EXACT SCIENCES CORP Form SC 13G October 29, 2010

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Exact Sciences Corporation (Name of Issuer)

Common Stock, \$0.01 par value (Title of Class of Securities)

30063P105 (CUSIP Number)

October 21, 2010 (Date of Event Which Requires Filing of this Statement)

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

- o Rule 13d-1(b)
- x Rule 13d-1(c)
- o 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).

CUSIP No. 30063P105

1.	Names of Reporting Persons I.R.S. Identification Nos. of above persons (entities only) D. E. Shaw & Co., L.P. 13-3695715		
2.	Check the Appropriate Box i (a) (b)	f a Member of a Group o o	o (See Instructions)
3.	SEC Use Only		
4.	Citizenship or Place of Organ Delaware	nization	
Number of Shares Beneficially Owned by Each Reporting Person With	5.		Sole Voting Power -0-
	6.		Shared Voting Power 2,000,906
	7.		Sole Dispositive Power -0-
	8.		Shared Dispositive Power 2,029,804
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,029,804		
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o		
11.	Percent of Class Represented by Amount in Row (9) 5.0%		
12.	Type of Reporting Person (S IA, PN	ee Instructions)	

CUSIP No. 30063P105

	1.	Names of Reporting Persons I.R.S. Identification Nos. of above persons (entities only) David E. Shaw	
	2.	(a) (a)	te Box if a Member of a Group (See Instructions)
	3.	SEC Use Only	
	4.	Citizenship or Place of Organization United States	
Number of Shares Beneficially Owned by Each Reporting Person With		5.	Sole Voting Power -0-
		6.	Shared Voting Power 2,000,906
		7.	Sole Dispositive Power -0-
		8.	Shared Dispositive Power 2,029,804

- Aggregate Amount Beneficially Owned by Each Reporting Person 9. 2,029,804
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o
- 11. Percent of Class Represented by Amount in Row (9) 5.0%
- 12. Type of Reporting Person (See Instructions) IN

Item 1.			
(a)	Name of Issuer Exact Sciences Corporatio	n	
(b)	Address of Issuer's Principal Executive Offices 441 Charmany Drive Madison, WI 53719		
Item 2.			
(a)	Name of Person Filing D. E. Shaw & Co., L.P. David E. Shaw		
(b)	Address of Principal Business Office or, if none, Residence The business address for each reporting person is: 120 W. 45th Street, 39th Floor New York, NY 10036		
(c)	Citizenship D. E. Shaw & Co., L.P. is a limited partnership organized under the laws of the state of Delaware. David E. Shaw is a citizen of the United States of America.		
(d)	Title of Class of Securities Common Stock, \$0.01 par value		
(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 Applicat	ble		
Item 4.		Ownership	
As of Octobe	r 21, 2010:		
(a) Amount b	eneficially owned:		
D. E. Shaw 8	2 Co., L.P.:	2,029,804 shares This is composed of (i) 1,144,596 shares in the name of D. E. Shaw Valence Portfolios, L.L.C., (ii) 707,396 shares in the name of D. E. Shaw Oculus Portfolios, L.L.C., and (iii) 177,812 shares under the management of D. E. Shaw Investment Management, L.L.C.	
David E. Sha	w:	2,029,804 shares This is composed of (i) 1,144,596 shares in the name of D. E. Shaw Valence Portfolios, L.L.C., (ii) 707,396 shares in the name of	

D. E. Shaw Oculus Portfolios, L.L.C., and (iii) 177,812 shares under the management of D. E. Shaw Investment Management, L.L.C.

		5.0% 5.0%
(c) Number of shares to which the person has:		
(i)	Sole power to vote or to direct the vote: D. E. Shaw & Co., L.P.: David E. Shaw:	-0- shares -0- shares
(ii)	Shared power to vote or to direct the vot D. E. Shaw & Co., L.P.: David E. Shaw:	e: 2,000,906 shares 2,000,906 shares
(iii)	Sole power to dispose or to direct the dis D. E. Shaw & Co., L.P.: David E. Shaw:	sposition of: -0- shares -0- shares
(iv)	Shared power to dispose or to direct the D. E. Shaw & Co., L.P.: David E. Shaw:	disposition of: 2,029,804 shares 2,029,804 shares

David E. Shaw does not own any shares directly. By virtue of David E. Shaw's position as President and sole shareholder of D. E. Shaw & Co., Inc., which is the general partner of D. E. Shaw & Co., L.P., which in turn is the managing member and investment adviser of D. E. Shaw Valence Portfolios, L.L.C., the investment adviser of D. E. Shaw Oculus Portfolios, L.L.C., and the managing member of D. E. Shaw Noure of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co., L.L.C., which in turn is the managing member of D. E. Shaw Oculus Portfolios, L.L.C., David E. Shaw may be deemed to have the shared power to vote or direct the vote of 2,000,906 shares, and the shared power to dispose or direct the disposition of 2,029,804 shares, the 2,029,804 shares as described above constituting 5.0% of the outstanding shares and, therefore, David E. Shaw may be deemed to be the beneficial owner of such shares. David E. Shaw disclaims beneficial ownership of such 2,029,804 shares.

Item 5. Not Applicable	Ownership of Five Percent or Less of a Class
Item 6. Not Applicable	Ownership of More than Five Percent on Behalf of Another Person
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	2 cmg reported on 25 and 1 arong recompany of Conder 1 oroon
Item 8. Not Applicable	Identification and Classification of Members of the Group
Item 9. Not Applicable	Notice of Dissolution of Group
Item 10.	Certification

By signing below, each of D. E. Shaw & Co., L.P. and David E. Shaw certify that, to the best of such reporting person's knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having such purposes or effect.

SIGNATURE

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct. A Power of Attorney, dated October 24, 2007, granted by David E. Shaw in favor of Rochelle Elias, is attached hereto.

Dated: October 29, 2010

D. E. Shaw & Co., L.P.

By:

/s/ Rochelle Elias

Rochelle Elias Chief Compliance Officer

David E. Shaw

By:

/s/ Rochelle Elias

Rochelle Elias Attorney-in-Fact for David E. Shaw