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):

July 22, 2009

ADVENTRX Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

001-32157

(Commission

File Number)

(State or other jurisdiction of incorporation)

6725 Mesa Ridge Road, Suite 100, San Diego, California

(Address of principal executive offices)

Registrant's telephone number, including area code:

Not Applicable

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))

84-1318182

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

92121

(Zip Code)

858-552-0866

Top of the Form

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On July 22, 2009, the Board of Directors (the "Board") of ADVENTRX Pharmaceuticals, Inc. (the "Company") appointed Patrick L. Keran, currently the Company's General Counsel, Secretary and Vice President, Legal, to additionally serve as the Company's principal financial and principal accounting officer on an interim basis, effective immediately. In connection with the foregoing, Mark N.K. Bagnall, the Company's former principal financial and principal accounting officer and currently a member of the Board, ended his service as principal financial and principal accounting officer. Mr. Bagnall continues to serve on the Board.

Mr. Keran has served as the Company's General Counsel since August 2006, as its Secretary September 2006, and as its Vice President, Legal since January 2007. From April 2004 to August 2006, Mr. Keran was associate general counsel at Isis Pharmaceuticals, a publicly held drug discovery and development company. From February 2003 to April 2004, Mr. Ker an practiced corporate law at the law firm of Heller Ehrman LLP, specializing in public and private financings, licensing arrangements, mergers and acquisitions and corporate governance matters. From September 1999 to February 2003, Mr. Keran practiced law at the law firm of Brobeck Phleger & Harrison LLP where he had a similar corporate practice. Mr. Keran is licensed to practice law in the State of California. Mr. Keran received a B.A. from the University of California at San Diego and a J.D. from the University of California at Berkeley, Boalt Hall School of Law.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

July 24, 2009

ADVENTRX Pharmaceuticals, Inc.

By: /s/ Patrick L. Keran

Name: Patrick L. Keran Title: Vice President, Legal