

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**SCHEDULE 13G  
(Rule 13d-102)**

**INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b)(c), AND  
(d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)  
(Amendment No. 5)\***

Exact Sciences Corporation

---

(Name of Issuer)

Common Stock

---

(Title of Class of Securities)

30063P105

---

(CUSIP Number)

December 31, 2006

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(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\* 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 the disclosures provided in a prior cover page.

The information required in 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 ("Act") 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).

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

One Liberty Fund III, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)  
(a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

6 SHARED VOTING POWER  
726,999  
7 SOLE DISPOSITIVE POWER  
8 SHARED DISPOSITIVE POWER

726,999

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

726,999

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.7%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

OneLiberty Partners III, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

- (a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

6 SHARED VOTING POWER

726,999

7 SOLE DISPOSITIVE POWER

8 SHARED DISPOSITIVE POWER

726,999

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

726,999

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.7%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

OneLiberty Fund IV, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

- (a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

6 SHARED VOTING POWER

475,788

7 SOLE DISPOSITIVE POWER

8 SHARED DISPOSITIVE POWER

475,788

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

475,788

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

1.8%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

OneLiberty Advisors Fund IV, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)  
(a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

6 SHARED VOTING POWER

475,788

7 SOLE DISPOSITIVE POWER

8 SHARED DISPOSITIVE POWER

475,788

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

475,788

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

1.8%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

OneLiberty Partners IV, LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

- (a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

6 SHARED VOTING POWER

475,788

7 SOLE DISPOSITIVE POWER

8 SHARED DISPOSITIVE POWER

475,788

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

475,788

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

1.8%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

OO

**1** NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Stephen J. Ricci

**2** CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

- (a)   
(b)

**3** SEC USE ONLY

**4** CITIZENSHIP OR PLACE OF ORGANIZATION

United States

**5** SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	37,500	<b>6</b> SHARED VOTING POWER
	1,202,787	<b>7</b> SOLE DISPOSITIVE POWER
	37,500	<b>8</b> SHARED DISPOSITIVE POWER
	1,202,787	

**9** AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,240,287

**10** CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

**11** PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

4.6%

**12** TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Edwin M. Kania, Jr.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

- (a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	160,569	6 SHARED VOTING POWER
	1,202,787	7 SOLE DISPOSITIVE POWER
	160,569	8 SHARED DISPOSITIVE POWER
	1,202,787	

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,363,356

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.1%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN



Amendment No. 5 to Schedule 13G

- Item 1 (a). Name of Issuer :  
Exact Sciences Corporation
- Item 1 (b). Address of Issuer's Principal Executive Offices :  
100 Campus Drive, Marlboro, MA 01752
- Item 2 (a). Names of Persons Filing :  
(1) One Liberty Fund III, L.P. ("Fund III"); (2) OneLiberty Partners III, L.P. ("Partners III"); (3) OneLiberty Fund IV, L.P. ("Fund IV"); (4) OneLiberty Partners IV, LLC ("Partners IV"); (5) OneLiberty Advisors Fund IV, L.P. ("Advisors IV"); (6) Edwin M. Kania, Jr. ("Kania") and (7) Stephen J. Ricci ("Ricci"). Ricci and Kania are the general partners of Partners III and the individual managing members of Partners IV. Partners III is the general partner of Fund III. Partners IV is the general partner of each of Fund IV and Advisors IV.
- Item 2 (b). Address of Principal Business Office or, if None, Residence :  
The address of the principal business office of each of Fund III, Partners III, Fund IV, Partners IV, Advisors IV, Kania and Ricci is c/o Flagship Ventures, One Memorial Drive, 7<sup>th</sup> Floor, Cambridge, MA 02142.
- Item 2 (c). Citizenship :  
Each of Fund III, Partners III, Fund IV and Advisors IV is a limited partnership organized under the laws of the state of Delaware. Partners IV is a limited liability company organized under the laws of the state of Delaware. Each of Kania and Ricci is a United States citizen.
- Item 2 (d). Title of Class of Securities :  
Common Stock, \$.01 par value per share
- Item 2 (e). CUSIP Number :  
30063P105
- Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a :  
Not Applicable.
- Item 4. Ownership .
- (a) Amount Beneficially Owned:  
As of December 31, 2006, Fund III is the record holder of 726,999 shares of Common Stock. As of December 31, 2006, Partners III does not hold any shares of Common Stock, but as general partner of Fund III, Partners III may be deemed to own beneficially 726,999 shares of Common Stock. As of December 31, 2006, Fund IV is the record holder of 465,096 shares of Common Stock. As of December 31, 2006, Advisors IV is the record holder of 10,692 shares of Common Stock. As of December 31, 2006, Partners IV does not hold any shares of Common Stock, but as general partner of Fund IV and Advisors IV, may be deemed to own beneficially 475,788 shares of Common Stock. By virtue of their relationship as affiliated limited partnerships that have an

overlapping general partner, Partners IV, each of Fund IV and Advisors IV may be deemed to own beneficially 475,788 shares of Common Stock. Kania is also the record owner of stock options to purchase 73,749 shares of Common Stock exercisable within 60 days of December 31, 2006. Kania is also record owner of 86,820 shares of Common Stock. In his capacity as a managing member of Partners IV and general partner of Partners III, Kania may be deemed to beneficially own 1,363,356 shares of Common Stock. Ricci is record holder of 37,500 shares, which amount was previously reported as 42,500 shares due to a ministerial error. In his capacity as a managing member of Partners IV and general partner of Partners III, Ricci may be deemed to beneficially own 1,240,287 shares of Common Stock. Each reporting person expressly disclaims beneficial ownership, except to the extent of his or its pecuniary interest therein, if any, of the shares of Common Stock, except in the case of (i) Fund III for the 726,999 shares of Common Stock which it holds of record, (ii) Fund IV for the 465,096 shares of Common Stock which it holds of record, (iii) Advisors IV for the 10,692 shares of Common Stock which it holds of record, (iv) Kania for the options to purchase 73,749 shares of Common Stock which he holds of record and the 86,820 shares of Common Stock which he holds of record and Ricci for the 37,500 shares of Common Stock which he holds of record.

(b) Percent of Class:

One Liberty Fund III, L.P.:

2.7%

OneLiberty Partners III, L.P.:

2.7%

OneLiberty Fund IV, L.P.:

1.8%

OneLiberty Partners IV, LLC:

1.8%

OneLiberty Advisors Fund IV, L.P.:

1.8%

Stephen J. Ricci:

4.6%

Edwin M. Kania, Jr.:

5.1%

The foregoing percentages are calculated based on the 26,777,813 shares of Common Stock reported to be outstanding as of December 31, 2006, according to the Issuer, as adjusted pursuant to Rule 13d-3(d)(1).

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

0 shares for each reporting person except for Ricci and Kania. For Ricci, 37,500 shares of Common Stock, and for Kania, 73,749 shares of Common Stock which may be purchased pursuant to stock options exercisable within 60 days of December 31, 2006 and 86,820 shares of Common Stock.

(ii) shared power to vote or to direct the vote:

One Liberty Fund III, L.P.:

726,999 shares

OneLiberty Partners III, L.P.:

726,999 shares

OneLiberty Fund IV, L.P.:

475,788 shares

OneLiberty Partners IV, LLC:

475,788 shares

OneLiberty Advisors Fund IV, L.P.:

475,788 shares

Stephen J. Ricci:

1,202,787 shares

Edwin M. Kania, Jr.:  
1,202,787 shares

(iii) sole power to dispose or direct the disposition of:

0 shares for each reporting person except for Ricci and Kania. For Ricci, 37,500 shares of Common Stock, and for Kania, 73,749 shares of Common Stock which may be purchased pursuant to stock options exercisable within 60 days of December 31, 2006 and 86,820 shares of Common Stock.

(iv) shared power to dispose or direct the disposition of:

One Liberty Fund III, L.P.:

726,999 shares

OneLiberty Partners III, L.P.:

726,999 shares

OneLiberty Fund IV, L.P.:

475,788 shares

OneLiberty Partners IV, LLC:

475,788 shares

OneLiberty Advisors Fund IV, L.P.:

475,788 shares

Stephen J. Ricci:

1,202,787 shares

Edwin M. Kania, Jr.:

1,202,787 shares

Item 5. Ownership of Five Percent or Less of a Class.

Not Applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not Applicable.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not Applicable.

Item 8. Identification and Classification of Members of the Group.

Not Applicable.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certifications.

Not Applicable. This statement on Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: February 14, 2007

ONE LIBERTY FUND III, L.P.

By: OneLiberty Partners III, L.P.  
Its General Partner

By: \_\_\_\_\_ \*  
Stephen J. Ricci  
General Partner

ONELIBERTY PARTNERS III, L.P.

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
General Partner

ONELIBERTY FUND IV, L.P.

By: OneLiberty Partners IV, LLC  
Its General Partner

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
General Partner

ONELIBERTY ADVISORS FUND IV, L.P.

By: OneLiberty Partners IV, LLC  
Its General Partner

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
Managing Member

ONELIBERTY PARTNERS IV, LLC

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
Managing Member

STEPHEN J. RICCI

\_\_\_\_\_  
\*

EDWIN M. KANIA, JR.

\_\_\_\_\_  
\*

\* The undersigned attorney-in-fact, by signing his name below, does hereby sign this statement on behalf of the above indicated filers pursuant to Powers of Attorney filed hereto as Exhibit II.

\_\_\_\_\_  
/s/ Stephen J. Ricci

Stephen J. Ricci  
Attorney-in-Fact

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of shares of stock of Exact Sciences Corporation.

EXECUTED this 14th day of February, 2007.

ONE LIBERTY FUND III, L.P.

By: OneLiberty Partners III, L.P.  
Its General Partner

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
General Partner

ONELIBERTY PARTNERS III, L.P.

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
General Partner

ONELIBERTY FUND IV, L.P.

By: OneLiberty Partners IV, LLC  
Its General Partner

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
General Partner

ONELIBERTY ADVISORS FUND IV, L.P.

By: OneLiberty Partners IV, LLC  
Its General Partner

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
Managing Member

ONELIBERTY PARTNERS IV, LLC

By: \_\_\_\_\_ \*  
Edwin M. Kania, Jr.  
Managing Member

STEPHEN J. RICCI

\_\_\_\_\_  
\*

EDWIN M. KANIA, JR.

\_\_\_\_\_  
\*

\* The undersigned attorney-in-fact, by signing his name below, does hereby sign this statement on behalf of the above indicated filers pursuant to Powers of Attorney filed hereto as Exhibit II.

\_\_\_\_\_  
/s/ Stephen J. Ricci

Stephen J. Ricci  
Attorney-in-Fact



## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Stephen J. Ricci and Edwin M. Kania, Jr., and each of them, with full power to act without the other, his true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his capacity as general partner or managing member of any partnership or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the By-laws of the National Association of Securities Dealers, Inc., granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 16th day of February, 2001.

/s/ Stephen J. Ricci

Stephen J. Ricci

/s/ Edwin M. Kania, Jr.

Edwin M. Kania, Jr.