

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

SCHEDULE 13D  
(RULE 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED  
PURSUANT TO 13d-1(a) AND AMENDMENTS THERETO  
FILED PURSUANT TO 13d-2(a)

UNDER THE SECURITIES EXCHANGE ACT OF 1934

SERAGEN, INC.

-----  
(NAME OF ISSUER)

COMMON STOCK \$.01 PAR VALUE

-----  
(TITLE OF CLASS OF SECURITIES)

817474-10-9

-----  
(CUSIP NUMBER)

WILLIAM L. RESPESS, ESQ., GENERAL COUNSEL  
LIGAND PHARMACEUTICALS INCORPORATED  
10275 SCIENCE CENTER DRIVE  
SAN DIEGO, CALIFORNIA 92121

-----  
(NAME, ADDRESS AND TELEPHONE NUMBER OF PERSON  
AUTHORIZED TO RECEIVE NOTICES AND COMMUNICATIONS)

MAY 11, 1998

-----  
(DATE OF EVENT WHICH REQUIRES FILING  
OF THIS STATEMENT)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box [ ].

Check the following box if a fee is being paid with the statement [ ].  
(A fee is not required only if the reporting person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

NOTE: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

(CONTINUED ON FOLLOWING PAGES)  
(PAGE 1 OF 7 PAGES)

-----  
CUSIP NO. 817474-10-9

13D

-----  
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-----

-----  
1 NAME OF REPORTING PERSONS  
S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS  
LIGAND PHARMACEUTICALS INCORPORATED  
IRS EMPLOYER IDENTIFICATION NO.: 77-0160744

-----  
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
N/A (a) [ ] (b) [ ]

-----  
3 SEC USE ONLY  
-----

4 SOURCE OF FUNDS  
00(1)

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDING IS REQUIRED  
PURSUANT TO ITEMS 2(d) OR 2(e) N/A [ ]

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
DELAWARE

NUMBER OF SHARES BENEFICIALLY OWNED BY REPORTING PERSON WITH	7	SOLE VOTING POWER	0
	8	SHARED VOTING POWER	118,654,461
	9	SOLE DISPOSITIVE POWER	0
	10	SHARED DISPOSITIVE POWER	0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 118,654,461

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11 EXCLUDES CERTAIN SHARES\*

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 89.2%

14 TYPE OF REPORTING PERSON\*  
CO

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

(1) The Securities of the Issuer are subject to stockholder voting agreements and irrevocable proxies granted to Reporting Entity. See Item 3 herein.

(CONTINUED ON FOLLOWING PAGES)  
(PAGE 2 OF 7 PAGES)

#### ITEM 1. SECURITY AND ISSUER

This statement relates to the common stock, \$.01 par value per share (the "Common Stock"), of Seragen, Inc. a Delaware corporation (the "Issuer"). The principal executive offices of the Issuer are located at 97 South Street, Hopkinton, Massachusetts 01748.

#### ITEM 2. IDENTITY AND BACKGROUND

This statement is filed by Ligand Pharmaceuticals Incorporated, a Delaware corporation ("Ligand"). Ligand's principal business and office address is 10275 Science Center Drive, San Diego, California 92121. Ligand is a biopharmaceutical company engaged in the discovery and development of small-molecule drugs which mimic or block the activities of various hormones and cytokines to regulate gene activity and the genetic processes affecting many diseases.

Neither Ligand, nor to its best knowledge, any of its executive officers or directors has during the last five years: (i) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

#### ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

Ligand has received from certain directors, executive officers and other stockholders (collectively, the "Stockholders") of the Issuer irrevocable proxies (the "Irrevocable Proxies") executed in connection with stockholder voting agreements (the "Stockholder Voting Agreements") to which the Stockholders are parties, to vote all shares of voting stock held by the

Stockholders in favor of the approval of that certain Agreement and Plan of Reorganization, dated as of May 11, 1998 (the "Merger Agreement"), by and among the Issuer, Ligand and Knight Acquisition Corporation, a Delaware corporation and a wholly-owned subsidiary of Ligand ("Merger Sub") and the consummation of the transactions contemplated in the Merger Agreement. The Irrevocable Proxies also grant Ligand the right to vote against approval of any proposal made in opposition to or in competition with the consummation of the transactions contemplated by the Merger Agreement.

The consideration for the obligations set forth in the Stockholder Voting Agreements, including the receipt of the Irrevocable Proxies by Ligand, was the execution of the of the Merger Agreement by Ligand, the Issuer and Merger Sub. Pursuant to the Merger Agreement, Merger Sub will be merged with and into the Issuer (the "Merger") whereby, upon consummation of the Merger, Merger Sub will cease to exist and the Issuer will be a wholly-owned subsidiary of Ligand.

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#### ITEM 4. PURPOSE OF THE TRANSACTION

The purpose for the acquisition by Ligand of the Irrevocable Proxies to vote the securities of the Issuer is to approve the Merger Agreement, the Merger and the transactions contemplated thereby.

#### ITEM 5. INTEREST IN SECURITIES OF ISSUER

- (a) Through the grant of Irrevocable Proxies, Ligand beneficially owns 118,654,461 shares<sup>(2)</sup> of Common Stock of the Issuer. This represents 89.2% of the outstanding Common Stock of the Issuer.
- (b) Ligand has shared power<sup>(3)</sup> to vote 118,654,461 shares of Common Stock of the Issuer as referenced in Item 5(a) above. Ligand does not have the right to dispose of any shares of the Issuer.
- (c) Not applicable.
- (d) The Stockholders have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities. The following Stockholders own 5% or greater of the Common Stock of the Issuer: Boston University, Leon C. Hirsch, Turi Josefsen, Gerald S.J. Cassidy, and Eli Lilly and Company.

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(2) The number of shares of Common Stock outstanding and the number of shares of Common Stock beneficially owned were calculated as of May 12, 1998. The number of shares beneficially owned by Ligand include the following securities subject to the Irrevocable Proxies and the Stockholder Voting Agreements: (i) 13,650,669 shares of Common Stock, (ii) 68,913,719 shares of Common Stock issuable upon the conversion of 23,800 shares Series B Preferred Stock of the issuer at a conversion price of \$.40 as determined pursuant to the Issuer's Certificate of Designation of Series B Preferred Stock, (iii) 10,029,000 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days and (iv) 26,061,073 shares of Common Stock issuable upon the conversion of warrants.

(3) Ligand has the power to vote the shares with respect to the following matters: (i) in favor of approval of the Merger Agreement and the Merger and any matter that could reasonably be expected to facilitate the Merger, (ii) against approval of any proposal made in opposition to or in competition with the consummation of the Merger or the Merger Agreement (iii) against any merger, consolidation, sale of assets, reorganization or recapitalization of the Issuer with any party other than Ligand and its affiliates, (iii) against any liquidation or winding up of the Issuer, and (iv) in the event of an involuntary bankruptcy proceeding not initiated by Ligand, to (A) call a special meeting of stockholders of the Issuer and (B) vote to elect member of the Board of Directors of the Company. Ligand may not exercise the Irrevocable Proxies on any other matter other than those set forth above and the stockholder may vote the shares on all other

matters.

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(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

The contracts, arrangements, understandings and relationships with respect to the securities of the Issuer are the Stockholder Voting Agreement with attached form of Irrevocable Proxy and the Merger Agreement as defined in Item 3 above. In addition to the foregoing, certain stockholders entered into a Stockholders Agreement, dated as of November 6, 1996 by and among Leon C. Hirsch, Turi Josefsen, Gerald S.J. Cassidy, Loretta P. Cassidy, Boston University and Reed R. Prior.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

Exhibit

- A Form of Stockholder Voting Agreement and attached Irrevocable Proxy (FILED HEREWITH)
- B Agreement and Plan of Reorganization, dated as of May 11, 1998, by and among the Issuer, Merger Sub and Ligand (1)(2)(3)

- - - - -

- (1) This exhibit was previously filed as part of, and is hereby incorporated by reference to, Exhibit 99.3 filed with the Issuer's Current Report on Form 8-K filed on May 15, 1998.
- (2) Confidential treatment has been requested for portions of this exhibit, which portions have been omitted from the attached exhibit and filed separately with the Commission.
- (3) The schedules referenced in this agreement have not been included because they are either disclosed in the agreement or do not contain information which is material to an investment decision. Ligand agrees to furnish to the Commission a copy of such schedules upon request.

(CONTINUED ON FOLLOWING PAGES)  
(PAGE 5 OF 7 PAGES)

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 21, 1998                      LIGAND PHARMACEUTICALS INCORPORATED

By: /s/ WILLIAM L. RESPESS  
-----  
William L. Respass, Vice President,  
General Counsel, Government Affairs

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EXHIBIT INDEX

<TABLE>  
<CAPTION>  
Exhibit  
Number

Description

<S> <C>

A Form of Stockholder Voting Agreement and attached Irrevocable Proxy  
(FILED HEREWITH)

B Agreement and Plan of Reorganization, dated as of May 1, 1998, by and  
among the Issuer, Merger Sub and Ligand (1)(2)(3)

</TABLE>

- (1) This exhibit was previously filed as part of, and is hereby incorporated by reference to, Exhibit 99.3 filed with the Issuer's Current Report on Form 8-K filed on May 15, 1998.
- (2) Confidential treatment has been requested for portions of this exhibit, which portions have been omitted from the attached exhibit and filed separately with the Commission.
- (3) The schedules referenced in this agreement have not been included because they are either disclosed in the agreement or do not contain information which is material to an investment decision. Ligand agrees to furnish to the Commission a copy of such schedules upon request.

(CONTINUED ON FOLLOWING PAGES)  
(PAGE 7 OF 7 PAGES)  
STOCKHOLDER VOTING AGREEMENT

THIS STOCKHOLDER VOTING AGREEMENT (the "Agreement") is made and entered into as of May 11, 1998, by and among Ligand Pharmaceuticals Incorporated, a Delaware corporation ("Parent"), and the undersigned stockholder (the "Stockholder") of Company. Capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to them in the Reorganization Agreement (as defined below).

#### RECITALS

A. Concurrently with the execution of this Agreement, Parent, Knight Acquisition Corporation, a Delaware corporation and a wholly owned subsidiary of Parent ("Merger Sub"), and Company have entered into an Agreement and Plan of Reorganization (the "Reorganization Agreement"), which provides for the merger (the "Merger") of Merger Sub with and into Seragen, Inc., a Delaware corporation ("Company"). Pursuant to the Merger, all outstanding capital stock of Company may be converted into the right to receive voting common stock, \$.001 par value per share, of Parent, as set forth in the Reorganization Agreement.

B. The Stockholder is the beneficial owner (as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) with the right to vote or direct the voting of such number of shares of the outstanding capital stock of Company ("Company Capital Stock") and shares subject to outstanding options or warrants ("Option Shares" and collectively with Company Capital Stock, the "Shares") as is indicated on the signature page of this Agreement. In addition, the Stockholder may be the owner of other options or warrants to acquire shares of capital stock of the Company, which shares may not be deemed to be beneficially owned pursuant to Rule 13d-3 of the Exchange Act.

C. In consideration of the execution of the Reorganization Agreement by Parent, the Stockholder agrees (1) to restrict the transfer or disposition of (a) any of the Shares and (b) any options or warrants to acquire capital stock of the Company, or any other shares of capital stock of Company or options or warrants to acquire capital stock of Company acquired by the Stockholder hereafter and prior to the Expiration Date (as defined in Section 1.1 below) (collectively, the "Other Securities"), (2) to vote or direct the vote of the Shares and Other Securities so as to facilitate consummation of the Merger, and (3) to grant Parent an irrevocable proxy to vote the Shares and the Other Securities upon the terms and subject to the conditions set forth herein.

NOW, THEREFORE, the parties agree as follows:

#### 1. AGREEMENT TO RETAIN SHARES.

1.1 TRANSFER AND ENCUMBRANCE. Except as set forth in that certain Accord and Satisfaction Agreement among the Company, Seragen Technology, Inc., Trustees of Boston University, Seragen LLC, Marathon Biopharmaceuticals, LLC, United States Surgical Corp., Leon C. Hirsch, Turi Josefsen, Gerald S.J. Cassidy and Loretta P. Cassidy, Reed R. Prior, Jean C. Nichols, Ph.D., Elizabeth C. Chen, Robert W. Crane, Shoreline Pacific, the Institutional Division

Financial West Group and Lehman Brothers Inc. dated May 11, 1998 (the "Accord and Satisfaction Agreement"), the Stockholder agrees, during the period beginning on the date hereof and ending on the Expiration Date, not to transfer, sell, exchange, pledge or otherwise dispose of or encumber (collectively, "Transfer") any of the Shares, New Shares (as defined in Section 1.2 below), or Other Securities. As used herein, the term "Expiration Date" shall mean the earlier to occur of (i) such date and time as the Merger shall become effective in accordance with the terms and provisions of the Reorganization Agreement, (ii) the termination of the Reorganization Agreement under Sections 7.1(a), 7.1(b), 7.1(c), 7.1(d) (except in the instance where the Company has willfully breached a representation, warranty, covenant or agreement), 7.1(e), 7.1(f) and 7.1(k) (only in the event the Company has terminated the Reorganization Agreement) thereof or (iii) May 1, 2001.

1.2 NEW SHARES, NEW OPTIONS OR WARRANTS. The Stockholder agrees that any shares of capital stock of Company that the Stockholder purchases or with respect to which the Stockholder otherwise acquires beneficial ownership with the right to vote or direct the voting of such shares, after the date of this Agreement and prior to the Expiration Date, including without limitation, shares of Company Capital Stock acquired pursuant to the Accord and Satisfaction Agreement ("New Shares"), shall be subject to the terms and conditions of this Agreement to the same extent as if they constituted Shares. All options or warrants to acquire capital stock of the Company that the Stockholder acquires after the date of this Agreement and prior to the Expiration Date shall be subject to the terms and conditions of this Agreement to the same extent as if they constituted Other Securities or New Shares.

2. AGREEMENT TO VOTE SHARES. At every meeting of the stockholders of Company called with respect to any of the following, and at every adjournment thereof, and on every action or approval by written consent of the stockholders of Company with respect to any of the following, the Stockholder shall vote or direct the vote of the Shares and any New Shares: (a) in favor of approval of the Reorganization Agreement and the Merger and in favor of any matter that could reasonably be expected to facilitate the Merger; (b) against approval of any proposal made in opposition to or in competition with consummation of the Merger or the Reorganization Agreement, against any merger, consolidation, sale of assets, reorganization or recapitalization of Company with any party other than Parent, Merger Sub and their affiliates, agents and representatives and against any liquidation or winding up of Company; and (c) in the event of the filing of an involuntary petition against the Company under the United States Bankruptcy Code and following such filing, to (i) call a special meeting of the stockholders of the Company and (ii) vote to elect members of the Board of Directors of the Company; provided Parent has not, directly or indirectly, initiated such filing (each of the foregoing in (b) of this Section 2 is referred to as an "Opposing Proposal.")

3. NON-SOLICITATION AGREEMENT. The Stockholder agrees, prior to the Expiration Date, not to directly or indirectly take any action to solicit, initiate or encourage the making of any Acquisition Proposal (as hereinafter defined); provided, however, that a member of the Board of Directors of the Company who is also a stockholder of the Company (or who is an affiliate of a stockholder of the Company) may, in his role as a member of the Board of Directors of the Company, engage in negotiations with, or disclose any nonpublic information relating to the Company or afford access to the properties, books or records of the Company to, any person or entity that informs the Board of Directors that it is considering making, or has made, an Acquisition Proposal. The term "Acquisition Proposal" as used herein means any offer or proposal for, or any

indication of interest in, a merger or other business combination involving the Company or the acquisition of a majority of the outstanding shares of Company capital stock or a majority of the assets of the Company, other than the

transactions contemplated by the Reorganization Agreement. In the event that the Stockholder receives from any third party any offer or indication of interest (whether made in writing or otherwise) regarding any Acquisition Proposal, or any request for information about Company with respect to any Acquisition Proposal, then the Stockholder shall promptly communicate to Parent the material terms of each such offer, indication of interest or request, including the identity of the third party; provided Stockholder need not report casual contacts by any third party not involving discussion of the material terms of an Acquisition Proposal.

4. IRREVOCABLE PROXY. Concurrently with the execution of this Agreement, the Stockholder agrees to deliver to Parent a proxy in the form attached as Annex A (the "Proxy"), which shall be irrevocable to the extent provided in Section 212 of the Delaware General Corporation Law, covering the total number of Shares, Other Securities and New Shares beneficially owned (as such term is defined in Rule 13d-3 under the Exchange Act) by the Stockholder as set forth therein.

5. REPRESENTATIONS, WARRANTIES AND COVENANTS OF STOCKHOLDER. The Stockholder represents, warrants and covenants to Parent that the Stockholder: (i) is the beneficial owner of the Shares, which at the date of this Agreement and at all times up until the Expiration Date will be free and clear of any liens, claims, options, charges or other encumbrances, (ii) does not beneficially own any shares of capital stock of Company other than the Shares (excluding shares as to which Stockholder currently disclaims beneficial ownership in accordance with applicable law) and (iii) has full power and authority to make, enter into and carry out the terms of this Agreement and the Proxy, including, without limitation, receipt of any third party consents required by such Stockholder prior to execution of this Agreement and the Proxy.

6. ADDITIONAL DOCUMENTS. The Stockholder hereby covenants and agrees to execute and deliver any additional documents reasonably necessary or desirable to carry out the purpose and intent of this Agreement, the Reorganization Agreement and the Proxy.

7. CONSENT AND WAIVER. The Stockholder hereby gives any consents or waivers that are required for the consummation of the Merger under the terms of any agreement to which the Stockholder is a party or pursuant to any rights the Stockholder may have.

8. TERMINATION. This Agreement and the Proxy delivered in connection herewith shall terminate and shall have no further force or effect as of the Expiration Date.

#### 9. MISCELLANEOUS.

9.1 SEVERABILITY. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, then the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

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9.2 BINDING EFFECT AND ASSIGNMENT. This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, but, except as otherwise specifically provided herein, neither this Agreement nor any of the rights, interests or obligations of the parties hereto may be assigned by any of the parties without the prior written consent of the other parties.

9.3 AMENDMENTS AND MODIFICATION. This Agreement is one of a series of substantially identical Stockholder Voting Agreements ("Voting Agreement(s)") dated the date hereof, entered into between Parent and certain stockholders of the Company (individually, a "Holder" and collectively, the "Holders") owning collectively more than fifty percent (50%) of the outstanding voting stock of the Company. Each Voting Agreement may not be modified, amended, altered or supplemented except by the execution and delivery of a written agreement executed by each Holder.

9.4 SPECIFIC PERFORMANCE; INJUNCTIVE RELIEF. The parties acknowledge that Parent will be irreparably harmed and that there will be no

adequate remedy at law for a violation of any of the covenants or agreements of the Stockholder set forth herein. Therefore, it is agreed that, in addition to any other remedies that may be available to Parent upon any such violation, Parent shall have the right to enforce such covenants and agreements by specific performance, injunctive relief or by any other means available to Parent at law or in equity.

9.5 NOTICES. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or by commercial delivery service, or mailed by registered or certified mail (return receipt requested) or sent via facsimile (with acknowledgment of complete transmission) to the parties at the following addresses (or at such other address for a party as shall be specified by like notice):

(a) if to Parent, to:

Ligand Pharmaceuticals Incorporated  
10275 Science Center Drive  
San Diego, CA 92121  
Attention: William L. Respass, Esq.  
Telephone No.: (619) 550-7500  
Facsimile No.: (619) 550-7506

with a copy to:

Brobeck Phleger & Harrison LLP  
550 West C Street, Suite 1300  
San Diego, California 92101-3532  
Attention: Faye H. Russell, Esq.  
Telephone No.: (619) 234-1966  
Facsimile No.: (619) 234-3848

(b) if to the Stockholder, to the address set forth on the last page hereof.

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9.6 GOVERNING LAW; CONSENT TO JURISDICTION. This Agreement shall be governed by, construed and enforced in accordance with the internal laws of the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware. Company and the Stockholder irrevocably submit to the jurisdiction of any state or United States federal court sitting in Delaware, in any action or proceeding arising out of or related to this Agreement, and hereby irrevocably agree that all claims in respect of such action or proceeding may be heard and determined in such state or federal court. The Stockholder hereby irrevocably consents to the service of process which may be served in any such action or proceeding by certified mail, return receipt requested, by delivering a copy of such process to the Stockholder or by any other method permitted by law.

9.7 ENTIRE AGREEMENT. This Agreement and the Proxy contain the entire understanding of the parties in respect of the subject matter hereof and supersede all prior negotiations and understandings between the parties with respect to such subject matter.

9.8 COUNTERPARTS. This Agreement may be executed in several counterparts, each of which shall be an original, but all of which together shall constitute one and the same agreement.

9.9 EFFECT OF HEADINGS. The section headings herein are for convenience only and shall not affect the construction or interpretation of this Agreement.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be duly



executed on the day and year first above written.

LIGAND PHARMACEUTICALS                  Stockholder  
INCORPORATED

Name:  
-----

By:    By:  
-----

Name:                                      Title:  
-----

Title:  
-----  
-----

Stockholder's Address for Notice:  
-----  
-----

Shares beneficially owned:  
  
\_\_\_\_\_ shares of Company Common Stock  
  
\_\_\_\_\_ shares of Company Series B  
Preferred Stock  
  
\_\_\_\_\_ shares of Company Series D  
Preferred Stock  
  
\_\_\_\_\_ shares of Company Common  
Stock issuable upon exercise  
of all outstanding options  
and warrants (including the  
conversion of any underlying  
security)

[SIGNATURE PAGE TO STOCKHOLDER VOTING AGREEMENT]

-6-  
IRREVOCABLE PROXY  
TO VOTE  
SERAGEN, INC. STOCK

The undersigned stockholder of Seragen, Inc., a Delaware corporation ("Company"), hereby irrevocably (to the fullest extent permitted by Section 212 of the Delaware General Corporation Law) appoints David E. Robinson and William L. Respos of Ligand Pharmaceuticals Incorporated, a Delaware corporation ("Parent"), and each of them, as the sole and exclusive attorneys and proxies of the undersigned, with full power of substitution and resubstitution, to vote and exercise all voting and related rights (to the fullest extent that the undersigned is entitled to do so) with respect to all of the shares of capital stock of Company that now are or hereafter may be beneficially owned by the undersigned, and any and all other shares or securities of Company issued or issuable in respect thereof on or after the date hereof (collectively, the "Shares") in accordance with the terms of this Proxy. The Shares beneficially owned by the undersigned stockholder of Company as of the date of this Proxy are listed on the final page of this Proxy, along with the number of the share certificates which represent such Shares. Upon the undersigned's execution of this Proxy, any and all prior proxies given by the undersigned with respect to any Shares are hereby revoked and the undersigned agrees not to grant any subsequent proxies with respect to the Shares until after the Expiration Date (as defined below).

This Proxy is granted pursuant to that certain Stockholder Voting Agreement dated as of May 11, 1998, by and among Parent, Company and the

undersigned stockholder (the "Stockholder Agreement"), and is granted in consideration of Parent entering into that certain Agreement and Plan of Reorganization dated as of May 11, 1998 (the "Reorganization Agreement"), among Parent, Knight Acquisition Corporation, a Delaware corporation and a wholly-owned subsidiary of Parent ("Merger Sub"), and Company. The Reorganization Agreement provides for the merger of Merger Sub with and into Company in accordance with its terms (the "Merger") pursuant to which the undersigned stockholder shall receive a portion of the proceeds of the Merger. As used herein, the term "Expiration Date" shall mean the earlier to occur of (i) such date and time as the Merger shall become effective in accordance with the terms and provisions of the Reorganization Agreement, (ii) the termination of the Reorganization Agreement under Sections 7.1(a), 7.1(b), 7.1(c), 7.1(d) (except in the instance where the Company has willfully breached a representation, warranty, covenant or agreement), 7.1(e), 7.1(f) and 7.1(k) (only in the event the Company has terminated the Reorganization) thereof or (iii) May 1, 2001.

The attorneys and proxies named above, and each of them, are hereby authorized and empowered by the undersigned, at any time prior to the Expiration Date, to act as the undersigned's attorney and proxy to vote the Shares, and to exercise all voting, consent and similar rights of the undersigned with respect to the Shares (including, without limitation, the power to execute and deliver written consents pursuant to Section 228(a) of the Delaware General Corporation Law) at every annual, special or adjourned meeting of the stockholders of Company and in every written consent in lieu of any such meeting: (a) in favor of approval of the Reorganization Agreement and the Merger and in favor of any matter that could reasonably be

expected to facilitate the Merger, (b) against approval of any proposal made in opposition to or in competition with the consummation of the Merger or the Reorganization Agreement, against any merger, consolidation, sale of assets, reorganization or recapitalization of Company with any party other than Parent and its affiliates and against any liquidation or winding up of Company and (c) in the event of the filing of an involuntary petition against the Company under the United States Bankruptcy Code and following such filing, to (i) call a special meeting of the stockholders of the Company and (ii) vote to elect members of the Board of Directors of the Company; provided Parent has not, directly or indirectly, initiated such filing. The attorneys and proxies named above may not exercise this Proxy on any other matter except as provided in clauses (a), (b) and (c) above. The undersigned stockholder may vote the Shares on all other matters.

Any obligation of the undersigned hereunder shall be binding upon the successors and assigns of the undersigned.

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This Proxy is irrevocable (to the fullest extent permitted by Section 212 of the General Corporation Law of the State of Delaware). This Proxy shall terminate, and be of no further force and effect, automatically upon the Expiration Date.

Dated: \_\_\_\_\_, 1998

Signature of Stockholder:  
 \_\_\_\_\_

Print Name of Stockholder:  
 \_\_\_\_\_

<TABLE>  
 <CAPTION>

Shares beneficially owned:	Certificate Nos.
_____	_____
<S> <C> _____ shares of Company Common Stock	_____
_____ shares of Company Series B Preferred Stock	_____
_____ shares of Company Series D Preferred Stock	_____

\_\_\_\_\_ shares of Company Common Stock issuable upon exercise of all  
outstanding options and warrants (including the conversion of any  
underlying security)

</TABLE>

[SIGNATURE PAGE TO IRREVOCABLE PROXY]