Fibrocell Science, Inc. Form SC 13G December 11, 2009

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Fibrocell Science, Inc. (Name of Issuer)

Common Stock, par value \$0.001 per share (Title of Class of Securities)

315721100 (CUSIP Number)

September 3, 2009 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- [] Rule 13d-1(b)
- [X] Rule 13d-1(c)
- [] Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for 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).

Page 1 of 9 Pages

CUSIP No. 315721100

13G

Page 2 of 9 Pages

(1) NAMES OF REPORTING PERSONS

| | Highbridge International LLC | | | | | |
|-----------------------|---|-----------------------|------------|-------------------|------|-------------------|
| (2) | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) [X] (b) [] | | | | | |
| (3) | SEC USE ONLY | | | | | |
| (4) | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | | |
| | Cayman Islands, British West Indies | | | | | |
| NUMBER OF | (5) |) SOLE VOTIN | NG POWER | | | |
| SHARES | | | | | | |
| BENEFICIALLY | Y (6) | SHARED VO: 800,141 sh | | R Common Stock | | |
| OWNED BY | | | | | | |
| EACH | (7) |) SOLE DISPO 0 | OSITIVE PO | OWER | | |
| REPORTING PERSON WITH | (8) |) SHARED DIS | SPOSITIVE | POWER | | |
| | | 800,141 sh | nares of (| Common Stock | | |
| (9) | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 800,141 shares of Common Stock | | | | | |
| (10) | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) [] | | | | | |
| (11) | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.46% | | | | | |
| (12) | TYPE (| OF REPORTING | PERSON (s | see instructio | ons) | |
| | | | | | | |
| CUSIP No. 3 | 157211(| 00 | | 13G | | Page 3 of 9 Pages |
| (1) | NAMES OF REPORTING PERSONS | | | | | |
| | Highbridge Capital Management, LLC | | | | | |
| (2) | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) [X] (b) [] | | | | | |
| (3) | SEC USE ONLY | | | | | |
| | | | | | | |

(4)

CITIZENSHIP OR PLACE OF ORGANIZATION

| | State | of Delaware | | | | |
|-------------|---|---|--|--|--|--|
| NUMBER OF | (5) | SOLE VOTING POWER | | | | |
| SHARES | | | | | | |
| BENEFICIALL | Y (6) | SHARED VOTING POWER | | | | |
| OWNED BY | | 800,141 shares of Common Stock | | | | |
| EACH | (7) | SOLE DISPOSITIVE POWER 0 | | | | |
| REPORTING | | | | | | |
| PERSON WITH | (8) | SHARED DISPOSITIVE POWER 800,141 shares of Common Stock | | | | |
| (9) | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 800,141 shares of Common Stock | | | | | |
| (10) | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) [] | | | | | |
| (11) | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.46% | | | | | |
| (12) | TYPE OF REPORTING PERSON (see instructions) OO | | | | | |
| CUSIP No. 3 | 157211(| 00 13G Page 4 of 9 Pages | | | | |
| | | | | | | |
| (1) | NAMES OF REPORTING PERSONS | | | | | |
| | Glenn | Dubin | | | | |
| (2) | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) [X] (b) [] | | | | | |
| (3) | SEC USE ONLY | | | | | |
| (4) | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | | |
| | United | d States | | | | |
| NUMBER OF | (5) | SOLE VOTING POWER | | | | |
| SHARES | | 0 | | | | |
| BENEFICIALL | Y (6) | SHARED VOTING POWER 800,141 shares of Common Stock | | | | |

OWNED BY (7) SOLE DISPOSITIVE POWER EACH 0 _____ REPORTING PERSON WITH (8) SHARED DISPOSITIVE POWER 800,141 shares of Common Stock (9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 800,141 shares of Common Stock (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.46% (12) TYPE OF REPORTING PERSON (see instructions) IN

CUSIP No. 315721100

13G

Page 5 of 9 Pages

Item 1.

(a) Name of Issuer

Fibrocell Science, Inc., a Delaware corporation (the "Company")

(b) Address of Issuer's Principal Executive Offices 405 Eagleview Boulevard Exton, Pennsylvania 19341

Item 2(a). Name of Person Filing

Item 2(b). Address of Principal Business Office

Item 2(c). Citizenship

Highbridge International LLC c/o Harmonic Fund Services The Cayman Corporate Centre, 4th Floor 27 Hospital Road Grand Cayman, Cayman Islands, British West Indies Citizenship: Cayman Islands, British West Indies

Highbridge Capital Management, LLC 9 West 57th Street, 27th Floor New York, New York 10019 Citizenship: State of Delaware

Glenn Dubin c/o Highbridge Capital Management, LLC 9 West 57th Street, 27th Floor

New York, New York 10019 Citizenship: United States

Item 2(d) Title of Class of Securities

Common Stock, \$0.001 par value ("Common Stock")

Item 2(e) CUSIP Number

315721100

- Item 3. If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:
- (a) [] Broker or dealer registered under Section 15 of the Act (15 U.S.C. 780).
- (b) [] Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) [] Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) [] Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) [] An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);

CUSIP No. 315721100

13G

Page 6 of 9 Pages

- (g) [] A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) [] A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) [] A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) [] Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to Rule 13d-1(c), check this box. [X]

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

As of the date of this filing, (i) Highbridge International LLC beneficially owns 800,141 shares of Common Stock and (ii) each of Highbridge Capital Management, LLC and Glenn Dubin may be deemed the beneficial owner of the 800,141 shares of Common Stock beneficially owned by Highbridge

International LLC.

Highbridge Capital Management, LLC is the trading manager of Highbridge International LLC. Glenn Dubin is the Chief Executive Officer of Highbridge Capital Management, LLC. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person. In addition, each of Highbridge Capital Management, LLC and Glenn Dubin disclaims beneficial ownership of shares of Common Stock held by Highbridge International LLC.

(b) Percent of class:

The Company's Quarterly Report for the quarterly period ended September 30, 2009 filed on Form 10-Q on November 24, 2009 indicates that as of November 20, 2009 there were 14,666,666 shares of Common Stock outstanding. Therefore, based on the Company's outstanding shares of Common Stock (i) Highbridge International LLC may be deemed to beneficially own 5.46% of the outstanding shares of Common Stock of the Company and (ii) each of Highbridge Capital Management, LLC and Glenn Dubin may be deemed to beneficially own 5.46% of the outstanding shares of Common Stock of the Company. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person.

(c) Number of shares as to which such person has:

CUSIP No. 315721100

13G

Page 7 of 9 Pages

- (i) Sole power to vote or to direct the vote
 - 0
- (ii) Shared power to vote or to direct the vote

See Item 4(a)

(iii) Sole power to dispose or to direct the disposition of

0

(iv) Shared power to dispose or to direct the disposition of

See Item 4(a)

Item 5. Ownership of Five Percent or Less of a Class

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person

Not applicable.

Item 8. Identification and Classification of Members of the Group

See Exhibit I.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Exhibits:

Exhibit I: Joint Filing Agreement, dated as of December 11, 2009, by and among Highbridge International LLC, Highbridge Capital Management, LLC and Glenn Dubin.

CUSIP No. 315721100

13G

Page 8 of 9 Pages

SIGNATURES

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

Dated: December 11, 2009

HIGHBRIDGE CAPITAL MANAGEMENT, LLC

HIGHBRIDGE INTERNATIONAL LLC

By: Highbridge Capital Management, LLC

its Trading Manager

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director

/s/ Glenn Dubin

GLENN DUBIN

CUSIP No. 315721100

13G

Page 9 of 9 Pages

EXHIBIT I

JOINT FILING AGREEMENT

This will confirm the agreement by and among the undersigned that the Schedule 13G filed with the Securities and Exchange Commission on or about the date hereof with respect to the beneficial ownership by the undersigned of the shares of Common Stock, \$0.001 par value, of Fibrocell Science, Inc., is being filed, and all amendments thereto will be filed, on behalf of each of the persons and entities named below in accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Dated as of December 11, 2009

HIGHBRIDGE CAPITAL MANAGEMENT, LLC

HIGHBRIDGE INTERNATIONAL LLC

By: Highbridge Capital Management, LLC

its Trading Manager

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director

/s/ Glenn Dubin

GLENN DUBIN