

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 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): April 5, 2013

**Bacterin International Holdings, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-34951

(Commission File Number)

20-5313323

(IRS Employer Identification No.)

600 Cruiser Lane  
Belgrade, Montana

(Address of Principal Executive Offices)

59714

(Zip Code)

(406) 388-0480

(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 (see General Instruction A.2. below):

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 5.02 Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers**

Guy Cook resigned from his roles of Chief Executive Officer, President and Chairman of the Board effective April 5, 2013.

The Board unanimously voted to have Kent Swanson, an existing independent director, serve as Acting Chairman of the Board.

Our current Chief Financial Officer, John Gandolfo, and our Chief Operating Officer, Darrel Holmes, will jointly serve as interim Co-Chief Executive Officers until the Board appoints a new Chief Executive Officer.

Information for John Gandolfo and Darrel Holmes required by Items 401(b), (d), (e) and Item 404(a) of Regulation S-K is contained in our Annual Report on Form 10-K filed with the SEC on March 27, 2013 and incorporated by reference herein.

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.

Dated: April 5, 2013

**BACTERIN INTERNATIONAL HOLDINGS, INC.**

By: \_\_\_\_\_ /s/ \_\_\_\_\_ **John Gandolfo**

Name: John Gandolfo  
Title: Interim Co-Chief Executive Officer and Chief Financial Officer

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