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): April 29, 2009

BIOTIME, INC.

(Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation)

1-12830 (Commission File Number) 94-3127919 (IRS Employer Identification No.)

1301 Harbor Bay Parkway Alameda, California 94502 (Address of principal executive offices)

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(510) 521-3390

(Registrant's telephone number, including area code)

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))

Statements made in this Report that are not historical facts may constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those discussed. Such risks and uncertainties include but are not limited to those discussed in this report and in BioTime's Annual Report on Form 10-K filed with the Securities and Exchange Commission. Words such as "expects," "may," "will," "anticipates," "intends," "plans," "believes," "seeks," "estimates," and similar expressions identify forward-looking statements.

Section 8 – Other Events

Item 8.01 – Other Events

On April 29, 2009, the California Institute of Regenerative Medicine (CIRM) awarded us a \$4,721,706 grant for a stem cell research project related to our ACTCellerate[™] embryonic stem cell technology. Our grant project is titled "Addressing the Cell Purity and Identity Bottleneck through Generation and Expansion of Clonal Human Embryonic Progenitor Cell Lines." The overall objective of the research project is to generate tools useful in applying ACTCellerate[™] technology to the manufacture of patient-specific therapeutic products.

Our CIRM-funded research project will address the need for industrial scale production of pure therapeutic cells. Our technologies in regenerative medicine are based on the power of human embryonic stem (hES) cells and induced pluripotent stem (iPS) cells to become all of the cell types of the human body. hES and iPS-derived cells are generally difficult and costly to manufacture in large quantities, especially with the purity required for therapeutic use. Purity and precise identification of the desired therapeutic cells are essential for cell therapy because unlike a drug which may persist in the body for a matter of hours or days, a cell can persist in the body for a lifetime. Contamination of hES- or iPS-derived cells with the wrong cells could lead to toxicities resulting from normal but inappropriate tissue growth or tumor formation.

ACTCellerate[™] technology addresses the challenges of manufacturing purified cells of known identity by allowing the isolation of novel, highly-purified embryonic progenitor cells (hEPCs). Embryonic progenitors are cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. Progenitor cells may possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapy. The progenitor cells are relatively easy to manufacture on a large scale and in a purified state, which may make it advantageous to work with these cells compared to the direct use of hES or human iPS cells. We already have isolated and expanded a number of hEPCs that may be used in the funded research program.

Because hEPCs are clonal, meaning that they are derived from a single cell, they have the potential to grow as a pure cell line. However, the production of hEPCs for human therapeutic use will require a means of ascertaining that the cells being used are in fact the correct cells. Our research program proposes to map the surface markers on hEPC lines so that we can identify a molecular signature specific to a given hEPC line. The molecular signature will be the key to verifying the correct identity of cells intended to be used in therapy, and

will facilitate purification of hEPCs from any hES or iPS cell line. We will seek to identify antibodies and other cell purification reagents that will reveal the molecular signature of the desired hEPCs. The successful completion of our proposed project will provide well characterized hEPCs that are precursors of therapeutic cells such as nerve, blood vessel, heart muscle, and skin.

CIRM's independent reviewers who recommended funding of the grant concluded that our research project "addresses an unmet need in the field, is innovative, and has sound scientific rationale. If successful, the applicant's work would benefit the field by providing: 1) a shared bank of standardized good manufacturing practice (GMP)-produced hEPCs with methods for industrial scale up of the lines; 2) peptide and antibody reagents with protocols for identification and isolation of hEPCs; and 3) reagents and protocols for differentiating hEPCs to clinically relevant cells. Reviewers concurred that these resources would help advance stem cell therapies to the clinic."

The CIRM grant will provide up to \$4.7 million of funding for this research project over a period of three years, with \$1.6 million expected to be available during the first 12 months. We expect that the first funds will be available some time during the summer of 2009 and that work on the project will be ready to begin upon the receipt of funding.

CIRM was established in 2005 to fund over \$3 billion dollars of research in the field of stem cell biology in California. In particular, it aims to support and advance stem cell research and regenerative medicine under the highest ethical and medical standards for the discovery and development of cures, therapies, diagnostics and research technologies to relieve human suffering from chronic disease and injury. With this level of funding, CIRM is the largest source of funding for embryonic and pluripotent stem cell research in the world. CIRM's website can be found at http://www.cirm.ca.gov.

Section 9 - Financial Statements and Exhibits

Item 9.01 – Financial Statements and Exhibits.

Exhibit Number

Description

99.1

Press Release Dated April 30, 2009

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.

BIOTIME, INC.

Date: April 30, 2009

By <u>/s/ Steven A. Seinberg</u> Chief Financial Officer Exhibit Number

Description

99.1

Press Release Dated April 30, 2009



Exhibit 99.1

BioTime Awarded a \$4.7 Million Research Grant from the California Institute for Regenerative Medicine

- Grant to fund expansion of BioTime's ACTCellerate™ human embryonic stem cell product development -

ALAMEDA, CA, April 30, 2009 – BioTime, Inc., (OTCBB: BTIM) announced today that the California Institute for Regenerative Medicine (CIRM) has approved a grant to the Company of \$4.7 million to fund research related to its ACTCellerateTM embryonic stem cell technology. The overall objective of this grant is to generate tools useful in applying ACTCellerateTM technology to the manufacture of patient-specific therapeutic products.

BioTime's technologies in regenerative medicine are based on the power of human embryonic stem (hES) cells and induced pluripotent stem (iPS) cells to become all of the cell types of the human body. There is a significant business opportunity in both the research and therapeutic sector for marketing the hundreds of human cell types that come from these stem cells. However, one of the greatest challenges for stem cell researchers is to identify methods to isolate the many hundreds of human cell types in a purified state.

The new grant funds awarded by CIRM will be used by BioTime to "industrialize" the manufacture of the purified cell types for *therapeutic applications*. In particular, the aims of the grant are to generate tools useful in implementing ACTCellerateTM technology in a patient-specific manner, such as from a patient's own cells. Both BioTime and CIRM anticipate that the funded research may accelerate the translation of bench top science to bedside treatments for presently incurable diseases.

ACTCellerate[™] is a novel technology that allows the expansion of over 140 highly-purified primitive human embryonic progenitor cells (hEPCs) from hES or iPS cells. These hEPCs may possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapy. BioTime already has isolated and expanded a number of hEPCs that are being marketed for research purposes only through the Company's wholly owned subsidiary, Embryome Sciences, Inc.

CIRM was established in 2005 to fund over \$3 billion dollars of research in the field of stem cell biology in California. In particular, it aims to support and advance stem cell research and regenerative medicine under the highest ethical and medical standards for the discovery and development of cures, therapies, diagnostics, and research technologies to relieve human suffering from chronic disease and injury. With this level of funding, CIRM is the largest source of funding for embryonic and pluripotent stem cell research in the world. CIRM's website can be found at http://www.cirm.ca.gov.

BioTime's grant titled "Addressing the Cell Purity and Identity Bottleneck through Generation and Expansion of Clonal Human Embryonic Progenitor Cell Lines" was recommended for funding by CIRM's independent reviewers. The reviewer's statement concluded that the "proposal addresses an unmet need in the field, is innovative, and has sound scientific rationale. If successful, the applicant's work would benefit the field by providing: 1) a shared bank of standardized good manufacturing practice (GMP)-produced hEPCs with methods for industrial scale up of the lines; 2) peptide and antibody reagents with protocols for identification and isolation of hEPCs; and 3) reagents and protocols for differentiating hEPCs to clinically relevant cells. Reviewers concurred that these resources would help advance stem cell therapies to the clinic."

"With these Early Translational grants, CIRM has taken the first step in funding translational research that will be critical for the development of future therapies," said Alan Trounson, CIRM president. "These grants are an important part of CIRM's strategy to fund the best basic research and then bring the results of that work to patients."

"We deeply appreciate the generous support of the people of California for our research and product development," said Dr. Michael D. West, BioTime's Chief Executive Officer, who is the Principal Investigator on the grant. "This CIRM grant will allow us to offer important new products to stem cell researchers sooner than we had previously planned. We intend to compete for CIRM grant support for other programs as well. Such programs include iPS technology in the preclinical studies of the therapeutic uses of our technology, such as their use in the treatment of neurological, vascular, and orthopedic diseases."

Background

Regenerative medicine refers to therapies based on human embryonic stem (hES) cell or induced pluripotent stem (iPS) cell technology, designed to regenerate tissues afflicted with degenerative disease. The great scientific and public interest in regenerative medicine lies in the potential of hES and iPS cells to transform into any cell type of the human body. hES and iPS cells therefore show considerable potential as sources of new therapies for a host of currently incurable diseases such as diabetes, stroke, Parkinson's disease, Alzheimer's disease, heart failure, arthritis, muscular dystrophy, spinal cord injury, macular degeneration, hearing loss, liver failure, and many other disorders where cells become dysfunctional.

ACTCellerate[™] technology allows the isolation of novel, highly-purified embryonic progenitor cells (hEPCs). Embryonic progenitors are cells that are intermediate in the developmental process between embryonic stem cells and fully-differentiated cells. These progenitor cells may possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapy. Embryonic progenitor cells are relatively easy to manufacture on a large scale and in a purified state, which may make it advantageous to scale up these cells in the manufacturing process rather than scaling embryonic stem cells. BioTime's subsidiary, Embryome Sciences, Inc., sells progenitor cells, and the specific culture media that stimulate the propagation of the cells, to the research community through the company's website Embryome.com. BioTime and Embryome Sciences may also collaborate with others in the development of human therapeutic uses of the cell lines.

BioTime's CIRM-funded research will address the need for the industrial-scale manufacture of purified therapeutic cells. Purity and precise identification of the desired cells are essential for therapy because unlike a drug, which may persist in the body for a matter of hours or days, a cell can persist in the body for a lifetime. Contamination of transplanted cells with cells of an unintended type could lead to serious complications, even tumor formation. The CIRM grant will provide up to \$4.7 million of funding for this research project over a period of three years, with \$1.6 million expected to be available during the first 12 months. BioTime expects that the first funds will be available some time during the summer of 2009 and that work on the project will be ready to begin upon the receipt of funding.

Embryome Sciences is presently marketing a family of cell growth media called ESpanTM. These growth media are optimized for the growth of human embryonic progenitor cells. Additional new products that Embryome Sciences has targeted for development are ESpyTM cell lines, which will be derivatives of hES cells that send beacons of light in response to the activation of particular genes. Embryome Sciences also plans to bring to market cells carrying specific disease genes in collaboration with the Reproductive Genetics Institute of Chicago, Illinois; new growth and differentiation factors that will permit researchers to manufacture specific cell types from embryonic stem cells; and purification tools useful to researchers in quality control of products for regenerative medicine.

About BioTime, Inc.

BioTime, headquartered in Alameda, California, is a biotechnology company focused on the emerging field of regenerative medicine. BioTime's lead product Hextend is a blood plasma expander used in surgery, emergency trauma treatment and other applications. Hextend is manufactured and distributed in the U.S. by Hospira, Inc. and in South Korea by CJ CheilJedang Corp. under exclusive licensing agreements.

BioTime markets its stem cell research products through its wholly owned subsidiary <u>Embryome Sciences, Inc.</u> which is developing new medical and research products using embryonic stem cell technology. Additional information about BioTime can be found on the web at <u>www.biotimeinc.com</u>.

Hextend[®], ESpyTM, and ESpanTM, are trademarks of BioTime, Inc.

Forward-Looking Statements

Statements pertaining to future financial and/or operating results, future growth in research, technology, clinical development and potential opportunities for the company and its subsidiary, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements. Any statements that are not historical fact (including, but not limited to statements that contain words such as "will," "believes," "plans," "anticipates," "expects," "estimates,") should also be considered to be forward-looking statements. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, and maintenance of intellectual property rights. Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the company's business, particularly those mentioned in the cautionary statements found in the company's Securities and Exchange Commission filings. The company disclaims any intent or obligation to update these forward-looking statements.

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To receive ongoing BioTime corporate communications, please click on the following link to join our email alert list: <u>http://www.b2i.us/irpass.asp?</u> <u>BzID=1152&to=ea&s=0</u>