JDRF Request for Applications: Diversifying Diabetes Research Talent in Academia

December 2021

Summary

- The goal of this funding opportunity is to diversify the scientific workforce in academia working on the complex challenges to cure and improve lives with diabetes.
- Applicants must self-identify as members of underrepresented groups such as (but not limited to) racial and ethnic minorities, sexual orientation and gender identity, individuals with disabilities, and people from economically disadvantaged backgrounds.
- This pilot program will award grants of up to $400,000 over two years.

Funding Opportunity Description

The goal of this funding opportunity is to diversify the scientific workforce working on the complex challenges to cure and improve lives with diabetes. Funding will directly support a diabetes research project aligned with JDRF's Research Strategy led by a researcher early in their faculty careers.

In the two-year term of the award, awardees will focus their research efforts on a subject directly related to JDRF mission goals and research priorities (read more about JDRF's Research Strategy here) and position themselves to work at the leading edge of type 1 diabetes research. These awards are designed to support exceptionally promising investigators with funding and other resources from the JDRF network. Importantly, although this funding opportunity is targeted to early-career academic researchers, this award is not a training fellowship.

Background

Concerns over diversity and inclusion in biomedical research and minority underrepresentation in the biomedical research workforce have been recognized for several years. In 2011 Ginther et al. reported on the significant disparities in success rates for NIH R01 research grant applications between White and Black applicants during fiscal years 2000-2006[1]. This prompted the NIH Director, Dr. Francis Collins, to charge the Advisory Committee to the NIH Director (ACD) to form a Working Group on Diversity in the Biomedical Research Workforce (WGDBRW) to examine the findings and implications of the report and provide recommendations toward improving the recruitment and retention of underrepresented minorities, people with disabilities, and people from economically disadvantaged backgrounds in biomedical research. After careful review of the publication and additional analyses, the working group confirmed these findings and several recommendations to increase the diversity of the biomedical research workforce were presented in their published 2012 report[2]. This working group has since become permanent and has been charged with providing regular advice to the ACD on effective strategies to enhance diversity[3].

1 Ginther DK et al. Race, Ethnicity, and NIH Research Awards. Science. 2011 Aug 19; 333(6045): 1015–1019.

2 Draft Report of the Advisory Committee to the Director Working Group on Diversity in the Biomedical Research Workforce. June 2012. NIH Website: https://acd.od.nih.gov/documents/reports/DiversityBiomedicalResearchWorkforceReport.pdf

3 ACD Working Group on Diversity. NIH Website. https://acd.od.nih.gov/working-groups/wgd.html. Accessed July 16, 2021.

Their most recent report, published in February 2021, indicates that despite improvements in recent years, the representation of people from underrepresented groups (URGs) at the undergraduate, graduate, postdoctoral, and faculty levels remains significantly lower than in the U.S. population, where between 2012 and 2017 only 22% of all science and engineering bachelor's degrees and 9% of all doctorate degrees were earned by students from URGs, even though people from URGs represented approximately one third of the U.S. population[4]. The lack of diversity in the scientific workforce could discourage individuals from URGs from pursuing a science degree or a faculty position and create a negative culture for current scientific workforce members from URGs. Faculty from URGs have reported feeling isolated or excluded since few or none of their colleagues "look" like them. This lack of belonging among faculty from URGs can negatively impact personal well-being and professional opportunities, such as collaborations. In terms of funding disparities, this report also noted that despite improvements in rates of funding for trainees from URGs, funding of scientists from URGs—specifically Black scientists—remains alarmingly low with only 2% of all NIH R01 grants awarded to Black researchers in 2018[4]. This bottleneck at the transition between training and independent research positions at the faculty level severely limits career advancement opportunities for people from URGs and highlights the need for additional support and research funding at the R01 (equivalent to JDRF Strategic Research Agreement) level.

2%

of all R01 grants awarded to Black researchers in 2018

In addition to the lack of diversity in the scientific workforce and funding gaps, there are larger cultural issues within the scientific workforce that create challenges for researchers from URGs. These include structural issues with the university admissions and faculty hiring process which stem from admissions policies and practices that affect who is admitted to graduate programs and who progresses in academic careers resulting in Black scientists being less likely to receive their doctorate from a prestigious university, which in turn can negatively affect their ability to secure or retain a faculty position and progress their career through promotions. Moreover, instances of implicit and explicit biases, from both individuals and institutions, hinder the professional progress of faculty from URGs and have serious consequences for their mental health and well-being[4].

Promoting diversity and inclusion in the scientific workforce is of interest to society, as several reports have shown that diversity strengthens the Science, Technology, Engineering, and Mathematics (STEM) talent pool and ultimately contributes to greater innovation and productivity in research settings in which team members engage in cooperative problem-solving[5], that underrepresented groups produce higher rates of scientific novelty[6], and that ethnic diversity had the strongest correlation with scientific impact[7]. As such, it is JDRF's interest and priority to promote diversity in the scientific workforce so as to further enhance innovation and accelerate progress towards the development of treatments and cures for T1D.

Eligibility

- Applicants must self-identify as members of underrepresented groups such as (but not limited to) racial and ethnic minorities, sexual orientation and gender identity, individuals with disabilities, and people from economically disadvantaged backgrounds.

4 The Advisory Committee to the Director Working Group on Diversity Racism in Science Report. February 2021. https://acd.od.nih.gov/documents/presentations/02142021_DiversityReport.pdf

5 McGee R et al. Diversity in the Biomedical Research Workforce: Developing Talent. Mt Sinai J Med. 2012 May; 79(3): 397–411

6 Hofstra B, et al. The Diversity-Innovation Paradox in Science. Proc Natl Acad Sci U S A. 2020

7 AlShebli et al. The preeminence of ethnic diversity in scientific collaboration. Nat Commun. 2018; 9: 5163

- Applicants must have their Ph.D., M.D. (or equivalent degree from an accredited institution in the U.S.) and must have received their first faculty-level appointment less than 3 years before the submission date.
- Research may be conducted at domestic, for-profit and nonprofit, and public and private organizations – such as universities, colleges, hospitals, laboratories, units of state and local governments, and eligible agencies of the federal government.
- The pilot program is initially limited to applicants residing in the United States (U.S.) and affiliated with a U.S. organization. There are no citizenship requirements for this program.

Funding Mechanism

In response to this announcement, Letters of Intent (LOI) can be submitted under the following mechanism:

Strategic Research Agreement (SRA)

For Strategic Research Agreements, proposed budgets for projects should not exceed $400,000 USD (including 10% indirect costs) total costs for up to two years. The level of funding will vary depending on the scope and overall objectives of the proposal. If your project budget exceeds $400,000, please discuss with JDRF staff (contact information below). For more information on the Strategic Research Agreement (SRA) grant mechanism please refer to our website: https://grantcenter.jdrf.org/information-for-applicants/grant-mechanism-descriptions/strategic-research-agreements/

Under the terms of the grant award, written semi-annual reports will be required from the funded investigator as a basis for continued support. Investigators funded through this RFA will be required to participate in regular meetings with JDRF staff and share progress and data under confidentiality.

Letter of Intent

Prospective applicants should submit a LOI, [2 pages maximum] online via RMS360 to be considered for a full proposal request. The LOI template provided on the RMS360 website must be used to complete the application.to be considered for a full proposal request. The LOI template provided on the RMS360 website must be used to complete the application.

Proposal

An approved LOI is required prior to the submission of a full proposal. Upon notification of a request for a full proposal, the application must be completed using the templates provided on the RMS360. Proposal section templates in Microsoft Word, [10 pages maximum] should be type-written, single-spaced, and in typeface no smaller than 10-point font and have no more than six vertical lines per vertical inch. Margins, in all directions, must be at least ½ inch. Complete information should be included to permit a review of each application without reference to previous applications.

Note that all applications involving human subject research must include supplemental information to address subject safety, study design, and investigational product information. More details can be found in the Human Subject Research Guidelines.

JDRF follows the U.S. National Institutes of Health (NIH) guidelines for studies including human subjects, including the Common Rule changes.

Review Criteria

Applications will be subjected to confidential external scientific review evaluated on the following:

- Significance
- Relevance
- Approach
- Innovation
- Environment
- Resource sharing plan

Projected Timeline

Milestone	Date
LOI deadline	January 27, 2022
Notification of LOI Outcome	February 15, 2022
Full proposal deadline	March 15, 2022
Award notification	July 2022
Earliest anticipated start	September 2022

Program Contacts

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