

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
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|---|---|--|
| 1. Name and Address of Reporting Person* <u>Lundstrom Brian</u> (Last) (First) (Middle) 3911 SORRENTO VALLEY BOULEVARD (Street) SAN DIEGO CA 92121 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>ACADIA PHARMACEUTICALS INC [ACAD]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) <u>Sr. VP, Bus. Devt.</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>09/12/2007</u> | |
| | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|---------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 09/12/2007 | | M ⁽¹⁾ | | 5,100 | A | \$6.61 | 5,100 | D | |
| Common Stock | 09/12/2007 | | S ⁽¹⁾ | | 4,300 | D | \$16 | 800 | D | |
| Common Stock | 09/12/2007 | | S ⁽¹⁾ | | 100 | D | \$16.02 | 700 | D | |
| Common Stock | 09/12/2007 | | S ⁽¹⁾ | | 700 | D | \$16.03 | 0 | D | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|-------|--|-----------------|---|--|--|---|--|-------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | | Title |
| Stock Option (Right to Buy) | \$6.61 | 09/12/2007 | | M | | | 5,100 | (2) | 11/23/2014 | Common Stock | 5,100 | \$0 | 78,918 | D | |

Explanation of Responses:

- The transactions reported in this Form 4 were made pursuant to an automatic sales plan under Rule 10b5-1 of the Securities Exchange Act of 1934, as amended. The plan provides for the non-discretionary periodic sales of stock (and corresponding exercises of options, if needed) pursuant to predetermined trading parameters that do not permit Mr. Lundstrom to exercise any influence over how, when or whether to effect trades under the plan after its adoption.
- 25% of the shares subject to the Stock Option vested and became exercisable on November 24, 2005. The remaining shares vest and become exercisable thereafter in 36 equal monthly installments.

Thomas H. Aasen, Attorney-in-Fact 09/14/2007

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.