EXHIBIT 42

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

AMERICAN PUBLIC HEALTH ASSOCIATION, *et al.*, *Plaintiffs*, v. NATIONAL INSTITUTES OF HEALTH, *et al.*, *Defendants*.	Case No. 1:25-cv-10787-BEM Leave to File Under Seal Granted April 24, 2025 (ECF No. 36)

DECLARATION OF UAW MEMBER 13

I, [redacted], pursuant to 28 U.S.C. § 1746, declare as follows:

1. My name is [redacted] and I am a graduate student pursuing my PhD degree at the [redacted] ("[redacted]") Program in Biomedical Sciences and Engineering. I am about to finish the first year of my PhD program, and my studies are funded through a [redacted] fellowship called the Initiative for Maximizing Student Development ("IMSD"). My ultimate goal is to become a professor at a minority serving institution and further drive the field of natural product sciences with aspiring scientists from ethnically diverse backgrounds. I graduated from [redacted] in 2023 with a Bachelor of Science in chemistry where much of my research focused on [redacted] During my undergraduate studies, I found passion for chemistry and how it has the potential to help society and future generations. Since 2022, I have presented my research four times, and on one occasion I was awarded first place for my presentation.

2. I am offering this Declaration in my individual capacity and not on behalf of my employer.

3. I am a dues-paying member of United Auto Workers ("UAW") Local 4811.

4. [redacted]s IMSD fellowship is funded by the National Institutes of Health ("NIH") through the National Institute of General Medical Sciences ("NIGMS"). The grant award number is

[redacted] A true and correct copy of NIH's RePORTER webpage containing information about [redacted]'s grant is attached hereto as Exhibit A.

5. The Notice of Funding Opportunity ("NOFO"), PAR-24-031, is no longer available online. However, PAR-19-037, which is associated with a prior [redacted] IMSD grant, states that the purpose of the IMSD program is to help "develop a diverse pool of scientists earning a Ph.D., who have the skills to successfully transition into careers in the biomedical research workforce" by providing support to research-intensive institutions to develop didactic, research-focused, biomedical training and mentoring programs that "prepare trainees for careers that will have a significant impact on the health-related research needs of the Nation." A true and correct copy of the expired PAR-19-037 is attached hereto as Exhibit B. NIH IMSD grants are awarded directly to higher education institutions.

6. [redacted]'s IMSD program is funded for a ten-year period. *Id.* [redacted] graduate students, however, are provided with full-time support for two years, and new cohorts of IMSD students are selected annually. *See* Ex. A.

7. I began my PhD as an IMSD fellow in September 2024. A true and correct copy of my offer letter for the first year of my IMSD fellowship is attached hereto as Exhibit C. Since beginning at [redacted] I have continued studying chemistry and my research focuses on [redacted]. Specifically, my research explores [redacted] I plan to present my findings in a podcast to increase awareness of [redacted] and its relevance to daily life, and to author an editorial in [redacted] to share with the global scientific community.

8. My research is important because it could contribute to developing strategies for [redacted]. More generally, my research is important because recent years have seen a rise in antimicrobial resistant pathogens, which directly kills about one million people every year. Treatments for these pathogens decrease every few years so new treatment options are extremely important to global health.

9. The current grant for [redacted]s IMSD program began February 1, 2020, and beginning in January 2025, the continuation of the IMSD program at [redacted] became uncertain based on chaos at NIH. In 2024, [redacted] submitted a renewal application for IMSD funding because past funding was scheduled to end on January 31, 2025. The application received a strong score and on

January 7, 2025, the school received an email from Jeremy McIntyre, Program Director within the Division of Training and Workforce Development at NIGMS stating, "I am pleased to inform you that the above referenced grant [redacted] has been approved for funding – congratulations!" The email went on to say that the Notice of Award ("NOA") "should be issued in the coming weeks, and nothing is official until that is received." A true and correct copy of the January 7 email is attached hereto as Exhibit D.

10. As the January 31, 2025 date approached, however, [redacted] never received the NOA that Mr. McIntyre said should be coming, and NIH went silent. On January 31, with no NOA in hand and with several Executive Orders issued that could have implicated the IMSD program, [redacted] was under the impression that NIH funding for IMSD was not coming. On January 31, 2025, less than a year into my IMSD fellowship, I received a revised Notice of Appointment from [redacted] notifying me that my IMSD funding was ending that day. A true and correct copy of the revised Notice of Appointment is attached hereto as Exhibit E.

11. Just three days later, on February 3, 2025, [redacted] was notified that an NOA for continued IMSD funding had been issued by NIH, and I was told that my funding would likely be restored. This was a great relief.

12. Yet on April 2, 2025, Kenneth D. Gibbs, Jr., Director of the Division of Training and Workforce Development at NIGMS sent an email with the subject "NIGMS Funding Update" to the [redacted] Principal Investigator on the award stating "that due to changes in NIH/HHS priorities, the **Initiative for Maximizing Student Development (IMSD)** program has been terminated." A true and correct copy of the April 2, 2025 email is attached hereto as Exhibit F.

13. The chaos caused by NIH's inconsistent communication and ultimate termination of IMSD funding has put my entire financial security at risk. Without this funding, I will have to find other ways to fund my graduate studies, such as teaching assistant ("TA") positions. This will divert my focus from my research because TAing takes a lot of time and effort which will no longer be dedicated to research. I am very aware of how research can be impacted by financial insecurity because I worked multiple jobs throughout my undergraduate career in order to get by; one reason I was so excited about the IMSD funding was because it allowed me to devote all my focus on my passion for researching drug discovery. Additionally, I am expecting my first child, and I was relying on the financial stability that the IMSD fellowship provided me with. If I am forced to TA in addition to parenting and studying, I fear my research will be negatively impacted.

14. I am also very worried about how the termination of IMSD funding will impact other people like me who never would have had the opportunity to discover and explore their passion for science without it. Having mentors nurture my love of chemistry changed my life, and I fear that people who could develop a passion for the sciences like I did won't have the same opportunities. Without the IMSD program and other NIH programs like it, there will be far fewer people who can pursue a career in biomedical research.

15. I don't know if [redacted] is appealing the termination, and even if it does, I do not know the chance of success. I also don't have an understanding of why the IMSD program was cut or how it no longer aligns with agency priorities.

16. I am seeking to file this declaration under seal because I am concerned that my participation in this lawsuit could [redacted]

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 23 day of April, 2025.

[redacted]

EXHIBIT A

[redacted] IMSD

Project Number	Former Number	Contact PI/Project Leader	Awardee Organization
[redacted]	[redacted]	[redacted]	[redacted]

Description

Abstract Text

PROJECT SUMMARY/ABSTRACTThe [redacted] IMSD Graduate Training Program aims to create an inclusive training experience that increases the recruitment and retention of a broad population of Ph.D. students into the biomedical sciences and related fields. Building on decades of experience in promoting STEM diversity at the graduate and undergraduate levels, we will support Ph.D. students during the crucial transition at the beginning of graduate training. We will arm these students with the research and professionals skills to have successful careers in academia, industry and related fields. The [redacted] IMSD Graduate Training Program proposes to provide two years of support to 10 students who are admitted into one of four tracks of the Program in Biomedical Sciences and Engineering (PBSE), which serves as an interdisciplinary umbrella program with investigators studying diverse topics in biomedical science. We will select students who 1) have high potential for success in graduate studies, based on their demonstrated resilience in overcoming a variety challenges, and 2) are motivated to become leaders in improving equity in the biomedical sciences during their future careers. The program emphasizes fostering an inclusive community, strong mentorship and professional growth to promotes success for Ph.D. students from historically marginalized groups. In their first year, IMSD students will participate in the PBSE laboratory rotation program and take core courses that emphasize rigor and reproducibility in experimental design and conduct. They will also receive formal training in the responsible conduct of research and teaching. Each student will also be paired with an EARLy faculty mentor, who will aid in choosing rotation labs, completing an IDP, and identifying a supportive thesis advisor. In the summer of their first year, students well participate in a Research Proposal Working Group to outline a thesis project for fellowship applications. In the fall of their second year, IMSD students will participate in Qualifying Exam Working Group designed plan of study for qualifying exams that will take place in spring of their second year. In the summer of their second year, students will participate in the IMSD Graduate Leadership Academy for Diversity (GLAD). The program includes seminars, workshops, social justice journal club and community events IMSD Graduate aimed at helping students develop independent research initiative and mentorship skills. It also provides opportunities to explore career pathways and create a concrete career plan. Finally, the program prepares students to further impact the campus' overall research climate by projecting their own leadership skills to positively influence equity and inclusion.

Public Health Relevance Statement

PROJECT NARRATIVE To generate the scientific discoveries and medical interventions that meet the needs of our citizens, we must harness the inherit research talent present in the United States of America. However, disparities in the population of biomedical Ph.D. scientists indicate that innovative graduate training programs are needed to better recruit and retain researchers from a variety of backgrounds. [redacted] graduate training program creates an inclusive and interdisciplinary community that develops esearch and leadership skills across a diverse graduate student population to prepare the next generation of research scientists in the biomedical sciences.

NIH Spending Category

No NIH Spending Category available.

Project Terms

No Project Terms available.

Details

Contact PI/ Project Leader

Name
[redacted]

Title
PROFESSOR

Contact

View Email

Other PIs

Not Applicable

Program Official

Name
[redacted]

Contact

View Email

Organization

Name
[redacted]

City
[redacted]

Country
UNITED STATES (US)

Department Type
BIOCHEMISTRY

Organization Type
SCHOOLS OF ARTS AND SCIENCES

State Code
[redacted]

Congressional District
[redacted]

Other Information

Opportunity Number
PAR-24-031

Study [redacted]

Fiscal Year
2025

Award Notice Date
30-January-2025

Administering Institutes or Centers
National Institute of General Medical Sciences

CFDA Code
[redacted]

DUNS Number
[redacted]

UEI
[redacted]

Project Start Date
01-February-2020

Project End Date
31-January-2030

Budget Start Date
01-February-2025

Budget End Date
31-January-2026

Project Funding Information for 2025

Total Funding
[redacted]

Direct Costs
[redacted]

Indirect Costs
$[redacted]

Year	Funding IC	FY Total Cost by IC
2025	National Institute of General Medical Sciences	[redacted]

Sub Projects

No Sub Projects information available for [redacted]

Publications

> Disclaimer

No Publications available fo[redacted]

Patents

No Patents information available fo[redacted]

Outcomes

The Project Outcomes shown here are displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed are those of the PI and do not necessarily reflect the views of the National Institutes of Health. NIH has not endorsed the content below.

No Outcomes available fo[redacted]

Clinical Studies

No Clinical Studies information available fo[redacted]

News and More

Related News Releases

No news release information available fo[redacted]

History

No Historical information available fo[redacted]

Similar Projects

No Similar Projects information available [redacted]

EXHIBIT B

Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)

National Institutes of Health (NIH (http://www.nih.gov))

Components of Participating Organizations

National Institute of General Medical Sciences (NIGMS (http://www.nigms.nih.gov))

Funding Opportunity Title

Initiative for Maximizing Student Development (IMSD) (T32)

Activity Code

T32 (//grants.nih.gov/grants/funding/ac_search_results.htm?text_cond=t32&Search.x=0&Search.y=0&Search_Type=Activity) Institutional National Research Service Award (NRSA)

Announcement Type

New

Related Notices

- **November 20, 2020** - This PA has been reissued as PAR-21-025 (//grants.nih.gov/grants/guide/pa-files/PAR-21-025.html).
- **March 10, 2020** - Reminder: FORMS-F Grant Application Forms & Instructions Must be Used for Due Dates On or After May 25, 2020- New Grant Application Instructions Now Available. See Notice NOT-OD-20-077 (/grants/guide/notice-files/NOT-OD-20-077.html).
- **November 22, 2019** - Notice of NIH's Interest in Diversity. See Notice NOT-OD-20-031 (//grants.nih.gov/grants/guide/notice-files/NOT-OD-20-031.html).
- **September 23, 2019** - Notice of Pre-Application Webinar for PAR-19-037. See Notice NOT-GM-19-060 (//grants.nih.gov/grants/guide/notice-files/NOT-GM-19-060.html).
- **July 22, 2019** - Requirement for ORCID iDs for Individuals Supported by Research Training, Fellowship, Research Education, and Career Development Awards Beginning in FY 2020. See Notice NOT-OD-19-109 (/grants/guide/notice-files/NOT-OD-19-109.html).
- **July 10, 2019** - Notice of Clarification of Institutional and Program Director/Principal Investigator Eligibility for PAR-19-037. See Notice NOT-GM-19-047 (/grants/guide/notice-files/NOT-GM-19-047.html).
- **May 13, 2019** - NIGMS-Managed HIV/AIDS Research Portfolio Transitioning to NIAID. See Notice NOT-GM-19-039 (/grants/guide/notice-files/NOT-GM-19-039.html).
- **March 20, 2019** - Notice of Change to Evaluation of Plans for 'Training in Methods for Enhancing Reproducibility' in NIGMS Training Grant Funding Opportunity Announcements. See Notice NOT-GM-19-026 (//grants.nih.gov/grants/guide/notice-files/NOT-GM-19-026.html).
- **December 20, 2018** - Notice of Clarification of Institutional Eligibility for PAR-19-037 . See Notice NOT-GM-19-007 (/grants/guide/notice-files/NOT-GM-19-007.html).
- NOT-GM-18-028 (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-028.html) "Notice of Intent to Publish a Funding Opportunity Announcement for the Initiative for Maximizing Student Development (IMSD) (T32) Program"

Funding Opportunity Announcement (FOA) Number

PAR-19-037

Companion Funding Opportunity

Not Applicable

Number of Applications

Applicant organizations may submit only one application. See Section III. 3. Additional Information on Eligibility.

Catalog of Federal Domestic Assistance (CFDA) Number(s)

93.859

Funding Opportunity Purpose

The goal of the Initiative for Maximizing Student Development (IMSD) program is to develop a diverse pool of scientists earning a Ph.D., who have the skills to successfully transition into careers in the biomedical research workforce. This funding opportunity announcement (FOA) provides support to eligible, domestic institutions to develop and implement effective, evidence-based approaches to biomedical training and mentoring that will keep pace with the rapid evolution of the research enterprise. NIGMS expects that the proposed research training programs will incorporate didactic, research, mentoring and career development elements to prepare trainees for careers that will have a significant impact on the health-related research needs of the Nation. This program is limited to applications from training programs at research-intensive institutions (i.e., those with a 3-year average of NIH Research Project Grant funding equal to or above $7.5 million total costs).

This FOA does not allow appointed trainees to lead an independent clinical trial but does allow them to obtain research experience in a clinical trial led by a mentor or co-mentor.

Key Dates

Posted Date

October 25, 2018

Open Date (Earliest Submission Date)

January 22, 2019

Letter of Intent Due Date(s)

Not Applicable

Application Due Date(s)

February 22, 2019; January 28, 2020; January 28, 2021, by 5:00 PM local time of applicant organization. All types of applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

AIDS Application Due Date(s)

Not Applicable

Scientific Merit Review

June/July 2019, June/July 2020, June/July 2021

Advisory Council Review

October 2019; October 2020; October 2021 (http://grants1.nih.gov/grants/funding/submissionschedule.htm#reviewandaward)

Earliest Start Date

February 2020, February 2021, February 2022

Expiration Date

New Date November 20, 2020 per issuance of PAR-21-025 (https://grants.nih.gov/grants/guide/pa-files/PAR-21-025.html). (Original Expiration Date: January 29, 2021)

Due Dates for E.O. 12372

Not Applicable

Required Application Instructions

It is critical that applicants follow the Training (T) Instructions in the SF424 (R&R) Application Guide (//grants.nih.gov/grants/guide/url_redirect.htm?id=12000), except where instructed to do otherwise (in this FOA or in a Notice from the *NIH Guide for Grants and Contracts* (//grants.nih.gov/grants/guide/)). Conformance to all requirements (both in the Application Guide and the FOA) is required and strictly enforced. Applicants must read and follow all application instructions in the Application Guide as well as any program-specific instructions noted in Section IV. When the program-specific instructions deviate from those in the Application Guide, follow the program-specific instructions. **Applications that do not comply with these instructions may be delayed or not accepted for review.**

Table of Contents

Part 2. Full Text of Announcement

Section I. Funding Opportunity Description

The overall goal of the NIH Ruth L. Kirschstein National Research Service Award (NRSA) program is to help ensure that a diverse pool of highly trained scientists is available in appropriate scientific disciplines to address the Nation's biomedical, behavioral, and clinical research needs. In order to accomplish this goal, NRSA training programs are designed to train individuals to conduct research and to prepare for research careers. More information about NRSA programs may be found at the Ruth L. Kirschstein National Research Service Award (NRSA) (//grants.nih.gov/grants/guide/url_redirect.htm?id=41125) website.

Purpose and Background Information

The National Institutes of Health (NIH) recognizes the need to diversify the scientific workforce by enhancing the participation of individuals from groups identified as underrepresented (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html) in the biomedical, clinical, behavioral and social sciences (collectively termed "biomedical") research workforce. Research shows that diverse teams working together and capitalizing on innovative ideas and distinct perspectives outperform homogenous teams. Scientists and trainees from diverse backgrounds and life experiences bring different perspectives, creativity, and individual interests to address complex scientific problems. There are many benefits that flow from a diverse NIH-supported scientific workforce, including fostering scientific innovation, enhancing global competitiveness, contributing to robust learning environments, improving the quality of research, enhancing public trust, and increasing the likelihood that health disparities and the needs of underserved populations are addressed in biomedical research.

NIGMS strives to ensure that future generations of researchers will be drawn from the entire pool of talented individuals, bringing different aptitudes, perspectives, interests, and experiences to address complex scientific problems. NIGMS seeks to enhance the diversity of the biomedical research workforce by supporting individuals from a variety of backgrounds at multiple training and career stages in a variety of institutions and educational settings across the country. Accordingly, NIGMS developed separate institutional eligibility tracks for review and funding of its undergraduate and graduate diversity enhancing programs based on NIH research project grant (RPG) (https://grants.nih.gov/grants/glossary.htm#ResearchProjectGrantRPG) funding levels. The two tracks include research-intensive, i.e., those with a 3-year average of NIH RPG funding greater than or equal to $7.5 million total costs, and research-active, i.e., those with a 3-year average of RPG funding less than $7.5 million total costs (RPG data are available through NIH RePORTER (https://report.nih.gov/award/index.cfm)). To prevent the duplication of diversity enhancing NIGMS programs, each institution will be eligible for one diversity enhancing undergraduate program (either Maximizing Access to Research Careers, MARC (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-031.html), or Undergraduate Research Initiative for Student Enhancement, U-RISE (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-030.html)) and one diversity enhancing graduate program (either IMSD (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-028.html), or Graduate Research Initiative for Student Enhancement G-RISE (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-029.html)). Institutions with MARC, U-RISE, IMSD or G-RISE are eligible to participate in the Bridges to the Baccalaureate and/or Bridges to the Doctorate programs.

Need for the Program

In spite of recent advances, individuals from certain groups and backgrounds are underrepresented in the biomedical sciences research workforce as described in NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html). The severity of the underrepresentation of these groups increases throughout the training stages. For example, students from certain racial and ethnic groups, including Blacks or African Americans, Hispanics or Latinos, American Indians or Alaska Natives, Native Hawaiians and other Pacific Islanders comprise ~39 percent of the college age population (Census Bureau (http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml) data), but earn only ~17 percent of bachelor's degrees and ~13 percent of Ph.D. degrees in the life sciences (National Center for Science and Engineering Statistics (https://www.nsf.gov/statistics/data-tools.cfm)). Additionally, while the United States has seen a significant increase in the number of Ph.D. degrees in the biomedical sciences earned by scientists from groups underrepresented in the biomedical research workforce, a corresponding increase in the ranks of the faculty in basic science departments at medical schools has not occurred (Gibbs, et al., 2016, eLife 2016, 5:e21393; Valantine, Lund & Gammie, CBE-Life Sciences Education, 2016, 15:fe4).

Several reports (see for example, ACD Working Group on Diversity in the Biomedical Workforce, 2012 (https://acd.od.nih.gov/documents/reports/DiversityBiomedicalResearchWorkforceReport.pdf); PCAST Report, 2012 (https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final_2-25-12.pdf); From College to Careers: Fostering Inclusion of Persons with Disabilities in STEM, 2014 (http://www.sciencemag.org/booklets/college-careers); and Increasing College Opportunity for Low Income Students, 2014 (https://www.whitehouse.gov/sites/default/files/docs/white_house_report_on_increasing_college_opportunity_for_low-income_students.pdf)) recommend supporting programs that strive to recruit, train, and mentor students from underrepresented groups who have an interest in science, technology, engineering and math (STEM) as a means to effectively build a diverse and competitive scientific workforce.

Programmatic Approach

This FOA is intended to enable the community to develop and implement evidence-based approaches to biomedical research training and mentoring to enhance diversity in the biomedical research workforce. The President's Council of Advisors on Science and Technology (PCAST) report provided evidence that financial concerns and a deficit of peers from similar backgrounds can erode self-confidence and the will to remain in STEM majors (PCAST Report, 2012 (https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final_2-25-12.pdf)). NIGMS diversity enhancing institutional training grants offset the cost of appointed trainee stipends, tuition and fees, and training related expenses, including health insurance, in accordance with the approved NIH support levels. Additionally, funded programs are expected to provide activities that will build a strong cohort of research-oriented individuals while enhancing the science identity, self-efficacy, and a sense of belonging among the cohort members. Programmatic activities include, but are not limited to, providing authentic research experiences, academic enhancements, skills development, and additional mentoring - activities proven to increase persistence in STEM fields (cited in PCAST Report, 2012 (https://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final_feb.pdf) and Graduate STEM Education for the 21st Century, 2018 (https://www.nap.edu/catalog/25038/graduate-stem-education-for-the-21st-century)). Each program should provide high-quality training that equips individuals with the technical (e.g., appropriate methods, technologies, and quantitative/computational approaches), operational (e.g., independent knowledge acquisition, rigorous experimental design, and interpretation of data) and professional (e.g., management, leadership, communication, and teamwork) skills required for careers in the biomedical research workforce. Funded programs are expected to promote inclusive research environments (i.e., institutional and departmental environments where trainees from all backgrounds feel integrated into and supported by the biomedical research community).

Program Objective

The **Overarching Objective** of this Initiative for Maximizing Student Development (IMSD) Institutional Research Training Grant (T32) program is to develop a diverse pool of well-trained Ph.D. biomedical scientists, who have the following technical, operational, and professional skills:

- A broad understanding across biomedical disciplines and the skills to independently acquire the knowledge needed to advance their chosen fields;
- The ability to think critically and independently, and to identify important biomedical research questions and approaches that push forward the boundaries of their areas of study;
- A strong foundation in scientific reasoning, rigorous research design, experimental methods, quantitative and computational approaches, and data analysis and interpretation;
- A commitment to approaching and conducting biomedical research responsibly, ethically, and with integrity;
- Experience initiating, conducting, interpreting, and presenting rigorous and reproducible biomedical research with increasing self-direction;
- The ability to work effectively in teams with colleagues from a variety of cultural and scientific backgrounds, and to promote inclusive and supportive scientific research environments;
- The skills to teach and communicate scientific research methodologies and findings to a wide variety of audiences (e.g., discipline-specific, across disciplines, and the public); and
- The knowledge, professional skills and experiences required to identify and transition into careers in the biomedical research workforce (i.e., the breadth of careers that sustain biomedical research in areas that are relevant to the NIH mission).

Diversity at all levels from the kinds of science to the regions in which it is conducted to the backgrounds of the people conducting it contributes to excellence in research training environments and strengthens the research enterprise. This FOA is intended to support outstanding research training programs that will enhance diversity at all levels. As part of a larger initiative to enhance diversity, the IMSD program will support trainees earning at Ph.D. at research-intensive institutions.

Program Considerations

NIGMS intends to fund applications that propose feasible academic and research focused training programs that will enhance diversity in the biomedical workforce. Applicants are expected to identify training objectives (i.e., specific, measurable, and obtainable outcomes the program intends to achieve) and to develop plans to implement evidence-based training and mentoring activities that are grounded in the literature and from evaluations of existing relevant programs. Program objectives must align with the overarching goal of the IMSD diversity enhancing program. Funded programs are expected to provide evidence of accomplishing the training objectives in progress reports and upon renewal, to make training and career outcomes publicly available, and are strongly encouraged to disseminate successful training practices to the broader community.

Institutional commitment and support for the proposed training program are important elements of the application. The IMSD program may complement and synergize with other ongoing federally-supported predoctoral research training programs at the applicant institution (e.g., in the development of skills needed for careers in the biomedical research workforce); however, the IMSD program goals and activities to achieve those goals must be distinct from related programs currently receiving federal support at the same institution. Unless extremely well-justified, funding priority will be given to institutions that have limited NIGMS T32 predoctoral training grant support. In cases where an institution has multiple NIGMS predoctoral training grants, it is expected that these programs will seek to create administrative efficiencies to reduce costs and improve trainee services and outcomes. The training grant should be well integrated within one or more department(s)/program(s) and should exert a strong, positive influence on the development and execution of the curriculum, training opportunities, and mentoring. Training grant funds may not be used solely as a vehicle to provide stipends for trainees to conduct research.

NIGMS does not accept applications for predoctoral T32 programs proposing only short-term research training (T35). Programs proposing short-term research training should apply to the Kirschstein-NRSA Short-Term Institutional Research Training Grant Program (T35) exclusively reserved for predoctoral, short-term research training (see PA-18-404 (https://grants.nih.gov/grants/guide/pa-files/PA-18-404.html) and subsequent reissuances but note that NIGMS does not participate in that FOA). NIGMS will not

accept applications proposing combined predoctoral and postdoctoral training under this FOA.

Training grants are usually awarded for five years. Students are typically provided full-time support for two to three years of graduate studies. Use of training grant support in the first three years of graduate research training is strongly encouraged to provide maximum flexibility in the participation in courses, laboratory rotations, professional development, and cohort-building activities.

This FOA does not allow appointed trainees to lead an independent clinical trial, but it does allow them to obtain research experience in a clinical trial led by a mentor or co-mentor. NIH strongly supports training towards a career in clinically relevant research; thus, gaining experience in clinical trials under the guidance of a mentor or co-mentor is encouraged.

See Section VIII. Other Information for award authorities and regulations.

Section II. Award Information

Funding Instrument

Grant: A support mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity.

Application Types Allowed

New
Resubmission of applications submitted to this FOA

The OER Glossary (//grants.nih.gov/grants/guide/url_redirect.htm?id=11116) and the SF424 (R&R) Application Guide provide details on these application types.

Clinical Trial?

Not Allowed: Only accepting applications that do not propose clinical trials

Note: Appointed trainees are permitted to obtain research experience in a clinical trial led by a mentor or co-mentor.

Need help determining whether you are doing a clinical trial? (https://grants.nih.gov/grants/guide/url_redirect.htm?id=82370)

Funds Available and Anticipated Number of Awards

The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications.

Award Budget

Application budgets must reflect the actual needs of the proposed project.

Grantees are expected to be familiar with and comply with applicable cost policies and the NRSA Guidelines (*NIH Grants Policy Statement* - Institutional Research Training Grants (//grants.nih.gov/grants/guide/url_redirect.htm?id=41126)) or as stated in this FOA. Funds may be used only for those expenses that are directly related to and necessary for the research training and must be expended in conformance with OMB Cost Principles, the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11120), and the NRSA regulations, policies, guidelines, and conditions set forth in this document.

Award Project Period

Awards may be for project periods up to five years in duration.

Other Award Budget Information

Stipends, Tuition, and Fees

Kirschstein-NRSA awards provide stipends as a subsistence allowance to help defray living expenses during the research training experience.

NIH will contribute to the combined cost of tuition and fees at the rate in place at the time of award. Provide requested amounts in the application budget.

Stipend levels, as well as funding amounts for tuition and fees and the institutional allowance are announced annually in the *NIH Guide for Grants and Contracts,* and are also posted on the Ruth L. Kirschstein National Research Service Award (NRSA) webpage (https://researchtraining.nih.gov/resources/policy-notices).

Trainee Travel

NIGMS recognizes the need of trainees from diverse backgrounds, including those from underrepresented groups, to attend scientific meetings and/or training events, and to build professional networks. NIGMS will provide up to $1,000 per trainee to travel to scientific meetings or training experiences that will enhance scientific development, build science identity, create a sense of belonging in the scientific community, and build professional networks. Plans for trainee travel should be well justified.

Training Related Expenses

NIGMS will provide funds to help defray other research training expenses, such as health insurance, consultant costs, research supplies, and faculty/staff travel directly related to the research training program.

The total amount of Training Related Expenses (TRE) that may be requested is limited to a maximum of $6,400/trainee/year.

TRE funds may be used for:

Costs associated with skills development training activities (e.g., focusing on quantitative and computational, problem-solving, critical thinking, scientific writing, effective communication, and project management); with seminar speakers, who will serve as role models to the trainees; and with training or mentoring interventions designed to increase persistence in research (e.g., those designed to increase science identity, self-efficacy and a sense of belonging in the scientific community).

In addition, funds may be used for personnel costs/staff salary. Typically, salary support for the PD/PI/co-Investigators (or in a combination of multiple PDs/PIs/co-Investigators) does not exceed 1.8 person months (i.e., 15% effort on a 12-month basis) in total, depending on the size and scope of the program.

Typically, the total combined salary support for other administrative personnel (e.g., program administrator/program coordinator and/or program assistant/clerical support) does not exceed 3.0 person months (i.e., 25% effort on a 12-month basis) depending on the size and scope of the program.

Limited program evaluation costs (typically up to $3,000 for the 5-year training grant period) and other program-related expenses may be included within the budget for training-related expenses.

Indirect Costs

Indirect Costs (also known as Facilities & Administrative [F&A] Costs) are reimbursed at 8% of modified total direct costs (exclusive of tuition and fees, consortium costs in excess of $25,000, and expenditures for equipment), rather than on the basis of a negotiated rate agreement.

NIH grants policies as described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11120) will apply to the applications submitted and awards made in response to this FOA.

Section III. Eligibility Information

1. Eligible Applicants

Eligible Organizations

Higher Education Institutions

- Public/State Controlled Institutions of Higher Education
- Private Institutions of Higher Education

The following types of Higher Education Institutions are always encouraged to apply for NIH support as Public or Private Institutions of Higher Education:

- Hispanic-serving Institutions
- Historically Black Colleges and Universities (HBCUs)
- Tribally Controlled Colleges and Universities (TCCUs)
- Alaska Native and Native Hawaiian Serving Institutions
- Asian American Native American Pacific Islander Serving Institutions (AANAPISIs)

Nonprofits Other Than Institutions of Higher Education

- Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education)

Governments

- Indian/Native American Tribal Governments (Federally Recognized)
- Indian/Native American Tribal Governments (Other than Federally Recognized)
- U.S. Territory or Possession

Other

- Native American Tribal Organizations (other than Federally recognized tribal governments)
- Faith-based or Community-based Organizations

For diversity enhancing programs, NIGMS recognizes separate institutional eligibility tracks: research-intensive, i.e., those with a 3-year average of NIH research project grant (RPG) (https://grants.nih.gov/grants/glossary.htm#ResearchProjectGrantRPG) funding greater than or equal to $7.5 million total costs, and research-active, i.e., those with a 3-year average of RPG funding less than $7.5 million total costs (RPG data are available through NIH RePORTER (https://report.nih.gov/award/index.cfm)). For example, FY 2016, FY 2017 and FY 2018 for applications submitted in January 2019.

Institutional eligibility for this FOA is limited to research-intensive institutions as defined above. To prevent the duplication of NIGMS diversity enhancing programs, each institution is eligible for one undergraduate program (either MARC (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-031.html) or U-RISE (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-030.html)) and one graduate program (either IMSD (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-028.html) or G-RISE (https://grants.nih.gov/grants/guide/notice-files/NOT-GM-18-029.html)). Institutions with NIGMS MARC, U-RISE, IMSD, or G-RISE funding are eligible for the Bridges to the Baccalaureate and/or Bridges to the Doctorate programs.

An institution funded through the G-RISE or IMSD program that changes category due to changes in research project grant funding during the grant cycle should apply to the appropriate program based on their eligibility at the time of renewal. Programs that change category will report on the programs outcomes of the prior funding period(s), up to 15 years, using the appropriate tables.

The sponsoring institution must assure support for the proposed program through an Institutional Support Letter within the Letters of Support attachment. Additionally, a signed letter is required from the Provost or similar official with institution-wide responsibility verifying the eligibility of the applicant institution at the time of application submission according to the eligibility criteria indicated above. See the application instructions for the required Letters of Support attachment in Section IV.2.

Foreign Institutions

Non-domestic (non-U.S.) Entities (Foreign Institutions) **are not** eligible to apply.

Non-domestic (non-U.S.) components of U.S. Organizations **are not** eligible to apply.

Required Registrations

Applicant Organizations

Applicant organizations must complete and maintain the following registrations as described in the SF 424 (R&R) Application Guide to be eligible to apply for or receive an award. All registrations must be completed prior to the application being submitted. Registration can take 6 weeks or more, so applicants should begin the registration process as soon as possible. The NIH Policy on Late Submission of Grant Applications (//grants.nih.gov/grants/guide/notice-files/NOT-OD-15-039.html) states that failure to complete registrations in advance of a due date is not a valid reason for a late submission.

- Dun and Bradstreet Universal Numbering System (DUNS) (http://fedgov.dnb.com/webform) - All registrations require that applicants be issued a DUNS number. After obtaining a DUNS number, applicants can begin both SAM and eRA Commons registrations. The same DUNS number must be used for all registrations, as well as on the grant application.
- System for Award Management (SAM) (https://www.sam.gov/portal/public/SAM/) (formerly CCR) Applicants must complete and maintain an active registration, **which requires renewal at least annually**. The renewal process may require as much time as the initial registration. SAM registration includes the assignment of a Commercial and Government Entity (CAGE) Code for domestic organizations which have not already been assigned a CAGE Code.
- eRA Commons (//grants.nih.gov/grants/guide/url_redirect.htm?id=11123) - Applicants must have an active DUNS number and SAM registration in order to complete the eRA Commons registration. Organizations can register with the eRA Commons as they are working through their SAM or Grants.gov registration. eRA Commons requires organizations to identify at least one Signing Official (SO) and at least one Program Director/Principal Investigator (PD/PI) account in order to submit an application.
- Grants.gov (//grants.nih.gov/grants/guide/url_redirect.htm?id=82300) Applicants must have an active DUNS number and SAM registration in order to complete the Grants.gov registration.

Program Directors/Principal Investigators (PD(s)/PI(s))

All PD(s)/PI(s) must have an eRA Commons account. PD(s)/PI(s) should work with their organizational officials to either create a new account or to affiliate their existing account with the applicant organization in eRA Commons.If the PD/PI is also the organizational Signing Official, they must have two distinct eRA Commons accounts, one for each role. Obtaining an eRA Commons account can take up to 2 weeks.

Eligible Individuals (Program Director/Principal Investigator)

Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research training program as the Training Program Director/Principal Investigator (Training PD/PI) is invited to work with his/her organization to develop an application for support. Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply for NIH support.

For institutions/organizations proposing multiple PD(s)/PI(s), visit the Multiple Program Director/Principal Investigator Policy (//grants.nih.gov/grants/multi_pi/index.htm) and submission details in the Senior/Key Person Profile (Expanded) Component of the SF 424 (R&R) Application Guide.

As described in the instructions for the Training Program Director(s)/Principal Investigator(s) (PD(s)/PI(s)) in Section IV.2 below, NIGMS encourages multiple PD(s)/PI(s), particularly when each brings a unique perspective and skill set that will enhance training. At least one of the training PD(s)/PI(s) should be an established investigator in the biomedical sciences and capable of providing both administrative and scientific leadership to the development and implementation of the proposed program. Additional PD(s)/PI(s), including individuals with experience in the science of education, relevant social science disciplines, program evaluation, mentoring, and university administration may be included to achieve the training goals. The PD(s)/PI(s) must have a regular full-time appointment (i.e., not adjunct, part-time, retired, or emeritus) at the applicant institution. Any of the PD(s)/PI(s) may serve as the contact PD/PI. The PD(s)/PI(s) will be responsible for the selection and appointment of trainees to the approved research training program, and for the overall direction, management, administration, and evaluation of the program. The PD(s)/PI(s) will be expected to monitor and assess the program and submit all documents and reports as required. The PD(s)/PI(s) have responsibility for the day-to-day administration of the program and are responsible for appointing members of the Advisory Committee (when applicable) and using their recommendations to determine the appropriate allotment of funds.

2. Cost Sharing

This FOA does not require cost sharing as defined in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11126)

3. Additional Information on Eligibility

Number of Applications

Applicant organizations may submit only one application (normally identified by having a unique DUNS number or NIH IPF number).

The NIH will not accept duplicate or highly overlapping applications under review at the same time. This means that the NIH will not accept:

- A new (A0) application that is submitted before issuance of the summary statement from the review of an overlapping new (A0) or resubmission (A1) application.
- A resubmission (A1) application that is submitted before issuance of the summary statement from the review of the previous new (A0) application.
- An application that has substantial overlap with another application pending appeal of initial peer review (see NOT-OD-11-101 (//grants.nih.gov/grants/guide/notice-files/NOT-OD-11-101.html)).

Preceptors/Mentors (Participating Faculty)

The selected faculty should be active researchers in the biomedical sciences as demonstrated by recent publications and research support. When building a training team, programs should include faculty who are committed to training, mentoring, and providing supportive and inclusive research environments. Programs are encouraged to build a diverse team of preceptors/mentors that includes, for example, faculty from underrepresented groups (NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)), women, and faculty at different career stages (i.e., junior as well as senior faculty).

Trainees

The individual to be trained must be a citizen or a noncitizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment. Additional details on citizenship, training period, and aggregate duration of support are available in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=61131).

All trainees are required to pursue their research training full time, normally defined as 40 hours per week, or as specified by the sponsoring institution in accordance with its own policies.

Appointments are normally made in 12-month increments, and no trainee may be appointed for less than nine months during the initial period of appointment, except with prior approval of the NIH awarding unit. Use of training grant support in the first three years of graduate research training is strongly encouraged to provide maximum flexibility in the participation in courses, laboratory rotations, professional development, and cohort-building activities.

Trainees must be enrolled in a program leading to a Ph.D. in a biomedical discipline.

Section IV. Application and Submission Information

1. Requesting an Application Package

Buttons to access the online ASSIST system or to download application forms are available in Part 1 of this FOA. See your administrative office for instructions if you plan to use an institutional system-to-system solution.

2. Content and Form of Application Submission

It is critical that applicants follow the Training (T) Instructions in the SF424 (R&R) Application Guide (//grants.nih.gov/grants/guide/url_redirect.htm?id=12000) except where instructed in this funding opportunity announcement to do otherwise. Conformance to the requirements in the Application Guide is required and strictly enforced. Applications that are out of compliance with these instructions may be delayed or not accepted for review.

For information on Application Submission and Receipt, visit Frequently Asked Questions Application Guide, Electronic Submission of Grant Applications (//grants.nih.gov/grants/guide/url_redirect.htm?id=41137).

Page Limitations

All page limitations described in the SF424 (R&R) Application Guide and the Table of Page Limits (//grants.nih.gov/grants/guide/url_redirect.htm?id=61134) must be followed.

Instructions for Application Submission

The following section supplements the instructions found in the SF424 (R&R) Application Guide and should be used for preparing an application to this FOA.

SF424(R&R) Cover

Follow all instructions provided in the SF424 (R&R) Application Guide, with the following modifications:

Descriptive Title of Applicants Project: Use the format IMSD at .

SF424(R&R) Project/Performance Site Locations
Follow all instructions provided in the SF424 (R&R) Application.

SF424 (R&R) Other Project Information
Follow all instructions provided in the SF424 (R&R) Application, with the following additional modifications:

Are Human Subjects Involved: Check "No" unless the training program itself requires the trainees to take a workshop or course that will involve human subjects.

Are Vertebrate Animals Used: Check "No" unless the training program itself requires the trainees to take a workshop or course that will involve vertebrate animals.

Project Summary/Abstract. Provide an overview of the entire program. Include the mission, objectives, rationale and design of the research training program. Highlight key activities in the training plan that promote skills development and successful transitions into careers in the biomedical research workforce. Indicate the intended trainee outcomes.

Other Attachments:

An Advisory Committee is not a required component of a training program. However, if an Advisory Committee is intended, provide a plan for the appointment of an Advisory Committee to monitor progress of the training program. The roles, responsibilities, and desired expertise of committee members, frequency of committee meetings, and other relevant information should be included. Describe how the Advisory Committee will evaluate the overall effectiveness of the program. Advisory Committee members should not be identified or contacted prior to receiving an award. Please name your file Advisory_Committee.pdf .

Recruitment Plan to Enhance Diversity (3-page maximum). The applicant must provide the recruitment plan to enhance diversity. The application should include outreach strategies and activities designed to recruit potential training program candidates who are from diverse backgrounds, including underrepresented racial and ethnic groups, first generation college students, students from low socio-economic backgrounds, and individuals with disabilities (see NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)). Applicants are encouraged to consult the NIGMS webpage for strategies to enhance diversity in training programs (https://www.nigms.nih.gov/training/diversity/pages/approaches.aspx) when designing their plans. Describe the specific efforts to be undertaken by the training program and how these might coordinate with trainee recruitment efforts of the medical school(s), graduate school(s), and/or the institution(s). Centralized institutional efforts alone will not satisfy the requirement to recruit individuals from underrepresented groups. Participating faculty are expected to be actively involved in recruitment efforts. Please name the file Recruitment_Plan.pdf . If this attachment is not included, the application will be considered incomplete and will not be reviewed.

Trainee Retention Plan (3-page maximum). The applicant must provide a *Trainee Retention Plan*. The trainee retention plan must describe efforts to sustain the scientific interests as well as the academic and research progress of trainees from all backgrounds within a program (i.e., retention). Applicants are encouraged to consult the NIH's extramural diversity website to identify promising retention practices (https://extramural-diversity.nih.gov/building-participation/recruitment-retention) and to use evidence-based practices for retention with the recognition that the variety of trainee backgrounds and experiences may necessitate the need to tailor retention approaches. Describe the specific efforts to be undertaken by the training program and how these might coordinate with trainee retention efforts of the medical school(s), graduate school(s), and/or the institution(s). Centralized institutional efforts alone will not satisfy the requirement to implement robust and successful mechanisms to retain all trainees (e.g., participating faculty are expected to be actively involved in trainee retention efforts). Please name the file Retention_Plan.pdf . If this attachment is not included, the application will be considered incomplete and will not be reviewed.

Outcomes Data Collection and Storage Plan (2 pages maximum). The applicant must provide a plan to track the outcomes for all supported trainees for a minimum of 15 years beyond the trainee's participation in the program. Programs are encouraged to make the aggregate outcome data available on the institution's website. If the applicant intends to make the data available, describe how the aggregate data will be de-identified before public posting (1-page maximum). The applicant must include a strategy to ensure the secure storage and preservation of program data and outcomes. Describe how the data will be centralized, safeguarded, and retrievable during leadership changes (1-page maximum). Please name the file Data_Collection_Storage_Plan.pdf . If this attachment is not included, the application will be considered incomplete and will not be reviewed.

Dissemination Plan (1-page maximum). The application must provide a specific plan to disseminate nationally any findings or materials developed under the auspices of the program. Examples of dissemination may include data or materials from successful training or mentoring interventions via web postings, presentations at scientific meetings, and/or workshops. Please name the file Dissemination_Plan.pdf . If this attachment is not included, the application will be considered incomplete and will not be reviewed.

The filename provided for each Other Attachment will be the name used for the bookmark in the electronic application in eRA Commons.

SF424(R&R) Senior/Key Person Profile Expanded
Follow all instructions provided in the SF424 (R&R) Application with the following modifications:

Biographical sketch. The personal statement should describe a commitment to scientific rigor, training, mentoring, and to promoting inclusive and supportive scientific environments.

PHS 398 Cover Page Supplement
Follow all instructions provided in the SF424 (R&R) Application.

PHS 398 Training Subaward Budget Attachment(s)
Follow all instructions provided in the SF424 (R&R) Application Guide.

Training Budget
Follow all instructions provided in the SF424 (R&R) Application Guide with the following additional modifications:

- Include all allowable categories of funds requested to support trainees in the program.
- As per the instructions, request actual amounts for tuition/fees and provide justification. The amounts may be adjusted at the time of award.
- Include all personnel other than the Training PD(s)/PI(s) in the Other Personnel section, including Program Coordinators, clerical, and administrative staff.

PHS 398 Research Training Program Plan
The PHS 398 Research Training Program Plan Form is comprised of the following sections:

- Training Program
- Faculty, Trainees, and Training Record
- Other Training Program Sections
- Appendix Note that the Appendix should only be used in circumstances covered in the NIH policy on appendix materials or if the FOA specifically instructs applicants to do so.

Follow all instructions provided in the SF424 (R&R) Application Guide with the following additional modifications:

Particular attention must be given to the required Training Data Tables (//grants.nih.gov/grants/guide/url_redirect.htm?id=61169) for new predoctoral applications (Tables: 1, 2, 3, 4, 5A, 6A, and 8A Part III). In the Program Plan, the application should summarize key data from the tables that highlight the characteristics of the applicant pool, participating faculty, institutional support, student outcomes, and other factors that contribute to the overall training environment of the program.

Training Program

Follow all training instructions for NIH in the SF424 (R&R) application guide except where instructed to do otherwise.

Program Plan

The Program Plan attachment is required and must adhere to the NIH Table of Page Limits, as well as the organization and instructions provided below. Do not follow the organization and instructions provided in the in the SF424 (R&R) application guide for the Program Plan attachment; instead applicants must use the instructions below. Start each section with the appropriate heading.

Rationale, Mission, Objectives, and Overall Training Plan

Applications must include the rationale for the proposed diversity enhancing training program as well as the feasibility of success in the context of the trainee pool and institutional setting. The application should describe how the IMSD program will develop a diverse pool of well-trained scientists who have the technical, operational and professional skills required to conduct research in an ethically responsible and rigorous manner and to enter careers in the biomedical research workforce as delineated in the Program Objective. The application should describe how the program will improve the training environment and not simply provide financial support to graduate trainees from diverse backgrounds. Specifically, the application should describe the following:

- The rationale for the proposed diversity enhancing research training program. The application should describe the current institutional efforts to promote diversity and to create inclusive training environments, and how the IMSD program will enhance, but not duplicate, these efforts. The application must demonstrate the presence of a sufficient number of potential trainees, including those from underrepresented groups (Table 1 and 6A (https://grants.nih.gov/grants/forms/data-tables.htm)), and of faculty mentors/participating faculty in the appropriate biomedical fields (Tables 2 and 4 (https://grants.nih.gov/grants/forms/data-tables.htm)). The application must demonstrate the existence of sufficient resources to achieve the training objectives (Table 3 (https://grants.nih.gov/grants/forms/data-tables.htm)). The rationale for the program should expand upon the *Training Outcome* data requested below that provides institutional baseline data on previous student outcomes comparing success rates for groups that are well-represented and underrepresented in the biomedical research workforce (see NIH s Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)).
- The training mission (i.e., broad statement of purpose of the program), and objectives (i.e., specific measurable outcomes the program intends to achieve). The baseline data, the trainee pool, and institutional context should inform the objectives and the design of the proposed program activities. Objectives should include, but not be limited to, Ph.D. completion rates and appropriate time-to-degree. The program-specific mission and objectives should align with the Overarching Objective of this funding announcement described above.
- How the courses, structured activities, and research experiences will accomplish the specific training mission and objectives. Explain how these training activities are designed to develop the technical, operational, and professional skills of trainees (applications must include the Required Training Activities appendix to provide material for required training activities and may include the Elective Activities appendix for up to four additional activities.
- How the training activities will employ evidence-based approaches to trainee learning, mentorship, inclusion, and professionaldevelopment.
- The activities that will build a strong cohort of research-oriented individuals while enhancing the science identity, self-efficacy, and a sense of belonging among the cohort members.
- The trainees academic and research background needed to pursue the proposed training and plans to accommodate differences in preparation among trainees (e.g., training and mentoring interventions provided in the summer before starting graduate courses and throughout the graduate experience).
- Representative examples of training programs for individual trainees. Examples may include degree requirements, didactic courses, laboratory experiences, qualifying examinations, and program specific training or mentoring activities. Describe how each trainee's program will be guided, and how the trainee's performance will be monitored and evaluated. Discuss the anticipated time required to complete the training program up to degree attainment.
- Institutions with NIGMS funded predoctoral T32 training programs must justify the need for the IMSD and explain the ways that the IMSD program plan is distinct from, but will share resources and synergize with, other NIGMS-funded predoctoral training programs at the same institution (i.e., NIGMS predoctoral training programs listed in Table 3 (https://grants.nih.gov/grants/forms/data-tables.htm)). See the "Program Considerations" in Section I, above.
- How the training activities will be available to other trainees in the program(s), department(s) or institution(s) from which the supported trainees are drawn.
- For multi-disciplinary and/or multi-departmental programs, indicate how the individual disciplinary and/or departmental components of the program are integrated and coordinated and how they will relate to an individual trainee's experience.

Career Development

The application should describe the following:

- How the pool of potential applicants and trainees will be provided with information about the career outcomes of graduates of the program (including on publicly accessible websites) and about the overall biomedical research workforce employment landscape;
- How trainees in the program will be provided with adequate and appropriate information regarding the variety of careers in the biomedical research workforce for which their training would be useful;
- How trainees will learn the skills, knowledge, and steps needed to attain positions in the sectors of the biomedical research workforce that are of interest to them; and
- How the training program or institution will provide experiential learning opportunities (e.g., internships, shadowing, informational interviews, teaching opportunities) that allow trainees to develop the professional skills and networks necessary to transition into careers in the biomedical research workforce.

Program Oversight, Participating Faculty Selection, and Mentor Training

The application should include the planned strategy and administrative structure to oversee and monitor the program and to ensure appropriate and timely trainee progress for the duration of the trainees' graduate careers (the application may include the "Evaluation and Assessment Instruments" Appendix to provide blank rubrics or forms). The application should describe how the participating faculty are trained to ensure the use of evidence-based teaching, training, and mentoring practices that promote the development of trainees from all backgrounds, including trainees from underrepresented groups in the biomedical sciences (NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)). The application should describe the following:

- How the program will ensure that participating faculty employ the highest standards of scientific rigor and impart those standards to their trainees;
- How the program will ensure that participating faculty reinforce and augment the curricular material on responsible conduct of research and methods for enhancing reproducibility;
- The mechanism for matching trainees with the appropriate participating faculty (e.g., laboratory rotations, faculty forums, and interviews);
- How the program will ensure that participating faculty engage in activities that promote trainee career development (including but not limited to the utilization of Individual Development Plans) and fulfill the need of the trainees to obtain their Ph.D. degrees in a timely fashion with the skills, credentials, and experiences to transition into careers in the biomedical research workforce that are consistent with the trainees interests and values; and

A mechanism to monitor mentoring, including oversight of the effectiveness of the trainee/participating faculty match, and a plan for removing faculty displaying unacceptable mentorship qualities from the training program (the application may include the appendix labeled Conflict Resolution Protocols to provide details of the plan).

If a program coordinator or administrator position is planned to enhance oversight, a description of the person's administrative capabilities that are essential to coordinate the program must be included in the application.

Institutional and Departmental Commitment to the Program

The application should describe how the level of institutional and departmental commitment to research and training excellence will promote the success of the trainees and training program. A letter providing assurances of the institutional commitment must be included in the Letters of Support section of the application. Detailed instructions on the types of support are found below in the *Letters of Support* section of the FOA.

Training Program Director(s)/Principal Investigator(s) (PD(s)/PI(s))

The application should describe how the Training Program PD(s)/PI(s) will promote the success of the trainees and training program. NIGMS encourages multiple PD(s)/PI(s) (MPI), particularly when each brings a unique perspective and skill set that will enhance training as described in the Eligible Individuals section above. The application should expand on the information in the biosketch(es) to address how the PD/PI or PD/PI team has:

- The administrative and training experience to provide strong leadership, direction, management, and administration of the proposed research training program;
- The time to commit sufficient effort to ensure the program s success given other professional obligations (the application should indicate the program director's effort in person months in the proposed program);
- At least one member who has scientific expertise in the biomedical sciences and who has a record of using rigorous and transparent methods in experimental design, data collection, analysis and reporting;
- A demonstrated commitment to training the next generation of the biomedical research workforce, leading recruitment efforts to enhance diversity, and fostering inclusive research environments. As with all participating faculty, the PD(s)/PI(s) should have received training on how to effectively mentor trainees from all backgrounds, e.g. trainees from groups underrepresented in the biomedical sciences (NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)); and
- The application must also describe the administrative structure and leadership succession plan for critical positions (e.g., PD(s)/PI(s)).

Preceptors/Mentors (Participating Faculty)

The application should describe how the participating faculty will promote the success of the trainees and training program. Describe how the program has or will build a diverse team of participating faculty (e.g., individuals from underrepresented backgrounds, women, and faculty at different career stages) to help trainees gain access to potential role models within the training program and to enhance the excellence of the training environment. Summarize and expand on the material presented in the Training Tables 2 and 4 (https://grants.nih.gov/grants/forms/data-tables.htm) and biosketches. The application should address how the participating faculty:

- Have sufficient time to commit to training given their other professional obligations;
- Receive training in effective, evidence-based mentoring and teaching practices;
- Cooperate, interact, and collaborate (which can include joint sponsorship of trainee research);
- Promote the development of trainee skills in approaches to rigorous experimental design, methods of data collection, data analysis and interpretation, and reporting;
- Provide opportunities for trainees to initiate, conduct, interpret, and present rigorous, reproducible, and responsible biomedical research with increasing self-direction;
- Demonstrate a commitment to effective mentoring and to promoting inclusive, safe, and supportive scientific and training environments; and
- Are evaluated as mentors and teachers.

Trainee Positions, Recruitment, Retention

Through the narrative and summaries of the information presented in the required Training Tables (https://grants.nih.gov/grants/forms/data-tables.htm) and the attachments, the following areas relevant to trainees should be addressed:

- Provide a strong justification for the number of requested trainee positions in the context of other NIGMS-funded training grants at the institution. Describe the characteristics of the applicant pool, applicants eligible for support, and the percentage of training eligible students supported though the training program (Table 6A (https://grants.nih.gov/grants/forms/data-tables.htm)). Describe the strategies to provide financial support to the trainees when they are not appointed to the training grant (e.g., funds from fellowships, research grants, institutional endowments);
- Expand upon the recruitment plan to enhance diversity (provided in Other Attachments) and explain how it will identify and recruit a diverse pool of potential candidates from a wide variety of institution types and backgrounds (with a focus on identifying effective recruitment strategies for individuals from underrepresented groups in the biomedical sciences, NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)). Program candidates should have the potential to strongly benefit from, and with proper training and support, succeed in the program. Information on dimensions of diversity not included in the training tables (e.g., trainees from disadvantaged backgrounds) can be incorporated into the narrative;
- Describe the plans for a holistic candidate review process (i.e., a process that considers metrics beyond undergraduate institution, GPA, and standardized test scores) that will select a diverse group of promising trainees who have taken advantage of the research opportunities available to them and are committed to contributing to the biomedical research enterprise;
- Define and justify the selection and re-appointment criteria for trainees in the training program (appointment procedure protocols must be provided in the "Trainee Appointment Procedures" appendix); and
- Expand upon the trainee retention plan (provided in the Other Attachments) and describe how it will promote the well-being and success of all trainees throughout their graduate training.

Training Outcomes

This section is intended to provide previous trainee outcomes for the program described in the proposal (or for newly proposed programs describing outcomes for students in similar programs at the institution). The application should provide information below about recent graduate outcomes through narrative descriptions and a summary of the data presented in the NIH Training Tables (https://grants.nih.gov/grants/forms/data-tables.htm). Although the training tables for new applications only allow for five years of recent graduate outcomes, applicants may describe up to 15 years of outcomes in the narrative. The applicant should describe the following:

- Aggregate data on the diversity of the trainees, including demographic data (see NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html); data should be provided in Table 6 (https://grants.nih.gov/grants/forms/data-tables.htm)A and the narrative);
- Evidence that recent graduates conducted rigorous research that advanced scientific knowledge and/or technologies, with increasing self-direction (including peer-reviewed publications in Table 5A (https://grants.nih.gov/grants/forms/data-tables.htm) and other measures of scientific accomplishment appropriate to the field);
- The rate of Ph.D. degree attainment and time-to-degree for recent graduates. In the narrative, clearly explain how the time-to-degree was calculated, including the training start and endpoints. The application must include detailed outcome data regarding the number of students who graduated with a Ph.D. (obtained goal), remain in the Program (in training), or withdrew from the program (attrition) in the body of the text;
- A description or analysis of how the Ph.D. degree attainment and time-to-degree data for recent program graduates from underrepresented groups (NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)) (//grants.nih.gov/grants/guide/notice-files/NOT-OD-15-053.html) compares to the data for recent graduates from well-represented groups; and
- The success of recent graduates transitioning to careers in the biomedical research workforce (Table 8A (https://grants.nih.gov/grants/forms/data-tables.htm) Part III).

Program Evaluation and Dissemination

NIGMS funded training programs must conduct ongoing evaluations to monitor the success of the training and mentoring activities. The application should:

- Describe the evaluation or assessment process to determine whether the overall program is effective in meeting its training mission and objectives, and whether the scientific research climate is inclusive, safe, and supportive of trainee development (the application may include the "Evaluation and Assessment Instruments" appendix to provide blank survey instruments, rubrics or forms);
- Detail the plans for being responsive to internal and external outcomes analyses, critiques, surveys and evaluations;
- Expand upon the information in the *Outcomes Data Collection and Storage Plan attachment and explain how the* plan *will effectively* track trainee and career outcomes, provide information to prospective and current trainees about outcomes, and ensure the data collection and storage methods will be safeguarded and preserved; and
- Expand upon the information in the *Dissemination Plan* attachment to explain how the PD(s)/PI(s) will share the outcomes of the training or mentoring interventions with the broader community.

Plan for Instruction in the Responsible Conduct of Research

Individuals are required to comply with the instructions for Plan for Instruction in the Responsible Conduct of Research as provided in the SF424 (R&R) Application Guide, along with the following additional instructions:

Describe how the Responsible Conduct of Research (RCR) components are integrated into the overall curriculum, i.e., how they are taught at multiple stages of trainee development and in a variety of formats and contexts. Explain how the teaching of RCR synergizes with elements of the curriculum designed to enhance the trainees ability to conduct rigorous and reproducible research. Describe how all participating faculty will reiterate and augment key elements of responsible conduct when trainees are performing mentored research in their laboratories.

Plan for Instruction in Methods for Enhancing Reproducibility

Applicants are required to provide a Plan for Instruction in Methods for Enhancing Reproducibility using the following instructions:

A Plan for Instruction in Methods for Enhancing Reproducibility attachment is required (not to exceed three pages). The plan must describe how trainees will be instructed in principles important for enhancing research reproducibility including, at a minimum, critical evaluation of foundational research underlying a project, rigorous experimental design and data interpretation, consideration of relevant biological variables such as sex, authentication of key biological and/or chemical resources, data and material sharing, record keeping, and transparency in reporting. Applicants are encouraged to consult the NIGMS clearinghouse for training modules to enhance data reproducibility (https://www.nigms.nih.gov/training/pages/clearinghouse-for-

training-modules-to-enhance-data-reproducibility.aspx) and other resources when developing the plans. Describe how instruction strategies are sufficiently well integrated into the overall curriculum, that is, how they are taught at multiple stages of trainee development and in a variety of formats and contexts. Describe how all participating faculty will reiterate and augment key elements of methods for enhancing scientific rigor and reproducibility when trainees are performing research in their laboratories.

Faculty, Trainees, And Training Record Section

Participating Faculty Biosketches

Participating faculty should provide a personal statement within their biosketches that describes the appropriateness of their research background for the proposed training program, and their commitment to the following:

- Training, mentoring, and promoting inclusive, safe, and supportive research environments;
- Maintaining a record of, and providing training in rigorous and unbiased experimental design, methodology, analysis, interpretation, and reporting of results;
- Supporting trainees participating in activities required to identify and transition into careers in the biomedical research workforce that are consistent with the trainees skills, interests, and values; and
- Fulfilling the need of the trainees to complete their Ph.D. degrees in a timely fashion with the skills, credentials, and experiences to transition into careers in the biomedical research workforce.

Letters of Support

Combine all Letters of Support into a single PDF file.

Institutional Support Letter (10-page maximum).

The application must include a signed letter on institutional letterhead from a President, Provost, Dean, or similar key institutional leader that describes the activities and resources provided by the institution that will ensure the success of the planned training program and its trainees. As applicable, the letter should address how the institution: promotes a culture in which the highest standards of scientific rigor, reproducibility and responsible conduct are advanced; provides opportunities for early stage faculty and those with a hiatus in research support to participate in training; supports core facilities and technology resources that can be used to enhance training; provides adequate staff, facilities, and educational resources to the planned program; supports the PDs/PIs and other key staff associated with the planned training program; ensures that faculty have protected time available to devote to mentoring, training and research; fosters and rewards excellence in training and mentoring (for example, through institutional policies); provides support for remediation or removal of Participating Faculty who are poorly performing mentors; promotes diversity and inclusion at all levels of the research training environment (trainees, staff, faculty, and leadership); ensures that the research and clinical facilities as well as the laboratory and clinical practices promote the safety of trainees; ensures that the research and clinical facilities are accessible to trainees with disabilities; promotes a positive, supportive and inclusive research, clinical and training environment for individuals from all backgrounds; ensures that proper policies, procedures, and oversight are in place to prevent discriminatory harassment and other discriminatory practices and to appropriately respond to allegations of such discriminatory practices, including providing any required notifications to NIH (e.g., requesting a change of PD/PI status; see NOT-OD-15-152 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-152.html) and NOT-OD-18-172 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-172.html)); ensures that trainees will continue to be supported when they transition from the training grant to other funding sources; and provides resources and expertise for evaluating the training outcomes of the program. For institutions that have multiple graduate training programs, the letter should also explain how the programs will synergize and share resources when appropriate, and how the training faculty, pool of potential trainees, and resources are sufficiently robust to support both the proposed and existing programs. All information related to institutional support, as defined above, must be included within the 10-page limit of this letter. If this letter is not included, the application will be considered incomplete and will not be reviewed.

Institutional Eligibility Letter (1-page maximum).

The Provost or similar official with institution-wide responsibility must certify that all the components of the institution together received support from the NIH totaling greater than or equal to $7.5 million per year (in both direct and F&A/indirect costs) in the past 3 years, as described in Section III, "Eligible Organization". If this attachment is not included, the application will be considered incomplete and will not be reviewed.

Other Letters of Support.

Additional letters of support for (such as those from partner institutions or organizations) are permitted; however, these letters may not contain any information required in the Institutional Support Letter.

Data Tables

The application must include the required Training Data Tables (https://grants.nih.gov/grants/guide/url_redirect.htm?id=61169) for new applications for predoctoral programs (Tables: 1, 2, 3, 4, 5A, 6A, and 8A Part III). Applications that do not contain these tables, or submit any additional tables in this section, will be considered noncompliant and will not be reviewed.

Appendix

Limited items are allowed in the Appendix. Follow all instructions for the Appendix as described in the SF424 (R&R) Application Guide; any instructions provided here are in addition to theSF424 (R&R) Application Guide instructions.

The Appendix is meant to provide additional details to the following topics, but not meant to substitute for clear descriptions in the body of the application. Do not include items other than the allowable materials described below, as doing so will result in administrative withdrawal of the application. A summary sheet listing all the items included in the Appendix may be included in the first Appendix attachment.

The following are required Appendix materials:

- Required Training Activities. To adequately assess the content of the didactic portion of the training program, the application must provide syllabi/outlines of all required training activities (e.g., syllabi for courses, mentor training materials, professional development workshops, career exploration opportunities, skills development activities).
- Responsible Conduct of Research Syllabi. In addition to the Plan for Instruction in the Responsible Conduct of Research (described above), the application must provide syllabi/outlines of materials relating to Responsible Conduct of Research and descriptions of when in the trainees career path the material is taught.
- Trainee Selection and Appointment Procedures (3-page maximum). The application must outline the criteria for trainee selection from the training grant eligible pool and the process for trainee appointment. Materials may include, but not be limited to appointment protocols and/or blank applications.

The following are allowable Appendix materials:

- Elective Activities. The application may include summary content from up to four additional elective courses and/or training activities (e.g., syllabi or summaries for courses, mentor training materials, outlines of professional development workshops, career exploration opportunities, or skills development activities).
- Evaluation and Assessment Instruments. The application may provide blank surveys, rubrics, and/or forms used to (a) document and monitor trainee progress and (b) determine whether the training and research environment is effective, inclusive, safe, and supportive.
- Conflict Resolution Protocols (3-page maximum). The application may provide detailed protocols for addressing problems with trainee and faculty matches, removal of faculty from the training program with unacceptable training/mentoring skills and for conflict resolutions for multi PD(s)/PI(s) and mentor/mentee relationships.

Applications that exceed the number of allowed appendices or the page limitation of any of the allowed materials will be considered noncompliant and will not be reviewed.

PHS Assignment Request Form
All instructions in the SF424 (R&R) Application Guide must be followed.

3. Unique Entity Identifier and System for Award Management (SAM)

See Part 1. Section III.1 for information regarding the requirement for obtaining a unique entity identifier and for completing and maintaining active registrations in System for Award Management (SAM), NATO Commercial and Government Entity (NCAGE) Code (if applicable), eRA Commons, and Grants.gov

4. Submission Dates and Times

Part I. Overview Information contains information about Key Dates and times. Applicants are encouraged to submit applications before the due date to ensure they have time to make any application corrections that might be necessary for successful submission. When a submission date falls on a weekend or Federal holiday (https://grants.nih.gov/grants/guide/url_redirect.htm?id=82380), the application deadline is automatically extended to the next business day.

Organizations must submit applications to Grants.gov (//grants.nih.gov/grants/guide/url_redirect.htm?id=11128) (the online portal to find and apply for grants across all Federal agencies). Applicants must then complete the submission process by tracking the status of the application in the eRA Commons (//grants.nih.gov/grants/guide/url_redirect.htm?id=11123), NIH's electronic system for grants administration. NIH and Grants.gov systems check the application against many of the application instructions upon submission. Errors must be corrected and a changed/corrected application must be submitted to Grants.gov on or before the application due date and time. If a Changed/Corrected application is submitted after the deadline, the application will be considered late. Applications that miss the due date and time are subjected to the NIH Policy on Late Application Submission.

Applicants are responsible for viewing their application before the due date in the eRA Commons to ensure accurate and successful submission.

Information on the submission process and a definition of on-time submission are provided in the SF424 (R&R) Application Guide.

5. Intergovernmental Review (E.O. 12372)

This initiative is not subject to intergovernmental review. (//grants.nih.gov/grants/guide/url_redirect.htm?id=11142)

6. Funding Restrictions

All NIH awards are subject to the terms and conditions, cost principles, and other considerations described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11120). The National Research Service Award (NRSA) policies (//grants.nih.gov/grants/guide/url_redirect.htm?id=41171) apply to this program. An NRSA appointment may not be held concurrently with another Federally sponsored fellowship, traineeship, or similar Federal award that provides a stipend or otherwise duplicates provisions of the NRSA.

Pre-award costs are allowable only as described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11143). Note, however, that pre-award costs are not allowable charges for stipends or tuition/fees on institutional training grants because these costs may not be charged to the grant until a trainee has actually been appointed and the appropriate paperwork submitted to the NIH awarding component.

7. Other Submission Requirements and Information

Applications must be submitted electronically following the instructions described in the SF424 (R&R) Application Guide. Paper applications will not be accepted.

Applicants must complete all required registrations before the application due date. Section III. Eligibility Information contains information about registration.

For assistance with your electronic application or for more information on the electronic submission process, visit Applying Electronically (//grants.nih.gov/grants/guide/url_redirect.htm?id=11144). If you encounter a system issue beyond your control that threatens your ability to complete the submission process on-time, you must follow the Guidelines for Applicants Experiencing System Issues (//grants.nih.gov/grants/ElectronicReceipt/support.htm#guidelines). For assistance with application submission, contact the Application Submission Contacts in Section VII.

Important reminders:

All PD(s)/PI(s) must include their eRA Commons ID in the Credential field of the Senior/Key Person Profile Component of the SF424(R&R) Application Package. Failure to register in the Commons and to include a valid PD/PI Commons ID in the credential field will prevent the successful submission of an electronic application to NIH.

The applicant organization must ensure that the DUNS number it provides on the application is the same number used in the organization's profile in the eRA Commons and for the System for Award Management (SAM). Additional information may be found in the SF424 (R&R) Application Guide.

See more tips (//grants.nih.gov/grants/guide/url_redirect.htm?id=11146) for avoiding common errors.

Upon receipt, applications will be evaluated for completeness and compliance with application instructions by the Center for Scientific Review, NIH. Applications that are incomplete or non-compliant will not be reviewed.

Requests of $500,000 or more for direct costs in any year

Applicants requesting $500,000 or more in direct costs in any year are not required to contact a Scientific/ Research Contact (https://grants.nih.gov/grants/guide/pa-files/par-17-068.html#_Section_VII._Agency) prior to submitting an application. The Policy on the Acceptance for Review of Unsolicited Applications that Request $500,000 or More in Direct Costs as described in the SF424 (R&R) Application Guide is not applicable to this FOA.

Add any other Submission Requirements and Information here, include heading (use Heading 4 Style) and description. Do not include information about the CONTENT and FORM of the application, which should instead be placed above in Section IV.2. Content and Form.

Post Submission Materials

Add modifications only if your FOA will deviate from the Policy by adding bullets describing the modification.

Applicants are required to follow the instructions for post-submission materials, as described in the policy (//grants.nih.gov/grants/guide/url_redirect.htm?id=82299). Any instructions provided here are in addition to the instructions in the policy.

Section V. Application Review Information

1. Criteria

Only the review criteria described below will be considered in the review process. As part of the NIH mission (//grants.nih.gov/grants/guide/url_redirect.htm?id=11149), all applications submitted to the NIH in support of biomedical and behavioral research are evaluated for scientific and technical merit through the NIH peer review system.

Overall Impact

Reviewers will provide an overall impact score to reflect their assessment of the likelihood that the proposed training program will produce a diverse pool of well-trained scientists with the technical (e.g., appropriate methods, technologies, and quantitative/computational approaches), operational (e.g., independent knowledge acquisition, rigorous experimental design, and interpretation of data), and professional (e.g., management, leadership, communication, and teamwork) skills necessary to conduct rigorous and reproducible research, and transition into careers in the biomedical research workforce, in consideration of the following review criteria and additional review criteria (as applicable for the project proposed).

Specifically, do the courses, structured training activities, mentoring, and research experiences equip the trainees with:

- A broad understanding across biomedical disciplines, and the skills to independently acquire the knowledge needed to advance their chosen field;
- The ability to think critically and independently and to identify important biomedical research questions and approaches that push forward the boundaries of their areas of study;
- A strong foundation in scientific reasoning, rigorous research design, experimental methods, quantitative and computational approaches, as well as data analysis and interpretation;
- A commitment to approaching and conducting biomedical research responsibly, ethically, and with integrity;
- Experience initiating, conducting, interpreting, and presenting rigorous and reproducible biomedical research with increasing self-direction;
- The ability to work effectively in teams with colleagues from diverse backgrounds, and to promote an inclusive and supportive scientific research environment;
- The skills to teach and communicate scientific research methodologies and findings to a wide variety of audiences (e.g., discipline-specific, across disciplines, and the public); and
- The knowledge, professional skills and experiences required to identify and transition into careers in the biomedical research workforce (i.e., the breadth of careers that sustain biomedical research in areas that are relevant to the NIH mission)?

Scored Review Criteria

Reviewers will consider each of the review criteria below in the determination of the merit of the training program and give a separate score for each. An application does not need to be strong in all categories to be judged likely to have major scientific impact.

Training Program and Environment

Rationale, Mission, Objectives, and Overall Training Plan

- Does the application provide a compelling rationale for the proposed research training program? Specifically, does the proposed program demonstrate the presence of a sufficient pool of potential trainees from diverse backgrounds, including those from underrepresented groups (Table 1 and 6A), participating faculty with the appropriate scientific expertise (Tables 2 and 4), and resources to achieve the training objectives (Table 3)?
- Are the mission and objectives for the training program specific and measurable and in alignment with the goal of producing a diverse pool of well-trained scientists with the technical, operational, and professional skills necessary to transition into careers in the biomedical research workforce?
- Will the courses, structured training activities, mentoring, and research experiences achieve the stated mission and objectives of the training program (material provided in the "Required Training Activities appendix)?
- Does the training program plan provide a compelling explanation of how the courses, structured training activities, mentoring, and research experiences are likely to enhance the success of the trainees?
- Does the program employ modern, evidence-based approaches to training, mentorship, inclusion, and professional development?
- Are the activities likely to build a strong cohort of research-oriented individuals while enhancing the science identity, self-efficacy, and a sense of belonging among the cohort members?
- Are there plans to accommodate differences in preparation among trainees?
- Does the application provide examples of how each trainee's progress will be guided and how the trainee's performance and skills development will be monitored and evaluated?
- If the institution has multiple NIGMS-funded predoctoral training programs, is there a strong justification for the need for the proposed IMSD program? Does the application describe how the IMSD program is distinct from, but planning to share resources and synergize with other NIGMS-funded predoctoral training programs at the institution (listed in Table 3, and reinforced in the Institutional Support Letter in the Letters of Support section)?
- Is it clear how the proposed program will enhance the research training environment and not simply provide financial assistance for the trainees?
- Is it clear how the training activities will be available to other students in the program(s), department(s) or institution(s) from which the trainees are drawn?
- For multi-disciplinary and/or multi-departmental programs, is it clear how the individual disciplinary and/or departmental components of the program are integrated and coordinated and how each will relate to an individual trainee's experience?

Career Development

- Will the applicants and trainees be provided with information about the career outcomes of graduates of the program and about the overall biomedical research workforce employment landscape?
- Will the trainees be provided with adequate and appropriate information regarding the wide variety of careers in the biomedical research workforce for which their training may be useful?
- Will the trainees learn the skills, knowledge, and steps needed to attain positions in the sectors of the biomedical research workforce that are of interest to them?
- Will the training program or institution provide experiential learning opportunities (e.g., internships, shadowing, informational interviews) that allow trainees to develop the professional skills and networks necessary to transition into careers in the biomedical research workforce?

Program Oversight, Participating Faculty Selection, and Mentor Training

- Does the application describe an effective strategy and administrative structure to oversee and monitor the program to ensure appropriate and timely trainee progress for the duration of the trainees' graduate careers?
- Is selection of the participating faculty based on a commitment to training and mentoring, and not simply research productivity?
- Will the participating faculty be trained to ensure the use of evidence-based teaching and mentoring practices that promote the development of trainees from all backgrounds?
- Do the potential mentors have a record of employing the highest standards of rigor and transparency in their research and have plans to impart those standards to their trainees?
- Will the program ensure that participating faculty reinforce and augment the curricular material on responsible conduct of research and methods for enhancing rigor and reproducibility?
- Is there a clear mechanism for matching the trainees with appropriate participating faculty (e.g., laboratory rotations, faculty forums and interviews)?
- Is there a plan to ensure that faculty engage in activities that promote trainee career development (including but not limited to the utilization of Individual Development Plans) and fulfill the need of the trainees to obtain their Ph.D. degrees in a timely fashion with the skills, credentials, and experiences to transition into careers in the biomedical research workforce that are consistent with the trainees interests and values?
- Is there a mechanism to monitor mentoring, including oversight of the effectiveness of the trainee/participating faculty match, and a plan for removing participating faculty displaying unacceptable mentorship qualities from the training program?
- If a program coordinator or administrator position is planned, is there a description of the person's administrative capabilities that are essential to coordinate the program?

Institutional and Departmental Commitment to the Program

- Will the institutional and departmental commitment to research and training excellence promote the success of the trainees and training program?
- Is there clear institutional commitment to develop and promote a culture in which the highest standards of scientific rigor, reproducibility, and responsible conduct of research are advanced?
- Does the institution provide opportunities for early stage faculty and those with a hiatus in research support to participate in training? Are the core facilities and technology resources necessary for the success of the program well supported?
- Is there adequate support of the PD(s)/PI(s) and other key staff, facilities, and educational resources associated with the training program?
- Do faculty have sufficient protected time available to devote to training and mentoring activities?
- Is there evidence that the institution fosters and rewards excellence in training and mentoring (for example, through institutional policies)?Are diversity and inclusion promoted at all levels of the research training environment (trainees, staff, faculty, and leadership)?
- Is there evidence that the research facilities and laboratory practices ensure the safety of trainees?
- Are the research facilities accessible to trainees with disabilities?
- Are appropriate policies and procedures in place to protect trainees from harassment and other prohibited practices?
- Is there a commitment to ensure that trainees will continue to be supported when they transition from the training grant to other sources of support?
- Are there resources and the expertise for evaluating the training outcomes of the program?
- Does the program plan describe the changes the graduate program(s), department(s), and/or the institution(s) will make to better support the goals of the training program?
- If a program coordinator or administrator position is planned, is there a description of the person's administrative capabilities that are essential to coordinate the program?

Training Program Director(s)/Principal Investigator(s) (PD(s)/PI(s))

- Do the PD(s)/PI(s) have the administrative and training experience to provide strong leadership, direction, management, and administration of the proposed research training program?
- Is there evidence of a successful past training record of the PD(s)/PI(s), including the success of former trainees in seeking independent support and establishing productive scientific careers?

- Do the PD(s)/PI(s) have the time to commit sufficient effort to ensure the program's success, given their other professional obligations?
- Does at least one member of the PD/PI team have a demonstrated record of using rigorous and transparent methods in experimental design, data collection, analysis, and reporting in a biomedical field?
- Have the PD(s)/PI(s) received training on how to effectively mentor trainees, including those from underrepresented groups, and promote inclusive, safe, and supportive research training environments?
- Do the PD(s)/PI(s) have a demonstrated commitment to training the next generation of the biomedical research workforce, leading recruitment efforts to enhance diversity, and fostering inclusive research environments?
- Does the application describe the administrative structure and leadership succession plan for critical positions (e.g., PD/PI)?
- For applications designating multiple PD(s)/PI(s):
- Will the multiple PD/PI leadership approach benefit the trainees and enhance the ability of the program to achieve its training goals?
- Is there a clear leadership plan including the designated roles and responsibilities, governance, conflict resolution procedures, and organizational structure (see Multiple PD/PI Leadership Plan section)?

Preceptors/Mentors (Participating Faculty)

- Do the participating faculty have a record of rigorous and unbiased experimental design, methodology, analysis, interpretation, and reporting of results?
- Do the participating faculty have adequate funding and the appropriate scientific expertise (Tables 2, 3, 4, and Participating Faculty Biosketches)?
- Do the participating faculty have a record of conducting ethically sound and responsible scientific research?
- Do the selected participating faculty come from diverse backgrounds, for example, individuals from groups underrepresented in the biomedical sciences, women, as well as faculty at different career stages (i.e., junior and senior faculty)? If not, are there plans to recruit faculty to enhance the diversity?
- Do the participating faculty have the time to commit sufficient effort to ensure trainee development and success, given their other professional obligations?
- Is there evidence that the participating faculty cooperate, interact, and collaborate (which can include joint sponsorship of trainee research)?
- Do the participating faculty provide opportunities for trainees to initiate, conduct, interpret, and present rigorous and reproducible biomedical research with increasing self-direction?
- Do the participating faculty have plans for ensuring their trainees develop skills in approaches to experimental design, as well as methods of data collection, analysis, interpretation, and reporting?
- Do the participating faculty demonstrate a commitment to effective mentoring and promoting inclusive and supportive scientific and training environments?
- Do the participating faculty express a willingness to engage in conversations with trainees about their career goals and options and to support trainees participating in activities required to identify and transition into careers in the biomedical research workforce that are consistent with the trainees skills, interests, and values?
- Do the participating faculty have a commitment to fulfilling the need of the trainees to obtain their Ph.D. degrees in a timely fashion with the skills, credentials, and experiences to transition into careers in the biomedical research workforce?

Trainee Positions, Recruitment, and Retention

- Does the application provide a strong justification for the number of positions given the pool of potential trainees, and the expressed institutional support for trainees when they are not supported by the training grant (Table 1, Table 6A, Institutional Support Letter)?
- Is the recruitment plan likely to identify and attract a broad and diverse group of candidates to apply to the program, including individuals from a wide variety of institution types and backgrounds (see NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)) with the potential to strongly benefit from, and with proper training and support, succeed in the training program (Tables 6A and the "Recruitment Plan to Enhance Diversity" attachment)?
- Is a holistic candidate review process proposed (i.e., a process that considers metrics beyond undergraduate institution, GPA, and standardized test scores) that will allow a broad group of trainees, who have taken advantage of the research opportunities available to them and are committed to contributing to the biomedical research enterprise, the ability to participate in the training program?
- Are there well-defined and justified selection and re-appointment criteria for trainees in the training program?
- Is there an adequate, evidence-based retention plan to ensure the well-being and success of all trainees throughout their graduate training (see the "Trainee Retention Plan" attachment)?

Training Record

Training Outcomes

- Does the program provide evidence that trainees conducted rigorous research that advanced scientific knowledge and/or technologies with increasing self-direction (e.g., peer-reviewed publications listed in Table 5A, and other accomplishments appropriate to the field)?
- Does the application contain information about the current rate of Ph.D. degree attainment and time-to-degree for trainees?
- Are completion rates and time-to-degree for trainees from underrepresented groups (NIH's Interest in Diversity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-210.html)) comparable to those from well-represented groups?
- Are the trainees transitioning to careers in the biomedical research workforce (i.e., the breadth of careers involved in the conduct and support of biomedical research in areas that are relevant to the NIH mission; Training Table 8A Part III)?

Program Evaluation and Dissemination

- Is there a well thought out evaluation or assessment process to determine whether the overall program is effective in meeting its training mission and short, intermediate and long-term objectives, and whether the training and scientific research climates are inclusive and supportive of trainee development?
- Is there evidence that the program has been and/or will be responsive to internal and external critiques and evaluations?
- Are effective mechanisms in place for obtaining feedback from current and former trainees?
- Does the training program have a plan to track trainee outcomes and make the data publicly available on the institution's website (narrative and "*Outcomes Data Collection and Storage Plan*" attachment)?
- Does the training program have a plan to ensure the preservation of and access to program data (narrative and "Outcomes Data Collection and Storage Plan" attachment)?
- Does the application provide an effective plan to share the outcomes of the training or mentoring interventions with the broader community (narrative and Dissemination Plan attachment)?

Additional Review Criteria

As applicable for the project proposed, reviewers will evaluate the following additional items while determining scientific and technical merit, and in providing an overall impact score, but will not give separate scores for these items.

Protections for Human Subjects

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Inclusion of Women, Minorities, and Children

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Vertebrate Animals

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Biohazards

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Resubmissions

For Resubmissions, the committee will evaluate the application as now presented, taking into consideration the responses to comments from the previous scientific review group and changes made to the project.

Renewals

Not Applicable

Revisions

Not Applicable

Additional Review Considerations

As applicable for the project proposed, reviewers will consider each of the following items, but will not give scores for these items, and should not consider them in providing an overall impact score.

Recruitment Plan to Enhance Diversity

Peer reviewers will separately evaluate the recruitment plan to enhance diversity after the overall score has been determined. Reviewers will examine the strategies to be used to recruit a diverse pool of potential candidates that includes individuals from underrepresented groups. The overall plan will be rated as ACCEPTABLE only if the recruitment strategies for all of the relevant groups identified in the NIH Interest in Diversity are viewed by the review panel as acceptable; otherwise the plan will be rated as UNACCEPTABLE. The consensus of the review committee will be included in an administrative note in the summary statement.

Training in the Responsible Conduct of Research

All applications for support under this FOA must include a plan to fulfill NIH requirements for instruction in the Responsible Conduct of Research (RCR). Taking into account the specific characteristics of the training program, the level of trainee experience, and the particular circumstances of the trainees, the reviewers will evaluate the adequacy of the proposed RCR training in relation to the following five required components: 1) **Format** - Does the plan satisfactorily address the format of instruction, e.g., lectures, coursework, and/or real-time discussion groups, including face-to-face interaction? (A plan involving only on-line instruction is not acceptable); 2) **Subject Matter** Do the plan and syllabus provided in the appendix include a sufficiently broad selection of subject matter, such as conflict of interest, authorship, data management, human subjects and animal use, laboratory safety, research misconduct, and research ethics? 3) **Faculty Participation** - Does the plan adequately describe how faculty will participate in the instruction? 4) **Duration of Instruction** - Does the plan meet the minimum requirements for RCR, i.e., at least eight contact hours of instruction? 5) **Frequency of Instruction** Does the plan meet the minimum requirements for RCR, i.e., at least once during each career stage (undergraduate, post-baccalaureate, predoctoral, postdoctoral, and faculty levels) and at a frequency of no less than once every four years?

Are the RCR components sufficiently well integrated into the overall curriculum? Are they taught at multiple stages of trainee development and in a variety of formats and contexts? Does the teaching of RCR synergize with elements of the curriculum designed to enhance trainees abilities to conduct rigorous and reproducible research? Is there evidence that all participating faculty reiterate and augment key elements of responsible conduct when trainees are performing mentored research in their laboratories?

The plan will be rated as ACCEPTABLE or UNACCEPTABLE, and the summary statement will provide the consensus of the review committee.

Training in Methods for Enhancing Reproducibility

Does the Instruction in Methods for Enhancing Reproducibility plan describe how trainees will be instructed in principles important for enhancing research reproducibility including, at a minimum, critical evaluation of foundational research underlying a project, rigorous experimental design, consideration of relevant biological variables such as sex, authentication of key biological and/or chemical resources, data and material sharing, record keeping, and transparency in reporting? Are the rigor and transparency components sufficiently well integrated into the overall curriculum? Are they taught at multiple stages of trainee development and in a variety of formats and contexts? Does the teaching synergize with elements of the curriculum designed to enhance the trainees ability to conduct responsible research? Is there evidence that all participating faculty reiterate and augment key elements of methods for enhancing reproducibility when trainees are performing mentored research in their laboratories? The plan will be rated as ACCEPTABLE or UNACCEPTABLE, and the summary statement will provide the consensus of the review committee.

Select Agent Research

Generally, not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Budget and Period of Support

Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research training program.

2. Review and Selection Process

Applications will be evaluated for scientific and technical merit by (an) appropriate Scientific Review Group(s), convened by the NIGMS Office of Scientific Review (https://www.nigms.nih.gov/training/pages/ReviewProcess.aspx) in accordance with NIH peer review policy and procedures (//grants.nih.gov/grants/guide/url_redirect.htm?id=11154), using the stated review criteria. Assignment to a Scientific Review Group will be shown in the eRA Commons. Site visits may be employed as part of this process; however, applicants should not assume that site visits are automatic.

As part of the scientific peer review, all applications:

- May undergo a selection process in which only those applications deemed to have the highest scientific and technical merit (generally the top half of applications under review) will be discussed and assigned an overall impact score.
- Will receive a written critique.

Applications will be assigned on the basis of established PHS referral guidelines to the appropriate NIH Institute or Center. Applications will compete for available funds with all other recommended applications. Following initial peer review, recommended applications will receive a second level of review by the appropriate national Advisory Council or Board. The following will be considered in making funding decisions:

- Scientific and technical merit of the proposed project as determined by scientific peer review.
- Availability of funds.
- Relevance of the proposed project to program priorities.
- Geographic distribution of the NIGMS training grant portfolio.

3. Anticipated Announcement and Award Dates

After the peer review of the application is completed, the PD/PI will be able to access his or her Summary Statement (written critique) via the eRA Commons (//grants.nih.gov/grants/guide/url_redirect.htm?id=11123). Refer to Part 1 for dates for peer review, advisory council review, and earliest start date

Information regarding the disposition of applications is available in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11156).

Section VI. Award Administration Information

1. Award Notices

If the application is under consideration for funding, NIH will request "just-in-time" information from the applicant as described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11157).

A formal notification in the form of a Notice of Award (NoA) will be provided to the applicant organization for successful applications. The NoA signed by the grants management officer is the authorizing document and will be sent via email to the grantee's business official.

Awardees must comply with any funding restrictions described in Section IV.5. Funding Restrictions. Selection of an application for award is not an authorization to begin performance. Any costs incurred before receipt of the NoA are at the recipient's risk. These costs may be reimbursed only to the extent considered allowable pre-award costs.

Any application awarded in response to this FOA will be subject to terms and conditions found on the Award Conditions and Information for NIH Grants (//grants.nih.gov/grants/guide/url_redirect.htm?id=11158) website. This includes any recent legislation and policy applicable to awards that is highlighted on this website.

2. Administrative and National Policy Requirements

All NIH grant and cooperative agreement awards include the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11120) as part of the NoA. For these terms of award, see the *NIH Grants Policy Statement* Part II: Terms and Conditions of NIH Grant Awards, Subpart A: General (//grants.nih.gov/grants/guide/url_redirect.htm?id=11157) and Part II: Terms and Conditions of NIH Grant Awards, Subpart B: Terms and Conditions for Specific Types of Grants, Grantees, and Activities (//grants.nih.gov/grants/guide/url_redirect.htm?id=11159). More information is provided at Award Conditions and Information for NIH Grants (//grants.nih.gov/grants/guide/url_redirect.htm?id=11158).

Recipients of federal financial assistance (FFA) from HHS must administer their programs in compliance with federal civil rights law. This means that recipients of HHS funds must ensure equal access to their programs without regard to a person's race, color, national origin, disability, age and, in some circumstances, sex and religion. This includes ensuring your programs are accessible to persons with limited English proficiency. HHS recognizes that research projects are often limited in scope for many reasons that are nondiscriminatory, such as the principal investigator's scientific interest, funding limitations, recruitment requirements, and other considerations. Thus, criteria in research protocols that target or exclude certain populations are warranted where nondiscriminatory justifications establish that such criteria are appropriate with respect to the health or safety of the subjects, the scientific study design, or the purpose of the research.

For additional guidance regarding how the provisions apply to NIH grant programs, please contact the Scientific/Research Contact that is identified in Section VII under Agency Contacts of this FOA. HHS provides general guidance to recipients of FFA on meeting their legal obligation to take reasonable steps to provide meaningful access to their programs by persons with limited English proficiency. Please see http://www.hhs.gov/ocr/civilrights/resources/laws/revisedlep.html. The HHS Office for Civil Rights also provides guidance on complying with civil rights laws enforced by HHS. Please see http://www.hhs.gov/ocr/civilrights/understanding/section1557/index.html (https://www.hhs.gov/ocr/civilrights/understanding/section1557/index.html); and http://www.hhs.gov/ocr/civilrights/understanding/index.html (https://www.hhs.gov/ocr/civilrights/understanding/index.html). Recipients of FFA also have specific legal obligations for serving qualified individuals with disabilities. Please see http://www.hhs.gov/ocr/civilrights/understanding/disability/index.html (https://www.hhs.gov/ocr/civilrights/understanding/disability/index.html). Please contact the HHS Office for Civil Rights for more information about obligations and prohibitions under federal civil rights laws at http://www.hhs.gov/ocr/office/about/rgn-hqaddresses.html (https://www.hhs.gov/ocr/office/about/rgn-hqaddresses.html) or call 1-800-368-1019 or TDD 1-800-537-7697. Also note it is an HHS Departmental goal to ensure access to quality, culturally competent care, including long-term services and supports, for vulnerable populations. For further guidance on providing culturally and linguistically appropriate services, recipients should review the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care at http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53 (https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53).

In accordance with the statutory provisions contained in Section 872 of the Duncan Hunter National Defense Authorization Act of Fiscal Year 2009 (Public Law 110-417), NIH awards will be subject to the Federal Awardee Performance and Integrity Information System (FAPIIS) requirements. FAPIIS requires Federal award making officials to review and consider information about an applicant in the designated integrity and performance system (currently FAPIIS) prior to making an award. An applicant, at its option, may review information in the designated integrity and performance systems accessible through FAPIIS and comment on any information about itself that a Federal agency previously entered and is currently in FAPIIS. The Federal awarding agency will consider any comments by the applicant, in addition to other information in FAPIIS, in making a judgement about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 45 CFR Part 75.205 Federal awarding agency review of risk posed by applicants. This provision will apply to all NIH grants and cooperative agreements except fellowships.

Institutional NRSA training grants must be administered in accordance with the current NRSA section of the *NIH Grants Policy Statement* - Institutional Research Training Grants (//grants.nih.gov/grants/guide/url_redirect.htm?id=61170).

The taxability of stipends is described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=41171). Policies regarding the Ruth L. Kirschstein-NRSA payback obligation are explained in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=41171).

Inventions and Copyrights

Awards made primarily for educational purposes are exempted from the PHS invention requirements and thus invention reporting is not required, as described in the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=61131).

Cooperative Agreement Terms and Conditions of Award

Not Applicable

3. Reporting

When multiple years are involved, awardees will be required to submit the Research Performance Progress Report (RPPR) (//grants.nih.gov/grants/rppr/index.htm) annually. Funded programs are expected to provide evidence of accomplishing the training objectives in progress reports and upon renewal. Continuation support will not be provided until the required forms are submitted and accepted. Awardees must submit the Data Table 8A with the RPPR.

NIH policy requires the submission of an annual Federal Financial Report (FFR) (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_11/11.3_institutional_research_training_grants.htm?tocpath=11%20Ruth%20L.%20Kirschstein%20National%20Research%20Service%20Awards%7C11.3%20Institutional%20Research%20Training%20Grants%7C11.3.13%20Reporting%20Requirements%7C_____5#11.3.13.5_Federal_Financial_Report_(FFR)) 90 days after the end of the calendar quarter in which the budget period ends. The FFR must be submitted through the eRA Commons (Commons); see NIH Guide Notice NOT-OD-11-017 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-11-017.html) for additional information on this electronic submission requirement and due dates. Failure by the grantee institution to submit required forms in a timely, complete, and accurate manner may result in an expenditure disallowance or a delay in any continuation funding for the award.

The Federal Funding Accountability and Transparency Act of 2006 (Transparency Act), includes a requirement for awardees of Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY2011 or later. All awardees of applicable NIH grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.fsrs.gov (//grants.nih.gov/grants/guide/url_redirect.htm?id=11170) on all subawards over $25,000. See the *NIH Grants Policy Statement* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11171) for additional information on this reporting requirement.

Other Reporting Requirements

- The institution must submit a completed Statement of Appointment (PHS Form 2271 (//grants.nih.gov/grants/guide/url_redirect.htm?id=61189)) for each trainee appointed or reappointed to the training grant for 8 weeks or more. Grantees must submit the PHS 2271 data electronically using the xTrain system. More information on xTrain is available at xTrain (eRA Commons) (//grants.nih.gov/grants/guide/url_redirect.htm?id=41183). An appointment or reappointment may begin any time during the budget period, but not before the budget period start date of the grant year.
- A notarized statement verifying possession of permanent residency documentation must be submitted with the Statement of Appointment (PHS Form 2271 (//grants.nih.gov/grants/guide/url_redirect.htm?id=61189)). Individuals with a Conditional Permanent Resident status must first meet full (non-conditional) Permanent Residency requirements before receiving support.
- Termination Notice: Within 30 days of the end of the total support period, the institution must submit a Termination Notice (PHS Form 416-7 (//grants.nih.gov/grants/guide/url_redirect.htm?id=41179)) via xTrain (//grants.nih.gov/grants/guide/url_redirect.htm?id=41183) for each trainee appointed for eight weeks or more.

A final RPPR, the expenditure data portion of the Federal Financial Report, and Termination Notices for all trainees, are required for closeout of an award as described in the NIH Grants Policy Statement (//grants.nih.gov/grants/guide/url_redirect.htm?id=11161).

In accordance with the regulatory requirements provided at 45 CFR 75.113 and Appendix XII to 45 CFR Part 75, recipients that have currently active Federal grants, cooperative agreements, and procurement contracts from all Federal awarding agencies with a cumulative total value greater than $10,000,000 for any period of time during the period of performance of a Federal award, must report and maintain the currency of information reported in the System for Award Management (SAM) about civil, criminal, and administrative proceedings in connection with the award or performance of a Federal award that reached final disposition within the most recent five-year period. The recipient must also make semiannual disclosures regarding such proceedings. Proceedings information will be made publicly available in the designated integrity and performance system (currently FAPIIS). This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available. Full reporting requirements and procedures are found in Appendix XII to 45 CFR Part 75 Award Term and Conditions for Recipient Integrity and Performance Matters.

4. Evaluation

In carrying out its stewardship of human resource-related programs, the NIH may request information essential to an assessment of the effectiveness of this program from databases and from participants themselves. Participants may be contacted after the completion of this award for periodic updates on various aspects of their employment history, publications, support from research grants or contracts, honors and awards, professional activities, and other information helpful in evaluating the impact of the program.

Within ten years of making awards under this program, NIH will assess the program's overall outcomes, gauge its effectiveness in enhancing diversity, and consider whether there is a continuing need for the program. Upon the completion of this evaluation, NIH will determine whether to (a) continue the program as currently configured, (b) continue the program with modifications, or (c) discontinue the program.

The overall evaluation of the program will be based on metrics that will include, but are not limited to, the following:

- Institution types represented
- Geographical distribution of programs
- Demographics of trainees
- Trainee Ph.D. completion rates
- Time-to-degree
- Scientific accomplishments of trainees
- Trainee career outcomes

Section VII. Agency Contacts

We encourage inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants.

Application Submission Contacts

eRA Commons Help Desk (Questions regarding eRA Commons registration, submitting and tracking an application, documenting system problems that threaten submission by the due date, post submission issues)
Finding Help Online: http://grants.nih.gov/support/ (//grants.nih.gov/support/) (preferred method of contact)

Telephone: 301-402-7469 or 866-504-9552 (Toll Free)

Grants.gov Customer Support (//grants.nih.gov/grants/guide/url_redirect.htm?id=82301) (Questions regarding Grants.gov registration and submission, downloading forms and application packages)
Contact Center Telephone: 800-518-4726
Email: support@grants.gov (mailto:support@grants.gov)

GrantsInfo (Questions regarding application instructions and process, finding NIH grant resources)
Email: GrantsInfo@nih.gov (mailto:GrantsInfo@nih.gov) (preferred method of contact)

Telephone: 301-945-7573

Scientific/Research Contact(s)

Sailaja Koduri, Ph.D.
National Institute of General Medical Sciences
Telephone: 301-594-3900
Email: Sailaja.Koduri@nih.gov (mailto:Sailaja.Koduri@nih.gov)

Veerasamy Ravichandran, Ph.D.
National Institute of General Medical Sciences
Telephone: 301-451-9822
Email: veerasamy.ravichandra@nih.gov (mailto:veerasamy.ravichandra@nih.gov)

Peer Review Contact(s)

Stephanie Constant, Ph.D.
National Institute of General Medical Sciences
Phone: 301-594-3663
Email: stephanie.constant@nih.gov (mailto:stephanie.constant@nih.gov)

Financial/Grants Management Contact(s)

Justin Rosenzweig
National Institute of General Medical Sciences
Telephone: 301-594-0158
Email: rosenzwj@nigms.nih.gov (mailto:rosenzwj@nigms.nih.gov)

Section VIII. Other Information

Recently issued trans-NIH policy notices (//grants.nih.gov/grants/guide/url_redirect.htm?id=11163) may affect your application submission. A full list of policy notices published by NIH is provided in the *NIH Guide for Grants and Contracts* (//grants.nih.gov/grants/guide/url_redirect.htm?id=11164). All awards are subject to the terms and conditions, cost principles, and other considerations described in the NIH Grants Policy Statement (//grants.nih.gov/grants/guide/url_redirect.htm?id=11120).

Authority and Regulations

Awards are made under the authorization of Section 487 of the Public Health Service Act as amended (42 USC 288) and under Federal Regulations 42 CFR 66.

EXHIBIT C

[redacted]

DIVISION OF PHYSICAL AND BIOLOGICAL SCIENCES – OFFICE OF THE DEAN

TO ACCEPT THIS APPOINTMENT, please reply to this email *as soon as possible.*
Before accepting, please carefully read the notice below, including referenced attachments and/or links, with particular attention to the sections under RESPONSIBILITIES and TERMS OF EMPLOYMENT. Failure to accept an entire appointment may nullify the offer in its entirety.

October 1, 2024

Dear [redacted]

I am pleased to offer you an appointment as a Graduate Student Researcher –Trainee in the Chemistry and Biochemistry Department. Please note that you must complete any required employment forms before performing any work.

The effective dates of your appointment will be October 1, 2024 through December 31, 2024. As a first year rotation student, you will initially be reporting to the Graduate Program Assistant Director, Professor [redacted] at the Physical Sciences building on the [redacted] Main Campus. Your contact for general questions is [redacted]

WORK ASSIGNMENT
Your graduate student research duties will initially be to conduct imaging mass spectrometry experiments on bacterial-fungal interactions and liquid chromatography experiments to elucidate bioactive molecules.

SALARY
Your 50% GSR-Trainee appointment is made at GSR salary point 5 which has an annual salary rate of $93,184 (12-month basis); the prorated monthly salary for this salary point is $3,882.67.

The compensation for this appointment combines the funding you receive from the IMSD NIH Institutional T32 Grant and a monthly GSR Supplement in the amount of $1,530.67. Both your stipend and GSR Supplement will be paid monthly through the [redacted] Payroll System and are subject to any deductions that may be required by applicable State and Federal laws and regulations, and those of the University.

PAYROLL
Employment Forms: If this is your first appointment with the University, or you have had a break in service, you must contact [redacted] of the Physical and Biological Sciences Division to schedule an appointment to complete the required employment forms. The employment forms must be completed no later than the first day of this appointment. The scheduled release date of your first paycheck assumes timely completion and processing of all required employment forms. You are not permitted to begin work prior to completing the required forms.

Work Authorization: This offer of employment is contingent upon your ability to prove that you are authorized to work in the United States, as required by the Immigration Reform and Control Act of 1986.

Direct Deposit: Please note that [redacted] direct deposit information expires 60 days following an employee's separation date and is not automatically reactivated upon reappointment. All returning employees should review their direct deposit information online[redacted] to add or make updates as needed.

REPRESENTED POSITION AND UNION MEMBERSHIP
Your position is covered by a collective bargaining agreement between the [redacted] and the United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW). A copy of the collective bargaining agreement is available at: [redacted] Pursuant to this agreement, the University is required to release names and department addresses of all GSRs to the UAW each quarter.

A link to the UAW 4811 website is: https://www.uaw4811.org/. You may contact the UAW for assistance.

You will receive a DocuSign invitation to complete a UAW Local 4811 Membership Election Form. You may also find the UAW membership election form at [redacted]

WORKLOAD
Your workload shall be in accordance with Article[redacted] - Time and Effort Commitment. Any work assignment, including required training, orientation, required meetings, and/or required conferences, shall be included in the total workload for the appointment period.

RESPONSIBILITIES
New Employee Orientation: If this is your first GSR appointment at [redacted], you are required to attend a 30 minute UAW orientation. UAW orientation schedules are posted each term at [redacted]

GSR Duties: You are required to be responsive to work-related inquiries from your supervisor and provide them ready access to all data or assigned work products. If you do not understand the expectations of assigned tasks, procedures, or deadlines, or need additional training or support, please reach out to your supervisor immediately. The duties and expectations specific to this appointment may be described further in a Description of Duties form or other communication provided by your supervisor.

Attendance: You are expected to work your regularly assigned schedule and to generally be available as business requires during the workweek, with an emphasis placed on meeting your assigned responsibilities. For any scheduled workday, should you be late or absent for any reason, you must notify your supervisor in advance, whenever possible. Requests for a family or medical leave of absence pursuant to Article 18 should be made to APO Leaves a[redacted]

Leave and Absence Reporting: You are responsible for submitting a timesheet[redacted] each month by the established due date, even if you have no absences or leave to report. Your timesheet must accurately report any leaves, personal time off (PTO), and/or other absences. Failure to report an absence from work in any circumstance may result in an overpayment of public funds requiring your repayment. Submitting erroneous information in the time and attendance system will be subject to your submission being overridden and pay withheld for the time not worked. Failing to accurately report leave in any way and receiving an overpayment of funds is a serious violation of university policy that may result in disciplinary action, up to and including dismissal.

Required Training: You are required to complete any assigned training, including any online training courses (e.g. [redacted] Preventing Harassment & Discrimination), required for your employment.

TERMS OF EMPLOYMENT

Academic Eligibility: Your appointment is subject to regular review by the Graduate Division. To be eligible for this appointment, you must be currently registered and meet the academic requirements as outlined in the Graduate Student Handbook.

Employment Standing: This offer of employment is contingent on remaining in good employment standing. Appointments are dependent on maintaining satisfactory performance and adherence to the provisions of the collective bargaining agreement, including, but not limited to No-Strikes, Non-Discrimination, and Respectful Work Environment articles as well as University policies, procedures, and conduct standards applicable to your position, including the conduct and ethical standards addressed in [redacted] and those set forth in the Graduate Student Handbook and those required by your department/division.

Compliance: As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.

Conflict of Interest: The State of California requires that we inform all academic appointees of the Political Reform Act of 1974. This Act prohibits public officials from participating in governmental decisions when personal financial interests may be affected by those decisions. The Act requires that all government employees and officials disqualify themselves from participating in a governmental decision when a financial conflict of interest is present.

Conflict of Interest Related to Consensual Relationships (Policy [redacted]): You are responsible for complying with the Conflict of Interest Related to Consensual Relationships Policy , which applies to all types of conflicts of interest created by consensual relationships within the University community where an individual has responsibility for supervising, directing, overseeing, evaluating and/or advising the other(s).

FEE REMISSIONS

As a GSR with eligible appointments totaling 25% or more of full-time, you are entitled to 100% remission of tuition and eligible fees charged during the academic year. The fees included in the fee remission are the: (1) Student Services Fee, (2) premium for the Student Health Insurance Program (SHIP), and (3) 100% partial fee remission toward campus fees as set forth in the collective bargaining agreement.

Students receiving need-based financial aid may contact the Financial Aid Office to discuss the effect of this employment on the financial aid award.

ACCOMMODATIONS

All-gender Restrooms and Lactation Rooms: A GSR who anticipates a need for access to an all-gender restroom or lactation room should refer to Article [redacted] - Non-Discrimination in Employment for the applicable process. [redacted]'s interactive map [redacted] displays the all-gender restrooms and lactation rooms located on campus.

Reasonable Accommodation: GSRs who are disabled or become disabled should notify their supervisor or department to request reasonable accommodations, in advance of their start date or any time during their appointment in accordance with Article [redacted] - Reasonable Accommodation. At [redacted], requests for reasonable accommodation should be submitted to Disability Management Services. When possible, requests should be made in advance of the appointment.

CHILDCARE BENEFIT
GSRs with eligible appointments totaling 25% or more of full-time are eligible to participate in a campus childcare reimbursement program. Refer to Article [redacted]- Childcare for eligibility and additional details. Refer to the Graduate Student Childcare, Reimbursement Programs webpage for information on the campus program.

PERSONAL TIME OFF
Eligible GSRs may request the use of Personal Time Off (PTO) days, in accordance with Article[redacted] - Personal Time Off. Your GSR PTO balance for this appointment is 3 days.

Employment File and Human Resources Contact
An employment file has been established for you and will be maintained by the Physical and Biological Sciences Division. New material may be added to your employment file periodically during the term of your appointment, and you will be notified of any such additions. If you would like to review your employment file or have questions regarding this appointment, please contact the individual who emailed you this offer letter.

We are pleased to have you with us and hope your assignment is productive and fulfilling.

Sincerely,

[redacted]
Dean
Physical and Biological Sciences

[redacted]

EXHIBIT D

From: **McIntyre, Jeremy (NIH/NIGMS) [E]** jeremy.mcintyre@nih.gov
Subject: Re [redacted]
Date: January 7, 2025 at 1:22 PM
To: [redacted]
Cc: [redacted] NIGMS GM eRA Notifications (NIH/NIGMS) gmeranotifications@od.nih.gov, Moy, Jun (NIH/NIGMS) [E] moyj@nigms.nih.gov

Dear [redacted]
I am pleased to inform you that the above referenced grant has been approved for funding – congratulations!

The projected trainee slot numbers are:

- Year 1: 6
- Future year positions are subject to the availability of funds and satisfactory progress of the project.

The Notice of Grant Award should be issued in the coming weeks, and nothing is official until that is received.

Feel free to familiarize yourself with our answers to FAQs about NIGMS training programs as this has important information regarding the administration of NIGMS training grants, and reach out to me or the grants management specialist (cc'd) if there are any questions.

Cheers,
Jeremy

Jeremy McIntyre, Ph.D. (He/Him)
Program Director
Division of Training and Workforce Development
National Institute of General Medical Sciences
National Institutes of Health
Email: Jeremy.mcintyre@nih.gov
Updates to GRISE/IMSD/B2D Applications on/after 1/25/25
New Training Table Guidance for Applications on/after 1/25/25
Summary of Changes Feedback Loop
Upcoming updates to NIGMS Undergraduate Training Grants

EXHIBIT E

[redacted]

DIVISION OF PHYSICAL AND BIOLOGICAL SCIENCES – OFFICE OF THE DEAN [redacted]

REVISED LETTER: See italicized revisions

TO ACCEPT THIS APPOINTMENT, please reply to this email *as soon as possible*.
Before accepting, please carefully read the notice below, including referenced attachments and/or links, with particular attention to the sections under RESPONSIBILITIES and TERMS OF EMPLOYMENT. Failure to accept an entire appointment may nullify the offer in its entirety.

January 31, 2025
October 1, 2024

Dear [redacted]

I am pleased to offer you an appointment as a Graduate Student Researcher –Trainee in the Chemistry and Biochemistry Department. Please note that you must complete any required employment forms before performing any work.

The effective dates of your appointment will be October 1, 2024 through ***January 31, 2025***. As a first year rotation student, you will initially be reporting to the Graduate Program Assistant Director, Professor [redacted] at the Physical Sciences Building on the [redacted] Main Campus. Your contact for general questions is [redacted]

WORK ASSIGNMENT
Your graduate student research duties will initially be to conduct imaging mass spectrometry experiments on bacterial-fungal interactions and liquid chromatography experiments to elucidate bioactive molecules, ***as well as synthesizing kainoid derivatives and in vitro screened novel substrates for activity.***

SALARY
Your 50% GSR-Trainee appointment is made at GSR salary point 5 which has an annual salary rate of $93,184 (12-month basis); the prorated monthly salary for this salary point is $3,882.67.

The compensation for this appointment combines the funding you receive from the IMSD NIH Institutional T32 Grant and a monthly GSR Supplement in the amount of $1,530.67. Both your stipend and GSR Supplement will be paid monthly through the [redacted] Payroll System and are subject to any deductions that may be required by applicable State and Federal laws and regulations, and those of the University.

PAYROLL
Employment Forms: If this is your first appointment with the University, or you have had a break in service, you must contact [redacted] of the Physical and Biological Sciences Division to schedule an appointment to complete the required employment forms. The employment forms must be completed no later than the first day of this appointment. The scheduled release date of your first paycheck assumes timely completion and processing of all required employment forms. You are not permitted to begin work prior to completing the required forms.

Work Authorization: This offer of employment is contingent upon your ability to prove that you are authorized to work in the United States, as required by the Immigration Reform and Control Act of 1986.

Direct Deposit: Please note that [redacted] direct deposit information expires 60 days following an employee's separation date and is not automatically reactivated upon reappointment. All returning employees should review their direct deposit information online in [redacted] to add or make updates as needed.

REPRESENTED POSITION AND UNION MEMBERSHIP
Your position is covered by a collective bargaining agreement between [redacted] and the United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW). A copy of the collective bargaining agreement is available at: [redacted] Pursuant to this agreement, the University is required to release names and department addresses of all GSRs to the UAW each quarter.

A link to the UAW 4811 website is: https://www.uaw4811.org/. You may contact the UAW for assistance.

You will receive a DocuSign invitation to complete a UAW Local 4811 Membership Election Form. You may also find the UAW membership election form at [redacted]

WORKLOAD
Your workload shall be in accordance with Article [redacted] - Time and Effort Commitment. Any work assignment, including required training, orientation, required meetings, and/or required conferences, shall be included in the total workload for the appointment period.

RESPONSIBILITIES
New Employee Orientation: If this is your first GSR appointment at [redacted] you are required to attend a 30 minute UAW orientation. UAW orientation schedules are posted each term at [redacted]

GSR Duties: You are required to be responsive to work-related inquiries from your supervisor and provide them ready access to all data or assigned work products. If you do not understand the expectations of assigned tasks, procedures, or deadlines, or need additional training or support, please reach out to your supervisor immediately. The duties and expectations specific to this appointment may be described further in a Description of Duties form or other communication provided by your supervisor.

Attendance: You are expected to work your regularly assigned schedule and to generally be available as business requires during the workweek, with an emphasis placed on meeting your assigned responsibilities. For any scheduled workday, should you be late or absent for any reason, you must notify your supervisor in advance, whenever possible. Requests for a family or medical leave of absence pursuant to Article [redacted] should be made to APO Leaves at [redacted]

Leave and Absence Reporting: You are responsible for submitting a timesheet in [redacted] each month by the established due date, even if you have no absences or leave to report. Your timesheet must accurately report any leaves, personal time off (PTO), and/or other absences. Failure to report an absence from work in any circumstance may result in an overpayment of public funds requiring your repayment. Submitting erroneous information in the time and attendance system will be subject to your submission being overridden and pay withheld for the time not worked. Failing to accurately report leave in any way and receiving an overpayment of funds is a serious violation of university policy that may result in disciplinary action, up to and including dismissal.

Required Training: You are required to complete any assigned training, including any online training courses (e.g. [redacted] Preventing Harassment & Discrimination), required for your employment.

TERMS OF EMPLOYMENT

Academic Eligibility: Your appointment is subject to regular review by the Graduate Division. To be eligible for this appointment, you must be currently registered and meet the academic requirements as outlined in the Graduate Student Handbook.

Employment Standing: This offer of employment is contingent on remaining in good employment standing. Appointments are dependent on maintaining satisfactory performance and adherence to the provisions of the collective bargaining agreement, including, but not limited to No-Strikes, Non-Discrimination, and Respectful Work Environment articles as well as University policies, procedures, and conduct standards applicable to your position, including the conduct and ethical standards addressed in [redacted] Policy [redacted] and those set forth in the Graduate Student Handbook and those required by your department/division.

Compliance: As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.

Conflict of Interest: The State of [redacted] requires that we inform all academic appointees of the Political Reform Act of 1974. This Act prohibits public officials from participating in governmental decisions when personal financial interests may be affected by those decisions. The Act requires that all government employees and officials disqualify themselves from participating in a governmental decision when a financial conflict of interest is present.

Conflict of Interest Related to Consensual Relationships (Policy [redacted]): You are responsible for complying with the Conflict of Interest Related to Consensual Relationships Policy , which applies to all types of conflicts of interest created by consensual relationships within the University community where an individual has responsibility for supervising, directing, overseeing, evaluating and/or advising the other(s).

FEE REMISSIONS

As a GSR with eligible appointments totaling 25% or more of full-time, you are entitled to 100% remission of tuition and eligible fees charged during the academic year. The fees included in the fee remission are the: (1) Student Services Fee, (2) premium for the Student Health Insurance Program (SHIP), and (3) 100% partial fee remission toward campus fees as set forth in the collective bargaining agreement.

Students receiving need-based financial aid may contact the Financial Aid Office to discuss the effect of this employment on the financial aid award.

ACCOMMODATIONS

All-gender Restrooms and Lactation Rooms: A GSR who anticipates a need for access to an all-gender restroom or lactation room should refer to Article [redacted] - Non-Discrimination in Employment for the applicable process. [redacted]s interactive map [redacted] displays the all-gender restrooms and lactation rooms located on campus.

Reasonable Accommodation: GSRs who are disabled or become disabled should notify their supervisor or department to request reasonable accommodations, in advance of their start date or any time during their appointment in accordance with Article [redacted] - Reasonable Accommodation. [redacted] requests for reasonable

accommodation should be submitted to Disability Management Services. When possible, requests should be made in advance of the appointment.

CHILDCARE BENEFIT
GSRs with eligible appointments totaling 25% or more of full-time are eligible to participate in a campus childcare reimbursement program. Refer to Article [redacted] - Childcare for eligibility and additional details. Refer to the Graduate Student Childcare, Reimbursement Programs webpage for information on the campus program.

PERSONAL TIME OFF
Eligible GSRs may request the use of Personal Time Off (PTO) days, in accordance with Article [redacted] - Personal Time Off. Your GSR PTO balance for this appointment is ***4*** days.

Employment File and Human Resources Contact
An employment file has been established for you and will be maintained by the Physical and Biological Sciences Division. New material may be added to your employment file periodically during the term of your appointment, and you will be notified of any such additions. If you would like to review your employment file or have questions regarding this appointment, please contact the individual who emailed you this offer letter.

We are pleased to have you with us and hope your assignment is productive and fulfilling.

Sincerely,

[redacted]

Dean
Physical and Biological Sciences

[redacted]

EXHIBIT F

From: **Gibbs, Kenneth (NIH/NIGMS) [E]** kenneth.gibbs@nih.gov
Subject: NIGMS Funding Update
Date: April 2, 2025 at 10:35 AM
To: [redacted]

Re: [redacted]

Dear [redacted]

I am writing to let you know that due to changes in NIH/HHS priorities, the **Initiative for Maximizing Student Development (IMSD)** program has been terminated. Your institution can continue to draw funds on any active award for allowed costs that are within scope and consistent with the Grants Policy Statement. Further awards will not be made, and NIGMS will not permit no-cost extensions. We advise against recruiting future cohorts.

NIGMS grants management will follow up if there is any specific information or action needed regarding your award. For additional information regarding funding opportunities that NIGMS supports, see NIGMS TWD Webpage: https://www.nigms.nih.gov/training/Pages/TWDPrograms.

If you have specific follow up questions, please email nigmstrainingmail@nigms.nih.gov and include your grant number.

Kenneth D. Gibbs, Jr., PhD, MPH
Director, Division of Training and Workforce Development
National Institute of General Medical Sciences
National Institutes of Health