
PART I: OVERVIEW INFORMATION AND EXECUTIVE SUMMARY

Sponsoring Organization

**The Maryland Stem Cell Research Commission, on behalf of
The Maryland Stem Cell Research Fund ("MSCRF")**

Title

**Post-Doctoral Fellowship Grant
For Basic, Translational and Clinical Stem Cell Research
In Support of Medical Therapies**

Request For Applications (RFA) Number

RFA-MD-14-3

The Maryland Stem Cell Research Commission strongly encourages collaborations between for-profit and not-for-profit organizations and researchers. All Proposals must pertain to stem cell based therapy & regenerative medicine. Priority shall be given to translational and clinical research Projects.

Key Dates

Letter of Intent Submission Deadline: November 15, 2013, by 5:00 p.m.

Application Submission Deadline: January 17, 2014, by 5:00 p.m.

Peer Review Date(s): March 2014

Commission Review Date: May 2014

Earliest Anticipated Start Date: June 2014

Introduction

Stem cell research offers extraordinary promise for new medical therapies and a better understanding of debilitating human diseases, injuries and conditions. The development of new medical strategies for the prevention, diagnosis, treatment and cure of human diseases, injuries and conditions through human stem cell research is a high priority for the State of Maryland.

The Maryland Stem Cell Research Fund was established by the Maryland General Assembly, under the Maryland Stem Cell Research Act of 2006 (the "Stem Cell Act"), to promote State-funded human stem cell research and medical treatments through Grants to public and private entities in the State. The Maryland Stem Cell Research Commission ("the Commission") sets policies and administers the MSCRF.

The primary goal of the MSCRF is to support research that will advance the field of regenerative medicine with the goal of achieving human stem cell therapies to repair or replace missing, damaged, or diseased cells, tissues and organs. The MSCRF does not fund research aimed at killing or disabling stem cells implicated in the growth of cancer. Only Applications involving the study of human stem cells and the process of their differentiation shall be considered for funding.

The Commission has established several research funding mechanisms, including: Investigator-Initiated Research Grants, Exploratory Research Grants and Post-Doctoral Fellowship Research Grants.

This Request for Applications, **RFA-MD-14-3**, is soliciting Applications for **Post-Doctoral Fellowship Grants**. These Grants are for post-doctoral fellows who wish to conduct basic, translational and/or clinical research involving human stem cells.

Investigator-Initiated Research Grants are designed for Investigators with preliminary data supporting the Grant Application, who wish to conduct basic, translational and/or clinical research. **Exploratory Research Grants** are designed to attract and support Investigators who are new to the stem cell field (young Investigators and Investigators from other fields), and for new and/or innovative hypotheses, approaches, mechanisms or models that may differ from current thinking in the stem cell field and have little or no preliminary data supporting the Application. **Pre-Clinical and Clinical Stem Cell Research Grants** are designed to attract Applications from for-profit Companies that wish to conduct research in the State of Maryland using human stem cells to advance medical therapies. The projects must have clearly defined, achievable milestones, and conduct the funded therapeutic human stem cell research in Maryland.

In addition, the Commission continues to sponsor a **Program** that offers Maryland-based scientists an opportunity to collaborate with certain investigators funded by the California Institute of Regenerative Medicine (CIRM)(see www.MSCRF.org, Funding Opportunities).

The MSCRF supports Projects involving human stem cells of all types, as defined in the Stem Cell Act. All State-funded stem cell research must be conducted in Maryland.

Any one candidate may apply for only one new MSCRF Award in any given year.

All State-funded stem cell research must be conducted in Maryland. Applicants must commit to make the results of their MSCRF-funded research readily available to others, through publications (preferably), public presentations or other accessible means.

Objectives

The purpose of this RFA is to fulfill the provisions of the Stem Cell Act by providing State funds to train the next generation of human stem cell researchers and expand the biotechnology community in Maryland. There is currently a need for more investment in basic, translational and clinical research to pursue the potential of stem cell therapies.

Eligibility

Exceptional pre-doctoral students and post-doctoral fellows who wish to conduct basic, translational and/or clinical research in Maryland involving human stem cells and have institutional support are eligible to apply for this Award. The Applicant and all other MSCRF-funded personnel must be employed or retained by an eligible Maryland-based organization while conducting this work. Such affiliations may be permanent or temporary, full-time or part-time. Maryland-based research organizations of all types may serve as Post-Doctoral training locations. Such locations include public and private for-profit and not-for-profit organizations (e.g., universities, colleges, research institutes, companies and medical centers).

Organizations based outside the State of Maryland are not eligible for funding. However, collaborations with non-Maryland based organizations or persons may be allowable if the Applicant can demonstrate that none of the MSCRF funding will be used to support work performed outside of Maryland.

The Applicant is the Principal Investigator ("PI"), and the Mentor of the Applicant will have responsibilities under the Grant Agreement. Letters of support from the Applicant's Mentor and sponsoring institution, company, or organization are mandatory.

Individuals from underrepresented minorities and individuals with disabilities are encouraged to apply.

Award Size and Duration

Each Fellowship Award will provide up to fifty-five thousand dollars (\$55,000) per year, for up to two years, and will include all direct, indirect and fringe benefit costs.

Application Requirements

The application must include the following:

I. Application Information

-  Applicant's **Biosketch**, not to exceed four (4) pages
-  **Proposed Project Description**, not to exceed four (4) pages. The Project description should be organized according to the guidelines of the Investigator- Initiated Application (RFA-MD-14-1), and include sections on Significance, Innovation, Approach, Translational Potential, Bioethics and, if applicable, Collaborative Plan

II. Mentor and training program, to be completed by the Mentor

-  Mentor's Biosketch, not to exceed four (4) pages
-  Proposed Training Program and training Environment, not to exceed two (2) pages
-  List of up to five (5) previous Trainees, their current employment and any involvement in stem cell research
-  Evaluation of the Applicant and his/her potential to conduct stem cell research, not to exceed one (1) page
-  Letter of institutional/organizational support

- III. Two (2) Letters of Recommendation** from individuals other than the Mentor, to be incorporated electronically to the application by the Applicant describing the qualifications, commitment and potential of the Applicant in the field of stem cell research.

Letter of Intent

To be eligible to submit a Grant Application, a prospective Applicant must first submit a Letter of Intent ("LOI"). The LOI may not exceed one (1) page and must include the following information:

- 🍷 Descriptive Title of the proposed research
- 🍷 **Name, Address, Telephone Number** and **Email Address** of the PI
- 🍷 Name of **Sponsoring Organization(s)** and Site(s) of proposed research
- 🍷 Type of Grant Application (**Post-Doctoral Fellowship Grant**) and RFA number (**RFA-MD-14-3**)
- 🍷 Brief description of the Proposed Research
- 🍷 **Targeted Disease(s) or Condition(s)**, if applicable
- 🍷 **Human Stem Cell Type(s)** to be used (e.g., hESC, ASC or iPS)
- 🍷 Whether the proposed research is **Basic, Translational, or Clinical**
- 🍷 The area(s) and type(s) of **Expertise Necessary to Evaluate the Proposal**, including key words that identify elements of the research Proposal (such as disease focus, technical approaches, research fields and disciplines).

Applicants will not receive feedback on their LOIs. LOIs will not be used by reviewers or considered in the evaluation of Applications. The purpose of the Letter of Intent (LOI) is to determine if the grant submission is consistent with the goals of the MSCRF. The LOI is also intended to ensure that the members of Scientific Peer Review Committee have the appropriate range of expertise to optimally conduct their review.

Application and Submission Information

I. Application Information is available electronically on the MSCRF Website (see www.mscref.org).

II. Methods of Submission

A. A Letter of Intent (LOI) must be submitted electronically, by November 15, 2013, no later than 5:00 p.m. through a [TEDCO on line submission system](#)

B. The Grant Application must be submitted electronically by January 17, 2014, no later than 5p.m., using the [TEDCO on line submission system](#).

Fellowship instructions are posted on the MSCRF Web site. Do not wait until the last day to become familiar with the [TEDCO on line submission system](#).

One signed paper copy of the Fellowship Grant Application must be submitted to the Maryland Stem Cell Research Fund by mail (see address below). Deliveries in person will not be accepted.

Maryland Stem Cell Research Fund
Maryland TEDCO
5565 Sterrett Place, Suite 214
Columbia, MD 21044

All electronic submissions must be received by their respective due dates. The paper copy of the Application must be postmarked no later than the submission deadline, January 17, 2013.

Review Criteria

The Scientific Review Committee will use the NIH scoring system of 1-9 to rank each of the following criteria and the overall impact/priority of the Application. In this scoring system, “1” indicates the highest impact/priority and “9” indicates the lowest impact/priority.

-  The Applicant’s qualifications and potential to conduct stem cell research
-  The scientific merit of the proposed training Project with respect to **Significance, Innovation, Approach, Translational Potential, Bioethics and, if applicable, Collaborative Plan**. (See section V: C-X) of RFA-MD-14-1 for a more detailed description of the review criteria.)
-  The potential of the proposed Project to train the Applicant
-  The Mentor’s training record and qualifications, including stem cell biology
-  The training environment

Collaboration between For-profit and Not-for-profit Organizations

The Commission strongly encourages research collaborations between for-profit and not-for-profit organizations in Maryland, and will give preference to scientifically meritorious Applications that include such collaborations (e.g., collaborative research Projects, sharing of resources and/or equipment, training of for-profit employees in an academic institution, or training of academic personnel in a for-profit company).

Award Notices

The Commission will review the scientifically scored Applications and make its funding recommendations to the TEDCO Board, which will make the final funding decisions. After the TEDCO Board has made its determinations, and formal notification, in the form of a Notice of Award (NOA), will be sent via email to each successful Applicant.

No Applicant should assume receipt of funding for a Project until a Grant Agreement has been signed by the Applicant's sponsoring institution, company or organization and TEDCO. A template for the MSCRF Grant Agreement will be posted on the TEDCO Web site before the Awards are announced (see www.MSCRF.org).

Questions

Questions about this RFA must be submitted by email to: mscrinfo@tedco.md. Telephone inquiries will not be accepted.