Furthering Your Career in Biology

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



Supporting Researchers Throughout Their Career

A strong STEM enterprise requires learning and learners at all stages. To ensure a diverse and robust STEM workforce, NSF provides opportunities for **students**, **researchers**, and **educators** at a variety of career stages and across a diverse set of institution types.

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Undergrad	Research Experiences for Undergraduates Sites (REU Sites) & Research Experiences for Undergraduates Supplemental Awards (REU Supplements)	Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)	Research in Undergraduate Institutions (RUI) & Research Opportunity Awards (ROA)	Historically Black Colleges and Universities - Undergraduate Program (HBCU-UP) & Tribal Colleges and Universities Program (TCUP)
Postbac	Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP)			
Grad	Graduate Research Fellowship Program (GRFP)		Non-Academic Research Internships for Graduate Students (INTERN)	
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			

U.S. National Science Foundation (NSF) Career Stage Opportunities

RCN-UBE Research Coordination Networks in Undergraduate Biology Education

Supports networks of scientists focused on integrating biological research discoveries with innovations in education to improve learning experiences for undergraduates.

RUI/ROA Facilitating Research at Undergraduate Institutions

Supports research by faculty at Primarily Undergraduate Institutions (PUIs) at their home institution (RUI) or as visiting scientists at research-intensive organizations where they collaborate with other NSF-supported investigators (ROA).

Provides awards to strengthen STEM undergraduate education and research at HBCUs through several tracks.

TCUP Tribal Colleges and Universities Program

Supports tribal colleges and universities, Alaska Native-serving institutions, and Native Hawaiian-serving institutions to promote STEM research and education to increase the number of Native Americans in STEM.

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 Minority-Serving Institutions, R2, D/PU, or M1-3) who have no more than 3 years of service and have both research and educational duties.

CAREER NSF Faculty Early Career Development Program

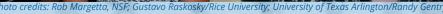
Supports early-career faculty who have the potential to serve as academic role models in research and education and lead advances in the mission of their department or organization.

MCA Mid-Career Advancement Program

Provides protected time and resources for Principal Investigators (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 a pilot

















U.S. National Science Foundation (NSF) Career Stage Opportunities

REU Sites Research Experience for Undergraduates Sites

Supports undergraduate summer research internships, each associated with a specific research project working closely with a faculty and other researchers.

Faculty propose to lead an REU Site by following the instructions in the REU solicitation.

Students apply directly to the site of interest and receive stipends and, in some cases, housing or travel assistance.



For Faculty



For Students

REU Supplements Research Experience for Undergraduates Supplements

REU Supplemental Awards support research by undergraduate students but are requested by a currently NSF-funded PI or by a proposing PI as a component of their proposal. As such, interested students should identify and contact potential PIs.



RaMP Research and Mentoring for Postbaccalaureates in Biological Sciences

Supports networks that provide full-time research, mentoring and training for recent graduates who lacked biological research or training opportunities during college. Proposals to NSF are submitted by potential mentors and students apply directly to funded projects.



GRFP Graduate Research Fellowship Program

Provides three-year fellowships that include a stipend and cost of education allowance for tuition and fees as well as access to opportunities for professional development available to NSF-supported graduate students.



INTERN Non-Academic Research Internships for Graduate Students

Offers supplemental funding to broaden research opportunities for graduate students and enable them acquire core professional competencies and skills to support careers in any sector of the U.S. economy.



PRFB Postdoctoral Research Fellowships in Biology

Supports postdoctoral fellows in selected areas of the life sciences who focus on broadening participation of underrepresented groups in biology; study the rules governing interactions between genomes, environments and phenotypes; or study plant genomes.

DID YOU KNOW?



Fast Facts

- 2017: First year of NSF's INTERN program
- 36: Number of months of a PRFB fellowship
- **152:** Current number of REU Sites in the biological sciences



Photo credit: The Echinacea Project, Chicago Botanic Garden

NSF ETAP U.S. National Science Foundation Education and Training Application

NSF ETAP helps people find and apply to education and training opportunities funded by NSF that foster growth at all stages of their academic journey.

NSF ETAP opens doors to valuable opportunities, including:

- Active field research experiences
- Hands-on learning and mentorship
- Summer programs and teaching assistantships
- Internships and career experience
- Scholarships and fellowships

Programs with opportunities listed on NSF ETAP include:

- Research Experiences for Undergraduates (REU)
- International Research Experiences
- for Students (IRES)

Students use ETAP to find and apply for NSF-funded training opportunities. NSF Investigators use NSF ETAP to advertise and accept applications for training opportunities. Every year, more NSF Opportunities are being managed through NSF ETAP. However, NSF ETAP does not include all NSF Education and Training Opportunities available.





https://etap.nsf.gov

Become a U.S. National Science Foundation (NSF) Reviewer!

Reviewers are critical to NSF's mission! Maintaining the gold standard of NSF Merit Review requires the involvement of the research community as panelists and ad-hoc reviewers.

As a reviewer you can:

- Provide reviews that are helpful for proposers and NSF
- Participate in panel discussions
- · Gain insights into effective proposal writing
- Meet colleagues and NSF program directors and staff

Review for the Directorate for Biological Sciences (BIO)

The mission of the Directorate for Biological Sciences (BIO) is to enable discoveries for understanding life. BIO-supported research advances the frontiers of biological knowledge and provides a theoretical basis for prediction within complex, dynamic living systems through an integration of scientific disciplines.



Sign up to review for NSF BIO

Review for the Graduate Research Fellowship Program (GRFP)

GRFP recognizes and supports outstanding graduate students pursuing research-based masters and doctoral degrees in science or engineering at accredited U.S. institutions. Serving as a GRFP Reviewer is an excellent opportunity to apply your research and career expertise to help identify future science and engineering leaders, and to gain valuable perspective to share with faculty and students at your institution.







Working at the U.S. National Science Foundation (NSF)

In addition to gaining research experience through programs funded by NSF, 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.



AAAS Fellowships at NSF

The Science & Technology Policy Fellowships 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

<u>Administrative positions</u> 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.



<u>Rotating Program Directors and Division Directors</u>

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

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

