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): June 2, 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:

- o 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 June 2, 2009, AVI BioPharma, Inc. (the "Company") and Charley's Fund, Inc. ("Charley's Fund"), a nonprofit organization that funds drug discovery and development initiatives specific to Duchenne muscular dystrophy ("DMD"), entered into the First Amendment to an existing Sponsored Research Agreement (the "Amendment"). The Amendment pertains to certain provisions of that certain Sponsored Research Agreement by and between the Company and Charley's Fund entered into effective October 12, 2007 (the "Agreement"). Under the terms of the Agreement, the Company was awarded a \$2.45 million research contract from Charley's Fund to support a new product development program using proprietary exon skipping technologies developed by the Company to overcome the effects of certain genetic errors in the dystrophin gene.

Under the Amendment, Charley's Fund will provide an additional \$3 million in sponsored research funds, above the \$2 million previously provided, to support the development of AVI-5038 through to submission of an IND application. The Agreement, as amended (the "Amended Agreement"), provides that the Company shall pay to Charley's Fund an amount equal to the funds provided by Charley's Fund under the Amended Agreement through royalty payments based on the commercialization of AVI-5038.

Item 9.01. Financial Statements and Exhibits.

The following exhibit is being furnished (not filed) herewith:

99.1 Press release, dated June 4, 2009, entitled "AVI BioPharma Signs an Additional Drug Development Contract with Charley's Fund Inc. for Duchenne Muscular Dystrophy"

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SIGNATURES

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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EXHIBIT INDEX

99.1 Press release, dated June 4, 2009, entitled "AVI BioPharma Signs an Additional Drug Development Contract with Charley's Fund Inc. for Duchenne Muscular Dystrophy"

AVI Press and Investor Contact: Julie Rathbun Investor Relations (541) 224-2575

Investorrelations@avibio.com

Charley's Fund Inc. Contact: Tracy Seckler (413) 528-5744 info@charleysfund.org

AVI BioPharma Signs an Additional Drug Development Contract with Charley's Fund Inc. for Duchenne Muscular Dystrophy

Fund has committed total of \$5Million to AVI-5038

PORTLAND, Ore., and SOUTH EGREMONT, Mass. — June 4, 2009 — AVI BioPharma, Inc. (Nasdaq: AVII) and Charley's Fund Inc. (CFI), a *not for profit* organization, today announced that AVI and CFI have amended their existing sponsored research agreement to provide for an additional \$3 million in sponsored research funds, for a total of \$5 million in support of the development of AVI-5038 through to IND. The drug candidate is based on proprietary PPMO chemistry and has the potential to skip exon 50 in certain patients with Duchenne muscular dystrophy (DMD). AVI's first contract with the Fund was initiated in October 2007 and partly supported the research that identified AVI-5038.

"We are excited that the research supported by our Fund allowed AVI to identify this drug candidate for further development. We are pleased to extend additional support to AVI to help the company reach its clinical goals in this devastating disease so that more children with DMD can be treated" said Benjamin Seckler, M.D., president of Charley's Fund Inc.

"Our new drug candidate — AVI-5038 — is based upon novel PPMO chemistry, which will potentially enhance the bioavailability and potency of exonskipping drugs," said Leslie Hudson, Ph.D., President and Chief Executive Officer of AVI BioPharma. "We appreciate the support and commitment of Charley's Fund Inc. to help advance this promising drug candidate towards the clinic."

AVI has selected and begun preclinical development on a lead molecule, based on AVI's proprietary PPMO chemistry that has the potential to skip dystrophin exon 50 and so not only restore the proper RNA reading frame but also produce functional dystrophin in patients with certain types of mutation. This therapeutic approach is similar to that of AVI—4658, which AVI has in more advanced development to potentially treat DMD patients with mutations that could benefit from skipping exon 51 of the dystrophin gene.

About Duchenne Muscular Dystrophy (DMD)

DMD is the most common fatal genetic disorder to affect children around the world. Approximately one in every 3,500 boys worldwide is afflicted with Duchenne muscular dystrophy with 20,000 new cases reported each year. It is a devastating and incurable muscle-

wasting disease associated with specific inborn errors in the gene that codes for dystrophin, a protein that plays a key structural role in muscle fiber function. Symptoms usually appear in male children before age six. Progressive muscle weakness of the legs and pelvis eventually spreads to the arms, neck, and other areas. By age 10, braces may be required for walking, and most patients are confined to a wheelchair by age 12. Eventually, this progresses to complete paralysis and increasing difficulty in breathing. The condition is terminal and death usually occurs before the age of 30. The outpatient cost of care for a non-ambulatory DMD boy is among the highest of any disease. There is currently no cure for DMD, but for the first time in decades, there are promising therapies in or moving into development.

About Charley's Fund Inc.

Charley's Fund Inc. is a not—for—profit foundation that finances therapeutics development for Duchenne muscular dystrophy. The foundation's mission is to expedite a treatment or cure in time to help this generation of children who suffer from DMD. Charley's Fund Inc. targets translational research — research that moves science from the lab into human clinical trials. The 501 (c)(3) public charity was co—founded in 2004 by Benjamin Seckler, M.D. and Tracy Kramer Seckler, whose son Charley has Duchenne muscular dystrophy. To learn more about Charley's Fund Inc., visit www.charleysfund.org.

About AVI BioPharma

AVI BioPharma is focused on the discovery and development of RNA—based drugs utilizing proprietary derivatives of its antisense chemistry (morpholino-modified phosphorodiamidate oligomers or PMOs) that can be applied to a wide range of diseases and genetic disorders through several distinct mechanisms of action. Unlike other RNA therapeutic approaches, AVI's antisense technology has been used to directly target both messenger RNA (mRNA) and its precursor (pre-mRNA), allowing for both up- and down-regulation of targeted genes and proteins. AVI's RNA—based drug programs are being evaluated for the treatment of Duchenne muscular dystrophy as well as for the treatment of cardiovascular restenosis through our partner Global Therapeutics, a Cook Group Company. AVI's antiviral programs have demonstrated promising outcomes in Ebola Zaire and Marburg Musoke virus infections and may prove applicable to other viral targets such as HCV or Dengue viruses. For more information, visit www.avibio.com.

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"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: The statements that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including, but not limited to, the results of research and development efforts, the results of preclinical and clinical testing, the effect of regulation by the FDA and other agencies, the impact of competitive products, product development, commercialization and technological difficulties, and other risks detailed in the company's Securities and Exchange Commission filings.

