

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-3**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933****Exact Sciences Corporation**

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)**441 Charmany Drive
Madison, WI 53719
(608) 284-5700**
(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)**02-0478229**
(I.R.S. Employer
Identification Number)**Maneesh K. Arora**
Chief Operating Officer and Chief Financial Officer
Exact Sciences Corporation
441 Charmany Drive
Madison, WI 53719
(608) 284-5700
(Name, address, including zip code, and telephone number,
including area code, of agent for service)**Please send copies of all communications to:****Mark R. Busch**
K&L Gates LLP
214 North Tryon Street, Suite 4700
Charlotte, NC 28202
(704) 331-7440**Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.**If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. (File No. 333-168907)If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer
(Do not check if a smaller reporting company)Smaller reporting company **CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee(2)
Common Stock	\$10,450,000	\$1,198

(1) Based on the public offering price. The Registrant previously registered securities at an aggregate offering price not to exceed \$150,000,000 on a Registration Statement on

Form S-3 (File No. 333-168907), which was declared effective on September 7, 2010. In accordance with Rule 462(b) promulgated under the Securities Act of 1933, an additional amount of common stock having a proposed maximum aggregate offering price of \$10,450,000 is hereby registered, which includes shares issuable upon exercise of the underwriters' option to purchase additional shares.

- (2) Calculated pursuant to Rule 457(o) on the basis of the maximum aggregate offering price of all of the securities to be registered and the number of securities being registered has been omitted. Represents the registration fee only for the additional amount of shares of the Registrant's common stock being registered hereby. The Registrant previously registered securities pursuant to a Registration Statement on Form S-3 (File No. 333-168907), as amended, for which a fee of \$10,695 was paid.

This Registration Statement shall become effective upon filing in accordance with Rule 462(b) under the Securities Act of 1933.

EXPLANATORY NOTE

This 462(b) Registration Statement relates to the public offering of common stock contemplated by the Registration Statement on Form S-3 (File No. 333-168907) (the “Original Registration Statement”), which was initially filed on August 17, 2010, and which, as amended, was declared effective by the Securities and Exchange Commission on September 7, 2010. This Registration Statement on Form S-3 (the “462 (b) Registration Statement”) is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, for the purposes of increasing the proposed maximum offering price from the \$150,000,000 registered in the Original Registration Statement by \$10,450,000. This amount does not exceed 20% of the maximum aggregate offering price of securities remaining available for issuance under the Original Registration Statement. Pursuant to Rule 462(b), the contents of the Registration Statement on Form S-3 (File No. 333-168907), including the exhibits thereto, are hereby incorporated by reference into this 462(b) Registration Statement.

Exhibit Index

Exhibit No.	Description
5	Opinion of K&L Gates LLP (Filed herewith)
23.1	Consent of K&L Gates LLP (included in its opinion filed as exhibit 5)
23.2	Consent of Grant Thornton LLP (Filed herewith)
24	Power of Attorney (included on signature page)



K&L Gates LLP
Hearst Tower, 47th Floor
214 North Tryon Street
Charlotte, NC 28202
† 704.331.7400 www.klgates.com

August 8, 2012

Exact Sciences Corporation
441 Charmany Drive
Madison, Wisconsin 53719

Ladies and Gentlemen:

We have acted as special counsel to Exact Sciences Corporation, a Delaware corporation (the “Company”), in connection with the issuance and sale by the Company of shares of the Company’s common stock, \$0.01 par value per share, pursuant to an Underwriting Agreement being entered into on the date hereof (the “Underwriting Agreement”) between the Company and Jefferies & Company, Inc. and Robert W. Baird & Co. Incorporated, as representatives of the several underwriters. In accordance with the Securities Act of 1933, as amended (the “Securities Act”), and the rules and regulations promulgated thereunder, the Company has prepared and filed with the Securities and Exchange Commission (the “SEC”) on the date hereof a Registration Statement on Form S-3 pursuant to Rule 462(b) under the Securities Act (the “462(b) Registration Statement”) registering \$10,450,000 of common stock (the “Shares”). The 462(b) Registration Statement relates to the Registration Statement on Form S-3 under the Securities Act originally filed with the Commission on August 17, 2010 (Registration No. 333-168907) (the “Original Registration Statement”).

You have requested our opinion as to the matters set forth below in connection with the issuance of the Shares. For purposes of rendering that opinion, we have examined the 462(b) Registration Statement, the Original Registration Statement, the Underwriting Agreement, the Company’s Sixth Amended and Restated Certificate of Incorporation and Amended and Restated By-laws, and the corporate action of the Company that provides for the issuance of the Shares, and we have made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and such other documents and instruments as we have deemed necessary or advisable for the purpose of rendering our opinion. In rendering our opinion, we also have made the assumptions that are customary in opinion letters of this kind. We have not verified any of those assumptions.

Our opinion set forth below is limited to the Delaware General Corporation Law, including all applicable statutory provisions, the applicable provisions of the Delaware Constitution and reported judicial decisions interpreting those statutes and laws.

Based upon and subject to the foregoing, it is our opinion that the Shares are duly authorized for issuance by the Company and, when issued and paid for as described in the Underwriting Agreement, will be validly issued, fully paid, and non-assessable.

We hereby consent to the filing of this opinion letter with the SEC as Exhibit 5 to the 462(b) Registration Statement. We also consent to the reference to our Firm in the preliminary prospectus supplement and the final prospectus supplement included in the 462(b) Registration Statement and the Original Registration Statement under the caption "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ K&L Gates LLP

K&L Gates LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 9, 2012 with respect to the financial statements and internal control over financial reporting included in the Annual Report on Form 10-K for the year ended December 31, 2011 of Exact Sciences Corporation, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference in the Registration Statement of the aforementioned reports, and to the use of our name as it appears under the caption "Experts."

/s/ Grant Thornton LLP

Milwaukee, WI
August 8, 2012
