Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ACADIA PHARMACEUTICALS INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

06-1376651 (I.R.S. Employer Identification Number)

3911 Sorrento Valley Boulevard, San Diego, CA 92121 (858) 558-2871

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Uli Hacksell, Ph.D.

Chief Executive Officer ACADIA Pharmaceuticals Inc.

3911 Sorrento Valley Boulevard, San Diego, CA 92121

(858) 558-2871

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Glenn F. Baity Vice President and General Counsel ACADIA Pharmaceuticals Inc. 3911 Sorrento Valley Boulevard San Diego, CA 92121 (858) 558-2871 D. Bradley Peck J. Patrick Loofbourrow Sean M. Clayton Cooley Godward Kronish LLP 4401 Eastgate Mall San Diego, CA 92121-9109 (858) 550-6000

Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this Registration Statement, as determined by Registrant.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the 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 this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer Non-Accelerated filer (Do not check if a smaller reporting company) Accelerated filer ⊠ Smaller reporting company □

CALCULATION OF REGISTRATION FEE

| | | | Proposed | |
|--|----------------|----------------|--------------|------------------|
| | | Proposed | Maximum | |
| | | Maximum | Aggregate | |
| | Amount to Be | Offering Price | Offering | Amount of |
| Title of Each Class of Securities to Be Registered | Registered (1) | per Share | Price (2) | Registration Fee |
| Common Stock, \$0.0001 par value | 7,072,364 | \$2.50(2) | \$17,680,910 | \$695 |
| Common Stock, \$0.0001 par value | 350,000 | \$3.92(3) | \$ 1,372,000 | \$ 54 |
| TOTAL | 7,422,364 | N/A | \$19,052,910 | \$749(4) |

- (1) Pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act. The price per share is based on the average of the high and low prices reported on The Nasdaq Global Market for shares of the Registrant's common stock on September 2, 2008.
- (3) Pursuant to Rule 457(g) under the Securities Act, the proposed maximum offering price per share is estimated by reference to the price per share at which the shares may be exercised under a warrant.
- (4) Pursuant to Rule 457(p) under the Securities Act, the Registrant hereby offsets the total registration fee due under this Registration Statement by \$5,444. Such amount represents the total filing fee associated with the unsold securities from the Registrant's registration statement on Form S-3, filed with the Commission on January 18, 2006 (No. 333-131079) and the related registration statement pursuant to Rule 462(b) under the Securities Act, filed with the Commission on April 21, 2006 (No. 333-133484) (together, the "Prior Registration Statements"). As the amount of the offset is more than the registration fee, the Registrant is not paying any filing fees in connection with this Registration Statement. By use of Rule 457(p), the Registrant also hereby deregisters all of the unsold securities under the Prior Registration Statements.

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.

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholder may sell the securities under this prospectus until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 5, 2008

PROSPECTUS

7,422,364 Shares



Common Stock

This prospectus relates to the sale of up to 7,422,364 shares of our common stock by us or the selling stockholder named herein. On August 4, 2008, we entered into a common stock purchase agreement with Kingsbridge Capital Limited, or Kingsbridge, pursuant to which we may issue to Kingsbridge up to 7,072,364 shares of our common stock. We are not required to sell any shares of common stock to Kingsbridge under the common stock purchase agreement. On the same date, we also issued Kingsbridge a warrant to purchase up to 350,000 shares of our common stock. To the extent that we do elect to sell any shares of our common stock to Kingsbridge pursuant to the common stock purchase agreement or Kingsbridge elects to exercise the warrant to acquire shares, this prospectus may be used by the selling stockholder named under the section titled "Selling Stockholder" to resell such shares. The selling stockholder may resell shares under this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholder may resell its shares of our common stock in the section titled "Plan of Distribution – Selling Stockholder. We will not be paying any underwriter" within the meaning of the Securities Act with respect to any shares resold under this prospectus are resold by the selling stockholder, nor will we receive any of the proceeds from any sale of shares by the selling stockholder.

To the extent that we do not issue shares to Kingsbridge under the common stock purchase agreement or the warrant, or the selling stockholder resells such shares other than pursuant to this prospectus, we may from time to time sell the shares offered under this prospectus in one or more offerings. We provide more information about how we may sell the shares of common stock offered under this prospectus in the section titled "Plan of Distribution – ACADIA Distribution". In the event that we sell any of the shares offered under this prospectus in one or more offerings, we will describe the specific terms of these offerings in one or more supplements to this prospectus.

Our common stock is listed on The Nasdaq Global Market under the symbol "ACAD". On September 4, 2008, the last reported sale price for our common stock was \$2.40. You are encouraged to obtain current market quotations for shares of our common stock.

Investing in our common stock involves a high degree of risk. See "Risk Factors" on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2008

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ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus and any related prospectus supplement or incorporated by reference in this prospectus. We have not, and the selling stockholder has not, authorized anyone to provide you with different information. No one is making offers to sell or seeking offers to buy our common stock in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus is accurate only as of the date on the front of this prospectus and that any information we have incorporated by reference or included in any prospectus supplement is accurate only as of the date given in the document incorporated by reference or the prospectus supplement, as applicable, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

References in this prospectus to "ACADIA," the "Company," "we," "us" and "our" refer to ACADIA Pharmaceuticals Inc., together with our whollyowned subsidiaries, ACADIA Pharmaceuticals AB and ACADIA Pharmaceuticals A/S.

"ACADIA" is our trademark. This prospectus also includes trademarks and trade names owned by other parties, and these trademarks and trade names are the property of their respective owners. Use or display by us of other parties' trademarks, trade dress or products in this prospectus is not intended to, and does not imply a relationship with, or endorsements or sponsorship of, us by the trademark or trade dress owners.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in our securities. You should read this entire prospectus carefully, including the section entitled "Risk Factors", any prospectus supplement, and the documents that we incorporate by reference into this prospectus and any prospectus supplement, before making an investment decision.

ACADIA PHARMACEUTICALS INC.

We are a biopharmaceutical company focused on the development and commercialization of small molecule drugs for the treatment of central nervous system disorders. Our most advanced product candidate is pimavanserin, currently in Phase III development for the treatment of Parkinson's disease psychosis, or PDP. We also have reported positive results from a Phase II trial with pimavanserin as a co-therapy in schizophrenia and from a proof-of-concept clinical study with pimavanserin for the treatment of sleep maintenance insomnia in healthy older adults. We have retained worldwide commercialization rights to pimavanserin. We also have a chronic pain program in Phase II development and a glaucoma program in Phase I studies in collaboration with Allergan, Inc. In addition to our clinical programs, we also are developing ACP-106, which is currently in IND-track development. All of the product candidates in our pipeline emanate from discoveries made using our proprietary drug discovery platform.

We were incorporated in Delaware in January 1997. Our principal executive offices are located at 3911 Sorrento Valley Boulevard, San Diego, California 92121, and our telephone number at that address is (858) 558-2871. Our website address is www.acadia-pharm.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

COMMITTED EQUITY FINANCING FACILITY WITH KINGSBRIDGE

On August 4, 2008, we entered into a committed equity financing facility, or CEFF, with Kingsbridge, pursuant to which Kingsbridge committed to purchase, subject to certain conditions, up to the lesser of \$60 million or 7,072,364 shares of our common stock. In connection with the CEFF, we entered into a common stock purchase agreement and registration rights agreement with Kingsbridge, both dated August 4, 2008, and on that date we also issued a warrant to Kingsbridge to purchase up to 350,000 shares of our common stock at an exercise price of \$3.915 per share. This warrant is exercisable beginning on February 4, 2009 and for a period of five years thereafter.

The common stock purchase agreement entitles us to sell and obligates Kingsbridge to purchase, from time to time over a period of three years, shares of our common stock for cash consideration, subject to certain conditions and restrictions. We are not obligated to sell any shares to Kingsbridge under the common stock purchase agreement. The shares of common stock that may be issued to Kingsbridge under the common stock purchase agreement and the warrant will be issued pursuant to an exemption from registration under the Securities Act of 1933, as amended, or the Securities Act. Pursuant to the registration rights agreement, we have filed a registration statement of which this prospectus is a part, covering the possible resale by Kingsbridge of any shares that we may issue to Kingsbridge under the common stock purchase agreement, or that we may offer to the public for resale shares of our common stock that we may issue to Kingsbridge pursuant to the common stock purchase agreement, or that Kingsbridge may acquire upon exercise of the warrant.

For a period of 36 months from the first trading day following the effectiveness of the registration statement of which this prospectus is a part, we may, from time to time, at our sole discretion, and subject to certain conditions that we must satisfy, "draw down" funds under the CEFF by selling shares of our common stock to Kingsbridge. The purchase price of these shares will be at a discount of up to 12 percent from the volume weighted average price of our common stock for each of the eight trading days following our election to draw down under the CEFF. The discount on each of these eight trading days will be determined as follows:

| | PERCENT | |
|---|------------|-------------|
| 171.7A D# | OF VWAP | (APPLICABLE |
| VWAP* | | DISCOUNT) |
| Greater than \$10.00 per share | 94% | (6)% |
| Greater than \$7.00 per share but less than or equal to \$10.00 per share | 92% | (8)% |
| Greater than \$3.00 per share but less than or equal to \$7.00 per share | 90% | (10)% |
| Greater than \$1.50 per share but less than or equal to \$3.00 per share | 88% | (12)% |

* As set forth in the common stock purchase agreement, "VWAP" means the volume weighted average price (the aggregate sales price of all trades of our common stock during each trading day divided by the total number of shares of common stock traded during that trading day) of our common stock during any trading day as reported by Bloomberg L.P. using the AQR function. The VWAP and corresponding discount will be determined for each of the eight trading days during a draw down pricing period.

During the eight trading day pricing period for a draw down, if the VWAP for any trading day is less than the greater of (i) \$1.50 or (ii) 90% of the closing price of our common stock on the trading day immediately preceding the beginning of the draw down pricing period, the VWAP for that trading day will not be used in calculating the number of shares to be issued in connection with that draw down, and the draw down amount for that pricing period will be reduced by one-eighth of the draw down amount initially specified. In addition, if trading in our common stock is suspended for any reason for more than three consecutive or non-consecutive hours during trading hours on any trading day during a draw down pricing period, that trading day will not be used in calculating the number of shares to be issued in connection with that draw down amount for that pricing period will be reduced by one-eighth of the draw down, and the draw down amount for that pricing period will be used in calculating the number of shares to be issued in connection with that draw down amount for that pricing period will be reduced by one-eighth of the draw down amount for that pricing period will be reduced by one-eighth of the draw down amount initially specified.

The maximum number of shares of common stock that we can issue pursuant to the CEFF is 7,072,364 shares. An additional 350,000 shares of common stock are issuable if Kingsbridge exercises the warrant that we issued to it in connection with the CEFF. We intend to exercise our right to draw down amounts under the CEFF, if and to the extent available, at such times as we have a need for additional capital and when we believe that sales of stock under the CEFF provide an appropriate means of raising capital.

Our ability to require Kingsbridge to purchase our common stock is subject to various limitations. We can make draw downs to a maximum of the greater of (i) 2.0% of our market capitalization at the time of the commencement of the draw down pricing period or (ii) the lesser of (A) 3.5% of our market capitalization at the time of the commencement of the draw down pricing period or (B) a number of shares determined by a formula based in part on the average trading volume and trading price of our common stock prior to the date of the draw down notice issued by us with respect to that pricing period. In no event can we require Kingsbridge to purchase shares in any draw down pricing period having an aggregate purchase price in excess of \$15 million. Unless we and Kingsbridge agree otherwise, a minimum of three trading days must elapse between the expiration of any draw down pricing period and the beginning of the next succeeding draw down pricing period.

During the term of the CEFF, without the prior written consent of Kingsbridge, we may not issue securities that are, or may become, convertible or exchangeable into shares of common stock where the purchase, conversion or exchange price for that common stock is determined using any floating discount or other post-issuance adjustable discount to the market price of the common stock, including pursuant to an equity line or other financing that is substantially similar to the arrangement provided for in the CEFF.

The issuance of our common stock under the CEFF or upon exercise of the Kingsbridge warrant will have no effect on the rights or privileges of existing holders of common stock except that the voting and percentage ownership interests of each stockholder will be reduced as a result of any such issuance. Although the number of shares of common stock that stockholders presently own will not decrease, these shares will represent a smaller percentage of our total shares that will be outstanding after any issuances of shares of common stock to Kingsbridge. If we draw down amounts under the CEFF when our share price is decreasing, we will need to issue more shares to raise the same amount than if we were to issue shares when our stock price is higher. Such issuances will have a dilutive effect and may further decrease our stock price.

Kingsbridge agreed in the common stock purchase agreement that during the term of the CEFF, neither Kingsbridge nor any of its affiliates, nor any entity managed or controlled by it, will enter into, execute, or cause or assist any other person to enter into or execute, any short sale of any of our securities, including our common stock, or engage, through related parties or otherwise, in derivative transactions directly related to shares of our common stock, except during the term of a draw down pricing period with respect to the shares that Kingsbridge purchased pursuant to the CEFF during that draw down pricing period. Subject to the foregoing restrictions, Kingsbridge has the right during any draw down pricing period to sell shares of our common stock equal in number to the aggregate number of shares of common stock purchased pursuant to the applicable draw down.

In order for Kingsbridge to be obligated to buy any shares of our common stock pursuant to a draw down, the following conditions, none of which is in the control of Kingsbridge, must be met as of the date we notify Kingsbridge of our election to sell shares pursuant to the CEFF, and the date upon which each settlement of the purchase and sale of our common stock occurs with respect to such draw down:

Each of our representations and warranties in the common stock purchase agreement must be true and correct in all material respects as of the date when made as though made at that time, except for representations and warranties that are expressly made as of a particular date.

- We must have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the common stock purchase agreement, the registration rights agreement and the warrant to be performed, satisfied or complied with by us.
- We must have complied in all respects with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection
 with the execution, delivery and performance of the common stock purchase agreement and the consummation of the transactions contemplated by it,
 except for such failures to comply as would not have a material adverse effect on the business, operations, properties or financial condition of us and
 our subsidiaries as a whole or prohibit or otherwise interfere with our ability to perform any of our obligations under the common stock purchase
 agreement, registration rights agreement or warrant.
- The registration statement, of which this prospectus is a part, must have previously become effective and must remain effective.
- We must not have knowledge of any event that could reasonably be expected to have the effect of causing the registration statement, of which this prospectus is a part, to be suspended or otherwise ineffective.
- Trading in our common stock must not have been suspended by the Securities and Exchange Commission, or the SEC, the Nasdaq Global Market or the Financial Industry Regulatory Authority and trading in securities generally on the Nasdaq Global Market must not have been suspended or limited.
- There must not be any statute, rule, regulation, order, decree, writ, ruling or injunction enacted, entered, promulgated, endorsed or, to our knowledge, threatened by any court or governmental authority which prohibits the consummation of or would materially modify or delay any of the transactions contemplated by the common stock purchase agreement.
- There must not be any action, suit or proceeding before any arbitrator or any governmental authority that is pending, and, to our knowledge, there
 must not be any investigation by any governmental authority threatened, against us, any of our subsidiaries or any of our or our subsidiaries' officers,
 directors or affiliates seeking to enjoin, prevent or change the transactions contemplated by the common stock purchase agreement or seeking
 material damages in connection with such transactions.
- We must have sufficient shares of common stock, calculated using the closing trade price of the common stock as of the trading day immediately
 preceding the date we notify Kingsbridge of our election to sell shares to Kingsbridge pursuant to the CEFF, registered under the registration
 statement of which this prospectus is a part to issue and sell such shares in accordance with such draw down.
- We must not be in default in any material respect under the warrant.
- Kingsbridge must have received an opinion from our outside legal counsel.

There is no guarantee that we will be able to meet the foregoing conditions or that we will be able to draw down any portion of the amounts available under the CEFF.

We also entered into a registration rights agreement with Kingsbridge, dated August 4, 2008. Pursuant to the registration rights agreement, we have filed the registration statement, of which this prospectus is a part, with the SEC relating to the resale by Kingsbridge of any shares of common stock purchased by it under the common stock purchase agreement or issued to it upon the exercise of its warrant. The effectiveness of this registration statement is a condition precedent to our ability to sell common stock to Kingsbridge under the common stock purchase agreement. We are entitled in certain circumstances, including the existence of certain kinds of material nonpublic information, to deliver a "blackout" notice to Kingsbridge to suspend the use of this prospectus and prohibit Kingsbridge from selling shares under this prospectus for a period of not more than 30 days. If we deliver a blackout notice in the 15 trading days following the settlement of a draw down or if the registration statement, of which this prospectus is a part, is not effective in circumstances not permitted by the registration rights agreement, then we must pay amounts to Kingsbridge or issue Kingsbridge additional shares in lieu of payment. The payment or issuance would be calculated by means of a varying percentage of an amount based on the number of shares held by Kingsbridge that were purchased pursuant to such draw down and the change in the market price of our common stock between the date the blackout notice is delivered (or the registration statement is not effective) and the date the prospectus again becomes available.

We may terminate the CEFF upon one trading day's notice to Kingsbridge, except that we may not terminate the CEFF during any draw down pricing period. Kingsbridge may, upon one trading day's notice to us, terminate the CEFF if we enter into a transaction prohibited by the common stock purchase agreement without Kingsbridge's prior written consent or if Kingsbridge provides notice to us of a material adverse event relating to our business and the event continues for ten trading days after the notice. Kingsbridge may also terminate the CEFF upon one trading day's notice to us at any time in the event that a registration statement is not initially declared effective in accordance with the registration rights agreement. In addition, either we or Kingsbridge may terminate the CEFF upon one day's notice if the other party has breached a material representation, warranty or covenant to the common stock purchase agreement and such breach is not remedied within 10 trading days after notice of such breach is delivered to the breaching party.

The foregoing summary of the CEFF does not purport to be complete and is qualified by reference to the common stock purchase agreement, the registration rights agreement and the warrant, copies of which have been filed as exhibits to our Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2008, which is incorporated by reference in the registration statement of which this prospectus is a part.

RISK FACTORS

An investment in our common stock is risky. Prior to making a decision about investing in our common stock, you should carefully consider the specific risks discussed in the sections entitled "Risk Factors" contained in our filings with the SEC that are incorporated by reference in this prospectus and any applicable prospectus supplement. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described in our SEC filings or in any applicable prospectus supplement or any additional risks or uncertainties actually occur, our business, results of operations and financial condition could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you might lose all or part of your investment.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and the documents incorporated by reference herein and any prospectus supplement hereto may contain, forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to statements about:

- the progress of clinical trials involving our drug candidates;
- the progress of our research and development programs;
- the benefits to be derived from relationships with our collaborators;
- the receipt of regulatory clearances and approvals;
- our estimates of future revenues and profitability; and
- our estimates regarding our capital requirements and our need for additional financing.

In some cases, you can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "expects", "plans", "anticipates", "believes", "estimates", "projects", "predicts", "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors" in our SEC filings, and may provide additional information in any applicable prospectus supplement. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

You should read this prospectus, the registration statement of which this prospectus is a part, the documents incorporated by reference herein, and any applicable prospectus supplement completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

You should rely only on the information contained, or incorporated by reference, in this prospectus and any applicable prospectus supplement. We have not, and the selling stockholder has not, authorized anyone to provide you with different information. The common stock offered under this prospectus is not being offered in any state where the offer is not permitted. You should not assume that the information provided by this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of this prospectus or the prospectus supplement, as applicable, or that any information incorporated by reference in this prospectus or in any prospectus supplement is accurate as of any date other than the date of the document so incorporated by reference. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of any shares of our common stock offered by us under this prospectus. Unless we indicate otherwise in the applicable prospectus supplement, we anticipate that any net proceeds will be used for working capital and general corporate purposes. We will set forth in the applicable prospectus supplement our intended use for the net proceeds received from the sale of any shares of our common stock sold by us pursuant to that prospectus supplement.

If we issue any shares of our common stock to Kingsbridge under the common stock purchase agreement or in connection with the exercise of the Kingsbridge warrant we will not receive any subsequent proceeds from the resale of such shares by the selling stockholder pursuant to this prospectus.

SELLING STOCKHOLDER

This prospectus may be used for the resale by the selling stockholder, Kingsbridge, of shares of common stock that we may issue pursuant to the common stock purchase agreement we entered into with Kingsbridge on August 4, 2008, or upon exercise of the warrant that we issued to Kingsbridge on August 4, 2008. We are filing the registration statement, of which this prospectus is a part, pursuant to the provisions of the registration rights agreement we entered into with Kingsbridge on August 4, 2008.

The selling stockholder may from time to time offer and sell pursuant to this prospectus any or all of the shares that it acquires under the common stock purchase agreement or upon exercise of the warrant.

The following table presents information regarding Kingsbridge, as the selling stockholder, and the shares that it may offer and sell from time to time under this prospectus. This table is prepared based on information supplied to us by the selling stockholder, and reflects holdings as of August 4, 2008. As used in this prospectus, the term "selling stockholder" includes Kingsbridge and any donees, pledges, transferees or other successors in interest selling shares received after the date of this prospectus from the selling stockholder as a gift, pledge, or other non-sale related transfer. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended. The percentage of shares of common stock beneficially owned prior to the offering shown in the table below is based both on an aggregate of 37,130,389 shares of our common stock outstanding on August 4, 2008, and on the assumption that all shares of common stock issuable under the common stock purchase agreement with Kingsbridge and all shares of common stock issuable upon exercise of the warrant are outstanding as of that date.

| | Shares of Common Stock | | | Shares of Common Stock | | |
|--------------------------------|------------------------------|---------|--------------|------------------------|----------------|--|
| | Beneficially Owned Number of | | Number of | Beneficially Owned | | |
| | Prior to Offering Sha | | Shares Being | After Of | After Offering | |
| Stockholders | Number | Percent | Offered | Number | Percent | |
| Kingsbridge Capital Limited(1) | 7,422,364(2) | 16.7% | 7,422,364 | 0 | 0% | |

(1) The business address of Kingsbridge Capital Limited is P.O. Box 1075, Elizabeth House, 9 Castle Street, St. Helier, Jersey, JE42QP, Channel Islands.

(2) Consists of 7,072,364 shares of common stock, the maximum number of shares of common stock issuable under the common stock purchase agreement we entered into with Kingsbridge on August 4, 2008, and 350,000 shares of common stock issuable upon exercise of the warrant we issued to Kingsbridge on August 4, 2008, which warrant is not exercisable before February 4, 2009. For the purposes hereof, we assume the issuance of all 7,422,364 shares. Adam Gurney, Tony Gardner-Hillman and Maria O'Donoghue have shared voting and investment control of the securities held by Kingsbridge.

PLAN OF DISTRIBUTION

To the extent that we issue shares to Kingsbridge under the CEFF or Kingsbridge acquires shares pursuant to its warrant, the shares of our common stock registered under this prospectus may be sold by the selling stockholder in the manner described below under "Selling Stockholder Distribution". To the extent that the selling stockholder does not resell shares of our common stock under this prospectus the shares offered under this prospectus may be sold by us in one or more offerings and in the manners described below under "ACADIA Distribution". To the extent that the selling stockholder uses this prospectus to resell shares issued to Kingsbridge under the CEFF or acquired by Kingsbridge upon exercise of the warrant, the shares will not be available for sale by us. Likewise, the number of shares that we may sell to Kingsbridge under the CEFF may be reduced by the number of shares we sell under this prospectus, because Kingsbridge is not obligated to accept any draw down to the extent that we do not have a sufficient number of shares available under the registration statement to issue the shares in such draw down. The manners in which the selling stockholder or we may offer shares under this prospectus are described in more detail below.

Selling Stockholder Distribution

To the extent that we issue shares to Kingsbridge under the CEFF or Kingsbridge acquires shares upon exercise of its warrant, the selling stockholder may offer such shares for resale under this prospectus. Except as described below, to our knowledge, the selling stockholder has not entered into any agreement, arrangement or understanding with any particular broker or market maker with respect to the shares of common stock offered hereby, nor, except as described below, do we know the identity of the brokers or market makers that will participate in the resale of the shares.

The selling stockholder may decide not to sell any shares. The selling stockholder may from time to time offer some or all of the shares of common stock through brokers, dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of the shares of common stock for whom they may act as agent. In effecting sales, broker-dealers that are engaged by the selling stockholder may arrange for other broker-dealers to participate. Kingsbridge is an "underwriter" within the meaning of the Securities Act. Any brokers, dealers or agents who participate in the distribution of the shares of common stock by the selling stockholder may also be deemed to be "underwriters," and any profits on the sale of the shares of common stock by them and any discounts, commissions or concessions received by any such brokers, dealers or agents may be deemed to be underwriting discounts and commissions under the Securities Act. To the extent the selling stockholder may be deemed to be an underwriter, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

The selling stockholder will act independently of us in making decisions with respect to the timing, manner and size of each sale by it. Such sales may be made on the Nasdaq Global Market, on the over-the-counter market, otherwise, or in a combination of such methods of sale, at then prevailing market prices, at prices related to prevailing market prices or at negotiated prices. The shares of common stock may be sold by the selling stockholder according to one or more of the following methods:

- a block trade in which the broker or dealer so engaged will attempt to sell the shares of common stock as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus;
- an over-the-counter distribution in accordance with the rules of Nasdaq;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- privately negotiated transactions;
- a combination of such methods of sale; and
- any other method permitted pursuant to applicable law.

Any shares covered by this prospectus which qualify for sale pursuant to Rule 144 of the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus. In addition, the selling stockholder may transfer the shares by other means not described in this prospectus.

Any broker-dealer participating in such transactions as agent may receive commissions from Kingsbridge (and, if they act as agent for the purchaser of such shares, from such purchaser). Broker-dealers may agree with Kingsbridge to sell a specified number of shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for Kingsbridge, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to Kingsbridge. Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) on the Nasdaq Global Market, on the over-the-counter market, in privately-negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above. To the extent required under the Securities Act, an amendment to this prospectus or a supplemental prospectus will be filed, disclosing:

- the name of any such broker-dealers;
- the number of shares involved;

- the price at which such shares are to be sold;
- the commission paid or discounts or concessions allowed to such broker-dealers, where applicable;
- that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, as supplemented; and
- other facts material to the transaction.

Underwriters and purchasers that are deemed underwriters under the Securities Act may engage in transactions that stabilize, maintain or otherwise affect the price of the securities, including the entry of stabilizing bids or syndicate covering transactions or the imposition of penalty bids. Kingsbridge and any other persons participating in the sale or distribution of the shares will be subject to the applicable provisions of the Exchange Act and the rules and regulations thereunder including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of, purchases by the selling stockholder or other persons or entities. Under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to special exceptions or exemptions. Regulation M may restrict the ability of any person engaged in the distribution of the securities to engage in market-making and certain other activities with respect to those securities. The anti-manipulation rules under the Exchange Act may apply to sales of the securities in the market. All of these limitations may affect the marketability of the shares and the ability of any person to engage in market-making activities with respect to the securities.

We have agreed to pay the expenses of registering the shares of common stock under the Securities Act, including registration and filing fees, printing expenses, administrative expenses and certain legal and accounting fees, as well as certain fees of counsel for the selling stockholder incurred in the preparation and negotiation of the CEFF agreements and the registration statement of which this prospectus forms a part. The selling stockholder will bear all discounts, commissions or other amounts payable to underwriters, dealers or agents, as well as transfer taxes and certain other expenses associated with its sale of securities.

Under the terms of the Kingsbridge common stock purchase agreement and the registration rights agreement, we have agreed to indemnify the selling stockholder and certain other persons against certain liabilities in connection with the offering of the shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute toward amounts required to be paid in respect of such liabilities.

At any time a particular offer of the shares of common stock is made by the selling stockholder, a revised prospectus or prospectus supplement, if required, will be distributed. Such prospectus supplement or post-effective amendment will be filed with the SEC, to reflect the disclosure of required additional information with respect to the distribution of the shares of common stock. We may suspend the sale of shares by the selling stockholder pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional information.

ACADIA Distribution

To the extent that the selling stockholder does not utilize this prospectus to resell shares of our common stock issued to or acquired by Kingsbridge pursuant to the common stock purchase agreement or warrant, we may sell the shares to one or more underwriters for public offering and sale by them and may also sell the shares to investors directly or through agents. We will name any underwriter or agent involved in the offer and sale of shares by us in the applicable prospectus supplement. We have reserved the right to sell or exchange shares directly to investors on our own behalf in those jurisdictions where we are authorized to do so.

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We may distribute the shares of our common stock from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We may also, from time to time, authorize dealers, acting as our agents, to offer and sell shares of our common stock upon the terms and conditions set forth in the applicable prospectus supplement. We, or the purchasers of shares for whom the underwriters may act as agents, may compensate underwriters in the form of underwriting discounts or commissions, in connection with any sale of shares we offer under this prospectus. Underwriters may sell such shares to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase shares as a principal, and may then resell the shares at varying prices to be determined by the dealer.

We will describe in the applicable prospectus supplement any compensation we pay to underwriters or agents in connection with an offering of shares of our common stock by us, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Dealers and agents participating in the distribution of shares we offer under this prospectus may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the shares may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against certain civil liabilities, including liabilities under the Securities Act and to reimburse these persons for certain expenses. We may grant underwriters who participate in the distribution of shares we are offering under this prospectus an option to purchase additional shares to cover over-allotments, if any, in connection with the distribution.

To facilitate the offering of shares of our common stock by us, certain persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the price of the shares. This may include over-allotments or short sales of the shares, which involve the sale by persons participating in the offering of more shares than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. These persons may stabilize or maintain the price of the shares by bidding for or purchasing shares in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if shares sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the shares at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

Certain underwriters, dealers or agents and their associates may engage in transactions with and perform services for us in the ordinary course of our business.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Cooley Godward Kronish LLP, San Diego, California. The selling stockholder and any underwriters will be advised about the other issues relating to any offering by their own legal counsel.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2007 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and we file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement under the Securities Act with respect to the shares of our common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits which are part of the registration statement. For further information with respect to us and the shares of our common stock offered by this prospectus, we refer you to the registration statement and the exhibits filed as part of the registration statement. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public from the SEC's website at www.sec.gov. We maintain a website at www.acadia-pharm.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents we filed with the SEC pursuant to Section 13 of the Exchange Act:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2007 (including information specifically incorporated by reference into our Form 10-K from our Proxy Statement for our 2008 Annual Meeting of Stockholders);
- Quarterly Reports on Form 10-Q for the quarters ended March 31, and June 30, 2008;
- Current Reports on Form 8-K filed on March 7, 2008, May 5, 2008 and June 16, 2008;
- Description of our common stock contained in our registration statement on Form 8-A dated May 19, 2004; and
- All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and before the last offering of securities under this prospectus (excluding any portion of such documents which are furnished and not filed with the SEC).

You may access our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, Proxy Statement, and amendments, if any, to those documents filed or furnished pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act with the SEC free of charge at the SEC's website or our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

You may request a copy of our SEC filings at no cost, by telephoning or writing us at the following address:

Investor Relations ACADIA Pharmaceuticals Inc. 3911 Sorrento Valley Boulevard San Diego, CA 92121 (858) 558-2871

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, payable by us in connection with the offering of common stock being registered. All amounts are estimates except the registration fee.

| | Amount to Be Paid |
|---------------------------------|---------------------------|
| Registration fee | \$ 0 |
| Legal fees and expenses | 25,000 |
| Accounting fees and expenses | 10,000 |
| Transfer agent fees | 3,500 |
| Printing and engraving expenses | 10,000 |
| Miscellaneous | 6,500 |
| Total | <u>6,500</u> \$ 55,000 |

Item 15. Indemnification of Directors and Officers

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interest of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

The Registrant's amended and restated certificate of incorporation and bylaws include provisions that indemnify directors and officers of the corporation for actions taken in such capacity, if the actions were taken in good faith and in a manner reasonably believed to be in the best interests of the corporation and, in a criminal proceeding, the director or officer had no reasonable cause to believe that his conduct was unlawful. A director or officer who is successful in defending a claim will be indemnified for all expenses incurred in connection with his defense. The Registrant has entered into indemnification agreements with its officers and directors that require the Registrant to indemnify such persons against any and all expenses (including attorneys' fees), witness fees, damages, judgments, fines, settlements and other amounts incurred in connection with any action, suit or proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was or at any time becomes a director, an officer or an employee of the Registrant or any of its affiliated enterprises, provided that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to our best interest and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

We maintain directors and officers insurance providing indemnification for certain of our directors, officers, affiliates, partners and employees for certain liabilities.

Item 16. Exhibits

| Exhibit <u>Number</u> 4.1 | Description of Document |
|---------------------------------|---|
| 4.2 | Amended and Restated Bylaws (filed as Exhibit 3.5 to Registration Statement File No. 333-113137). |
| 4.3 | Form of common stock certificate of Registrant (filed as Exhibit 4.1 to Registration Statement No. 333-52492, dated December 21, 2000). |
| 4.4 | Form of Warrant to Purchase Preferred Stock issued to GATX Ventures on May 31, 2002 (filed as Exhibit 4.3 to Registration Statement No. 333-113137). |
| 4.5 | Form of Warrant to Purchase Common Stock issued to purchasers in a private placement on April 20, 2005 (filed as Exhibit 4.3 to Registration Statement No. 333-124753). |
| 4.6 | Warrant to Purchase Common Stock issued to Kingsbridge Capital Limited on August 4, 2008 (filed as Exhibit 4.4 to the Registrant's Quarterly Report of Form 10-Q for the quarter ending June 30, 2008). |
| 5.1 | Opinion of Cooley Godward Kronish LLP. |
| 23.1 | Consent of Independent Registered Public Accounting Firm. |
| 23.2 | Consent of Counsel (included in Exhibit 5.1). |
| 24.1 | Power of Attorney (included on signature page). |
| | |

Item 17. Undertakings

A. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933, as amended, or the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that subparagraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment 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.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the Registrant is relying on Rule 430B:

(a) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(b) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement or prospectus that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the regi

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(ii) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses field in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement incorporated or made in any such document immediately prior to such date of first use.

B. For the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned Registrant hereby undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(1) any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(2) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(3) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(4) any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

C. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act (by reference in the registration statement 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.

D. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to provisions described in Item 15 above or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the 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 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 Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on September 5, 2008.

ACADIA PHARMACEUTICALS INC.

By:

/s/ ULI HACKSELL

Uli Hacksell President and Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Uli Hacksell and Thomas H. Aasen, and each of them, as his or her true and lawful attorneys in fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post effective amendments, exhibits thereto and other documents in connection therewith) to this registration statement and any subsequent registration statement filed by the Registrant pursuant to Rule 462(b) of the Securities Act of 1933, as amended, which relates to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys in fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|--|--|-------------------|
| /s/ ULI HACKSELL Uli Hacksell | President, Chief Executive Officer and Director (Principal Executive Officer) | September 5, 2008 |
| /s/ THOMAS H. AASEN Thomas H. Aasen | Vice President, Chief Financial Officer, Secretary and Treasurer (Principal Financial Officer and Principal Accounting Officer) | September 5, 2008 |
| /s/ LESLIE IVERSEN Leslie Iversen | Chairman of the Board | September 5, 2008 |
| /s/ GORDON BINDER Gordon Binder | Director | September 5, 2008 |
| /s/ MICHAEL BORER Michael Borer | Director | September 5, 2008 |
| /s/ LAURA A. BREGE Laura A. Brege | Director | September 5, 2008 |
| /s/ MARY ANN GRAY Mary Ann Gray | Director | September 5, 2008 |
| /s/ LESTER KAPLAN Lester Kaplan | Director | September 5, 2008 |
| /s/ TORSTEN RASMUSSEN Torsten Rasmussen | Director | September 5, 2008 |
| /s/ ALAN WALTON Alan Walton | Director | September 5, 2008 |

INDEX TO EXHIBITS

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| 24.1 | Power of Attorney (included on signature page). |
| | |



D. Bradley Peck (858) 550-6012 bpeck@cooley.com

September 5, 2008

ACADIA Pharmaceuticals Inc. 3911 Sorrento Valley Boulevard San Diego, CA 92121

Ladies and Gentlemen:

We have acted as counsel to ACADIA Pharmaceuticals Inc., a Delaware corporation (the "*Company*"), in connection with the Registration Statement on Form S-3 (the "*Registration Statement*") to be filed by the Company under the Securities Act of 1933, as amended (the "*Securities Act*"). The Company has provided us with a prospectus (the "*Prospectus*"), which forms part of the Registration Statement. The Prospectus provides that it will be supplemented in the future by one or more prospectus supplements (each, a "*Prospectus Supplement*").

The Registration Statement, including the Prospectus as supplemented from time to time by one or more Prospectus Supplements, will provide for (a) the offering for resale by the selling stockholder named therein (the "*Selling Stockholder*"), on a delayed or continuous basis, of up to a maximum of 7,422,364 shares of the Company's common stock, par value \$0.0001 per share, issuable to the Selling Stockholder, including (i) up to 7,072,364 shares of the Company's common stock (the "*Agreement Shares*"), that may be issued from time to time pursuant to a Common Stock Purchase Agreement, dated August 4, 2008, by and between the Company and the Selling Stockholder (the "*Agreement*") and (ii) up to 350,000 shares of the Company's common stock (the "*Warrant Shares*"), issuable upon the exercise of an outstanding Warrant issued to the Selling Stockholder (the "*Warrant*") in connection with the execution and delivery of the Agreement, or (b) to the extent that less than the maximum number of Agreement Shares and/or Warrant Shares are issued to the Selling Stockholder and resold by the Selling Stockholder pursuant to the Registration Statement, (the difference between the maximum number of the Agreement Shares and Warrant Shares and the actual number of Agreement Shares and Warrant Shares issued and sold by the Selling Stockholder are referred to herein as the "*Shortfall Number*"), the offering and sale of the Shortfall Number of shares of the Company's common stock, par value \$0.0001 per share, by the Company from time to time (the "*Company Shares*") pursuant to Rule 415 of the General Rules and Regulations promulgated under the Securities Act (the "*Securities Act Rules*").

In connection with this opinion, we have examined the Registration Statement, the Company's Amended and Restated Certificate of Incorporation and Bylaws, as currently in effect, the Agreement, the Warrant and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof, and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

We have also assumed that, at the time of any issuance and sale of the Agreement Shares, the Warrant Shares and the Company Shares, a sufficient number of shares of Common Stock is authorized and reserved or available for issuance, that the purchase consideration for the issuance and sale of the Company Shares is not less than the par value of the Common Stock, and that, prior to any offer and sale of Company Shares, the Company's board of directors (the "*Board*"), including any appropriate committee appointed thereby, will duly authorize the price at which the Company Shares are to be issued and sold.

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Our opinion is expressed solely with respect to the federal laws of the United States of America, the General Corporation Law of the State of Delaware, and the laws of the State of California. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that (a) if, as, and when the Agreement Shares and the Warrant Shares are issued and delivered by the Company to the Selling Stockholder in accordance with the terms of the Agreement and the Warrant, respectively, including, without limitation, the payment in full of applicable consideration, the Agreement Shares and Warrant Shares will be validly issued, fully paid, and nonassessable, and (b) with respect to any offering of the Company Shares, provided that (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act, and the Prospectus and any and all Prospectus Supplement(s) have been prepared, delivered and filed in compliance with the Securities Act and the applicable Securities Act Rules; (ii) the Board, including any appropriate committee appointed thereby, and appropriate officers of the Company have taken all necessary corporate action to approve the issuance of the Company Shares and related matters; and (iii) the issuance and sale of the Company Shares do not violate any applicable law or the operative certificate of incorporation or bylaws of the Company or result in a default under or breach of any agreement or instrument binding upon the Company Shares, when issued and sold as contemplated in the Registration Statement, the Prospectus and any related Prospectus Supplement(s) and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, will be duly authorized, validly issued, fully paid and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus which forms a part of the Registration Statement.

Very truly yours,

COOLEY GODWARD KRONISH LLP

By: /s/ D. Bradley Peck

D. Bradley Peck

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Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 4, 2008 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in ACADIA Pharmaceuticals Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

San Diego, California September 4, 2008