

2020 NSF CAREER AWARD GUIDE

This guide, developed by the Research Acceleration Office at CSU, is designed as a resource to give early career faculty an overview of the National Science Foundation (NSF) Faculty Early Career Development Program (CAREER Award). It includes a program summary, deadlines, eligibility information, first steps, tips for developing your application, a checklist, and additional resources. For further assistance with your NSF CAREER Award application, please contact Dr. BreeAnn Brandhagen within the RAO (breeann.brandhagen@colostate.edu).

Program Summary

The Faculty Early Career Development (CAREER) Program offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. This competition is open to scholars in all of the fields supported by NSF. NSF anticipates making 500 new and continuing awards this year.

Deadlines

July 27, 2020

NOTE: Applications must be submitted to OSP for internal review and approval at least 5 business days in advance of the NSF deadline.

Award Information

- 5-year duration
- \$400,000 minimum (including indirect costs), with the following exceptions: Awards for proposals to the Directorate for Biological Sciences (BIO), the Directorate for Engineering (ENG), or the Office of Polar Programs (OPP) are expected to total a minimum of \$500,000 for the 5-year duration.

Eligibility

- Proposers must meet all of the following eligibility requirements at the time of submission:
 - Hold a doctoral degree in a field supported by NSF
 - Be engaged in research in an area supported by NSF (science, engineering, or education)
 - Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor
 - Be untenured
 - Have not previously received a CAREER award



- The PI can only submit one CAREER proposal annually and may not participate in more than three CAREER competitions in any capacity.
- Proposal for a project should not be substantially the same as another currently under review by NSF.
- Faculty members who are Associate Professors or in equivalent appointments, with or without tenure, are not eligible for the CAREER program. Faculty members who hold Adjunct Faculty or equivalent appointments are not eligible for the CAREER program.
- *Tenure-Track Equivalency* - For a position to be considered a tenure-track-equivalent position, it must meet all of the following requirements, which must be confirmed in the Department Letter:
 - The employee has a continuing appointment that is expected to last five years
 - 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.

First Steps

- 1) Carefully review the [program solicitation](#) , [FAQs](#), and the [CAREER Proposal Submission Timeline](#).
- 2) Discuss your plan with your Department Chair, academic mentors, and peers that have been successful obtaining awards from NSF. For a list of NSF CAREER Award winners at Colorado State University, contact Dr. BreeAnn Brandhagen within the RAO (breeann.brandhagen@colostate.edu).
- 3) Determine which program area(s) at NSF is/are most appropriate to review your proposal (i.e. Molecular and Cellular Biosciences, Social and Economic Sciences) and identify a Program Officer in those area(s). For a list of NSF's program areas, see <http://www.nsf.gov/staff/orglist.jsp>.
- 4) Also identify the appropriate contact for the CAREER program in those Division(s), listed at: <http://www.nsf.gov/crssprgm/career/contacts.jsp>.
- 6) Send an email to the contacts you have identified, including a brief description of your proposed project and a request for feedback. Below are several questions you may want to ask:
 - Is your project a good fit for the program?
 - What are the expectations for the scope of research and education plans in this particular program area?
 - What is the typical award size in this program?
 - What type of review process does this program undertake (i.e. panel or ad hoc reviews)?



Developing the Education Plan

NSF's CAREER program requires that you include an education plan in addition to your plans for research and broader impacts. The research and education plans can be described separately within the Project Description, or you may present them together in an integrated narrative. Remember that reviewers who are subject experts in your field will be mostly familiar with your research component. Some programs may also send your proposal for review to education experts in your field. You should make sure that your education component is solid and well-argued. Education activities should be consistent with research and best practices in curriculum, pedagogy, and evaluation. Education plans must cite relevant publications, and local curricula and state education standards to be addressed, if applicable (e.g. for work with K-12 classes).

While NSF expects your education plan to be distinctive, innovative, and go beyond what is expected from a typical Assistant Professor in your field, it should also be doable and not require so much time that your other professional activities are compromised. It is important to choose activities that matter to you, and that fit well with your Department's mission and priorities.

Proposed education activities may be in a broad range of areas and may be directed to any level: K-12 students, undergraduates, graduate students, and/or the general public, but should be related to the proposed research.

Some examples are:

- designing innovative courses or curricula
- supporting teacher preparation and enhancement
- contributing to museum exhibits or programs
- conducting outreach and mentoring activities to enhance scientific literacy or involve students from groups that have been traditionally underrepresented in science researching students' learning and conceptual development in the discipline
- incorporating research activities into undergraduate courses
- teaching a graduate seminar on the topic of the research
- engaging the broader public with your research
- creating cyberinfrastructure that facilitates involvement of the broad citizenry in the scientific enterprise
- providing mentored international research experiences for U.S. students
- linking education activities to industrial, international, or cross-disciplinary work
- implementing innovative methods for evaluation and assessment
- designing new or adapting and implementing effective educational materials and practices, and plans for disseminating them
- build on, or otherwise meaningfully participate in, existing NSF-supported activities or other educational projects ongoing on campus
- using new or existing tools to broadly disseminate your research and education activities.
- partner with education focused programs at CSU (I.E. Speak Out, Little Shop of Physics)



A competitive proposal will include plans for assessing or evaluating your educational activities, tools, or materials. You are encouraged to make connections with appropriate education experts, and to include the necessary letters of commitment in your application. NSF recommends that applicants leverage existing NSF-supported activities or other educational projects ongoing on campus.

For assistance with identifying resources and programs at Colorado State University that you can leverage, contact Dr. BreeAnn Brandhagen within the RAO (breeann.brandhagen@colostate.edu).

See the appendix to this document for examples of CSU programs with which CAREER applicants might collaborate. Please note the recommended deadlines listed in the table below if you plan to request this type of assistance.

Broader Impacts

The Project Description in your CAREER proposal must include a separate section entitled “Broader Impacts.” While your discussion of broader impacts will likely refer to the education and outreach activities outlined in your education plan, you will also want to include information in this section about how your work advances scientific knowledge and contributes to the achievement of societally relevant outcomes, such as

- Full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM)
- Improved well-being of individuals in society
- Development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others
- Improved national security; increased economic competitiveness of the US
- Enhanced infrastructure for research and education



Application Checklist (also see: [CAREER Program Guidelines pages 5-8](#))

- Cover sheet (available in the submission system)
- Project Description (15 pages including research project proposal with objectives, methods, an expected significance, educational activities, broader impacts).
- References Cited (no page limit)
- PI Biosketch including both research and education activities (In ScienCV)
- Departmental Letter from Chair (2 pages)
- Letters of collaboration, NOT letters of support or recommendation (1 page each, should use NSF's single-sentence format)
- Budget and budget justification (5 pages)
- Data management plan (2 pages)
- Post-doctoral mentoring plan, if applicable (1 page)
- Collaborators and Other Affiliations Information (in NSF Excel template→available in June)
- Current and Pending Support (template available in June)

Additional Resources for Completing Application

CAREER AWARD WEB PAGE:

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503214

FREQUENTLY ASKED QUESTIONS:

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20025

CAREER PROGRAM GUIDELINES:

https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=503214&ods_key=nsf20525

RAO OFFICE: <https://www.research.colostate.edu/rao/>



RESEARCH
COLORADO STATE UNIVERSITY

CSU Resources and Broader Impact Connections	
Archibeque Engle, Shannon	Diversity Office
Cross, Jeni	Director, IRISS
Falkenberg, Karen	TILT Director of Curriculum and Instruction
Florant, Gregory (Greg)	Director, Graduate Center for Inclusive Mentoring
Foster, Michelle	Director of Diversity & Inclusion, Graduate Center for Inclusive Mentoring
Frierson, Rickey	WCNR, Director of Diversity and Inclusion
Johnson, Bridgette	Director, Black/African American Cultural Center, MURALS event
Johnson, Rachael	Diversity Programs in Engineering
Jones, Brian	Director, Little Shop of Physics
Kita, Kim	Director, Todos Santos and Study Abroad
Matthews, Dave	Girls who Code
Naughton, Blake	VP for Engagement and Extension (Megan Griffith, Exec. Assist.)
Perera, Rushika	CVMBS Diversity & Inclusion Committee Chair
Sample McMeeking, Laura	Director, CSU STEM Center
Squist, Shannon	Director, Community Connections, Fort Collins Museum of Discovery
Stone-Roy, Leslie	Brain Awareness Week
Tracy, Brian	Muscles Alive!
Tschillard, Ray	Poudre Learning Center
Warnock, Andrew	CNS Education and Outreach Center
*Please be aware that this list is still in development	

