

Registration No. 333-\_\_\_\_\_

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

INTEGRA LIFESCIENCES HOLDINGS CORPORATION  
(Exact Name of Registrant as Specified in its Charter)

Delaware

51-0317849

(State or other jurisdiction of  
incorporation or organization)

(I.R.S. Employer  
Identification No.)

311 Enterprise Drive  
Plainsboro, New Jersey 08536  
(609) 275-0500

(Address, including zip code, and telephone number,  
including area code, of Registrant's principal executive offices)

Integra LifeSciences Holdings Corporation Employee Stock Purchase Plan  
Integra LifeSciences Holdings Corporation 2003 Equity Incentive Plan  
(Full title of the plans)

John B. Henneman, III  
Integra LifeSciences Holdings Corporation  
311 Enterprise Drive  
Plainsboro, New Jersey 08536  
(609) 275-0500  
(Name, address and telephone number,  
including area code, of agent for service)

Copy to:  
Michael D. Levin  
Latham & Watkins LLP  
233 S. Wacker Drive, Suite 5800  
Chicago, Illinois 60606  
(312) 876-7700

(Full title of the plans)

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Offering          | Amount to be Registered | Proposed Maximum Offering Price Per Share (2) | Proposed Maximum Amount of Securities to be Registered (1) | Registered (1) |
|--|-------------------------|---|--|----------------|
| Common Stock, par value \$0.01 per share | 2,500,000               | \$31.04                                       | \$77,600,000   | \$9,133.52     |

~~(1) This registration statement registers for issuance shares of common stock (\$0.01 par value) (the "Common Stock") of Integra LifeSciences Holdings Corporation (the "Company") in the following amounts: (a) 1,000,000 shares issuable pursuant to the Company's Employee Stock Purchase Plan (the "ESPP Plan"); (b) 1,500,000 shares issuable pursuant to the Company's 2003 Equity Incentive Plan (the "2003 Plan") and (c) an indeterminate number of additional shares as may become issuable in connection with share splits, share dividends or similar transactions. Previously, the Company filed with the Securities and Exchange Commission (the "Commission") registration statements on Form S-8 registering 500,000 shares of Common Stock to be awarded and sold under the ESPP Plan (File No. 333-58235 dated June 30, 1998) and 2,500,000 shares of Common Stock to be awarded and sold under the 2003 Plan (File No. 333-109042 dated September 23, 2003). The contents of all prior registration statements relating to the plans are incorporated into this Registration Statement by reference. (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) under the Securities Act of 1933, as amended, and based on the average of the high and low prices of the common stock on the Nasdaq National Market on August 5, 2005.~~

PART I

- Item 1. Plan Information  
Not required to be filed with this Registration Statement.
- Item 2. Registrant Information and Employee Plan Annual Information Not required to be filed with this Registration Statement.

PART II

- Item 3. Incorporation of Documents by Reference.  
The following documents which have been filed by the Company with the Commission are incorporated by reference into this Registration Statement:
  - (a) the Company's Annual Report on Form 10-K for the year ended December 31, 2004, filed with the Commission on March 16, 2005 (the "2004 10-K");
  - (b) the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, filed with the Commission on May 10, 2005;
  - (c) the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, filed with the Commission on August 9, 2005;
  - (d) the Company's Current Reports on Form 8-K filed with the Commission on January 3, 2005; January 14, 2005; February 3, 2005; February 24, 2005, May 17, 2005, June 17, 2005, July 5, 2005 and July 29, 2005;

(e) all other reports filed by the Company pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the Company's fiscal year ended December 31, 2004; and

(f) the description of the Registrant's Common Stock contained in the Registration Statement on Form 10/A filed under the Exchange Act by the Registrant, which became effective on August 8, 1995, including any amendment or report filed for the purpose of updating such description.

All reports and other documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date hereof and prior to the filing of a post-effective amendment which indicates that all securities offered pursuant to this Registration Statement have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents or reports.

For purposes of this Registration Statement, any document or any statement contained in a document incorporated or deemed to be incorporated

herein by reference shall be deemed to be modified or superseded to the extent that a subsequently filed document or a statement contained therein, or in any other subsequently filed document which also is or is deemed to be incorporated by reference, modifies or supersedes such document or such statement in such document. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Not required to be filed with this Registration Statement.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits

| Exhibit<br>Number | Description of Exhibit |
|-------------------|------------------------|
|-------------------|------------------------|

- |     |   |
|-----|---|
| 4.1 | Integra LifeSciences Holdings Corporation Employee Stock Purchase Plan, as amended.   |
| 4.2 | Integra LifeSciences Holdings Corporation 2003 Equity Incentive Plan, (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed on April 17, 2003).                            |
| 4.3 | Amendment No. 1 to Integra LifeSciences Holdings Corporation 2003 Equity Incentive Plan (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 17, 2005)                           |
| 4.4 | Amended and Restated Certificate of Incorporation of the Company (Incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form 10/A which became effective on August 8, 1995)                       |
| 4.5 | Certificate of Amendment to Amended and Restated Certificate of Incorporation dated May 22, 1998 (Incorporated by reference to Exhibit 3.1(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 1998) |
| 4.6 | Certificate of Amendment to Amended and Restated Certificate of Incorporation dated May 17, 1999 (Incorporated by reference to Exhibit 3.1(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 2004) |
| 4.7 | Amended and Restated By-laws of the Company (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 24, 2005)   |

| Exhibit<br>Number | Description of Exhibit |
|-------------------|------------------------|
|-------------------|------------------------|

- |      |  |
|------|--|
| 5.1  | Opinion of Latham & Watkins LLP  |
| 23.1 | Consent of PricewaterhouseCoopers LLP  |
| 23.2 | Consent of Latham & Watkins LLP (included in Exhibit 5.1)                        |
| 24.1 | Power of Attorney (included in the signature page to the Registration Statement) |

Item 9. Undertakings

Not required to be filed with this Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this 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: August 12, 2005

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint Stuart M. Essig, John B. Henneman, III and David B. Holtz and each of them, with full power of substitution and full power to act without the other, his or her true and lawful attorney-in-fact and agent to act for him or her in his or her name, place and stead, in any and all capacities, to sign any and all amendments to the registration statement to which this power of attorney is attached (including without limitation any post-effective amendments thereto), and any registration statement for the same offering that is to be effective under rule 462(b) of the Securities Act, and to file each of the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises in order to effectuate the same as fully, to all intents and purposes, as they, he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

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

| Signature   | Title  | Date            |
|---|--|-----------------|
| /s/ Stuart M. Essig<br>-----<br>Stuart M. Essig                 | President, Chief Executive<br>Officer and Director<br>(Principal Executive Officer)                | August 12, 2005 |
| /s/ David B. Holtz<br>-----<br>David B. Holtz                   | Senior Vice President, Finance<br>and Treasurer (Principal<br>Financial and Accounting<br>Officer) | August 12, 2005 |
| /s/ Richard E. Caruso, Ph.D<br>-----<br>Richard E. Caruso, Ph.D | Chairman of the Board<br>of Directors  | August 12, 2005 |
| /s/ David Auth<br>-----<br>David Auth                           | Director   | August 12, 2005 |
| /s/ Keith Bradley, Ph.D<br>-----<br>Keith Bradley, Ph.D         | Director   | August 12, 2005 |
| /s/ James M. Sullivan<br>-----<br>James M. Sullivan             | Director   | August 12, 2005 |
| Anne M. VanLent<br>-----<br>Anne M. VanLent                     | Director   | August 12, 2005 |

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## EMPLOYEE STOCK PURCHASE PLAN

(As amended on May 17, 2004)

1. Purpose. This Employee Stock Purchase Plan (the "Plan") is intended to encourage stock ownership by all eligible employees of Integra LifeSciences Corporation (the "Company") and of certain of its "subsidiary corporations" (as defined in Section 424(f) of the Internal Revenue Code of 1986, as amended (the "Code")) so that they may acquire a, or increase their, proprietary interest in the success of the Company. It is further intended that options issued pursuant to this Plan shall constitute options issued pursuant to an "employee stock purchase plan," within the meaning of Section 423 of the Code. The Company's Board of Directors (the "Board") may, from time to time, approve participation in the Plan by employees of any subsidiary corporation of the Company and/or of any "parent corporation" of the Company (as defined in Section 424(e) of the Code).

2. Administration. The Plan shall be administered by the Stock Option Committee (the "Committee") of the Board. Acts approved by a majority of the Committee at which a quorum is present, or acts without a meeting reduced to or approved in writing by a majority of the members of the Committee, shall be the valid acts of the Committee. Each member of the Committee, while serving as such, shall be deemed to be acting in his or her capacity as a director of the Company. The Committee shall have full and final authority, in its discretion but subject to the express provisions of the Plan: (a) to interpret the Plan; (b) to make, amend, and rescind rules and regulations relating to the Plan; (c) to determine the terms and provisions of the instruments by which options shall be evidenced; and (d) to make all other determinations necessary or advisable for the administration of the Plan. No member of the Board or of the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder. Any and all authority of the Committee may be delegated by the Committee to a Plan Administrator.

### 3. Eligibility.

(a) General Rule. Except as provided in paragraph (b) below and subject to Section 9(e), each employee of the Company or a participating subsidiary corporation shall be eligible for option grants described in Section 5.

(b) Exceptions. An employee will not be eligible to participate in the Plan if he or she is customarily employed by the Company or a participating subsidiary corporation for twenty (20) hours or fewer per week or if he or she is customarily employed by the Company or a participating subsidiary corporation for not more than five (5) months in any calendar year. Further, an employee who is classified by the rules of the Committee as a "temporary employee" and who has been employed for less than six months, will not be eligible to participate in the Plan. In addition, in no event may an employee be granted an option if such employee, immediately after the option is granted would own stock possessing five (5) percent or more of the total combined voting power or value of all classes of stock of the Company or of its parent corporation (if any) or of a subsidiary corporation. For purposes of determining stock ownership under this paragraph, the rules of Section 424(d) of the Code (relating to attribution of stock ownership) shall apply, and stock which the employee may purchase under outstanding options shall be treated as stock owned by the employee.

4. Stock. The stock subject to the options shall be shares of the Company's authorized but unissued or reacquired as Treasury shares \$.01 par value common stock ("Common Stock"). The aggregate number of shares of Common Stock which may be issued under options shall not exceed one million five hundred thousand (1,500,000); provided that such number shall be adjusted if required by Section 9(h).

### 5. Grant of Option.

(a) Grant of Option. Employees shall have the right to purchase shares of Common Stock through payroll deductions under options granted as of July 1, 1998 (or, in the Committee's discretion, as soon as administratively practicable thereafter) and as of the first business day of each subsequent January (the "Grant Dates"). Each employee who meets the eligibility requirements of Section 3 shall be granted an option on the first Grant Date coinciding with or immediately following the date he or she becomes an eligible employee, and on each succeeding Grant Date, provided he or she continues to meet the eligibility requirements of Section 3. The term of the first option term shall be six (6) calendar months (or, in the Committee's discretion may be fewer than six (6) calendar months); the terms of the second and succeeding options shall be twelve (12) calendar months (from January 1 to December 31). If an individual becomes an eligible employee after the commencement and before October 1 of an Option Term, he or she shall be granted an option as of the first business day of the first calendar quarter (i.e., the first business day occurring on or after April 1, July 1, or October 1) (collectively, the "Delayed Grant Dates") coinciding with or immediately following his or her eligibility date, provided he or she continues to meet the eligibility requirements of Section 3. (b) Limit on Number of Shares Purchasable Under Option. In no event may the number of full shares purchased by an employee under an option granted pursuant to paragraph (a) above exceed 8,000 for an Option Term; provided that such number shall be adjusted if required by Section 9(h). The share limit in the preceding sentence shall be prorated in the case of an employee who is granted an option on a Delayed Grant Date. Further, the aggregate number of full shares of Common Stock purchasable

under an option for an Option Term shall be subject to the limitations described in Section 9(e) and Section 9(k).

#### 6. Participation.

(a) Payroll Deductions. Subject to rules established by the Committee from time to time, an eligible employee may elect to participate in the Plan by making payroll deductions (as a whole percentage of the employee's basic rate of compensation each pay, subject to the limits set forth in paragraph (b) below) for each Option Term in which the employee is eligible to participate. For purposes of this Plan, "basic rate of compensation" shall mean an employee's basic hourly rate or salary from the Company and its participating subsidiary corporations, excluding any commissions, bonuses, overtime, or other extra or incentive pay.

(b) Maximum Payroll Deduction. The maximum total payroll deductions for any employee for an Option Term may not exceed fifteen (15) percent of the employee's basic rate of compensation (as defined in paragraph (a) above) for the Option Term (or, if the employee has a Delayed Grant Date, for the portion of the Option Term during which the employee is eligible to participate).

(c) No Interest on Payroll Deductions. Payroll deductions made under the Plan will be held as general assets of the Company or a participating subsidiary, and will not be credited with any interest.

(d) Participation after Surrender or Cessation of Payroll Deductions. Each employee who has satisfied the eligibility requirements of Section 3 but who has elected to surrender his or her option or to cease payroll deductions in accordance with Section 8 (or, as described in paragraph (f) below, is deemed to have surrendered his or her option) for an Option Term, shall be granted an option in accordance with Section 5 in subsequent Option Terms, provided the employee continues to meet the eligibility requirements of Section 3. However, such employee must submit a new payroll deduction agreement under paragraph (a) above in order to begin payroll deductions for a subsequent Option Term.

(e) No Contract to Purchase. Electing to make payroll deductions for any Option Term will not constitute a contract to purchase any of the Common Stock purchasable under an option.

(f) Waiver of Rights. An employee who fails to elect to participate in the Plan for an Option Term in the manner and within the time provided under paragraph (a) above shall be deemed to have surrendered the option granted to the employee for such Option Term and shall have no further rights under the Plan with respect to such surrendered option.

#### 7. Exercise of Option.

(a) Method of Exercise. Unless the employee has surrendered his or her option and withdrawn his or her payroll deductions in accordance with Section 8(a) (or is deemed to have surrendered his or her option under Section 6(f)), as of the last business day of each Option Term (the "Exercise Date"), the employee will be credited for such number of full shares of Common Stock as his or her accumulated payroll deductions shall be sufficient to pay for in full, subject to the limitations of Section 5(b).

(b) Return of Excess Payroll Deductions. Any payroll deductions remaining after the employee exercises an option for an Option Term shall be refunded to the employee.

#### 8. Employee's Right to Surrender Option and/or Cease Payroll Deductions.

(a) Surrender of Option and Withdrawal of Payroll Deductions. An employee may elect to surrender his or her option for any Option Term and withdraw any payroll deductions already made for the Option Term under the Plan by giving written notice to the Company. However, in order for such surrender to be effective for the Option Term, the employee's written notice must be received by the Company on or before the sixtieth (60th) calendar day prior to the end of the Option Term. All of such employee's payroll deductions will be refunded to him or her as soon as practicable after the Company receives the employee's

notice of withdrawal, and no further payroll deductions will be made from the employee's pay until the employee completes a new payroll deduction agreement in accordance with Section 6(a) for a subsequent Option Term. As to any option so surrendered, the employee shall have no further right of any nature at any subsequent time.

(b) Cessation of Payroll Deductions. Without withdrawing any payroll deductions already made for the Option Term, an employee may elect to terminate his or her participation in part during an Option Term by ceasing payroll deductions for the remainder of the Option Term. However, in order for such election to be effective for the Option Term, the employee must give the Company written notice of such election in accordance with procedures prescribed by the Committee. An employee who elects to cease payroll deductions for an Option Term shall not be eligible to resume payroll deductions during such Option Term.

(c) No Effect on Later Participation. An employee's surrender of an option and/or cessation of payroll deductions for an Option Term will not have any effect upon his or her eligibility to participate in the Plan for subsequent Option Terms.

(d) Surrender Upon Termination of Employment. Upon termination of the employee's employment during an Option Term for any reason, including retirement, payroll deductions made by the employee for such Option Term will be



refunded to the employee, or, in the case of death, to the person or persons entitled thereto under Section 9(g).

9. Terms and Conditions of Options. Stock options granted pursuant to the Plan shall be evidenced by agreements in such form as the Committee shall prescribe, provided that all employees granted such agreements shall have the same rights and privileges (except as otherwise required under the Plan), and provided further that such agreements shall comply with and be subject to the terms and conditions set forth below.

(a) Number of Shares. Each option shall state the maximum number of shares to which it pertains.

(b) Option Price. The per share exercise price of an option shall be the lesser of (i) 85% of the per share fair market value of the Common Stock as of the Grant Date (or the employee's Delayed Grant Date) for the Option Term, or (ii) 85% of the per share fair market value of the Common Stock as of the Exercise Date for the Option Term. In making such determination, during such time as the Common Stock is listed upon an established stock exchange or exchanges, the per share "fair market value" shall be deemed to be the quoted closing price on the last business day before the Grant Date, Delayed Grant Date, or Exercise Date, whichever is applicable. During such time as the Common Stock is not listed upon an established stock exchange, the per share fair market value shall be determined by the Committee by a method sanctioned by the Code, or rules and regulations thereunder. The fair market value per share is to be determined in accordance with Treas. Reg. Section Section 1.421-7(e) and 20.2031-2. Subject to the foregoing, the Committee in fixing the exercise price shall have full authority and be fully protected in doing so.

(c) Medium and Time of Payment. The exercise price of an option shall be payable in United States dollars upon the exercise of the option and shall be payable only by accumulated payroll deductions made in accordance with Section 6.

(d) Term of Option. No option may be exercised after the end of the Option Term in which the option was granted.

(e) Accrual Limitation. No option shall permit the rights of an employee to purchase stock under all employee stock purchase plans, intended to qualify under Section 423 of the Code, of the Company and its parent corporation (if any) and subsidiary corporations to accrue at a rate which exceeds \$25,000 in fair market value of such stock (determined at the time options are granted) for each calendar year in which the option is outstanding at any time. For purposes of this paragraph (e) -- (i) the right to purchase Common Stock under an option accrues when the option (or any portion thereof) first becomes exercisable during the calendar year; (ii) the right to purchase Common Stock under an option accrues at the rate provided in the option but in no case may such rate exceed \$25,000 of fair market value of such Common Stock (determined on the Grant Date of such option) for any one calendar year; and (iii) a right to purchase Common Stock which has accrued under one option granted pursuant to the Plan may not be carried over to any other option.

(f) Termination of Employment. In the event that an employee ceases to be employed by the Company and its participating subsidiary corporations for any reason during the employee's participation in an Option Term, such individual shall be deemed to have surrendered his or her option for such Option Term and his or her accumulated payroll deductions shall be refunded in accordance with Section 8(d). Whether an authorized leave of absence for military or governmental service shall constitute termination of employment for the purposes of the Plan shall be determined by the Committee in accordance with applicable law, which determination, unless modified by the Board (in accordance with applicable law), shall be final and conclusive.

(g) Nontransferability. Neither payroll deductions made by an employee, nor any rights with regard to the exercise of an option or to receive stock, nor any rights to a return of payroll deductions under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way by the employee. Any such attempted assignment, transfer, pledge or other disposition shall be without effect. Notwithstanding the foregoing, any rights to a return of payroll deductions under the Plan after surrender of an option due to an employee's death, as described in Section 8(d), may be transferred by will or the laws of descent and distribution. An option may be exercised only by the employee.

(h) Recapitalization. Subject to any required action by the stockholders, the share limits of Section 4 and Section 5(b) and the number of shares of Common Stock covered by each outstanding option, and the price per share in each such option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock of the Company resulting from a subdivision (stock-split) or consolidation (reverse-split) of shares or the

payment of a stock dividend (but only on the Common Stock) or any other increase or decrease in the number of such shares affected, without receipt of consideration by the Company. Subject to any required action by the stockholders, if the Company shall be the surviving corporation in any merger or consolidation, each outstanding option shall pertain and apply to the securities to which a holder of the number of shares of Common Stock subject to the option would have been entitled. A dissolution or liquidation of the Company or a merger or consolidation in which the Company is not the surviving corporation, shall cause each outstanding option to terminate, provided that each employee granted an option under this Plan shall, in such event, have the right immediately prior to such dissolution or liquidation, or merger or consolidation in which the Company is not the surviving corporation, to exercise his or her option. In the event of a change in the Common Stock of the Company as presently

constituted which is limited to a change of all of its authorized shares with par value into the same number of shares with a different par value or without par value, the shares resulting from any such change shall be deemed to be Common Stock within the meaning of the Plan. To the extent that the foregoing adjustments relate to stock or securities of the Company, such adjustments shall be made by the Committee, whose determination in that respect shall be final, binding and conclusive provided that each option granted pursuant to this Plan shall not be adjusted in a manner that causes the option to fail to continue to qualify as an option issued pursuant to an "employee stock purchase plan" within the meaning of Section 423 of the Code. Except as expressly provided in this paragraph (h), an employee shall have no rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any stock dividend, any other increase or decrease in the number of shares of stock of any class, or any dissolution, liquidation, merger, or consolidation or spin-off of assets or stock of another corporation; and any issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to the option. The grant of an option pursuant to the Plan shall not affect in any way the right or power of the Company to make adjustments, reclassification, reorganizations or changes of its capital or business structure or to merge or to consolidate or to dissolve, liquidate or sell, or transfer all or any part of its business or assets.

(i) Rights as a Stockholder. An employee shall have no rights as a stockholder with respect to any shares of Common Stock covered by his or her option until the date the option is exercised in accordance with the terms of the Plan. No adjustment shall be made for dividends (ordinary or extraordinary, whether in cash, securities or other property) or distributions or other rights for which the record date is prior to the date such stock certificate is issued, except as provided in paragraph (h) above.

(j) Investment Purpose. Each option under the Plan shall be granted on the condition that the purchases of Common Stock thereunder shall be for investment purposes and not with a view to resale or distribution, except that in the event the Common Stock subject to such option is registered under the Securities Act of 1933, as amended (the "Securities Act"), or in the event a resale of such stock without such registration would otherwise be permissible, such condition shall be inoperative if in the opinion of counsel for the Company such condition is not required under the Securities Act or any other applicable law, regulation or rule of any governmental agency.

(k) Adjustment in Number of Shares Exercisable. If the aggregate number of shares purchased under options granted under the Plan exceeds the aggregate number of shares of Common Stock specified in Section 4, the Company shall make a pro rata allocation of the shares available for distribution so that the limit of Section 4 is not exceeded, and the balance of payroll deductions made by each participating employee shall be returned to him or her as promptly as possible.

(l) Other Provisions. The option agreements authorized under the Plan shall contain such other provisions as the Committee shall deem advisable, provided that no such provision may in any way be in conflict with the terms of the Plan.

10. Indemnification of Committee. In addition to such other rights of indemnification as they may have as directors or as members of the Committee, the members of the Committee shall be indemnified by the Company against the reasonable expenses, including attorneys' fees actually and necessarily incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan or any option granted thereunder, and against all amounts paid by them in settlement thereof (provided such settlement is approved by independent legal counsel selected by the Company) or paid by them in satisfaction of a judgment in any such action, suit or proceeding, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such Committee member is liable for negligence or misconduct in the performance of his or her duties; provided that within sixty (60) days after institution of any such action, suit or proceeding a Committee member shall in writing offer the Company the opportunity, at its own expense, to handle and defend the same.

11. Amendment of Plan. The Committee may, to the extent permitted by law, from time to time, with respect to any shares of Common Stock not subject to options at the time, suspend, discontinue, revise or amend the Plan in any respect whatsoever except that no such revision or amendment may permit granting of options under this Plan to persons other than employees of the Company, its parent corporation (if any) or a subsidiary corporation, or otherwise cause options issued under it to fail to meet the requirements of Section 423 of the Code. Furthermore, the Plan may not, without the approval of a majority of the votes cast at a duly held stockholders' meeting at which a quorum representing a majority of all outstanding voting stock is, either in person or by proxy, present and voting on the Plan, be amended in any manner that will change the number of shares subject to the Plan.

12. Effective Date of Plan. The Plan will become effective as of July 1, 1998, or as soon as administratively practicable thereafter, subject, however, to approval by the holders of at least a majority of the Common Stock present or represented, and entitled to vote, at a special or annual meeting of the stockholders at which a quorum is present held within twelve (12) months before or after February 27, 1998 (the date the Plan was approved by the Board). If the Plan is not so approved, the Plan shall not become effective.

13. Absence of Rights. The granting of an option to a person shall not entitle that person to continued employment by the Company or a participating

subsidiary corporation or affect the terms and conditions of such employment. The Company or any subsidiary corporation shall have the absolute right, in its discretion, to terminate an employee's employment, whether or not such termination may result in a partial or total termination of his or her option under this Plan.

14. Application of Funds. The proceeds received by the Company from the sale of Common Stock pursuant to options will be used for general corporate purposes.

15. Miscellaneous.

(a) Provisions of Plan Binding. The provisions of the Plan shall, in accordance with its terms, be binding upon, and inure to the benefit of, all successors of each employee participating in the Plan, including, without limitation, such employee's estate and the executors, administrator or trustees thereof, heirs and legatees, and any receiver, trustee in bankruptcy or representative of creditors of such employee.

(b) Applicable Law. Delaware law shall govern all matters relating to this Plan except to the extent it is superseded by federal law.

August 12, 2005

Integra LifeSciences Holdings Corporation  
311 Enterprise Drive  
Plainsboro, New Jersey 08536

Re: Registration Statement on Form S-8 with respect to  
2,500,000 shares of Common Stock, par value \$.01 per share

Ladies and Gentlemen:

In connection with the registration by Integra LifeSciences Holdings Corporation, a Delaware corporation (the "Company"), of 2,500,000 shares of common stock, par value \$.01 per share (the "Shares") issuable under the Company's Employee Stock Purchase Plan and the Company's 2003 Equity Incentive Plan (collectively, the "Plans"), under the Securities Act of 1933, as amended, on Form S-8 filed with the Securities and Exchange Commission on August 12, 2005 (the "Registration Statement"), you have requested our opinion with respect to the matters set forth below.

In our capacity as your special counsel in connection with such registration, we are familiar with the proceedings taken and proposed to be taken by the Company in connection with the authorization, issuance and sale of the Shares, and for the purposes of this opinion, have assumed such proceedings will be timely completed in the manner presently proposed. In addition, we have made such legal and factual examinations and inquiries, including an examination of originals or copies certified or otherwise identified to our satisfaction of such documents, corporate records and instruments, as we have deemed necessary or appropriate for purposes of this opinion.

In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic original documents of all documents submitted to us as copies.

We are opining herein as to the effect on the subject transaction only of the General Corporation Law of the State of Delaware, and we express no opinion with respect to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction or, in the case of Delaware, any other laws, or as to any matters of municipal law or the laws of any local agency within the state.

Subject to the foregoing, it is our opinion that the Shares have been duly authorized and, when issued as contemplated by the terms of the Plans, will be validly issued, fully paid and nonassessable.

We consent to your filing this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ Latham & Watkins LLP

Latham & Watkins LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 15, 2005 relating to the financial statements, financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in Integra LifeSciences Holdings Corporation's Annual Report on Form 10-K for the year ended December 31, 2004.

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey  
August 9, 2005