

MAY 20 - 21, 2019

# SPRING GRANTS CONFERENCE

NSF Wide Programs  
CAREER, REU, RUI/ROA



National  
Science  
Foundation

# Panelists

## **Karen Cone**

Program Director; Division of Molecular & Cellular Biosciences; Directorate for Biological Sciences



## **Sonia Esperança**

Program Director; Division of Earth Sciences; Directorate for Geosciences



## **Kathleen McCloud**

Program Director; Division of Physics; Directorate for Mathematical & Physical Sciences



# Programs Covered

- Faculty Early Career Development Program (CAREER)
- Research Experiences for Undergraduates (REU)
- Facilitating Research at Primarily Undergraduate Institutions: Research in Undergraduate Institutions (RUI) and Research Opportunity Awards (ROA)



**“Ask Early, Ask Often!”**



# CAREER Program

- CAREER Program Solicitation:  
NSF 17-537
- **Next Deadline Dates**
  - BIO, CISE, EHR:  
July 17, 2019
  - ENG: July 18, 2019
  - GEO, MPS, SBE:  
July 19, 2019

CAREER Program Website:

[www.nsf.gov/career](http://www.nsf.gov/career)

- Solicitations
- FAQs
- Division contacts
- Links to recent awards

# CAREER Program Goals

Emphasizes the importance NSF places on early development of academic careers

- The excitement of research is enhanced by inspired teaching and dissemination of new knowledge

Aims to provide stable support

- At a sufficient level and duration to enable awardees to develop careers
- Not only as outstanding researchers but also as effective, committed educator

Aims to encourage faculty and academic institutions to value and support the integration of research and education

- The process of discovery stimulates learning and assures that research findings are quickly and effectively communicated in a broader context and to a large audience

# CAREER Program Eligibility

- Hold a doctoral degree by proposal deadline
- Be untenured and employed in a tenure-track (or tenure-track-equivalent) assistant professor position at an eligible institution as of October 1st following deadline
- Have both research and educational responsibilities at the eligible institution
- Have not previously received a CAREER award
- Have not had more than two CAREER proposals reviewed previously



# CAREER Program Eligibility Tenure-Track Equivalency

**For a position to be considered a tenure-track-equivalent position, it must meet all of the following requirements:**

- ✓ The employee has a continuing appointment that is expected to last the five years of a CAREER grant.
- ✓ The appointment has substantial research and educational responsibilities.
- ✓ The proposed project relates to the employee's career goals and job responsibilities as well as to the mission of the department or organization.
- ✓ Departmental Letter must affirm that the investigator's appointment is at an early-career level equivalent to pre-tenure status, and the letter must clearly and convincingly demonstrate how the faculty member's appointment satisfies all the above requirements of tenure-track equivalency.

# CAREER Program Institutional Eligibility

- Academic institutions in the U.S. that award degrees in fields supported by NSF
- Non-profit, non-degree-granting organizations in the U.S. such as museums, observatories, or research labs (Note that eligibility requirements of the PI's position must be satisfied)
- NSF encourages proposals from all institutional types, including Minority Serving and Primarily Undergraduate Institutions





# CAREER Varies Across NSF



CAREER proposals are submitted to, and reviewed by, one or more of the disciplinary research programs.

Typical award sizes vary according to Directorate/Division/Program.



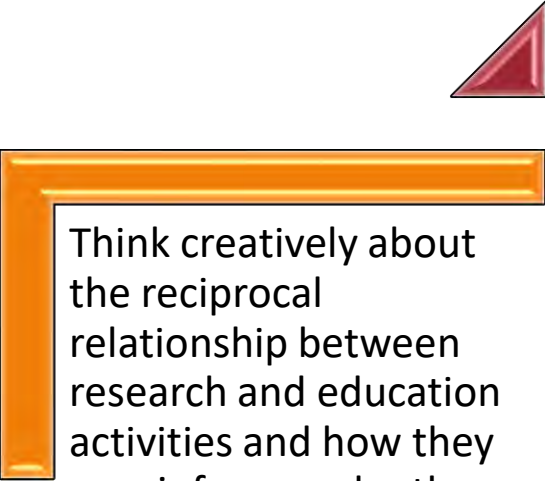
Expectations for scope of research and education activities vary with disciplinary community norms.



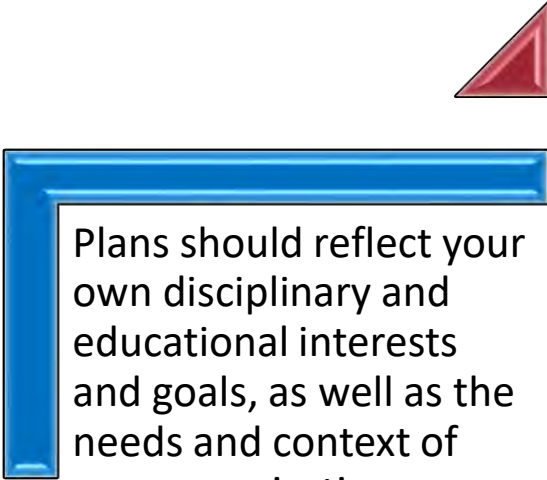
Talk to Division Contact(s) for more information (<http://www.nsf.gov/crssprgm/career/contacts.jsp>)

For interdisciplinary proposals, contact all relevant Program Directors or Division Contacts.

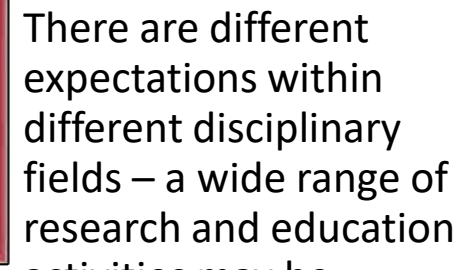
# CAREER Program Integration of Research and Education



Think creatively about the reciprocal relationship between research and education activities and how they may inform each other in your career development.

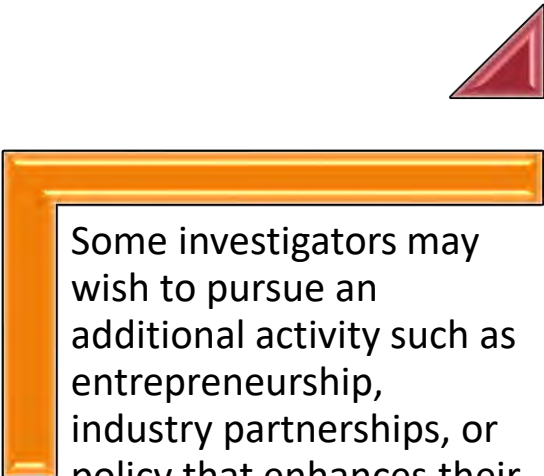


Plans should reflect your own disciplinary and educational interests and goals, as well as the needs and context of your organization.

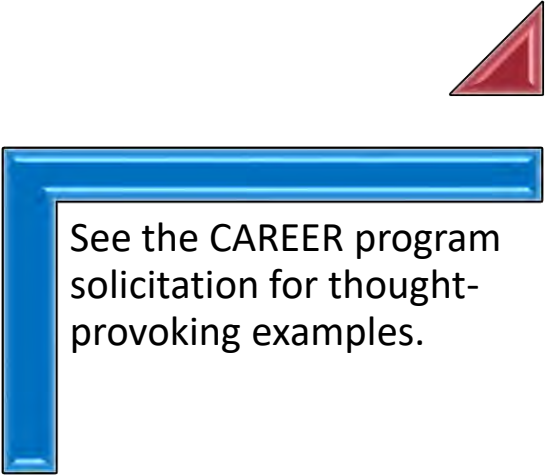


There are different expectations within different disciplinary fields – a wide range of research and education activities may be appropriate for the CAREER program.

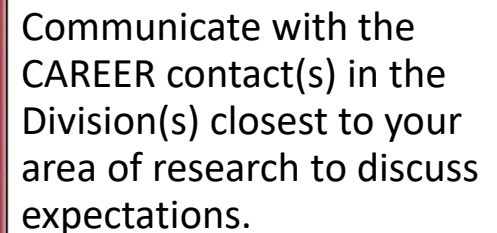
# CAREER Program Integration of Research and Education



Some investigators may wish to pursue an additional activity such as entrepreneurship, industry partnerships, or policy that enhances their research and education plans.



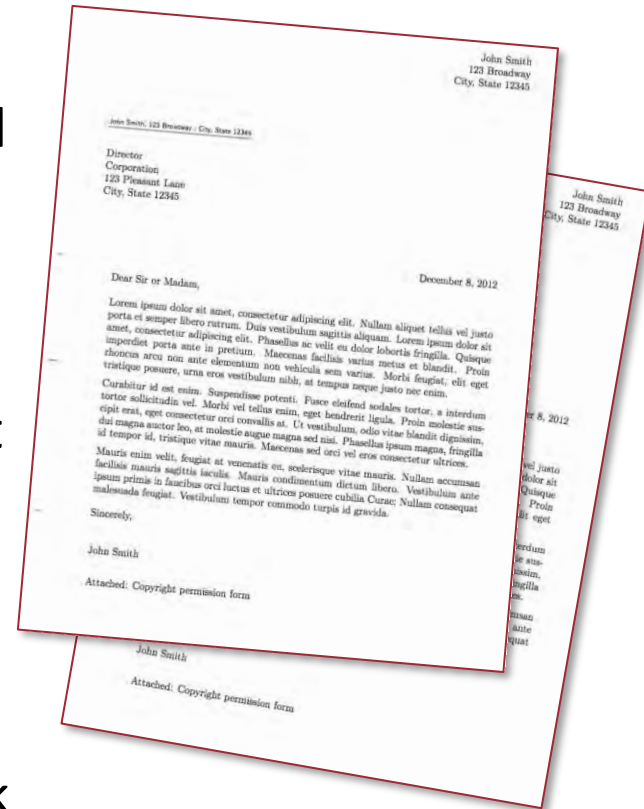
See the CAREER program solicitation for thought-provoking examples.



Communicate with the CAREER contact(s) in the Division(s) closest to your area of research to discuss expectations.

# CAREER Program Departmental Letter (2 pages)

- Commitment to the PI's proposed CAREER research and education activities
- Description of how the PI's career goals and responsibilities mesh with that of the organization and department
- Description of how the department will contribute to the professional development of the PI with mentoring and whatever is needed to further the PI's efforts to integrate research and education
- Statement indicating the PI's eligibility for the CAREER program (either as tenure-track or tenure-track equivalent junior appointment)





# Letter(s) of Collaboration

Letter should consist of a single-sentence statement of collaboration

- “If the proposal submitted by Dr. [name of the PI] entitled [proposal title] is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description.”
- Must NOT recommend or endorse PI or project

All relevant collaborative activities should be described in the Project Description, or in the Facilities, Equipment and Other Resources pages, such as:

- Intellectual contributions to the project
- Permission to access a site, use instrumentation or facility
- Offer to furnish samples / materials for research
- Logistical support / evaluation services
- Mentoring of U.S. students at a foreign site, if applicable

# CAREER Program Personnel and Budgets

- Co-PIs on cover sheet are not allowed
- Request for support of other senior personnel, consultants, or sub-awards is allowed, commensurate with a limited role in the project
- International activities are encouraged, if appropriate for the project
- Programs may support buy-out of academic year time for teaching-intensive institutions (check with your Program Officer)
- Programs may prefer to make awards with budget close to the anticipated minimum size (check with your Program Officer)



# REU Program

- REU Program Solicitation: NSF 13-542 (new solicitation coming soon!)
- Next Deadline Dates
  - REU Site Proposals
    - May 24, 2019: REU Site Proposals requiring access to Antarctica
    - August 28, 2019: REU Site Proposals
  - REU Supplements
    - Include as part of a new (or renewal) research proposal
    - Supplemental funding to an existing award
- REU Program Website:  
[https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5517](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517)
  - Solicitation
  - REU Site contacts
  - Links to recent awards



# REU Program Goals

- REU aims to provide appropriate and valuable training experiences for undergraduate students through participation in research.
- REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.
- REU projects feature high-quality interaction of students with faculty and/or other research mentors and access to appropriate facilities and professional development opportunities.





# REU Program Sites

## REU Sites

- Must have a well-defined common focus that enables a cohort experience for students.
- May be based in a single discipline or academic department or may offer interdisciplinary or multi-department research opportunities with a coherent intellectual theme.

## Proposals

- Should reflect the unique combination of the proposing organization's interests and capabilities and those of any partnering organizations.

## Significance

- Important means for extending high-quality research environments and mentoring to diverse groups of students.
- Aims to involve students in research who might not otherwise have the opportunity, particularly those from academic institutions where research programs in STEM are limited.

# REU Program Supplements

- Typically provides support for one or two undergraduate students to participate in research as part of a new or ongoing NSF-funded research project.
- Centers or large research efforts may request support for a number of students commensurate with the size and nature of the project (check with the cognizant Program Officer).
- Investigators should give serious attention not only to developing students' research skills but also to involving them in the culture of research in the discipline and connecting their research experience with their overall course of study.



# REU Program Special Opportunities

- Partnership with the Department of Defense
- Partnership with the Department of Energy's Geothermal Technologies Program
- International Projects
- Research Experiences for Teachers



# REU Program Eligibility Information

- REU Site Proposals

- A single individual may be designated as the PI.
- One additional person may be designated as co-PI
- Other anticipated research supervisors should be listed as non co-PI Senior Personnel

**ARE YOU  
ELIGIBLE?**

- Eligible Student Participants

- Student participants must be U.S. citizens, U.S. nationals, or permanent residents.
- Students who have received their bachelor's degrees and are no longer enrolled as undergraduates are generally not eligible to participate.
- For REU Sites, a significant fraction of the student participants should come from outside the host institution or organization.



# RUI/ROA Program

- RUI/ROA Program Solicitation: NSF 14-579
- RUI: Research in Undergraduate Institutions
- ROA: Research Opportunity Awards
- PUI: Primarily Undergraduate Institution
- **Next Deadline Dates**
  - Proposals accepted at any time (subject to program deadlines)

RUI/ROA Program Website:

[https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5518](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5518)

- Solicitations
- Links to recent awards

# RUI/ROA Program Goals

- RUI proposals support PUI faculty in research that engages them in their professional field(s), builds capacity for research at their home institution, and supports the integration of research and undergraduate education.
- ROAs similarly support PUI faculty research, but these awards typically allow faculty to work as visiting scientists at research-intensive organizations where they collaborate with other NSF-supported investigators.



# RUI/ROA Program Goals

An RUI proposal  
may be:

- A request to support an individual research project or a collaborative research project involving PUI faculty and students at their own or other institutions.
- A request involving shared research instrumentation.

ROA  
opportunities  
include:

- A supplement to an existing NSF award to support ROA activities for PUI faculty.
- Requests to rebudget funds in an existing NSF award to support ROA activities for PUI faculty.
- Submission of a new collaborative proposal between a PUI and another institution(s), with a ROA component as a subaward or as part of a linked collaborative proposal.

# RUI/ROA Eligible Institutions

- Eligible PUIs are accredited colleges and universities (including two-year community colleges) that award Associate's degrees, Bachelor's degrees, and/or Master's degrees in NSF-supported fields.
- Must have awarded 20 or fewer Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years.





# RUI Eligibility

- RUI proposals involving more than one academic institution are permitted, but one PUI must have overall management responsibility.
- Collaborations between PUIs and other organizations may be proposed; however, most of the researchers must be at PUIs.
- A PUI campus must be identified as the Primary Place of Performance
- Each PUI must include a Certification of RUI/ROA Eligibility in the Supplementary Documents section of the proposal.

**ARE YOU  
ELIGIBLE?**

# RUI Impact Statement

- An RUI proposal must include an RUI Impact Statement of up to five pages.
- Helps reviewers assess the likely impact of the proposed project on the research environment of the PUI.
  - Impact on the careers of the faculty participants
  - Ability of department(s) to better prepare students for entry into advanced-degree programs and/or careers in science and engineering

**Impact!**

# ROA Eligibility

- ✓ Requests involving ROA activities are managed according to the proposed ROA funding mechanism.
- ✓ For collaborative proposals that include a PUI(s) request for ROA activities, the PUI(s) assumes management responsibility for their portion of any award.
- ✓ Certification of RUI/ROA Eligibility must be included as a supplementary document in the PUI's portion of the proposal.
- ✓ RUI/ROA proposals must be employed by or have a commitment to be employed by an eligible home institution (i.e., a predominantly undergraduate institution) at the time the proposal is submitted.
  - ✓ Co-principal investigators may be from other institutions or from doctoral departments.

# For More Information

## “Ask Early, Ask Often!”

- [nsf.gov/staff](https://nsf.gov/staff)
- [nsf.gov/staff/orglist.jsp](https://nsf.gov/staff/orglist.jsp)
- [nsf.gov/about/career\\_opps/rotators/index.jsp](https://nsf.gov/about/career_opps/rotators/index.jsp)

