UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 19, 2005

IDERA PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) **001-31918** (Commission File Number)

04-3072298 (IRS Employer Identification No.)

345 Vassar Street, Cambridge, Massachusetts (Address of Principal Executive Offices) **02139** (Zip Code)

(617) 679-5500

Registrant's telephone number, including area code:

n/a

(Former Name or Former Address, if Changed Since Last Report)

(Former Name of Former Address, if Changed Since East Report)
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):
☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01: Entry into a Material Definitive Agreement

On October 19, 2005, Idera Pharmaceuticals, Inc. (the "Company") entered into an amended and restated employment agreement with Sudhir Agrawal, D. Phil., its President, Chief Executive Officer and Chief Scientific Officer. Under the agreement, Dr. Agrawal's employment will continue for a three-year term ending on October 19, 2008, which term will automatically be extended for an additional year on an annual basis unless either party provides notice otherwise. Under the agreement, Dr. Agrawal is entitled to receive an annual base salary of \$425,000 and an annual bonus in an amount equal to between 20% and 70% of his base salary, as determined by the Compensation Committee of the Company's Board of Directors.

Under the agreement, the Company confirmed its agreement to grant Dr. Agrawal options to purchase an aggregate of up to 600,000 shares of common stock upon the achievement of specified milestones. These milestones are described in the Company's Current Report on Form 8-K filed on May 18, 2005. Any options granted upon the achievement of these milestones would vest quarterly over a three-year period commencing on the date the option is granted.

If Dr. Agrawal's employment is terminated by the Company without cause or by him for good reason, the Company will pay Dr. Agrawal (a) a lump sum cash payment equal to the pro rata portion of the annual bonus that he earned in respect of the year preceding his termination date and (b) his base salary as severance for a period ending on the earlier of the final day of the term of the agreement in effect immediately prior to such termination and the second anniversary of his termination date (the "Severance Payment"). The Company has also agreed to continue to provide Dr. Agrawal with certain benefits for a period ending on the earlier of the final day of the term of the agreement in effect immediately prior to such termination and the second anniversary of his termination date, except to the extent another employer provides Dr. Agrawal with comparable benefits. Additionally, any stock options or other equity incentive awards previously granted to Dr. Agrawal will vest as of the termination date to the extent such options or equity incentive awards would have vested had he continued to be an employee of the Company until the final day of the term of the agreement in effect immediately prior to such termination.

If Dr. Agrawal's employment is terminated by him for good reason or by the Company without cause in connection with, or within one year after, a change in control of the Company, the Company will pay Dr. Agrawal in lieu of the Severance Payment a lump sum cash payment equal to his base salary multiplied by the lesser of the aggregate number of years (or portion thereof) remaining in his employment term and two years. The vesting of all stock options held by Dr. Agrawal will be accelerated in full upon the execution by Company of an agreement providing for the Company to be acquired or liquidated, or, if not previously accelerated in full, upon the occurrence of a change in control of the Company.

Dr. Agrawal has agreed that during his employment with the Company and for a one-year period thereafter, he will not hire or attempt to hire any employee of the Company or compete with the Company.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

IDERA PHARMACEUTICALS, INC.

Date: October 24, 2005 By: $\frac{\text{/s/Robert G. Andersen}}{\text{Robert G. Andersen}}$

Robert G. Andersen Chief Financial Officer and Vice President of Operations