### FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| Estimated average burden |           |  |  |  |  |  |  |  |  |
| hours per response:      | 0.5       |  |  |  |  |  |  |  |  |

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

|   |                | or Section 30(n) of the investment Company Act of 1940   |   |
|---|----------------|--|---|
| 1. Name and Address of Reporting Perso<br><u>ESSIG STUART</u> | n*             | 2. Issuer Name <b>and</b> Ticker or Trading Symbol<br>INTEGRA LIFESCIENCES HOLDINGS<br>CORP [ IART ] | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>X Director 10% Owner<br>Officer (give title Other (specify                  |
| (Last)(First)(Middle)311 C ENTERPRISE DRIVE                   |                | 3. Date of Earliest Transaction (Month/Day/Year)<br>03/28/2013                                       | below) below)   |
| (Street)<br>PLAINSBORO NJ<br>(City) (State)                   | 08536<br>(Zip) | 4. If Amendment, Date of Original Filed (Month/Day/Year)   | 6. Individual or Joint/Group Filing (Check Applicable<br>Line)<br>X Form filed by One Reporting Person<br>Form filed by More than One Reporting<br>Person |

#### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | Transaction<br>Code (Instr. |   |         |               |       | Securities<br>Beneficially         | (I) (Instr. 4) | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership |
|---------------------------------|--|---|-----------------------------|---|---------|---------------|-------|------------------------------------|----------------|---|
|                                 |  |   | Code                        | v | Amount  | (A) or<br>(D) | Price | Transaction(s)<br>(Instr. 3 and 4) |                | (Instr. 4)  |
| Common Stock                    | 03/28/2013                                 |   | J/K <sup>(1)</sup>          |   | 417,998 | D             | (1)   | 1,146,371                          | D              |   |

# Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| (  |   |  |   |                              |   |            |         |  |                    |   |                                     |   |  |  |  |
|--|---|--|---|------------------------------|---|------------|---------|--|--------------------|---|-------------------------------------|---|--|--|--|
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)    | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transa<br>Code (<br>8) |   | Derivative |         | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                    | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |                                     | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|  |   |  |   | Code                         | v | (A)        | (D)     | Date<br>Exercisable  | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of Shares |   | Transaction(s)<br>(Instr. 4)   |  |  |
| Forward<br>sale<br>contract<br>(obligation<br>to sell) | (1)   | 03/28/2013                                 |   | J/K <sup>(1)</sup>           |   |            | 500,000 | 03/28/2013   | 03/28/2013         | Common<br>stock   | 500,000                             | \$0.00  | 0  | D  |  |

#### Explanation of Responses:

1. On March 28, 2013, Mr. Essig settled a prepaid variable forward sale contract that was entered into on December 14, 2004, with Credit Suisse First Boston Capital LLC ("CSFB"). The contract obligated Mr. Essig to deliver to CSFB between 264,550 and 500,000 shares of Integra common stock (or at his election, an equivalent amount of cash) on the maturity date of the contract (March 28, 2013). The contract provided that the number of shares of Integra common stock that Mr. Essig would be obligated to deliver to CSFB on the maturity date would depend on the average price of Integra common stock for the 20 trading days prior to and including the settlement date. On March 28, 2013, the settlement price was \$40.5266 per share. Accordingly, Mr. Essig transferred to CSFB 417,998 shares of Integra common stock. **Remarks:** 

/s/ Kathryn Lamping; Attorney- 04/01/2013

in-Fact

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.