

Department of Legislative Services  
Maryland General Assembly  
2012 Session

FISCAL AND POLICY NOTE

House Bill 289 (Delegate Feldman)

Health and Government Operations and  
Economic Matters

---

Economic Development - Maryland Stem Cell Research Act - Revisions

---

This bill alters the name and purpose of the Maryland Stem Cell Research Fund and the name and membership of the Stem Cell Research Commission to include biotechnologies commercialization. The bill also alters other specified requirements related to the fund, the commission, and the disbursement of grant funds.

---

Fiscal Summary

**State Effect:** Higher education revenues and expenditures for the University of Maryland, Baltimore (UMB) likely decrease beginning in FY 2013 due to the bill's requirement that at least one-third of grants or loans awarded each year by the Stem Cell Research Fund be awarded to for-profit companies headquartered in the State. The exact fiscal impact to UMB cannot be reliably estimated at this time, as discussed below.

**Local Effect:** None.

**Small Business Effect:** Potential meaningful for small businesses that qualify for grant funding under the bill.

---

Analysis

**Bill Summary/Current Law:**

*Fund*

Chapter 19 of 2006 created the Maryland Stem Cell Research Fund to promote State-funded stem cell research and cures through grants and loans to public and private

entities in Maryland. Annually, the Governor may include in the budget bill an appropriation to the Stem Cell Research Fund. Money in the fund may be used to award grants and loans for State-funded stem cell research (or for related facilities, capital leases, or capital equipment) and to pay the costs necessary to administer the fund.

The bill renames the fund as the Maryland Stem Cell and Biotechnologies Commercialization Fund and specifies that a primary purpose of the fund is to support in-state, innovative biotechnology research and development that has the potential to create sustainable, in-state job growth including manufacturing jobs. The bill also specifies that money in the fund may be used to award grants and loans for research supporting a “qualified technology” which, under the bill, means any innovative and proprietary technology that comprises, interacts with, or analyzes biological material, including biomolecules, cells, tissues, or organs. “Qualified technology” includes a technology used for stem cell research. The bill allows grants to be awarded directly to for-profits and requires at least one-third of grants or loans awarded each year to be awarded to for-profit companies headquartered in the State. The bill further requires that, in selecting recipients from the nonprofit sector, priority be given to applicants that have co-development partnerships with Maryland for-profit companies, as determined by using the matching funds formula of the Maryland Industrial Partnership Program.

#### *Commission*

Chapter 19 of 2006 also established an independent Stem Cell Research Commission under the Maryland Technology Development Corporation (TEDCO). The commission consists of the Attorney General (or the Attorney General’s designee); three patient advocates; three individuals with experience in biotechnology; two individuals who work as scientists for the University System of Maryland (USM) and do not engage in stem cell research; two individuals who work as scientists for The Johns Hopkins University (JHU) and do not engage in stem cell research; two bioethicists; and two individuals with expertise in the field of biomedical ethics as it relates to religion.

Under the bill, the commission is renamed as the Stem Cell and Biotechnologies Commercialization Commission. The bill retains as commission members the Attorney General (or the Attorney General’s designee); three patient advocates; and three individuals with experience in biotechnology. However, the bill replaces the rest of the commission’s membership with two individuals who work in technology transfer for USM; two individuals who work in technology transfer for JHU; and two individuals with experience in investing in biotechnology.

Current law requires the commission to establish procedures and guidelines to be used for the review, evaluation, ranking, and rating of research proposals for State-funded stem cell research. The commission is further required to ensure that such procedures and

guidelines are based on the guidelines of the National Institutes of Health (NIH) Center for Scientific Review; the bill repeals this requirement.

The bill specifies that the procedures and guidelines established by the commission may be used to review, evaluate, rank, and rate research proposals for not only State-funded stem cell research but also research supporting a qualified technology.

#### *Review Committee*

Under current law, the Stem Cell Research Commission must contract with an independent scientific peer review committee of scientifically recognized stem cell research experts, which evaluates stem cell research proposals for the commission. The committee must review, evaluate, rank, and rate research proposals based on the procedures and guidelines established by the commission and in a manner that gives due consideration to the scientific, medical, and ethical implications of the research. Committee members may not reside in the State.

The bill specifies that the review committee with which the board contracts may consist of scientifically recognized experts in the field of stem cell research *or* other qualified technologies. The bill retains current standards for the committee's evaluation of research proposals, but also requires the committee to review, evaluate, rank, and rate research proposals for State-funded stem cell research in a manner that gives due consideration to the proprietary nature and long-term commercial potential of each proposal. The bill repeals the prohibition on committee members residing in the State but specifies that at least one member of the committee must be from the industrial sector and be familiar with the development and commercialization of biotechnology products.

#### *Reporting*

Current law requires TEDCO and the commission to submit an annual report to the Governor and the General Assembly on the progress of State-funded stem cell research. The report must identify each fund recipient, the amount of money received, and a description of the type of stem cell research performed by the recipient.

The bill retains these reporting requirements. The report must describe the type of stem cell research or research supporting a qualified technology performed by the recipient.

#### *Other*

Chapter 99 of 2005 established the Biotechnology Investment Tax Credit Program, which allows a tax credit of up to 50% of the amount contributed to a qualified Maryland biotechnology company.

**Background:** The commission is authorized to award three types of grants: investigator research grants, exploratory grants, and post-doctoral research grants. Most grants have been awarded to JHU and UMB.

In fiscal 2011, the Stem Cell Research Fund supported 36 research grants that were approved from 180 applications. TEDCO advises that it is in receipt of 263 letters of intent and 179 full applications for fiscal 2012. The Governor's proposed fiscal 2013 budget includes \$10.4 million in general funds to support grants under the Stem Cell Research Fund, approximately the same amount as appropriated in the previous two fiscal years (although \$2.0 million was transferred from the fund to the general fund in fiscal 2011).

The proposed fiscal 2013 budget includes an \$8.0 million appropriation to the reserve fund for the Biotechnology Investment Tax Credit Program.

**State Fiscal Effect:** TEDCO advises that, in fiscal 2011, the fund awarded 10 out of 36 (28%) grant or loan awards to collaborations with for-profit companies. Because almost all grants are awarded to UMB and JHU, higher education revenues and expenditures for UMB likely decrease beginning in fiscal 2013 due to the bill's requirement that at least one-third of grants or loans awarded each year by the fund be awarded to for-profit companies headquartered in the State. Based on the fiscal 2011 appropriation, \$580,000 represents the approximate difference between grants actually awarded to for-profit companies and grants that would have been awarded under the bill's proportional requirement. However, given the competitive nature of the annual award process, Legislative Services advises that the exact impact to UMB cannot be reliably estimated at this time.

TEDCO further advises that the commission's administrative costs may increase because, under the bill, additional expertise would be needed on the review committee. Given the expertise already required of the review committee, Legislative Services anticipates any increase in administrative costs to be minimal.

**Additional Comments:** Because most grants are awarded to UMB and JHU, the fiscal effect of the bill on JHU (a private nonprofit institution) is similar to the effect on UMB. Thus, under the bill, annual funding for JHU likely decreases beginning in fiscal 2013.

---

### **Additional Information**

**Prior Introductions:** HB 1159 of 2009, a similar bill, was heard in the House Government Operations Committee but received no further action. Its cross file, SB 948, was heard in the Senate Finance Committee but received no further action.

**Cross File:** None.

**Information Source(s):** Maryland Technology Development Corporation; The Johns Hopkins University; Department of Business and Economic Development; Department of Health and Mental Hygiene; University System of Maryland; Department of Legislative Services

**Fiscal Note History:** First Reader - February 5, 2012  
ncs/rhh

---

Analysis by: Jennifer A. Ellick

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510