Smith Family Awards Program for Excellence in Biomedical Research

A program of the Richard and Susan Smith Family Foundation

\$400,000 Awards over three years, inclusive of 5% overhead

Invited Full Proposal Guidelines

2024 Grant Cycle

Invited Full Proposal Deadline: Wednesday, October 11, 2023 12:00 Noon, U.S. ET

INVITATION ONLY

Only invited applicants may apply to the second stage of the Smith Excellence Program.

Award Period: April 1, 2024 – March 31, 2027

Up to five \$400,000 three-year awards will be made to support promising junior faculty with the potential to transform their fields through their research.

Eligibility

- Based at a nonprofit academic, medical, or research institution in Massachusetts or at Brown or Yale University.
- Full-time tenure-track (or equivalent) research faculty; received or will receive first independent research faculty appointment (normally tenure-track Assistant Professor) on or between October 1, 2020 through April 1, 2024.
- Have less than \$350,000 in combined federal and non-federal funding in direct costs per year, excluding the institutional start-up package and other intramural support.

Applicant eligibility must be verified by the relevant department Chair and the institution's Office of Sponsored Research, or the full proposal will not be considered. There is no limit on the number of applicants from a given institution.

Health Resources in Action promotes diversity of gender, ethnicity, and perspectives, among many other forms, across its grant programs. Applications from women and people from groups underrepresented in biomedical research are particularly encouraged.

Program Overview and Mission

The Smith Family Foundation is committed to effecting permanent positive change in the lives of the residents of Greater Boston, particularly individuals and families in economically disadvantaged communities. In the area of health, the Foundation supports the advancement of biomedical research and the expansion of access to high-quality health care at safety net institutions serving low-income individuals and communities of Greater Boston.

The Smith Family Awards Program for Excellence in Biomedical Research was created in 1991 to launch the careers of newly independent biomedical researchers with the ultimate goal of achieving medical breakthroughs. Since 1992, the Program has funded 192 outstanding scientists and has provided \$42.1 million in research support.

The Smith Family Awards Program for Excellence in Biomedical Research is managed by The Medical Foundation at Health Resources in Action (HRiA). HRiA is a nonprofit organization in Boston that advances public health and medical research.

Research Focus

The three-year Award supports newly independent faculty engaged in **basic or translational biomedical research**. Investigators in the physical sciences (physics, chemistry, and engineering) whose projects focus on biomedical science are also encouraged to apply. While basic research projects involving human subjects, data, and samples are eligible, clinical trials research is beyond the scope of this program.

We invite proposals from starting faculty members who study a wide range of problems in diverse biological systems. For example, we have supported research as diverse as regulated translation in synapse formation, bacterial regulators of immunity, kinetochore function in centromere cohesion, neural codes for perception, and DNA damage pathways in tumors. We recognize that very basic biology that can be discovered in systems ranging from bacteria to plants to human tumors to then impact fields as distant as neural pathfinding and immune function. We welcome proposals that range from fundamental biology to translational research with direct applicability to basic and translational biomedical research needs. Our review committees have traditionally been composed of bacterial and eukaryotic geneticists, immunologists, neurobiologists, developmental biologists, cancer biologists, and transcriptional regulation experts, who can assess a wide range of biological proposals.

In recognition of the importance of research collaboration within the scientific community, collaboration is an additional, but not required, positive ancillary factor. These projects may involve researchers within and/or outside the applicant's institution.

Eligibility Requirements

United States citizenship is not required.

Institution

- Researchers must have their primary appointment at a nonprofit academic, medical, or research institution in Massachusetts, or at Brown University or Yale University.
- Research projects must be conducted within the entity that is submitting the application.
 Award funds will go to that entity. For example, if an applicant submits from Harvard
 Medical School, the research project must be conducted at Harvard Medical School and not
 at an affiliate location (such as Massachusetts General Hospital or Boston Children's
 Hospital).

Career stage

- Applications will be accepted from full-time faculty who have received or will receive their first independent research faculty appointment on or between October 1, 2020 through April 1, 2024. Due to the COVID-19 pandemic, the eligibility period for the 2022, 2023, and 2024 grant cycles was extended by one year. This means that researchers who were promoted to their first tenure-track Assistant Professor appointment no more than 3.5 years prior to the award start date of April 1, 2023 are eligible to apply for this award in the current grant cycle. As in years prior to 2022, it is likely that in future cycles the eligibility window will be 2.5 years of independence prior to the award start.
- We understand that there is a continuum of independence at many institutions beginning with emerging independence at the Instructor level. However, to level the playing field and ensure that all applicants have only one window of eligibility, we consider the tenure-track Assistant Professor appointment to be the first independent faculty appointment.
- If an Applicant has been on medical or family leave, or if research was interrupted for other reasons, this period of absence does not count towards eligibility. Please address any gaps in work history in the Personal Statement on the Biosketch. The Department or Division Chair must also confirm the leave of absence as well as applicant eligibility in the "Applicant Independence/Institutional Commitment Form."
- All applicants must have completed their postdoctoral training by the funding start date of April 1, 2024.
- The Applicant's <u>level of independence</u> is critical. The "Applicant Independence/Institutional Commitment Form" must be completed by the Department or Division Chair and must describe space, start-up package, and institutional commitment. This form will be used by the Scientific Review Committee in evaluating independence. Although it is expected that a national search will have been conducted for the Applicant's position, candidates may have been promoted within their current institutions. If the Applicant was promoted internally, the Chair must clarify why a national search was not conducted. <u>Institutional commitment</u> is also important. In addition to describing the Applicant's qualifications, the Department or Division Chair must explain how the institution will contribute to the Applicant's independent professional development. This is the same form used during the initial application. Please carryforward the completed form from the initial application.

Current, Pending and Post Award Funding

Concurrent Federal and Non-Federal Support

- Applicants are ineligible if, at the time of application, they have combined federal and non-federal funding totaling \$350,000 or more in direct costs in either of the first two years (4/1/24 3/31/25 or 4/1/25 3/31/26) of the three-year Smith Award. This figure refers to external funding only and not an Applicant's start-up package, other intramural support, or the Smith Award.
- Applicants are also ineligible if they were previously or are currently a Principal Investigator or Multiple PI (NIH), Co-PI (NSF), or equivalent on an R01, P01, Pioneer Award, New Innovator Award or similar large awards from other federal agencies or national foundations.

Pending Federal and Non-Federal Support

- Applicants who have pending R01s or other large applications to the NIH and other agencies are encouraged to submit proposals to the Smith Family Foundation. However, neither the applicant nor the institution may accept funding with budgetary overlap with the proposed aims of a funded Smith project. To avoid conflicts if your proposal receives a funding recommendation, we strongly suggest that you do not propose the same aims and budget in different grant applications. Please note that if a Smith Excellence award is made, neither the Institution nor the awardee may accept funding that results in an overlap of funding for the Smith Excellence project. If the work proposed in the Smith Excellence proposal is funded by another source before the Smith awards are announced, the applicant must notify HRiA at SmithExcellence@hria.org and withdraw the application immediately.
- If an applicant is notified on or prior to 12/1/2023 that they have been successful in securing federal or non-federal grant support which, when combined with other support, totals \$350,000 or more in direct costs in either of the first two years of the Smith Award, the application to the Smith Excellence Program will be ineligible for review. Notification of funding after 12/1/23 will not impact eligibility for a Smith Family Award. It is the responsibility of all applicants to contact SmithExcellence@hria.org as soon as notification of any new funding is received.

Award Selection Criteria

The Scientific Review Committee uses the following criteria to evaluate applications.

Impact

The proposed basic or translational biomedical research addresses an important problem and has high potential to lead a fundamental advance in basic biology or a substantial advance in translational biology. In the longer term, the work has potential to generate a medical breakthrough.

Applicant

- The applicant has high potential to carry out independent research and clear ability to develop a sound research plan.
- The institution has demonstrated an appropriate level of commitment to her/him.
- Collaboration is an additional, but not required, positive ancillary factor.

Research project

- Research question and hypothesis are clearly stated and are based on sound precedents and a clear rationale.
- Study design is appropriate to answer the question(s) and technically feasible.
- The proposal makes sense in the context of the pertinent literature and the work of other investigators in the field of study.

Application Process

The Smith Family Award for Excellence in Biomedical Research is a two-stage proposal process. Invited applicants have been asked to submit Full Proposals due on October 11, 2023. Funding begins on or about April 1, 2024. The online application system will notify applicants once the

application is received and will be used to communicate with applicants about the status of their applications.

PLEASE NOTE: If the Applicant is unable to accept the Award, the Award will not be transferred to another investigator involved in the research project.

Proposal Writing Tips

While the number of applicants invited to submit a full proposal is low in the second stage of review and the anticipated success rate is 25-30%, all invited applicants are strong candidates and therefore the level of competition is high. **Applicants are strongly encouraged to prioritize good grantsmanship in writing their full applications, to maximize their chances of being funded.**

The Review Committee is composed of a diverse group of researchers who can assess a wide range of biomedical research proposals, such as bacterial and eukaryotic geneticists, immunologists, neurobiologists, developmental biologists, cancer biologists, and experts in transcriptional regulation. Characteristics of a well-written proposal include the following:

- Main points are communicated clearly and concisely. The big picture of what will be done, why it is important, and how it will advance the field is clear.
- The language is understandable to a general scientific audience. When jargon must be used, it is clearly explained, and complex technical points are put in context.
- Specific aims and concise/essential background, experiments, and analysis plan are connected with clear logic, and key choices are justified. Sufficient detail about the approach is provided that the reviewers can clearly understand the proposed experiments.
- Written responses answer the questions, and the use of references is appropriate. The writing is clear and does not overly rely on references to cheat the word count.
- For applicants in crowded fields, the proposal makes clear how the study will bring a fresh perspective. Innovation and novelty in the field *should not be overstated*. Reviewers typically check this.
- Goals and metrics of success are well-defined.
- While the work must be feasible, top-scoring proposals typically have at least one ambitious aim. The preliminary proposal format is intended to give you the freedom to be creative.
 Reviewers do not look favorably on applications that look and feel like a shrunken, repurposed R01.
- The impact of the work and how it will lead to a fundamental advance in basic biology or a substantial advance in translational biology should be clear.
- Any appearance of scientific or budgetary overlap with other current or pending support is
 clearly described, including a plan to avoid duplication of funding. Because Smith awardees
 are not allowed to accept funding that overlaps with the aims of the Smith project, we
 suggest applicants avoid proposing the same aims and budget in different grant applications.
- Information about preprints and major papers in press is shared in the Biosketch.

Applicants are encouraged to seek grant writing advice within their institutions and externally, and to ensure that the initial proposal is clear and comprehensible to a scientist from a related field as well as to a specialist. It may be helpful to read examples of successful proposals, such as those

found in the grant-writing tip sheets for NIH research grants. Institutions and colleagues may also be willing to provide examples of well-written and successful grant applications. Applicants are encouraged to invite a mentor to do a close read and provide feedback on the completed application.

Suggested resources:

Secrets to Writing a Winning Grant: https://www.nature.com/articles/d41586-019-03914-5 NIH grant writing tips:

https://www.nlm.nih.gov/ep/Tutorial.html

https://www.nimh.nih.gov/funding/grant-writing-and-application-process/grant-writing-tips.shtml https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/write-your-application.htm#Important%20Writing%20Tips

Acknowledgement of Support

The Award Recipient and Institution are encouraged to announce receipt of this Award entitled: the Smith Family Award for Excellence in Biomedical Research, and credit financial support to the Richard and Susan Smith Family Foundation, Newton, MA.

Publications

Publications or presentations resulting from research supported by this Award must also acknowledge support from the **Richard and Susan Smith Family Foundation**, **Newton**, **MA**.

Terms of the Award

Please download "Terms of the Award" from https://hria.org/tmf/Smith for information regarding use of the Award funds, indirect costs, payment schedule, reporting schedule, and other Awardee and Institutional requirements.

A listing of prior **Award Recipients** and their research summaries as well as **Frequently Asked Questions** may also be found at this site.

APPLICATION DEADLINE

Wednesday, October 11, 2023 (12:00 PM, U.S. Eastern Time)

Before beginning the online submission, download and save the "Excellence Application Form" and "Grants Program Budget Template", which can be found at https://hria.org/tmf/Smith.

Use the following link to continue the application process:

Continue a Saved Application: https://www.GrantRequest.com/SID 738?SA=AM

The following sections must be completed for the online submission:

1. Institution's Tax ID Number

Please review and update the following tabs in the online form:

- 2. Applicant Data: Institution, Contact, Educational Background Information
- 3. Key Personnel: This is read-only based on the names entered in the Initial Proposal. If this section needs to be edited, please email the Grants Officer with the correct information.
- 4. Research Project: Project Title; Research Project Summary; Non-Technical Summary; Non-Technical Overview; Impact Statement; and Brief Biographical Statement
- 5. Institutional Contact Information: Department/Division Chair, Authorized Institutional Representative, Institutional Officer to Receive Funds

6. Attachments:

- PDF Document Upload The following documents and forms must be combined and converted into ONE PDF file, in the order noted, for upload. This document must be named LastName, FirstName.pdf (for example, Doe, Jane.pdf). Make sure all pages are numbered sequentially starting with the Application Cover Page as Page #1.
 - Application Cover Page
 - Table of Contents: Follow the Table of Contents and number ALL pages consecutively.
 - Key Personnel: Collaborator information (this should match the Key Personnel tab on the online form. If this section on the online form needs to be edited, please email the Grants Officer at SmithExcellence@hria.org
 - Research Project Summary, Performance Sites, Non-Technical Overview, and Impact Statement: Complete these sections according to the instructions on the template. The Research Project Summary will be posted on our website if the project is funded (suggested length of 200 words).
 - Applicant Independence / Institutional Commitment Form: The Department or Division Chair must complete this form, sign at the bottom, and <u>forward to the</u> <u>Applicant for upload</u>. This form is **not** a request for a Letter of Recommendation. The Committee has requested that Chairs answer the questions directly, and do not paste in a Letter of Reference. Note: This is the same formed used during the initial application. Please copy and paste the form submitted during the initial application.

- If you need a copy of this form, please email the Grants Officer at SmithExcellence@hria.org
- Applicant Biosketch: Use the new, updated March 2021 form for your NIH Biographical Sketch (https://grants.nih.gov/grants/forms/biosketch.htm). Please include information about all current, pending, and completed funding support on the Budget Form tab called "Other Support".
- O Grants Program Budget Template: Complete this form for the three years of the project. For projects whose total costs exceed Y1/Y2/Y3 \$134,000/\$133,000/\$133,000, list the other sources of support in the "Other Support" tab. Please include all current, pending, and completed support regardless of relationship to the current Smith request. Indirect costs (institutional overhead) may not exceed 5% of direct costs or \$6,349 per year. Total support from the Smith Family Foundation, including overhead, is \$134,000 for year one, \$133,000 for year two, and \$133,000 for year three. The Budget Template must be (1) included in the PDF for committee review and (2) uploaded separately as an Excel document to be used in expenditure tracking if the grant is funded. Please ensure that the numbers you have entered are identical in both formats or we will not be able to process the application.
- Research Proposal: A maximum of 5 pages is permitted (3-5 pages suggested), excluding a bibliography of references. Proposal sections include Specific Aims, Background and Significance, Preliminary Data (if available), Research Design and Methods, Potential Limitations, Project Timeline, Future Direction of Laboratory over Next Five Years, and Bibliography.
 - Include all figures, graphs, tables, and images related to the project in the 3-5 pages. For any projects involving collaboration, please include a brief description of these efforts within the 3-5 pages.
 - Format this section with **Arial 11** as the font and size. Use single or double line spacing within paragraphs, double line spacing between paragraphs, and one inch or larger margins on all four sides. Figures, legends, and tables may use a font size of 8. Include the Applicant's name at the top of each page.
- Letter(s) of Collaboration/Confirmation of Outside Resources: (forwarded to the Applicant for inclusion in the document upload)
 - Collaborations are not required but are encouraged. If the Applicant has collaborators, letters of collaboration must be forwarded to the Applicant for inclusion in the document upload. These letters must confirm the availability of resources outside the Applicant's institution and confirm any significant collaborative relationship, either within or outside the Applicant's institution. These are brief letters (up to one page) addressing the collaboration.

6. Attachments (continued):

 Grants Program Budget Template: The budget form should be attached in the online application system as a separate Excel file. The budget figures in the Excel file must exactly match the figures included in the PDF upload. The Excel file must be named LastName, FirstName Budget.xlsx (for example, Doe, Jane Budget.xlsx).