

OXFORD BIOSCIENCE PARTNERS IV LP  
Form SC 13D/A  
February 10, 2006

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

SCHEDULE 13D

(RULE 13d-101)

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

RULE 13d-2(a)

(Amendment No. 2 ) 1

SOLEXA, INC.

-----  
(Name of Issuer)

COMMON STOCK

-----  
(Title of Class of Securities)

83420X105

-----  
(CUSIP Number)

Jonathan J. Fleming  
c/o Oxford Bioscience Partners IV L.P.  
222 Berkeley Street  
Boston, Massachusetts 02116  
(617) 357-7474

-----  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)  
January 18, 2006

-----  
(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 that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

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1 The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Item 1. SECURITY AND ISSUER.  
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This statement relates to the Common Stock, \$0.01 par value (the "Common Stock") of Solexa, Inc. (the "Issuer") having its principal executive office 25861 Industrial Blvd., Hayward, California, 94545.

Item 2. IDENTITY AND BACKGROUND.  
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- (a) This Statement is being filed on behalf of: Oxford Bioscience Partners IV L.P. ("Oxford IV") and mRNA Fund II L.P. ("MRNA II"); OBP Management IV L.P. ("OBP IV"), the sole general partner of Oxford IV and MRNA II; and Jeffrey T. Barnes, Mark P. Carthy, Jonathan J. Fleming, Michael E. Lytton and Alan G. Walton, who are the general partners of OBP IV. The individuals and entities named in this paragraph are referred to collectively herein as the "Reporting Persons."
- (b) The address for all Reporting Persons other than Alan G. Walton is 222 Berkeley St., Boston, MA 02116  
  
The address for Alan G. Walton is 315 Post Road West, Westport, CT 06880.
- (c) No changes have occurred since Schedule 13D relating to the Reporting Persons filed on March 14, 2005 (the "Filing").
- (d) No changes with respect to the Reporting Persons have occurred since the Filing.
- (e) No changes with respect to the Reporting Persons have occurred since the Filing.
- (f) No changes with respect to the Reporting Persons have occurred since the Filing.

Item 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.  
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Not applicable.

Item 4. PURPOSE OF TRANSACTION.  
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Not applicable.

Item 5. INTEREST IN SECURITIES OF THE ISSUER.  
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- (a) Not applicable.
- (b) Not applicable.

- (c) Not applicable.
- (d) Not applicable.
- (e) As of January 18, 2006, all of the Reporting Persons have ceased to beneficially own more than five percent of the outstanding Common Stock.

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Item 6. CONTRACTS, ARRANGEMENTS, UNDERTAKINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.  
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Not applicable.

Item 7. MATERIAL TO BE FILED AS EXHIBITS.  
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Exhibit 1 - Agreement regarding filing of joint Schedule 13D.

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SIGNATURES

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.

Dated: February 8, 2006

OXFORD BIOSCIENCE PARTNERS IV L.P.  
by its General Partner, OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming  
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Name: Jonathan J. Fleming  
Title: General Partner

MRNA FUND II L.P.  
By its General Partner, OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming  
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Name: Jonathan J. Fleming  
Title: General Partner

OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming

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Name: Jonathan J. Fleming  
Title: General Partner

/s/ Jeffrey T. Barnes  
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Jeffrey T. Barnes

/s/ Mark P. Carthy  
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Mark P. Carthy

/s/ Jonathan J. Fleming  
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Jonathan J. Fleming

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/s/ Michael E. Lytton  
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Michael E. Lytton

/S/ Alan G. Walton  
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Alan G. Walton

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EXHIBIT INDEX

A. Agreement regarding filing of joint Schedule 13D.

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Exhibit A

JOINT FILING UNDERTAKING

Pursuant to Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, each of the undersigned agree that the Schedule 13D, and any amendments thereto, filed with respect to the beneficial ownership by the undersigned of the equity securities of Solexa, Inc., is being filed on behalf of each of the undersigned.

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Dated: February 8, 2006

OXFORD BIOSCIENCE PARTNERS IV L.P.  
by its General Partner, OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming  
-----

Name: Jonathan J. Fleming  
Title: General Partner

MRNA FUND II L.P.  
by Its General Partner, OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming  
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Name: Jonathan J. Fleming  
Title: General Partner

OBP MANAGEMENT IV L.P.

By: /s/ Jonathan J. Fleming  
-----

Name: Jonathan J. Fleming  
Title: General Partner

/s/ Jeffrey T. Barnes  
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Jeffrey T. Barnes

/s/ Mark P. Carthy  
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Mark P. Carthy

/s/ Jonathan J. Fleming  
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Jonathan J. Fleming

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/s/ Michael E. Lytton  
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Michael E. Lytton

/s/ Alan G. Walton  
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Alan G. Walton

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