

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): **May 5, 2009**

AVI BioPharma, Inc.

(Exact name of registrant as specified in its charter)

Oregon
(State or other
jurisdiction of
incorporation)

001-14895
(Commission File Number)

93-0797222
(I.R.S. Employer
Identification No.)

4575 SW Research Way, Suite 200
Corvallis, OR 97333
(Address of principal executive offices)

(541) 753-3635
Registrant's telephone number, including area code

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On May 5, 2009, AVI BioPharma, Inc. (the "Company"), entered into a contract with the U.S. Defense Threat Reduction Agency ("DTRA") to support development of DTRA's programs with the Transformational Medical Technologies Initiative ("TMTI"). Under this contract, DTRA will pay up to \$5.1 million to the Company for the work to be performed by the Company. The work will involve the application of the Company's propriety PMOplus antisense chemistry and will begin immediately.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Corvallis, State of Oregon, on May 11, 2009.

AVI BioPharma, Inc.

By: /s/ Leslie Hudson, Ph.D.

Leslie Hudson, Ph.D.
President and Chief Executive Officer
(Principal Operating Officer)

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