

Maryland's Funding of Stem Cell Research

A Balanced Approach Supporting Scientists, Patients and Biotechs

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Phillip A. Singerman, PhD.

Linda F. Powers

Managing Directors

Toucan Capital Fund II

www.toucancapital.com



MD Stem Cell Funding Program Reflects Multiple Constituencies

Adopted March 2006. Initial \$15M.

Melded divergent legislative approaches, interests of multiple stakeholders (patients, scientists, biotechs).

Articulated 3 goals:

- Support great science, retain scientific talent
- Develop and deliver new treatments for patients
- Capture economic benefits in biotech industry

Research funding plus ban on human cloning.



MD's Program Has Progressed Rapidly

7/06 Commissioners appointed.

7-10/06 Regs drafted and adopted. All major policy issues and all program details decided (NIH just a model).

(form of funding; types, sizes and duration of grants; selection criteria; eligible investigators, uses of funds; IP terms; translation potential and/or plan; procedures; etc.)

11/1/06 RFAs released. (12/3 optional LOIs received.)

11/06-1/07 Scientific Peer Review Committee recruited.

1/8/07 Grant applications received.



MD Program: Key Differentiators

- All cell types on an equal footing: adult and ESCs.
“let the best cell type(s) win”
- Both basic and translational research.
- Facilities eligible only to extent necessary for research.
- RFAs expressly call for broadest possible array of applications, including unconventional.
- Out-of-state parties can be eligible:
 - researchers, if come to MD to perform the research;
 - companies, if research conducted in MD.



MD Program: Key Differentiators, cont.

2 types of grants:

- investigator-initiated: \$500K/yr x 3yrs + overhead;
- exploratory: \$100K/yr x 2yrs + overhead.

IP belongs to applicant.

Annual report and in-state symposium presentation required; publications encouraged.

Sharing of cell lines initially developed with MD \$\$ must be shared, but can charge for them, require license, etc.



MD's Grant Selection Criteria Emphasize Patient Interests While Serving All 3 Program Goals

6 criteria for selection of grants: the NIH 5 (adapted), plus translation plan or potential.

- Significance (including for clinical practice or for biotech in MD)
- Approach (well reasoned, etc.)
- Innovation (including potential impact on biotech or on medical innovation in MD)
- Investigators (appropriate expertise, etc.)
- Environment (support, etc.)



- Translation potential and/or plan



Extremely Strong Pool of Applications Received in First RFA Cycle

44 Exploratory Grant applications (\$~10M)

41 Investigator-Initiated Grant applications (~\$70M)

Broad range of diseases, as well as tools and methods:

Alzheimers, ALS (Lou Gehrig's), spinal cord injury, Parkinson's, MS, heart and vascular, diabetes, kidney disease, muscle repair, bone repair, lung disease, liver disease, Gaucher's disease, cancer.

Broad range of cell types:

embryonic, cord blood, various adult stem cells, cancer stem cells.



MD Program Likely To Continue and Grow

Highly supportive new Governor (O'Malley).

FY 08 budget provides for \$25M

Highly supportive State Legislature and Congressional delegation.

Strong, committed, well-organized patient advocates.

Strong and growing scientific talent.

