Furthering Your Career in Biology

Student Research Opportunities through the U.S. National Science Foundation (NSF)



Supporting Researchers Throughout Their Career

Academic career pathways aren't always simple and linear, but have on- and off-ramps, pivots, and different barriers for different people. To ensure a diverse STEM workforce, NSF supports **students** and **educators** at career transition points across a diverse institution types.

institution types	5.		
Pre-K to 12	Research Experiences for Teachers Sites in the Biological Sciences (BIO-RETS)		
Undergrad	Research Experiences for Undergraduates Sites (REU Sites) and Supplemental Awards	Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)	Research in Undergraduate Institutions (RUI) and Research Opportunity Awards (ROA)
Postbacc	Research and Mentoring for Postbaccalaureates (RaMP) in Biological Sciences	Research Experience for Post- Baccalaureate Students (REPS) in the Biological Sciences Supplemental Awards	
Grad	Graduate Research Fellowship Program (GRFP)		
Postdoc	Postdoctoral Research Fellowships in Biology (PRFB)		
Early Career Faculty	Building Research Capacity of New Faculty in Biology (BRC-BIO)	Faculty Early Career Development Program (CAREER)	
Mid-Career Faculty	Mid-Career Advancement (MCA) Program	Transitions to Excel and Cellular Biosc (Transi	iences Research



BRC-BIO Building Research Capacity of New Faculty in Biology

□Supports pre-tenure faculty at institutions that are not among the nation's most research intensive (PUIs, some MSIs, R2, D/PU, or M1-3) who must have no more than 3 years of service and have both research and educational duties.



CAREER NSF Faculty Early Career Development Program

Supports early-career faculty who have the potential to serve as academic role models in research and education and lead advances in the mission of their department or organization.



MCA Mid-Career Advancement Program

Provides protected time and resources for PIs at Associate Professor rank* to work with a partner to remain engaged and active in cutting-edge research at a critical career stage.



* Eligibility extended to Full professors at PUIs in BIO & GEO as pilot



NSF ETAP (Education & Training Application)

ETAP helps people find and apply to Education and Training Opportunities funded by NSF. Every year, more NSF Opportunities are being managed through NSF ETAP. However, ETAP does not include all of NSF Education and Training Opportunities available.

- Students use ETAP to find and to apply for NSF funded training opportunities
- NSF Investigators use ETAP to advertise and accept applications for training opportunities.
- Programs with opportunities listed on ETAP include:
 - Research Experiences for Undergraduates (REU)
 - International Research Experiences for Students (IRES)
 - Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP)







REU Research Experience for Undergraduates

□Supports undergraduate summer research internships, each associated with a specific research project working closely with a faculty and other researchers. Students receive stipends and, in some cases, housing or travel assistance.

IRES International Research Experiences for Students

Supports international active research participation by undergraduate and/or graduate students in high quality international research, education and professional development experiences in NSF-funded research areas.

RaMP Research and Mentoring for Post-baccalaureates in **Biology**

Networks around a scientific theme to support postbaccalaureate students with little past research to receive a full year of mentoring, career development and research experience.









- 152: Current number of REU Sites in the biological sciences
- **\$600-700:** Per week stipend range for students participating in IRES
- 8-12: Number of expected mentors and mentees in a RaMP network

Working at NSF

In addition to gaining research experience through programs funded by NSF, young and early-career scientists can also work at NSF as part of focused several programs and/or through gaining federal employment.

Undergraduate

The <u>NSF Summer Scholars Internship Program</u> focuses on developing the potential of students through a 10-week summer internship in an NSF office aligned with their academic interests.



Graduate & Postdoc Level

<u>The Science & Technology Policy Fellowships</u> program, managed by AAAS, provides opportunities for scientists and engineers to contribute to federal policymaking while learning firsthand about the intersection of science and policy.



<u>The Mass Media Science & Engineering Fellowship</u>, also managed by AAAS, places science students and postdoctoral trainees in newsrooms to work as reporters, editors and production assistants.



NSF Staff Positions

Administrative positions at NSF help support the management of merit review and program administration, as well as provide other types of support to Program Directors and Division, Directorate, and NSF leadership. These positions include Program Assistants, Program Specialists, Program Analysts, and Science Assistants.



Rotating Program Directors and Division Directors

NSF offers a chance for scientists, engineers, and educators to join us as temporary program directors - called <u>rotators</u>. Rotators get to:

- make funding recommendations about proposals
- influence the directions the fields of science, engineering & education
- support cutting-edge research mentor junior research members



