UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 7)*

Integra LifeSciences Holdings Corporation

(Name of Issuer)

Common Stock Par Value \$.01 (Title of Class of Securities)

457985208

(CUSIP Number)

Stuart M. Essig c/o Integra LifeSciences Holdings Corporation 311 Enterprise Drive Plainsboro, New Jersey 08536

With a copy to:

Jonathan B. Levy Lindquist & Vennum P.L.L.P. 4200 IDS Center Minneapolis, Minnesota 55402 (612) 371-3211

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

November 3, 2010

(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 §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

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.

* 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 ("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).

NAMES OF REPORTING PERSONS 1 Stuart M. Essig CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) o SEC USE ONLY 3 SOURCE OF FUNDS (SEE INSTRUCTIONS) 4 PF CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) 5 CITIZENSHIP OR PLACE OF ORGANIZATION 6 United States SOLE VOTING POWER 7 NUMBER OF 2,115,312* SHARES SHARED VOTING POWER BENEFICIALLY 8 OWNED BY 0 EACH SOLE DISPOSITIVE POWER 9 REPORTING PERSON 2,115,312* WITH SHARED DISPOSITIVE POWER 10 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11 2,115,312* CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) 12 0 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 13 7.49% TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) 14 IN

* Includes 1,175,000 shares of common stock underlying options to purchase common stock. Options to purchase 1,061,457 shares of common stock are exercisable as of, or within 60 days of, November 5, 2010. Although shares underlying all options held by Mr. Essig are included in the amounts set forth on lines 7, 9 and 11, Mr. Essig disclaims beneficial ownership of the 113,543 shares of common stock underlying options not exercisable as of, or within 60 days of, November 5, 2010. Mr. Essig also disclaims beneficial ownership of restricted stock unit grants of 100,000, 375,000, 750,000 and 100,000 shares that have been made to him by the Company, as he does not have, and will not acquire voting or dispositive power over the shares issuable under such grants until six months and one day following his separation from the Company.

This Amendment No. 7 ("Amendment No. 7") amends and supplements the statement on Schedule 13D initially filed on November 14, 2005 (the "Original Filing" and, as amended, the "Schedule 13D") by Stuart M. Essig with respect to Common Stock, \$.01 par value (the "common stock"), of Integra LifeSciences Holdings Corporation (the "Company"). Capitalized terms used and not defined in this Amendment No. 7 have the meanings set forth in the Schedule 13D.

Item 5. Interest in Securities of Issuer

Item 5 of the Schedule 13D is hereby amended and restated in its entirety as follows:

(a) Aggregate number and percentage of class beneficially owned:

As of November 5, 2010, Mr. Essig may be deemed to be the beneficial owner of 2,115,312 shares of common stock. This ownership consists of the following:

(i) 940,312 shares of common stock held directly by Mr. Essig; and

(ii) 1,175,000 shares of common stock underlying options to purchase common stock (of which options to purchase 1,061,457 shares of common stock are exercisable as of, or within 60 days of, November 5, 2010).

Based on calculations made in accordance with Rule 13d-3(d), Mr. Essig may be deemed the beneficial owner of 7.49% of the outstanding shares of common stock. This calculation is based on 28,256,442 shares of common stock outstanding as of October 26, 2010.

The above calculations include 113,543 shares of common stock underlying options held by Mr. Essig that are not exercisable as of, or within 60 days of, November 5, 2010. Mr. Essig disclaims beneficial ownership of these shares. Excluding these shares, Mr. Essig would be deemed the beneficial owner of 2,001,769 shares of common stock (or 7.08% of the outstanding shares of common stock).

(b) Voting and Dispositive Power:

Mr. Essig has sole voting and dispositive power over 2,115,312 shares that may be deemed to be beneficially owned by him as of November 5, 2010. This consists of the following (i) the 940,312 shares of common stock held directly by Mr. Essig and (ii) 1,175,000 shares of common stock underlying options to purchase common stock, of which Mr. Essig disclaims beneficial ownership with respect to 113,543 shares of common stock as set forth in Item 5(a).

- (c) Transactions in the Company's securities in the past sixty (60) days: The information concerning transactions in the common stock of the Company effected by Mr. Essig in the past sixty (60) days is set forth in Appendix A hereto and incorporated herein by reference. All of the transactions were open market sales.
- (d) Right to Direct the Receipt of Dividends: Not applicable.
- (e) Last Date on Which Reporting Person Ceased to be a 5% Holder: Not Applicable.
- Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

On April 13, 2009, the Company and Mr. Essig entered into Amendment 2009-1 to Mr. Essig's Second Amended and Restated Employment Agreement (the "2009-1 Amendment"). Under the 2009-1 Amendment, Mr. Essig became eligible to receive a Special FY 2009 Restricted Stock Award if applicable performance goals determined by the Compensation Committee were satisfied. Mr. Essig received an award of 18,336 shares in December 2009, and 11,670 of these shares are included in the shares deemed beneficially owned by Mr. Essig in this Amendment No 7. The remaining 6,666 shares from this award are not included in Mr. Essig's beneficial ownership because these shares have been withheld by the Company for tax obligations. The restricted stock award vests in full on December 31, 2010 if Mr. Essig is employed with the Company on that date.

Item 7. <u>Material to be Filed as Exhibits</u>

(a) Amendment 2009-1 to Second Amended and Restated Employment Agreement dated April 13, 2009 between the Company and Mr. Essig (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 13, 2009).

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

Dated: November 10, 2010

Name: /s/ Stuart M. Essig Stuart M. Essig

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APPENDIX A

Transactions by Mr. Essig in Integra LifeSciences Holdings Corporation during the past sixty (60) days.

Date	Number of Shares Sold	Price Per Share	
November 2, 2010	63,500	\$	43.0694 ₁
November 3, 2010	36,500	\$	42.9617 ₂

1 The price shown represents the weighted average price of the shares sold. The range of sale prices was \$42.95 - \$43.32.

² The price shown represents the weighted average price of the shares sold. The range of sale prices was \$42.75 - \$43.10.