

# HOUSE BILL 1159

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CF 9lr3250

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By: **Delegates Feldman, Barkley, Bronrott, Eckardt, Hecht, Lee, Montgomery, and Morhaim**

Introduced and read first time: February 13, 2009

Assigned to: Health and Government Operations and Economic Matters

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## A BILL ENTITLED

1 AN ACT concerning

2 **Economic Development – Maryland Stem Cell Research Act – Revisions**

3 FOR the purpose of altering the name of the Stem Cell Research Commission to be the  
4 Stem Cell and Biotechnologies Commission; requiring the Commission to  
5 establish certain procedures and guidelines regarding research supporting a  
6 qualified technology; altering the name of the Maryland Stem Cell Research  
7 Fund to be the Maryland Stem Cell and Biotechnologies Research Fund;  
8 altering the purpose of the Fund; altering the approved uses of money in the  
9 Fund; requiring that a certain percentage of awards per year be made to certain  
10 for-profit companies; requiring that priority be given to certain applicants when  
11 awarding funds to applicants in the nonprofit sector; altering the membership of  
12 the Maryland Stem Cell Research Commission; altering the composition of the  
13 membership of the peer review committee; requiring the peer review committee  
14 to consider certain factors when reviewing a proposal; repealing the provision of  
15 law prohibiting a member of the peer review committee from residing in the  
16 State; and altering the requirements for a certain report; altering the definition  
17 of certain terms; defining a certain term; and generally relating to the Maryland  
18 Stem Cell Research Act.

19 BY repealing and reenacting, with amendments,  
20 Article – Economic Development  
21 Section 10–429, 10–431, 10–432, 10–434 through 10–436, and 10–442  
22 Annotated Code of Maryland  
23 (2008 Volume)

24 BY repealing and reenacting, without amendments,  
25 Article – Economic Development  
26 Section 10–430 and 10–437 through 10–441  
27 Annotated Code of Maryland  
28 (2008 Volume)

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EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF  
2 MARYLAND, That the Laws of Maryland read as follows:

3 **Article – Economic Development**

4 10–429.

5 (a) In this part the following words have the meanings indicated.

6 (b) “Adult stem cell” means a stem cell that is:

7 (1) derived from human tissue; and

8 (2) obtained after birth.

9 (c) “Commission” means the Stem Cell **AND BIOTECHNOLOGIES** Research  
10 Commission.

11 (d) “Committee” means the independent scientific peer review committee  
12 that contracts with the Commission under § 10–436 of this subtitle.

13 (e) “Fund” means the Maryland Stem Cell **AND BIOTECHNOLOGIES**  
14 Research Fund established under § 10–434 of this subtitle.

15 (f) “Human cloning” means the replication of a human being through the  
16 production of a precise genetic copy of nuclear human DNA or any other human  
17 molecule, cell, or tissue in order to create a new human being or to allow development  
18 beyond an embryo.

19 (g) “Institutional review board” has the meaning stated in the federal  
20 regulations on the protection of human subjects.

21 (h) “Oocyte” means a female germ cell or egg.

22 (i) (1) **“QUALIFIED TECHNOLOGY” MEANS ANY INNOVATIVE AND**  
23 **PROPRIETARY TECHNOLOGY THAT COMPRISES, INTERACTS WITH, OR ANALYZES**  
24 **BIOLOGICAL MATERIAL INCLUDING BIOMOLECULES, CELLS, TISSUES, OR**  
25 **ORGANS.**

26 (2) **“QUALIFIED TECHNOLOGY” INCLUDES A TECHNOLOGY USED**  
27 **FOR STEM CELL RESEARCH.**

28 [(i)] (j) “State–funded stem cell research” means stem cell research  
29 conducted with State money and using:

30 (1) material obtained in accordance with § 10–438 of this subtitle; or

1 (2) adult stem cells.

2 [(j)] (K) “Stem cell” means a human cell that has the ability to:

3 (1) divide indefinitely;

4 (2) give rise to many other types of specialized cells; and

5 (3) give rise to new stem cells with identical potential.

6 [(k)] (L) “Valuable consideration” means financial gain or advantage in  
7 connection with material obtained in accordance with § 10–438 of this subtitle.

8 10–430.

9 Nothing in this part may be construed to prohibit the creation of stem cell lines  
10 to be used for therapeutic research purposes.

11 10–431.

12 (a) There is a Stem Cell **AND BIOTECHNOLOGIES** Research Commission.

13 (b) The Commission is an independent commission that functions in the  
14 Corporation.

15 (c) The Commission consists of the following members:

16 (1) the Attorney General or the Attorney General’s designee;

17 (2) three patient advocates, one appointed by the Governor, one  
18 appointed by the President of the Senate, and one appointed by the Speaker of the  
19 House of Delegates;

20 (3) three individuals with experience in biotechnology, one appointed  
21 by the Governor, one appointed by the President of the Senate, and one appointed by  
22 the Speaker of the House of Delegates;

23 (4) two individuals who work as scientists for the University System of  
24 Maryland and do not engage in stem cell research, appointed by the University  
25 System of Maryland;

26 (5) two individuals who work as scientists for the Johns Hopkins  
27 University and do not engage in stem cell research, appointed by the Johns Hopkins  
28 University;

1 (6) two bioethicists, one appointed by the University System of  
2 Maryland and one appointed by the Johns Hopkins University; [and]

3 (7) two individuals with expertise in the field of biomedical ethics as it  
4 relates to religion, appointed by the Governor; **AND**

5 **(8) TWO INDIVIDUALS WITH EXPERIENCE IN INVESTING IN**  
6 **BIOTECHNOLOGY, APPOINTED BY THE GOVERNOR.**

7 (d) (1) The term of an appointed member is 2 years.

8 (2) The terms of the appointed members are staggered as required by  
9 the terms provided for members on October 1, 2008.

10 (3) At the end of a term, an appointed member continues to serve until  
11 a successor is appointed and qualifies.

12 (4) An appointed member may not serve more than three consecutive  
13 full terms.

14 (5) An appointed member who is appointed after a term has begun  
15 serves only for the rest of the term and until a successor is appointed and qualifies.

16 (e) Each member of the Commission shall disclose to the State Commission  
17 on Ethics whether the member is employed by or has a financial interest in an entity  
18 that may apply to conduct State-funded stem cell research.

19 (f) The members of the Commission shall elect a chair from among the  
20 appointed members of the Commission.

21 (g) A majority of the full authorized membership of the Commission is a  
22 quorum.

23 (h) The Commission shall meet at least twice a year.

24 (i) A member of the Commission:

25 (1) may not receive compensation as a member of the Commission; but

26 (2) is entitled to reimbursement for expenses under the Standard  
27 State Travel Regulations, as provided in the State budget.

28 (j) The Commission may employ a staff, including contractual staff, in  
29 accordance with the State budget.

30 10-432.

1 (a) The Commission shall:

2 (1) adopt regulations that ensure that adult stem cell and stem cell  
3 research financed by the Fund complies with State law;

4 (2) develop criteria, standards, and requirements for the initial review  
5 of grant and loan applications by the Commission;

6 (3) review grant and loan applications to ensure that each application  
7 is complete and satisfies the criteria, standards, and requirements developed by the  
8 Commission, including approval by an institutional review board;

9 (4) establish procedures and guidelines to be used by the committee  
10 for the review, evaluation, ranking, and rating of research proposals for State-funded  
11 stem cell research **OR RESEARCH SUPPORTING A QUALIFIED TECHNOLOGY**;

12 (5) ensure that the procedures and guidelines established under item  
13 (4) of this subsection are based on the guidelines of the National Institutes of Health  
14 Center for Scientific Review;

15 (6) establish criteria, standards, and requirements for consideration of  
16 grant and loan applications based on the rankings and ratings of the committee;

17 (7) make recommendations consistent with the criteria, standards,  
18 and requirements established by the Commission and based on the rankings and  
19 ratings of the committee regarding the award of grants and loans from the Fund;

20 (8) establish standards for the oversight and use of awards;

21 (9) conduct progress oversight reviews of recipients;

22 (10) notify the Corporation regarding the submission by a recipient, or  
23 failure of a recipient, to submit institutional review board approval for a grant or loan  
24 awarded under this subtitle; and

25 (11) develop guidelines on disclosure and recusal to be followed by  
26 members of the Commission when considering grant and loan applications.

27 (b) The Commission may consult with experts in performing its duties.

28 10-434.

29 (a) There is a Maryland Stem Cell **AND BIOTECHNOLOGIES** Research  
30 Fund.

31 (b) [The purpose of the Fund is to promote State-funded stem cell research  
32 and cures through grants and loans to public and private entities in the State] **A**

1 **PRIMARY PURPOSE OF THE FUND IS TO SUPPORT INNOVATIVE BIOTECHNOLOGY**  
2 **RESEARCH AND DEVELOPMENT IN THE STATE THAT HAS THE POTENTIAL TO**  
3 **CREATE SUSTAINABLE JOB GROWTH IN THE STATE, INCLUDING**  
4 **MANUFACTURING JOBS.**

5 (c) The Corporation shall administer the Fund.

6 (d) (1) The Fund is a special, nonlapsing fund that is not subject to  
7 reversion under § 7-302 of the State Finance and Procurement Article.

8 (2) The Treasurer shall hold the Fund separately, and the Comptroller  
9 shall account for the Fund.

10 (e) The Fund consists of:

11 (1) appropriations as provided in the State budget; and

12 (2) any other money from any other source accepted for the benefit of  
13 the Fund.

14 (f) Money in the Fund may only be used to:

15 (1) award grants and loans for State-funded stem cell research **OR**  
16 **RESEARCH SUPPORTING A QUALIFIED TECHNOLOGY**, in accordance with the  
17 recommendations of the Commission;

18 (2) award grants and loans for facilities, capital leases, and capital  
19 equipment where State-funded stem cell research is conducted, in accordance with the  
20 recommendations of the Commission; and

21 (3) pay the costs necessary to administer the Fund.

22 (g) (1) The Treasurer shall invest the money in the Fund in the same  
23 manner as other State money may be invested.

24 (2) Any investment earnings shall be paid into the Fund.

25 (h) (1) The Governor may include in the State budget bill each fiscal year  
26 an appropriation to the Fund.

27 (2) Expenditures from the Fund may only be made in accordance with  
28 an appropriation approved by the General Assembly in the State budget or by an  
29 approved budget amendment.

30 10-435.

31 (a) A grant or loan awarded under this part is contingent on the recipient:

1 (1) submitting to the Commission approval from an institutional  
2 review board; and

3 (2) entering into a memorandum of understanding with the  
4 Corporation that:

5 (i) establishes the scope of the State's ownership or other  
6 financial interest in the commercialization and other benefits of the results, products,  
7 inventions, and discoveries of State-funded stem cell research; and

8 (ii) to the extent consistent with federal and State law, reflects  
9 the intellectual property policies of the institution.

10 (b) A recipient shall submit the approval required under subsection (a)(1) of  
11 this section within 6 months after the award of the grant or loan.

12 (c) The Corporation may not disburse grant or loan money to a recipient  
13 until:

14 (1) the recipient has obtained the approval required under subsection  
15 (a)(1) of this section; and

16 (2) the recipient and the Corporation have entered into the  
17 memorandum of understanding required under subsection (a)(2) of this section.

18 **(D) AT LEAST ONE-THIRD OF THE GRANTS OR LOANS AWARDED EACH**  
19 **YEAR SHALL BE AWARDED TO FOR-PROFIT COMPANIES HEADQUARTERED IN**  
20 **THE STATE.**

21 **(E) IN SELECTING RECIPIENTS FROM THE NONPROFIT SECTOR,**  
22 **PRIORITY SHALL BE GIVEN TO APPLICANTS THAT HAVE CODEVELOPMENT**  
23 **PARTNERSHIPS WITH STATE FOR-PROFIT COMPANIES.**

24 10-436.

25 (a) The Commission shall contract with an independent scientific peer  
26 review committee composed of scientifically recognized experts in the field of stem cell  
27 research **OR OTHER QUALIFIED TECHNOLOGIES.**

28 (b) The committee shall:

29 (1) review, evaluate, rank, and rate research proposals for  
30 State-funded stem cell research:

31 (i) based on the procedures and guidelines established by the  
32 Commission; [and]

1 (ii) in a manner that gives due consideration to the scientific,  
2 medical, and ethical implications of the research; and

3 (III) IN A MANNER THAT GIVES DUE CONSIDERATION TO THE  
4 PROPRIETARY NATURE AND LONG-TERM COMMERCIAL POTENTIAL OF EACH  
5 PROPOSAL; AND

6 (2) make recommendations to the Commission, based on the rankings  
7 and ratings awarded to research proposals by the committee, for the award and  
8 disbursement of grants and loans under the Fund.

9 (c) A member of the committee:

10 (1) is not eligible to receive a grant or loan for State-funded stem cell  
11 research from the Fund; AND

12 [(2) may not reside in the State; and

13 (3)] (2) shall be subject to conflict of interest standards that are at  
14 least as stringent as the standards on conflict of interest adopted by the National  
15 Institutes of Health.

16 (D) AT LEAST ONE MEMBER OF THE COMMITTEE SHALL BE FROM THE  
17 INDUSTRIAL SECTOR AND BE FAMILIAR WITH THE DEVELOPMENT AND  
18 COMMERCIALIZATION OF BIOTECHNOLOGY PRODUCTS.

19 10-437.

20 (a) A person who conducts State-funded stem cell research shall conduct the  
21 research in a manner that considers the ethical and medical implications of the  
22 research.

23 (b) A person who conducts State-funded stem cell research may not engage  
24 in any research that intentionally and directly leads to human cloning.

25 10-438.

26 (a) A health care practitioner licensed under the Health Occupations Article  
27 who treats individuals for infertility shall:

28 (1) provide individuals with information sufficient to enable them to  
29 make an informed and voluntary choice regarding the disposition of any unused  
30 material; and

31 (2) present to individuals the option of:

- 1 (i) storing or discarding any unused material;
- 2 (ii) donating any unused material for clinical purposes in the  
3 treatment of infertility;
- 4 (iii) except as provided in subsection (b) of this section, donating  
5 any unused material for research purposes; and
- 6 (iv) donating any unused material for adoption purposes.

7 (b) Any unused material donated for State-funded stem cell research may  
8 not be an oocyte.

9 (c) An individual who donates any unused material for research purposes  
10 under subsection (a)(2) of this section shall provide the health care practitioner with  
11 written consent for the donation.

12 10-439.

13 (a) A person may not purchase, sell, transfer, or obtain any material donated  
14 in accordance with § 10-438 of this subtitle for valuable consideration.

15 (b) A person may not give valuable consideration to another to encourage the  
16 production of material donated in accordance with § 10-438 of this subtitle for the sole  
17 purpose of medical research.

18 (c) A person who violates this section is guilty of a misdemeanor and on  
19 conviction is subject to imprisonment not exceeding 3 years or a fine not exceeding  
20 \$50,000 or both.

21 10-440.

22 (a) A person may not conduct or attempt to conduct human cloning.

23 (b) A person who violates this section is guilty of a felony and on conviction is  
24 subject to imprisonment not exceeding 10 years or a fine not exceeding \$200,000 or  
25 both.

26 10-441.

27 The Corporation, in consultation with the Commission, shall adopt regulations  
28 to establish procedures for making the disbursement of a grant or loan contingent on  
29 obtaining the approval of an institutional review board.

30 10-442.

31 (a) On or before January 1 of each year, the Corporation and the Commission  
32 shall report to the Governor and, in accordance with § 2-1246 of the State

1 Government Article, the General Assembly on the progress of State-funded stem cell  
2 research conducted in accordance with this part.

3 (b) The report shall identify:

4 (1) each recipient of money from the Fund;

5 (2) the amount of money awarded to each recipient; and

6 (3) a description of the type of stem cell research **OR RESEARCH**  
7 **SUPPORTING A QUALIFIED TECHNOLOGY** performed by the recipient.

8 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect  
9 October 1, 2009.