

REQUEST FOR APPLICATIONS (RFA)

MSCRF Post-Doctoral Fellowship Program

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.

FUNDING OBJECTIVES

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

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. Applicants must commit to making the results of their MSCRF-funded research readily available to others, through publications (preferably), public presentations or other accessible means.

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, commercial and clinical research to pursue the potential of stem cell therapies.

Important note: Revised and improved RFAs.

Funding applications have been modified to include revised and/or new submission fields. Please peruse the recently revised RFAs to be appropriately informed of the changes to prevent delays in the application submission process.

ELIGIBILITY INFORMATION

The applicant must have completed the doctoral degree within the past 3 years, unless the applicant had any career breaks or periods of part-time work, for example parental or long-term sick leave.

Exceptional post-doctoral fellows who wish to conduct research in Maryland and have institutional or company 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 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 (post-doc fellow) 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, DURATION & TERMS

Each Fellowship Award will provide up to \$65,000 dollars per year, for up to two years, and will include all direct, and fringe benefit costs for a total of up to \$130,000.

Because the nature and scope of the proposed research will vary from Application to Application, the size and duration of Awards may also vary. Approved projects may be funded at or below the requested/proposed amount, for a number of reasons, including potential reductions in state appropriations or funding otherwise available to MSCRF.

APPLICATION AND SUBMISSION INFORMATION

DEI Registration

Pursuant to its enabling legislation, TEDCO is required to foster inclusive and diverse entrepreneurship and innovation throughout Maryland. Accordingly, TEDCO is now collecting race, gender, and ethnicity data, to better understand the communities that are accessing MSCRF resources/funding. This data will not be accessible to MSCRF/TEDCO program/fund managers and will only be provided to them in an aggregated (anonymous) form. The data will not be used for funding consideration.

CONTENT & FORMAT OF APPLICATION

All sections of the Application must be submitted through the TEDCO online submission system. The document must be formatted using point size 12 Arial font, with margins no smaller than one-half (0.5) inch on all sides. Uploaded file must be limited to 80 megabytes (MB).

The Application must include the following Sections:

A. Application Information

- Applicant's **Biosketch**, not to exceed four (4) pages in any format.
- 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.

B. 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. This section covers the Mentor's recommendation for the applicant.
- Letter of institutional/organizational support. A separate recommendation letter from the mentor is not required.

C. Proposed Project Description –

The Project description should be organized to include only sections on Significance, Innovation, Approach, Translational Potential and Bioethics.

- **Project Summary - Limited to one (1) page** Project Summary describing the proposed research and its potential contribution toward the goals of the MSCRF and this RFA, as set forth in this document.
- **Research Plan - Limited to four (4) pages, including all tables, figures and charts** A description of the Research Strategy and Design, Data in support of the Proposal, Significance, Specific Aims, Rationale, Approach and Innovation.
- **Translational Potential and/or Plan - Limited to one half page not included in the page count** An explanation of (i) the relationship between the proposed research and the etiology, prevention, diagnosis or treatment of human diseases or conditions;(ii) how clinical practice and treatment of human diseases or conditions will be advanced by the proposed research; (iii) how the proposed research may contribute to new medical therapies or test new therapies in human patients; and/or (iv) how the proposed research will translate prior research results into new medical therapies or test new therapies in human patients, and the projected time line for accomplishing such clinical application(s).

D. Response to Reviewer Comments, if Applicable - Limited to three (3) pages

For Applicants Resubmitting an Application that was previously reviewed under any MSCRF funding mechanism, but not funded: An Introduction to the revised Application, including the Application Number of the previous MSCRF submission, and a point-by-point response to the prior scientific review.

E. Bioethics - Limited to one half page not included in the page count

A description of the ethical issues relevant to the proposed research and how these issues will be addressed, including, but not limited to, a discussion of the ethical issues related to the cell type(s) and cell line(s) to be used; animal welfare (i.e., IACUC); IRB review and related concerns regarding human subjects, if applicable; and Stem Cell Research Oversight Committee review (required of all Projects that involve human embryonic stem cells). If new cell line(s) will be created, the Application must explain how the biological materials used to create them will be obtained and how subjects will be consented. Applicants should refer to existing human stem cell research ethics guidelines and the Maryland Stem Cell Research Act.

D. Appendix - Limited to 5 supplemental pages (Upload in the same file as the application)

The Appendix shall include (in this order):

(1) Literature in Support of the Application

A list of scientific Literature in support of the Proposal, including Author, Title, Journal, Volume Publication Date, and Page Numbers.

(2) Supporting materials. Do not include information that should be in the main sections of the proposal.

There are no indirect costs allowed with the postdoc fellowship program. It typically covers postdoc salary/benefits. However, no budget justification is required for postdoctoral fellowship applications.

Web form Information

In addition, applicants must complete all the web form information in the online system as early as possible to avoid unexpected delays. This information include:

- Short Abstract (maximum 300 words). If awarded, this information becomes public. Do not include any confidential or proprietary information.
- A bioethics section (maximum 250 words)
- Impact on biotechnology in Maryland statement (maximum 250 words): Briefly describe the potential of this application to impact the biotechnology sector in the state of Maryland. Some examples may include IP that may be licensed or lead to commercialization, existing or proposed collaborations, creation of new jobs, and workforce development.
- Translation potential and plan

University applicants must obtain approval from their research/grants administration office before submitting an application. Please attach a letter or evidence of such approval along with the uploaded application.

SOURCE FOR APPLICATION INFORMATION

Application information will be available electronically on the MSCRF Web site (see www.mscref.org).

SUBMISSION DEADLINES & REVIEW DATES

- **Application submission deadline:** January 22, 2024, by 5:00 p.m. EST.
- **Peer review date(s) and presentation by the applicant:** 1st week of April 2024
- **Commission review date(s) and announcement of awards:** May 2024

Principal Investigators are encouraged to register in the TEDCO online submission system at least one month before the Application Submission Deadline. The Grant Application must be submitted electronically by January 22, 2024, no later than 5 p.m., using the [TEDCO on line submission system](#). Late submissions will not be considered, and the application will be withdrawn. Any sections or page that exceeds in words or length the limit stated in the RFA will not be reviewed. Do not use the appendix to circumvent any page limits either. Any such information provided will not be reviewed.

REVIEW INFORMATION

The Scientific Review Committee will use a 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 Mentor and the training record and qualifications
- The potential of the proposed Project to train the Applicant
- The training environment
- The scientific merit of the proposed training Project

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. training of for-profit employees in an academic institution, or training of academic personnel in a for-profit company, or collaborative research Projects).

The Commission reserves the right to pursue collaborative funding arrangements with third parties and, in such an event, the further right to share the application materials and/or the review summaries with those potential co-funders upon the execution of a Confidentiality Agreement restricting their further disclosure.

AWARD ADMINISTRATION INFORMATION

NOTIFICATION

The PI's affiliate organization will be notified electronically when the Application is received. A formal notification, in the form of a Notice of Award ("NOA"), signed by the MSCRF Executive Director, will be sent via email to successful Applicants.

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 MSCRF.

POST AWARD REPORTING

- A. **Annual Progress Reports** - PIs must file Annual Progress Reports describing the research conducted, and the interim and/or final results of that research, at the end of each funding year. Financial reporting relevant to the MSCRF-funded Project shall be specified in the Grant Agreement executed between TEDCO and the Awardee's affiliate institution, company or organization. Progress Reports must be submitted to the MSCRF electronically through the TEDCO on-line submission system, no later than thirty (30) days after the end of the annual period covered in the report.
The MSCRF will review all Annual Reports to evaluate the progress that has been made relative to the plans, timetables and budgets proposed in the respective Applications before funding for the subsequent year is approved.
- B. **Annual Symposium Presentations** - The MSCRF will conduct an in-State Annual Symposium to report to the scientific community and the public the progress of the MSCRF program. All PIs

must present, orally or in poster format, their on-going or completed MSCRF-funded research at each Annual Symposium, during and immediately following their Grant period.

- C. **Final Report** - Within forty-five (45) days after the end of the Grant period, PIs must file their Final Reports, describing the research conducted and the results of this research. This Final Report shall include explanations and justifications for any proposed studies that were substantially changed or not completed. The Final Report must also describe the impact, significance, and clinical potential/applicability of the research results.

- D. **Publications, Patents & Subsequent Non-MSCRF Funding** - During the funding period and after it has ended, Awardees must continue to notify the Director of the MSCRF of any clinical application(s), publication(s), patent(s) and/or non-MSCRF funding and/or income (licensing fees, royalties, etc.) that result(s) in whole or in part from MSCRF-funded research and/or its commercialization. Such metrics demonstrate the success of the MSCRF Program and support the Commission's appeal for continued funding. To facilitate future communication, the PI and the Awardee shall ensure that their contact information is kept up to date.

COMPLIANCE

A Company and/or PI not in compliance with the reporting obligations under the Post-Doctoral Fellowship Grant shall not be eligible to apply for continued or subsequent MSCRF funding.

AGENCY CONTACTS

Inquiries about this RFA must be submitted by email to: mscrinfo@tedcomd.com