

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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POST EFFECTIVE AMENDMENT NO. 3  
TO  
FORM S-3  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933  
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INTEGRA LIFESCIENCES HOLDINGS CORPORATION  
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE  
(STATE OR OTHER JURISDICTION OF  
INCORPORATION OR ORGANIZATION)

51-0317849  
(I.R.S. EMPLOYER  
IDENTIFICATION NUMBER)

311 ENTERPRISE DRIVE  
PLAINSBORO, NJ 08536  
(609) 275-0500  
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,  
OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

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JOHN B. HENNEMAN, III  
EXECUTIVE VICE PRESIDENT, CHIEF ADMINISTRATIVE  
OFFICER & SECRETARY  
311 ENTERPRISE DRIVE  
PLAINSBORO, NJ 08536  
(609) 275-0500  
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE  
NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPY TO:  
MICHAEL D. LEVIN  
LATHAM & WATKINS LLP  
233 S. WACKER DRIVE  
CHICAGO, ILLINOIS 60606  
(312) 876-7700

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: Not  
applicable.

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.  \_\_\_\_\_

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 delivery of the prospectus is expected to be made pursuant to Rule 434,  
please check the following box.

THIS POST EFFECTIVE AMENDMENT SHALL BECOME EFFECTIVE IN ACCORDANCE WITH  
SECTION 8(C) OF THE SECURITIES ACT OF 1933, AS AMENDED, ON SUCH DATE AS THE  
SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(C), MAY  
DETERMINE.

EXPLANATORY NOTE

(the "Registration Statement"), Integra LifeSciences Holdings Corporation (the "Company") registered (i) \$120,000,000 aggregate principal amount of 2 1/2% Contingent Convertible Subordinated Notes due 2008 (the "Notes") and (ii) 3,514,164 shares of common stock, \$0.01 par value per share (the "Common Stock"), of the Company. The Registration Statement was declared effective on September 25, 2003.

The Company's obligation to keep the Registration Statement effective has expired. Accordingly, this Post Effective Amendment No. 3 to the Registration Statement is being filed for the purpose of deregistering all Notes and shares of Common Stock, the sale of which was registered under the Registration Statement, that were not sold under the Registration Statement. As of July 21, 2005, \$35,968,000 aggregate principal amount of the Notes and 1,053,312 shares of Common Stock (issuable upon conversion of such Notes) remained unsold under the Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company has duly caused this Post Effective Amendment No. 3 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Plainsboro, State of New Jersey, on date set forth below.

Integra LifeSciences Holdings Corporation

By: /s/ JOHN B. HENNEMAN, III

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John B. Henneman, III  
Executive Vice President,  
Chief Administrative Officer and Secretary

Date: July 22, 2005

Pursuant to the requirements of the Securities Act, this registration statement has been signed by each of the following persons on July 22, 2005 in the capacities indicated.

Signature	Title
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* -----	
Stuart M. Essig, Ph.D	President, Chief Executive Officer and Director (Principal Executive Officer)
* -----	
David B. Holtz	Senior Vice President, Finance (Principal Financial and Accounting Officer)
* -----	
Richard E. Caruso, Ph.D	Chairman of the Board of Directors
* -----	
Keith Bradley, Ph.D	Director
* -----	
David Auth	Director
* -----	
James M. Sullivan	Director
* -----	
Anne M. VanLent	Director

\* John B. Henneman, III, by signing his name hereto, does hereby sign this document on behalf of each of the above named officers and/or directors of the Company pursuant to the powers of attorney duly executed by such person.

By: /s/ JOHN B. HENNEMAN, III

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John B. Henneman, III  
Executive Vice President,  
Chief Administrative Officer and Secretary

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