant to this Section 6. The obligations undertaken by Consultant pursuant to this Section 6 shall not apply to any Confidential Information which hereafter shall become published or otherwise generally available to the public, except in consequence of a willful or negligent act or admission by Consultant, or its employees or consultants, in contravention of the obligations hereinabove set forth in this Section 6, and such obligations shall, as so limited, survive expiration or termination of this Agreement.

- 7. REPRESENTATIONS AND WARRANTIES. Consultant represents and warrants that it is not under any obligation, contractual or otherwise to any person or entity which would prevent it from entering into this Agreement or prevent, impede or hinder it from fully faithfully performing any of its duties and services hereunder.
- 8. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.
- 9. SEVERABILITY. If in any jurisdiction, any provision of this Agreement or its application to any party or circumstance is restricted, prohibited or unenforceable, such provision shall, as to such jurisdiction, be ineffective only to the extent of such restriction, prohibition or unenforceability, without invalidating the remaining provisions hereof and without affecting the validity or enforceability of such provision in any other jurisdiction or its application to other parties or circumstances. In addition, if any one or more of the provisions contained in this Agreement shall for any reason in any jurisdiction be held to be excessively broad as to time, duration, geographical scope, activity or subject, it shall be construed, by limiting and reduction it, so as to be enforceable to the extent compatible with the applicable law of such jurisdiction as it shall then appear.

IN WITNESS WHEREOF, this Consulting Agreement has been executed by the Company and Consultant as of the date first written above.

SIGA PHARMACEUTICALS, INC.

By: /s/ Judson A. Cooper
-----Authorized Officer

CSO VENTURES LLC

By: /s/ Joshua D. Schein
-----Authorized Officer

### CONSULTING AGREEMENT

CONSULTING AGREEMENT ("Agreement"), dated as of January 1, 1996, between SIGA Pharmaceuticals, Inc., a Delaware corporation having offices at 666 Third Avenue, 30th Floor, New York, NY 10017 and Dr. Vincent A. Fischetti, c/o The Rockefeller University, 1230 York Avenue, New York, NY 10021 ("Consultant").

WHEREAS, the Company has entered into a License and Research Support Agreement, dated as of the date hereof ("the "License Agreement") with Consultant's current employer The Rockefeller University ("Rockefeller") covering certain technology relating to vaccines and the development of antibiotics.

WHEREAS, in connection with the License Agreement and the Company's support of scientific research to be engaged in by Rockefeller thereunder, the Company desires to retain Consultant, and Consultant desires to be retained, as a part-time Chief Scientific Advisor, all pursuant to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants herein contained, it is agreed as follows:

- 1. DUTIES. The Company hereby retains the Consultant as its parttime Chief Scientific Advisor, to assist in the administration of the License Agreement and in the performance of scientific research thereunder in research laboratories at Rockefeller (the "Consulting Services"), and the Consultant hereby accepts such retention and shall perform for the Company the duties described herein, faithfully and to the best of his ability. In this regard, Consultant shall devote an average of 19% of his business time and attention to matters on which the Company shall request his services, subject to the direction of senior management of the Company.
- 2. TERM. The Consultant's retention hereunder shall be for a term of two (2) years (the "Initial Term") commencing as of the date hereof, and shall be automatically renewed for up to three additional one (1) year periods (each period a "Renewal Term"; together with the Initial Term, the "Consultancy Period") unless either party notifies the other in writing of its intention not to so renew this Agreement no less than 90 days prior to the expiration of the Initial Term or any Renewal Term.
- 3. PLACE OF PERFORMANCE. In connection with rendering Consulting Services to the Company, Consultant shall be based in New York, NY, where the Company currently has its executive offices and where Rockefeller's research laboratories currently are located. Consultant acknowleges that the Company may require that from time to time Consultant travel on behalf of the Company in connection with scientific conferences or meetings with potential strategic or financial partners or advisors, or in connection with potential financing transactions, and the Company shall give Consultant reasonable prior notice of such requirements and an approximation of the number of days that Consultant's services will be required.

# 4. COMPENSATION AND EXPENSES.

- (a) In consideration for Consultant's performing the Consulting Services for the Company, the Company shall pay to Consultant a consulting fee of \$75,000 per year, payable quarterly in advance.
- (b) In addition to its consulting fees, Consultant may also be paid annual bonuses and other compensation, including stock options, as may be determined by the Board of Directors of the Company.

- (c) The Company will reimburse Consultant for actual out-of-pocket expenses incurred in connection with the performance of the Consulting Services, provided that Consultant submits receipts or other expense records to the Company in accordance with the Company's general reimbursement policy then in effect.
- 5. EMPLOYEE BENEFIT PLANS. Because Consultant is a consultant to and not an employee of the Company, Consultant shall not be entitled to participate in any employee benefit plans in effect for employees of the Company.
- 6. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and inures to the benefit of the Company and its affiliates, successors and assigns and is binding upon and inures to the benefit of Consultant and his successors and assigns; provided that in no event shall Consultant's obligations to perform the Consulting Services be delegated or transferred by Consultant without the prior written consent of the Company.

#### 7. TERMINATION.

- (a) This Agreement may only be terminated by the Company for Cause, or upon Consultant's death or Disability.
- (b) The Company shall have "Cause" to terminate this Agreement upon(i) Consultant's conviction of, or plea of "no contest" to, any felony; or (ii) any material breach by Consultant of any provision of this Agreement.
- (c) "Disability" shall mean Consultant's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). The Company shall give Consultant written notice of termination which shall take effect thirty (30) days after the date it is sent to Consultant unless Consultant shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).
- (d) In the event of a termination of this Agreement for Cause, or Consultant's death or Disability, Consultant shall receive consulting fees only to the Date of Termination. If the Company shall terminate Consultant other than for Cause or his death or Disability, the Company shall be obligated to pay Consultant the full amount of compensation due Consultant hereunder through the completion of the Initial Term, or the Renewal Term, as the case may be, then in effect at the time of termination.
- INVENTIONS, PATENTS AND TECHNOLOGY. Consultant shall promptly and fully disclose to the Company any and all inventions, methods, improvements, discoveries, original works of authorship, trade secrets, or other intellectual property conceived, developed or reduced to practice by Consultant or any of his employees, consultants or research assistants, during the performance of the Consulting Services hereunder or derived from Confidential Information, as hereinafter defined, including without limitation, as relates to the Core Technology, as defined in the License Agreement (collectively, "Work Product"). Consultant shall treat all Work Product as the Confidential Information of the Company. Consultant agrees and does hereby assign to the Company and its successors and assigns, without further consideration, his entire right, title and interest in and to all Work Product developed during the performance of Consulting Services hereunder or derived from any Confidential Information, whether or not patentable or copyrightable, subject only to the provisions of the License Agreement and Rockefeller's rights thereunder and any other existing written agreement Consultant may have with Rockefeller. Consultant further agrees to execute all applications for patents and/or copyrights, domestic or foreign, assignments and other papers necessary to secure and enforce rights relating to the Work Product. The parties acknowledge that all original works of authorship that are made by Consultant within the scope of the Consulting

Services and that may be protected by copyrighted are "works made for hire," as that time is defined in the United States Copyright Act (17 USC Section 101).

#### COVENANTS.

- (a) Consultant hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Company not in the public domain ("Confidential Information") disclosed by the Company in the course of performing Consulting Services with the Company is attributable substantially to the fact that such Confidential Information is maintained by the Company in the strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Consultant, therefore, covenants and agrees to keep strictly secret and confidential the Confidential Information of the Company in accordance with the following provisions of this Section 9(a), subject only to the provisions of the License Agreement and Rockefeller's rights thereunder. Consultant covenants and agrees to safeguard the Confidential Information of the Company disclosed to or otherwise acquired by Consultant in the course of performing Consulting Services and to prevent the disclosure or other dissemination thereof to any third party, or the use thereof by any competitor. In implementation of the foregoing, Consultant shall not disclose any of the Confidential Information of the Company to any employee, consultant or research assistant except those for whom disclosure is necessary for the effective performance of their responsibilities as employees, consultants or research assistants and, in each case, only to the extent required for such effective performance of responsibilities by employees, consultants or research assistants to whom such disclosure is made pursuant to this Section 9(a). The obligations undertaken by Consultant pursuant to this Section 9(a) shall not apply to any Confidential Information which hereafter shall become published or otherwise generally available to the public, except in consequence of a willful or negligent act or admission by Consultant, or his employees, consultants or research assistants, in contravention of the obligations hereinabove set forth in this Section 9(a), and such obligations shall, as so limited, survive expiration or termination of this Agreement.
- (b) Consultant shall not, during or after the term of this Agreement, make any statement or do any act which will disparage or injure the goodwill or reputation of the Company.
- (c) Consultant acknowledges and agrees that (i) the principal business of the Company is development of the Core Technology, as defined in the License Agreement; (ii) he is one of the limited number of persons who has developed such business; (iii) the business of the Company is conducted primarily throughout the United States but also internationally; (iv) his work for the Company has included the identification and solicitation of present and prospective strategic partners; (v) his work for the Company has provided him, and his consulting services for the Company will continue to provide him, with confidential information. To induce the Company to enter into this Agreement, Consultant covenants and agrees that:
- (i) From the date hereof and until the date that is two (2) years from the expiration of the Consultancy Period (the "Restricted Period"), Consultant shall not unless with written consent of the Company:
  - (A) engage in the business of research and development of the Core Technology, or, (I) during the Consultancy Period, engage in the business of research and development of any other products or processes in which the Company is engaged during the term of this Agreement or in any other business presently being conducted or which may from time to time be conducted by the Company, or, (II) during the two year period after the end of the Consultancy Period, engage in the business of research and development of any other products or processes in which the Company had been engaged at the end of the Consultancy Period or for the six (6) months prior thereto or in any other business conducted by the

Company at the end of the Consultancy Period or for the six (6) months prior thereto (collectively the "Prohibited Activity") in the United States or elsewhere for his own account;

- (B) directly or indirectly, enter the employ of, or render any services to, any individual, corporation, partnership or other business entity (a "Person") engaged in any Prohibited Activity in the United States or elsewhere; or
- (C) become interested in any Person engaged in any Prohibited Activity in the United States, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, employee, trustee, consultant or in any other relationship or capacity; provided, however, that Consultant may own directly or indirectly, solely as an investment, securities of any Person which are traded on any national securities exchange if Consultant (x) is not a controlling person of, or a member of a group which controls, such person or (y) does not, directly or indirectly, own 5% or more of any class of securities of such person;
- (ii) directly or indirectly hire, engage or retain any person which at any time during the Restricted Period or for the two year period prior thereto was a supplier, client or customer of the Company, or directly or indirectly solicit, entice or induce any such person to become, a supplier, client or customer of any other person engaged in any Prohibited Activity; or
- (iii) directly or indirectly hire, employ or retain any person who at any time was an employee of the Company or directly or indirectly solicit, entice, induce or encourage any such person to become employed by any other person.
- (d) The restrictions of Section 9(c) shall continue to apply in the event that the Consultant elects not to renew this Agreement in accordance with the provisions of Section 2.
- (e) Notwithstanding the foregoing, the restrictions of Section 9(c) shall not apply in the event Consultant is terminated without Cause by the Company or if the rights to the Core Technology revert back to The Rockefeller University.
- (f) Consultant hereby acknowledges that the covenants and agreements contained in Sections 8 and 9 (the "Restrictive Covenants") are reasonable and valid in all respects and that the Company is entering into this Agreement, inter alia, on such acknowledgment. If Consultant breaches, or threatens to

commit a breach, of any of the Restrictive Covenants, the Company shall have the following rights and remedies, each of which rights and remedies shall be independent of the other and severally enforceable, and all of which rights and remedies shall be in addition to, and not in lieu of, any other rights and remedies available to the Company under law or in equity: (i) the right and remedy to have the Restrictive Covenants specifically enforced by any court having equity jurisdiction, it being acknowledged and agreed that any such breach or threatened breach will cause irreparable injury to the Company and that money damages will not provide an adequate remedy to the Company; (ii) the right and remedy to require Consultant to account for and pay over to the Company all compensation, profits, monies, accruals, increments or other benefits (collectively, "Benefits") derived or received by Consultant as the result of any transactions constituting a breach of any of the Restrictive Covenants, and Consultant shall account for and pay over such Benefits to the Company; (iii) if any court determines that any of the Restrictive Covenants, or any part thereof, is invalid or unenforceable, the remainder of the Restrictive Covenants shall not thereby be affected and shall be given full effect, without regard to the invalid portions; and (iv) if any court construes any of the Restrictive Covenants, or any part thereof, to be unenforceable because of the duration of such provision or the area covered thereby, such court shall have the power to reduce the duration or area of

such provision and, in its reduced form, such provision shall then be enforceable and shall be enforced.

- (g) The parties intend to and hereby confer jurisdiction to enforce the Restrictive Covenants upon the courts of any jurisdiction within the geographical scope of such Covenants. If the courts of any one or more such jurisdictions hold the Restrictive Covenants wholly unenforceable by reason of the breadth of such scope or otherwise, it is the intention of the parties that such determination not bar or in any way affect the Company's right to the relief provided above in the courts of any other jurisdiction, within the geographical scope of such Covenants, as to breaches of such Covenants in such other respective jurisdictions such Covenants as they relate to each jurisdiction being, for this purpose, severable into diverse and independent covenants.
- 10. REPRESENTATIONS AND WARRANTIES. Consultant represents and warrants that he is not under any obligation, contractual or otherwise, to Rockefeller or to any other person, which would prevent his entering into this Agreement or prevent, impede or hinder his fully faithfully performing any of his duties and services hereunder.
- 11. NOTICE. For the purpose of this Agreement, notices and all other communications provided for herein shall be in writing and shall be deemed to have been duly given (i) when delivered, if personally delivered, (ii) when sent by facsimile transmission, when receipt therefor has been duly received, or (iii) when mailed by United States registered mail, return receipt requested, postage prepaid, or by recognized overnight courier, addressed as follows:

### If, to Consultant:

Dr. Vincent A. Fischetti c/o Rockefeller University 1230 York Avenue New York, NY 10021 Fax: 212-327-7584

#### If, to the Company:

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017 Attention: President Fax: 212-986-2399

or to such other address as any party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

12. MISCELLANEOUS. No provisions of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing signed by authorized officers of each party. No waiver by either party hereto of, or compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Agreement. The validity, interpretation, construction and performance of this Agreement shall be governed by the internal laws of the State of New York. Any controversy arising under or in relation to this Agreement shall be settled by binding arbitration in New York, New York in accordance with the laws of the State of New York and the rules of the American Arbitration Association.

- 13. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.
- 14. SEVERABILITY. If in any jurisdiction, any provision of this Agreement or its application to any party or circumstance is restricted, prohibited or unenforceable, such provision shall, as to such jurisdiction, be ineffective only to the extent of such restriction, prohibition or unenforceability, without invalidating the remaining provisions hereof and without affecting the validity or enforceability of such provision in any other jurisdiction or its application to other parties or circumstances. In addition, if any one or more of the provisions contained in this Agreement shall for any reason in any jurisdiction be held to be excessively broad as to time, duration, geographical scope, activity or subject, it shall be construed, by limiting and reduction it, so as to be enforceable to the extent compatible with the applicable law of such jurisdiction as it shall then appear.

IN WITNESS WHEREOF, this Consulting Agreement has been executed by the Company and Consultant as of the date first written above.

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua D. Schein
-----Authorized Officer

Vincent A. Fischetti
Dr. Vincent A. Fischetti

[HRUBY]

#### CONSULTING AGREEMENT

CONSULTING AGREEMENT ("Agreement"), dated as of January 1, 1996, between SIGA Pharmaceuticals, Inc., a Delaware corporation having offices at 666 Third Avenue, 30th Floor, New York, NY 10017 and Dr. Dennis Hruby, 4017 NW Christine, Corvallis, OR 97330-3263 ("Consultant").

WHEREAS, the Company has entered into a Research Support Agreement, dated as of the date hereof (the "Research Agreement") with Consultant's current employer The State Board of Higher Education on behalf of Oregon State University ("Oregon") covering certain technology relating to vaccines and the development of antibiotics.

WHEREAS, in connection with the Research Agreement and the Company's support of scientific research to be engaged in by Oregon thereunder, the Company desires to retain Consultant, and Consultant desires to be retained, as a part-time Senior Scientific Advisor, all pursuant to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants herein contained, it is agreed as follows:

- 1. DUTIES. The Company hereby retains the Consultant as its parttime Senior Scientific Advisor, to assist in the administration of the Research Agreement and in the performance of scientific research thereunder in research laboratories at Oregon (the "Consulting Services"), and the Consultant hereby accepts such retention and shall perform for the Company the duties described herein, faithfully and to the best of his ability. In this regard, Consultant shall devote an average of 20% of his business time and attention to matters on which the Company shall request his services, subject to the direction of senior management of the Company.
- 2. TERM. The Consultant's retention hereunder shall be for a term of two (2) years (the "Initial Term") commencing as of the date hereof, and shall be automatically renewed for up to three additional one (1) year periods (each period a "Renewal Term"; together with the Initial Term, the "Consultancy Period") unless either party notifies the other in writing of its intention not to so renew this Agreement no less than 90 days prior to the expiration of the Initial Term or any Renewal Term.
- 3. PLACE OF PERFORMANCE. In connection with rendering Consulting Services to the Company, Consultant shall be based in Corvallis, Oregon, where Oregon's research laboratories currently are located. Consultant acknowleges that the Company may require that from time to time Consultant travel on behalf of the Company in connection with scientific conferences or meetings with potential strategic or financial partners or advisors, or in connection with potential financing transactions, and the Company shall give Consultant reasonable prior notice of such requirements and an approximation of the number of days that Consultant's services will be required.

### 4. COMPENSATION AND EXPENSES.

- (a) In consideration for Consultant's performing the Consulting Services for the Company, the Company shall pay to Consultant a consulting fee of \$50,000 per year, payable quarterly in advance.
- (b) In addition to its consulting fees, Consultant may also be paid such bonuses and other compensation, including stock options, if any, as may from time to time be determined by the Board of Directors of the Company.

- (c) The Company will reimburse Consultant for actual out-of-pocket expenses incurred in connection with the performance of the Consulting Services, provided that Consultant submits receipts or other expense records to the Company in accordance with the Company's general reimbursement policy then in effect.
- 5. EMPLOYEE BENEFIT PLANS. Because Consultant is a consultant to and not an employee of the Company, Consultant shall not be entitled to participate in any employee benefit plans in effect for employees of the Company.
- 6. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and inures to the benefit of the Company and its affiliates, successors and assigns and is binding upon and inures to the benefit of Consultant and his successors and assigns; provided that in no event shall Consultant's obligations to perform the Consulting Services be delegated or transferred by Consultant without the prior written consent of the Company.

#### 7. TERMINATION.

- (a) This Agreement may be terminated by the Company for Cause, or upon Consultant's death or Disability.
- (b) The Company shall have "Cause" to terminate this Agreement upon(i) Consultant's conviction of, or plea of "no contest" to, any felony; or (ii) any material breach by Consultant of any provision of this Agreement.
- (c) "Disability" shall mean Consultant's incapacity due to physical or mental illness that results in his being unable to substantially perform his duties hereunder for six consecutive months (or for six months out of any nine month period). The Company shall give Consultant written notice of termination which shall take effect thirty (30) days after the date it is sent to Consultant unless Consultant shall have returned to the performance of his duties hereunder during such thirty (30) day period (whereupon such notice shall become void).
- (d) In the event of a termination of this Agreement for Cause, or Consultant's death or Disability, Consultant shall receive consulting fees only to the Date of Termination. If the Company shall terminate Consultant other than for Cause or his death or Disability, the Company shall be obligated to pay Consultant the full amount of compensation due Consultant hereunder through the completion of the Initial Term, or the Renewal Term, as the case may be, then in effect at the time of termination.
- 8. INVENTIONS, PATENTS AND TECHNOLOGY. Consultant shall promptly and fully disclose to the Company any and all inventions, methods, improvements, discoveries, original works of authorship, trade secrets, or other intellectual property conceived, developed or reduced to practice by Consultant or any of his employees, consultants or research assistants, during the performance of the Consulting Services hereunder or derived from Confidential Information, as hereinafter defined, including without limitation, as relates to the Core Technology, as defined in the Research Agreement (collectively, "Work Product"). Consultant shall treat all Work Product as the Confidential Information of the Company. Consultant agrees and does hereby assign to the Company and its successors and assigns, without further consideration, his entire right, title and interest in and to all Work Product developed during the performance of Consulting Services hereunder or derived from any Confidential Information, whether or not patentable or copyrightable, subject only to the provisions of the Research Agreement and Oregon's rights thereunder and any other existing written agreement Consultant may have with Oregon. Consultant further agrees to execute all applications

for patents and/or copyrights, domestic or foreign, assignments and other papers necessary to secure and enforce rights relating to the Work Product. The parties acknowledge that all original works of authorship that are made by Consultant within the scope of the Consulting Services and that may be protected by copyrighted are "works made for hire," as that time is defined in the United States Copyright Act (17 USC Section 101).

#### 9. COVENANTS.

- (a) Consultant hereby recognizes that the value of all trade secrets and other proprietary data and all other information of the Company not in the public domain ("Confidential Information") disclosed by the Company in the course of performing Consulting Services with the Company is attributable substantially to the fact that such Confidential Information is maintained by the Company in the strict confidentiality and secrecy and would be unavailable to others without the expenditure of substantial time, effort or money. Consultant, therefore, covenants and agrees to keep strictly secret and confidential the Confidential Information of the Company in accordance with the following provisions of this Section 9(a), subject only to the provisions of the Research Agreement and Oregon's rights thereunder. Consultant covenants and agrees to safeguard the Confidential Information of the Company disclosed to or otherwise acquired by Consultant in the course of performing Consulting Services and to prevent the disclosure or other dissemination thereof to any third party, or the use thereof by any competitor. In implementation of the foregoing, Consultant shall not disclose any of the Confidential Information of the Company to any employee, consultant or research assistant except those for whom disclosure is necessary for the effective performance of their responsibilities as employees, consultants or research assistants and, in each case, only to the extent required for such effective performance of responsibilities by employees, consultants or research assistants to whom such disclosure is made pursuant to this Section 9(a). The obligations undertaken by Consultant pursuant to this Section 9(a) shall not apply to any Confidential Information which hereafter shall become published or otherwise generally available to the public, except in consequence of a willful or negligent act or admission by Consultant, or his employees, consultants or research assistants, in contravention of the obligations hereinabove set forth in this Section 9(a), and such obligations shall, as so limited, survive expiration or termination of this Agreement.
- (b) Neither party shall, during or after the term of this Agreement, make any statement or do any act which will disparage or injure the goodwill or reputation of the other party.
- (c) Consultant acknowledges and agrees that (i) the principal business of the Company is development of the Core Technology, as defined in the Research Agreement; (ii) he is one of the limited number of persons who has developed such business; (iii) the business of the Company is conducted primarily throughout the United States but also internationally; (iv) his work for the Company has included the identification and solicitation of present and prospective strategic partners; (v) his work for the Company has provided him, and his consulting services for the Company will continue to provide him, with confidential information. To induce the Company to enter into this Agreement, Consultant covenants and agrees that:
- (i) From the date hereof and until the date that is two (2) years from the expiration of the Consultancy Period (the "Restricted Period"), Consultant shall not unless with written consent of the Company:
  - (A) engage in the business of research and development of the Core Technology, or, (I) during the Consultancy Period, engage in the business of research and development of any other products or processes in which the Company is engaged during the term of this Agreement or in any other business presently being conducted or which may from time to time be conducted by the Company, or, (II) during the two year period after the end of the Consultancy Period, engage in the business of

research and development of any other products or processes in which the Company had been engaged at the end of the Consultancy Period or for the six (6) months prior thereto or in any other business conducted by the Company at the end of the Consultancy Period or for the six (6) months prior thereto (collectively the "Prohibited Activity") in the United States or elsewhere for his own account;

- (B) directly or indirectly, enter the employ of, or render any services to, any individual, corporation, partnership or other business entity (a "Person") engaged in any Prohibited Activity in the United States or elsewhere; or
- (C) become interested in any Person engaged in any Prohibited Activity in the United States, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, employee, trustee, consultant or in any other relationship or capacity; provided, however, that Consultant may own directly or indirectly, solely as an investment, securities of any Person which are traded on any national securities exchange if Consultant (x) is not a controlling person of, or a member of a group which controls, such person or (y) does not, directly or indirectly, own 5% or more of any class of securities of such person;
- (ii) directly or indirectly hire, engage or retain any person which at any time during the Restricted Period or for the two year period prior thereto was a supplier, client or customer of the Company, or directly or indirectly solicit, entice or induce any such person to become, a supplier, client or customer of any other person engaged in any Prohibited Activity; or
- (iii) directly or indirectly hire, employ or retain any person who at any time was an employee of the Company or directly or indirectly solicit, entice, induce or encourage any such person to become employed by any other person.
- (d) Notwithstanding the foregoing, the restrictions of Section 9(c) shall not apply in the event Consultant is terminated without Cause by the Company, but shall continue to apply in the event either the Company or Consultant elects not to renew this Agreement in accordance with the provisions of Section 2.
- (e) Consultant hereby acknowledges that the covenants and agreements contained in Sections 8 and 9 (the "Restrictive Covenants") are reasonable and valid in all respects and that the Company is entering into this Agreement, inter alia, on such acknowledgment. If Consultant breaches, or threatens to

commit a breach, of any of the Restrictive Covenants, the Company shall have the following rights and remedies, each of which rights and remedies shall be independent of the other and severally enforceable, and all of which rights and remedies shall be in addition to, and not in lieu of, any other rights and remedies available to the Company under law or in equity: (i) the right and remedy to have the Restrictive Covenants specifically enforced by any court having equity jurisdiction, it being acknowledged and agreed that any such breach or threatened breach will cause irreparable injury to the Company and that money damages will not provide an adequate remedy to the Company; (ii) the right and remedy to require Consultant to account for and pay over to the Company all compensation, profits, monies, accruals, increments or other benefits (collectively, "Benefits") derived or received by Consultant as the result of any transactions constituting a breach of any of the Restrictive Covenants, and Consultant shall account for and pay over such Benefits to the Company; (iii) if any court determines that any of the Restrictive Covenants, or any part thereof, is invalid or unenforceable, the remainder of the Restrictive Covenants shall not thereby be affected and shall be given full effect, without regard to the invalid portions; and (iv) if any court construes any of the Restrictive Covenants, or any part thereof, to be unenforceable because of the duration of such provision or the area covered thereby, such court shall have the power to reduce the duration or area of

such provision and, in its reduced form, such provision shall then be enforceable and shall be enforced.

- (f) The parties intend to and hereby confer jurisdiction to enforce the Restrictive Covenants upon the courts of any jurisdiction within the geographical scope of such Covenants. If the courts of any one or more such jurisdictions hold the Restrictive Covenants wholly unenforceable by reason of the breadth of such scope or otherwise, it is the intention of the parties that such determination not bar or in any way affect the Company's right to the relief provided above in the courts of any other jurisdiction, within the geographical scope of such Covenants, as to breaches of such Covenants in such other respective jurisdictions such Covenants as they relate to each jurisdiction being, for this purpose, severable into diverse and independent covenants.
- 10. REPRESENTATIONS AND WARRANTIES. Consultant represents and warrants that he is not under any obligation, contractual or otherwise, to Oregon or to any other person, which would prevent his entering into this Agreement or prevent, impede or hinder his fully faithfully performing any of his duties and services hereunder.
- 11. NOTICE. For the purpose of this Agreement, notices and all other communications provided for herein shall be in writing and shall be deemed to have been duly given (i) when delivered, if personally delivered, (ii) when sent by facsimile transmission, when receipt therefor has been duly received, or (iii) when mailed by United States registered mail, return receipt requested, postage prepaid, or by recognized overnight courier, addressed as follows:

### If, to Consultant:

Dr. Dennis Hruby 4017 NW Christine Corvallis, OR 97330-3263 Fax: 541-737-2440

#### If, to the Company:

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017 Attention: President Fax: 212-986-2399

or to such other address as any party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

12. MISCELLANEOUS. No provisions of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing signed by authorized officers of each party. No waiver by either party hereto of, or compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Agreement. The validity, interpretation, construction and performance of this Agreement shall be governed by the internal laws of the State of Oregon. Any controversy arising under or in relation to this Agreement shall be settled by binding arbitration in Corvallis, Oregon in accordance with the laws of the State of Oregon and the rules of the American Arbitration Association.

- 13. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.
- 14. SEVERABILITY. If in any jurisdiction, any provision of this Agreement or its application to any party or circumstance is restricted, prohibited or unenforceable, such provision shall, as to such jurisdiction, be ineffective only to the extent of such restriction, prohibition or unenforceability, without invalidating the remaining provisions hereof and without affecting the validity or enforceability of such provision in any other jurisdiction or its application to other parties or circumstances. In addition, if any one or more of the provisions contained in this Agreement shall for any reason in any jurisdiction be held to be excessively broad as to time, duration, geographical scope, activity or subject, it shall be construed, by limiting and reduction it, so as to be enforceable to the extent compatible with the applicable law of such jurisdiction as it shall then appear.

IN WITNESS WHEREOF, this Consulting Agreement has been executed by the Company and Consultant as of the date first written above.

SIGA PHARMACEUTICALS, INC.

By: /s/ Joshua D. Schein
-----Authorized Officer

/s/ Dennis Hruby
Dr. Dennis Hruby

SIGA PHARMACEUTICALS, INC. 666 THIRD AVENUE, 30TH FLOOR NEW YORK, NY 10017

March 1, 1996

Dr. Vincent A. Fischetti c/o The Rockefeller University 1230 York Avenue New York, NY 10021

Dear Vince:

This letter agreement is written to confirm that Dr. Vincent A. Fischetti ("Fischetti") has identified and introduced SIGA Pharmaceuticals, Inc. ("SIGA") to certain pharmaceutical companies, including SmithKline Beecham Pharmaceuticals and American Home Products, with whom SIGA may collaborate in a joint venture or research and development activities (a "Transaction").

- 1. Fees. The Company will grant to Fischetti options to purchase shares of the Company's Common Stock as follows:
  - a. Fischetti will receive 450,000 options to purchase 450,000 shares of the Company's Common Stock at a price of \$0.25 per share if and when SIGA enters into a Transaction with a company introduced by Dr. Fischetti.
  - b. Fischetti will receive an additional 450,000 options to purchase 450,000 shares of the Company's Common Stock at a price of \$0.25 per share if and when SIGA enters into a Transaction with a second company introduced by Dr. Fischetti.
- 2. Fischetti agrees to participate in meetings (such participation to be in person or by telephone, as appropriate) at which a potential Transaction is to be considered. Fischetti agrees that information regarding any potential Transaction will be treated confidentially by Fischetti and Fischetti's representatives or affiliates.
- 3. Notices. The Company will keep Fischetti informed as to the progress and status of negotiations with parties introduced by Fischetti as well as to the ultimate result(s) of such negotiations. Any notices, statements, or payments required by this agreement shall be in writing and shall be delivered in person, mailed postage prepaid, or transmitted by telex or facsimile to the parties at the addresses set forth below (unless delivery is in person), or to such substituted address as either party may hereafter state in a notice to the other.

### If to Fischetti:

Dr. Vincent A. Fischetti c/o The Rockefeller University 1230 York Avenue New York, NY 10021 Fax: 212-327-7584

If to the Company:

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017 Fax: 212-986-2399

4. Binding. This agreement shall inure to the benefit of and be binding on the respective parties hereto and the respective executors, administrators, successors, and assigns.

5. Other. The validity and interpretation of this agreement shall be

governed by, and construed and enforced in accordance with, the laws of the State of New York applicable to agreements made and to be fully performed therein. This agreement may not be modified or amended except in writing executed by the parties hereto. This agreement, and any modification or amendment thereto, may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument.

If the foregoing correctly sets forth our agreement, please so indicate by signing below and returning an executed copy to me.

Very truly yours,

SIGA Pharmaceuticals, Inc.

By: /s/ Joshua D. Schein
Joshua D. Schein

ACCEPTED AND AGREED AS OF THE DATE FIRST ABOVE WRITTEN

/s/ Vincent A. Fischetti
-----Dr. Vincent A. Fischetti

# STATEMENT RE: COMPUTATION OF PER SHARE EARNINGS

# SIGA PHARMACEUTICALS Computation of Per Share Earnings

		DECEMBER 31, 1996		DECEMBER 31, 1995	
	SHARES	DAYS OUTSTANDING	WEIGHTED AVERAGE SHARES OUTSTANDING		WEIGHTED AVERAGE
Shares to founders	2,079,170	365	2,079,170	4	2,079,170
Shares issued in March 1996 private placement	1,038,008	308	875,908	-	-
Shares issued in September 1996 private placement	250,004	95	65,070	-	-
Cheap Stock consideration for shares issued in September 1996 private placement	100,004	365	100,004	4	100,004
Cheap stock consideration for stock options and warrants issued during 1996	319,407	365	319,407	4	319,407
Weighted average shares outstanding			3,439,559		2,498,581
Net loss for period			\$(2,268,176)		\$ (1,000)
Net loss per common sh	are		\$ (0.66) ======		-

March 10, 1997

SIGA Pharmaceuticals, Inc. 666 Third Avenue, 30th Floor New York, NY 10017

Ladies and Gentlemen:

We have examined the Registration Statement on Form SB-2 (the "Registration Statement") to be filed by you with the Securities and Exchange Commission in connection with an offering (the "Public Offering") of 3,250,000 shares of common stock, par value \$.0001 per share (the "Common Stock"), of SIGA Pharmaceuticals, Inc. (the "Company"), and up to 325,000 shares of the Company's Common Stock issuable upon exercise of a certain Underwriter's Warrant (the "Warrant Shares"; the Offering shares and the Warrant Shares collectively referred to as the "Shares"). As your counsel in connection with the Public Offering and the offer and sale of the Common Stock, we have examined the originals, or photostatic or certified copies, of such records of the Company, certificates of the Company and of public officials and such other matters and documents as we have deemed necessary or relevant as a basis for this opinion.

Based on these examinations, it is our opinion that the Shares, when issued upon payment therefor, will be validly issued, fully paid and non-assessable shares of Common Stock of the Company.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the reference to this firm under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement.

Very truly yours,

/s/ Eilenberg & Zivian -----EILENBERG & ZIVIAN

### CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in the Prospectus constituting part of this Registration Statement on Form SB-2 of our report dated March 3, 1997 relating to the financial statements of SIGA Pharmaceuticals, Inc., which appears in such Prospectus. We also consent to the reference to us under the heading "Experts" in such Prospectus.

/s/PRICE WATERHOUSE LLP

PRICE WATERHOUSE LLP New York, New York March 10, 1997