NIGMS Training, Workforce Development and Diversity Programs

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Awards for Individuals – Finding the Funding Opportunity Announcement

• Most NIGMS individual awards use the “parent” Funding Opportunity – published by the Office of Extramural Research

• Exceptions: MOSAIC and PRAT
Visit the NIH Webpage for Parent FOAs
https://researchtraining.nih.gov/programs
Read the Funding Announcement

Department of Health and Human Services
Part 1. Overview Information

Participating Organization(s)
National Institutes of Health (NIH)

Components of Participating Organizations
National Cancer Institute (NCI)
National Eye Institute (NEI)
National Heart, Lung, and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
National Institute on Deafness and Other Communication Disorders (NIDCD)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
National Institute on Drug Abuse (NIDA)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of Mental Health (NIMH)
National Institute on Minority Health and Health Disparities (NIMHD)
National Institute of Neurological Disorders and Stroke (NINDS)
National Institute of Nursing Research (NINR)
National Library of Medicine (NLM)
National Center for Complementary and Integrative Health (NCCIH)
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP)

Special Note: Not all NIH Institutes and Centers participate in Parent Announcements. Applicants should carefully note which ICs participate in this announcement and view their respective areas of research interest and requirements at the Table of IC-Specific Information, Requirements, and Staff Contacts website. ICs that do not participate in this announcement will not consider applications for funding. Consultation with NIH staff before submitting an application is strongly encouraged.

Funding Opportunity Title
Ruth L. Kirschstein National Research Service Award (NRSA)
Individual Predoctoral Fellowship (Parent F31)
Keep in mind the deadlines: 1-3 per year

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<tr>
<th>K series</th>
<th>Research Career Development</th>
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<tr>
<td>renewal, resubmission, revision</td>
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<tr>
<td>F Series Fellowships (including F31 Diversity – NOT-00-17-029) new, renewal, resubmission</td>
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<td><strong>Individual National Research Service Awards (Standard)</strong></td>
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<td>(see NRSA Training Page)</td>
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<tr>
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<th>March 12</th>
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<td>April 8</td>
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[Google search for NIH application deadlines]
Getting started with an individual award – Are you ready?

Do you have:
- A research sponsor?
- A feasible scientific project that addresses a need or barrier in biomedicine?
- Strong training potential in the current research environment?
- Plans for a career as a research scientist?
NIGMS Diversity Supplement Program

- Work with a Principal Investigator who has an active NIGMS research grant to submit a request for an administrative diversity supplement to the grant
- Use the parent FOA but be sure to contact the program contact first: NIGMS-DSP@nigms.nih.gov
- Applications accepted on a rolling basis
Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity)

Individualized, mentored research training from outstanding faculty sponsors while conducting well-defined research projects in scientific health-related fields relevant to NIGMS.
NRSA Individual Predoctoral MD/PhD or Other Dual-Doctoral Degree Fellowships for Students at Institutions Without NIH-Funded Institutional Predoctoral Dual-Degree Training Programs (Parent F30)

For students in combined M.D.-Ph.D. (or other dual-doctoral degree, such as D.O.-Ph.D., D.D.S.-Ph.D. and D.V.M.-Ph.D.) programs at institutions that are not currently supported by the NIH-funded Medical Scientist Training Program.
Individual Awards for Postdoctoral Fellows, Early Career, and Faculty

Individual Postdoctoral National Research Service Award (NRSA) (Parent F32)
To support postdoctoral fellows to receive advanced and specialized training in basic and/or clinical research through an intensive, mentored research project experience that encourages the development of independence, innovation and creativity in a highly productive research setting.

Individual Senior NRSA Fellowships (Parent F33)
To support established independent investigators. Intended to allow investigators to make major changes in the direction of their research careers by providing them with opportunities to spend a short period of time training with an appropriate sponsor.
Individual Awards for Postdoctoral Fellows, Early Career, and Faculty

Pathway to Independence Awards (Parent K99/R00)
For postdoctoral scientists to receive both mentored and independent research support from the same award. The award provides up to 5 years of support consisting of two phases.
• K99 1-2 years of mentored support to postdoctoral fellows
• R00 up to 3 years of independent support contingent on the scientist securing an independent research position
Individual Awards for Postdoctoral/Faculty

Career Development Awards (Parent K08/K23)

Intended for assistant professor-level clinician-scientists
- K23 is for patient-oriented research
- K08 is for research that is not patient-oriented

NIGMS supports clinical research in the following areas:
- Anesthesiology
- Clinical Pharmacology
- Sepsis
- Innate Immunity and Inflammation
- Injury and Critical Illness

Mentored Quantitative Research Career Development Awards (Parent K25)

For quantitatively trained individual (postdoctoral to senior faculty level) who are committed to conducting basic biomedical research and who have the potential to develop into productive biomedical researchers.
NIGMS Postdoctoral Research Associate Training (PRAT) Program – NIGMS FOA

• Competitive three-year postdoctoral fellowship program that provides high quality research training in the basic biomedical sciences in NIH intramural research laboratories, and prepares fellows for leadership positions in biomedical careers

• Provides stipend, health insurance, and travel/training allowance

• Structured postdoctoral program with defined training components

https://www.nigms.nih.gov/Training/Pages/PRAT.aspx
Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) – NIGMS FOA

Postdoctoral Career Transition Award to Promote Diversity (K99/R00)
Institutionally Focused Research Education Cooperative Agreement to Promote Diversity (UE5)

Awards to scientific societies (UE5) and time to stand up the program

MOSAIC K99/R00 Applicants Compete

MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5

https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx
Individuals conducting research training at Non-Federal Government institutions and are currently, or have been, supported by one of these NIGMS Programs:

- NIGMS Diversity Supplement Program as postdoctoral scholars or faculty
- MOSAIC Program (K99/R00)
- Institutional Research and Academic Career Development Awards (IRACDA) – discuss shortly
Use NIGMS Funding Opportunity Announcements
• Exception: Clinical Postdoctoral T32
All NIGMS Training Programs Should -

• Focus on technical, operational and professional skills development
• Promote rigor and reproducibility in research
• Teach the responsible and safe conduct of research
• Promote diversity, equity and inclusion
• Encourage inclusive, safe, and supportive research environments
• Use evidence-informed educational and mentoring practices
• Employ cohort-building activities and interventions that enhance the trainees’ science identity and self-efficacy
• Provide individualized mentoring and oversight throughout
• Introduce trainees to a variety of scientific research areas and careers
• Collect and disseminate data on the success/failure of educational aims; make career outcomes publicly available
All NIGMS Training Programs Should -

- Have **strong** institutional support
- Encourage program leadership to have complementary expertise
- Build a diverse faculty cohort with a strong commitment to training and mentoring
- Display coordinated interactions and synergies with other NIGMS-funded training programs at the institution
Institutional National Research Service Awards (NRSA) T34/T32

Provide
• Student stipends to defray costs of living
• Tuition remission
• Training related expenses
• Indirect costs (8%)
PreK – 12, Undergraduate, & Postbac Programs

Undergrad trainees from our BUILD, MARC, and RISE programs share their summer #researchtraining bit.ly/2xZOgAL
Interactive partnerships between biomedical/clinical researchers and pre-kindergarten to grade 12 teachers, schools, and other interested organizations.

Provides opportunities for students from underserved communities to consider careers in basic or clinical research.
Bridges to the Baccalaureate (T34)

- Emphasizes the development of a diverse pool of undergraduates that bridge from two-year to four-year institutions, and subsequently earn their baccalaureate degree in the biomedical sciences.

- Encourages a strong partnership that offers a well-integrated set of activities both pre- and post-bridging (e.g., trainees conduct research both prior to and after bridging).

- Encourages articulation agreements to reduce the time-to-degree.

Applications due in September
Maximizing Access to Research Careers (MARC)
Undergraduate Research-Training Initiative for Student Enhancement (U-RISE)

**MARC**
- Institutions ≥ $7.5 million research project grants (RPG)

**U-RISE**
- Institutions < $7.5 million research project grants (RPG)

### T34
- Goal is to develop a diverse pool of undergraduates who complete their baccalaureate degree, and transition into and complete biomedical, research-focused higher degree programs (e.g., Ph.D. or M.D./Ph.D.).
- Trainee Support for 1-3 years, including a summer research experience

Applications due in May
**Postbaccalaureate Research Education Program (PREP) (R25)**

The goal is to develop a diverse pool of well-trained postbaccalaureates who will transition into and complete rigorous biomedical, research-focused doctoral degree programs (e.g., Ph.D. or M.D./Ph.D.) in biomedical fields relevant to the NIGMS mission.

Applications due in January
Programs for Master’s and Predoctoral Trainees
Bridges to the Doctorate – Partnerships (T32)

- Encourage a strong partnership that offers a well-integrated set of activities both pre- and post-bridging.
- Reduce the time to Ph.D. degree (e.g., with effective skill-building activities and course credit agreements).
- Enhance the research efforts of the faculty at the master’s degree granting institution through inter-institutional efforts.

Applications due in September.
Diversity Enhancing Graduate Diversity Training Programs (T32)

Initiative for Maximizing Student Development (IMSD)
Graduate Research Training Initiative for Student Enhancement (G-RISE)

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<th>Postbac</th>
<th>Graduate M.S.</th>
<th>Graduate Ph.D.</th>
<th>Postdoctoral</th>
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<td>Applications due in January</td>
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- Emphasize the development of a diverse pool of scientists earning a Ph.D., who have the skills to successfully transition into careers in the biomedical research workforce.
- Trainee Support for 2-3 years (typically early years)

Institutions ≥ $7.5 M RPG
Institutions < $7.5 M RPG
While preserving the best elements, NIGMS would like to catalyze changes in biomedical graduate training to keep pace with the rapid evolution of biomedical research.

Programs in 12 broad areas of basic biomedical sciences, including Transdisciplinary category for institutions that do not have an NIGMS T32

Applications due in January, May, September
Medical Scientist Training Programs (MSTP)

Goal is to develop a diverse pool of highly trained clinician-scientist leaders available to meet the nation’s biomedical research needs.

Applications due in January, May, September

Specifically, for Historically Black Colleges and Universities, Tribal Colleges and Universities and institutions in IDeA states

Applications due in January
Institutional Programs for Postdoctoral Trainees and Scholars
Institutional Clinical Postdoctoral Training Grants (T32)

Emphasize the selection of M.D. degree holders as trainees to provide at least 2 years of rigorous research training in basic, clinical and/or translational science areas:

- Anesthesiology
- Clinical Pharmacology
- Medical Genetics
- Injury and Critical Illness

Applications due in January
Uses Parent T32 FOA
Institutional Research and Academic Career Development Award (IRACDA) (K12)

- IRACDA supports postdoctoral training to prepare for independent research and teaching careers in academia
- Postdoctoral scholars have a research and teaching mentor
- Scholars split time doing research (75%) and in the classroom (25%) at the partner institution

Applications due in October
Research Training

- High School and Undergraduate
- Postbaccalaureate and Graduate Students
- Postdoctoral, Early Career, and Faculty
- Workforce Development