REPLIDYNE INC Form 8-K March 27, 2008

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): March 27, 2008 (March 27, 2008) REPLIDYNE, INC. (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

incorporation)

000-52082 (Commission File Number) 84-1568247 (I.R.S. Employer Identification No.)

1450 Infinite Drive, Louisville, Colorado (Address of principal executive offices)

80027

(Zip Code)

303-996-5500 *(Registrant s telephone number, including area code)*

Not Applicable

(Former name, former address and former fiscal year, 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)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

(b) On March 27, 2008, Christopher D. Earl, Ph.D. notified Replidyne, Inc. (the Company) of his resignation from the Board of Directors of the Company, effective immediately.

SIGNATURE

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.

REPLIDYNE, INC.

Dated: March 27, 2008

By: /s/ Mark L. Smith Mark L. Smith Chief Financial Officer Principal Accounting Officer