NSF Chemistry Office Hour

NSF Funding Opportunities for Early Career Investigators

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Faculty Early Career Development Program (CAREER)

Program Solicitation NSF 22-586 (released April 15, 2022):

This premier program emphasizes the importance the Foundation places on the early development of academic careers dedicated to stimulating the discovery process in which the excitement of research is enhanced by inspired teaching, enthusiastic learning, and disseminating new knowledge. Effective integration of research and education generates a synergy in which the process of discovery stimulates learning, and assures that the findings and methods of research and education are quickly and effectively communicated in a broader context and to a large audience.

The CAREER program embodies NSF's commitment to encourage faculty and academic institutions to value and support the integration of research and education. Successful Principal Investigators will propose creative, effective research and education plans, developed within the context of the mission, goals, and resources of their organizations, while building a firm foundation for a lifetime of contributions to research, education, and their integration.



CAREER Eligibility

Proposers must meet all of the following eligibility requirements as of the annual deadline:

- Hold a doctoral degree in a field supported by NSF
- Be engaged in research in an area of science, engineering, or education supported by NSF
- Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title)
- Be untenured and not associate professor at the time of application
- Have not previously received a CAREER award (prior or concurrent Federal support for other types of awards for non-duplicative research does not preclude eligibility)
- May submit only one CAREER proposal per annual competition
- May not participate in more than three CAREER competitions



CAREER Proposal Specifics: Project Description

The Project Description section should contain a well-argued and specific proposal for activities that will, over a <u>5-year period</u>, build a firm foundation for a lifetime of contributions to research and education in the context of the Principal Investigator's organization. In CHE, awards total a minimum of \$400,000 (including indirect costs) for the 5-year duration.

The Project Description should include:

- A description of the proposed research project, including preliminary supporting data where appropriate, specific objectives, methods and procedures to be used, and expected significance of the results;
- A description of the proposed educational activities and their intended impact;
- A description of how the research and educational activities are integrated or synergistic;
- A description of other broader impacts, besides the education activities, that will accrue from the project; and
- Results of prior NSF support, if applicable.



CAREER Proposal Specifics: Departmental Letter

The Departmental Letter should be no more than 2 pages in length and should contain the following elements:

- A statement to the effect that the PI is eligible for the CAREER program.
- An indication that the PI's proposed CAREER research and education activities are supported by and advance the educational and research goals of the department and the organization, and that the department is committed to the support and professional development of the PI
- A description of the relationship between the CAREER project, the PI's career goals and job responsibilities, and the mission of his/her department/organization
- A description of the ways in which the department head (or equivalent) will ensure the appropriate mentoring of the PI, in the context of the PI's career development and his/her efforts to integrate research and education throughout the period of the award and beyond.
- For joint appointments, the letter should be signed by both department heads

A proposal submitted without this Letter will be returned without review. The Department Letter should not be construed as a Letter of Support for the PI and should address only the items listed above.

CAREER Proposal Specifics: Collaboration

Co-Pls are not allowed in CAREER proposals.

If critical for a given project, support for collaborators may be requested in the senior personnel or consultant services budget line items of the proposal, or in subawards to another institution. However, while recognizing that projects may entail cross-disciplinary collaborations, it is expected that the primary support for a CAREER award will be for the PI and his/her research efforts, with support for other senior personnel commensurate with their limited role in the project.

Proposals submitted with co-principal investigators will be returned without review.



Letters of Collaboration

If the project involves collaborative arrangements of significance, these arrangements should be documented through letters of collaboration. The 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 or the Facilities, Equipment or Other Resources section of the proposal."

Letters of recommendation for the PI or other letters of support for the project are not permitted.

Project Description or Facilities, Equipment, and Other Resources must document the nature of all project collaborations, such as:

- Intellectual contributions to the project
- Permission to access a site, an instrument or a facility
- Offer of samples and materials for research
- Logistical support to the research and education program
- Mentoring of U.S. students at a foreign site, if applicable



CAREER Proposal Specifics: Integration of Research and Education

The Project Description should communicate how the research and educational activities are integrated or synergistic.

NSF recognizes that there is no single approach to an integrated research and education plan but encourages all applicants to think creatively about the reciprocal relationship between the proposed research and education activities and how they may inform each other in their career development as both outstanding researchers and educators.

Because there may be different expectations within different disciplinary fields and/or different organizations, a wide range of research and education activities may be appropriate for the CAREER program.

Proposers are encouraged to communicate with the CAREER contact or cognizant Program Officer in the Division closest to their area of research to discuss the expectations and approaches that are most appropriate for that area. **Check the NSF award database!**



Presidential Early Career Awards for Scientists and Engineers (PECASE)

Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees. Selection for this award is based on three important criteria: 1) innovative research at the frontiers of science, engineering and technology that is relevant to the mission of NSF, 2) community service demonstrated through scientific leadership, education, or community outreach, and 3) commitment to STEM equity, diversity, accessibility, and/or inclusion.

- Only recent CAREER awardees are considered as potential nominees
- Applicant must be a U.S. citizen, U.S. national or U.S. permanent resident by time of nomination
- Keep program officer informed of your important work
- Submit well written and comprehensive annual reports
- New: optional single copy document to indicate eligibility. If the PI does not meet the eligibility
 requirements at the time of submission but do meet the requirements post proposal submission,
 the PI may submit an interim report to indicate their eligibility.



CAREER Proposal Preparation

Deadline: July 27th, 2022 (fourth Wednesday in July, annually thereafter)

Instructions: Follow both the latest NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 22-1) and the CAREER Solicitation (NSF 22-586)

The PAPPG governs submission to the CAREER solicitation with some modified provisions.

Proposals must be prepared and submitted via Research.gov or via Grants.gov, and may not be prepared or submitted via FastLane.



Disciplinary Research Programs (CHE-DRP)

Program Solicitation NSF 21-589:

Represents an enhanced mechanism for the chemistry research community to *submit individual or small team research proposals* to the NSF Division of Chemistry's disciplinary research programs. The solicitation covers submission to the following CHE Disciplinary Research Programs: CAT, CMI, CSDM-A, CSDM-B, SYN, CTMC, CLP, ECS, MSN.

You can apply for a CAREER award and a DRP award in the same year if the proposal topics are not the same.

Receiving a DRP award does not prevent you from applying for a CAREER award.



Disciplinary Research Programs (CHE-DRP)

- If two proposals are submitted in a fiscal year, at least one must be collaborative.
- Award sizes average \$150,000 per year for three years.
- Submission window: Sep 1-30 (CAT, CSDM-A, CSDM-B, CTMC, SYN) and Oct
 1-31 (CMI, CLP, ECS, MSN) Check back for updates.



Upcoming Webinars

2022 NSF CAREER Foundation-Wide Program Briefing

Dates: May 10, 2022 at 2:00 – 4:00 PM ET

May 16, 2022 at 2:00 – 4:00 PM ET

Description: Both webinars will include the same briefing on the CAREER program and key

solicitation requirements followed by a Q&A session.

Registration Link: https://nsf.zoomgov.com/webinar/register/WN_bzkzSc1CT_2myYc3f7d5-Q

CAREER Proposal Submission Logistics Webinar

Date: May 26, 2022 at 2:00 - 3:30 PM ET

Description: Webinar review the system-related requirements in the CAREER proposal submission

timeline guidance and offer a technical demonstration in research.gov.

Registration Link: https://nsf.zoomgov.com/webinar/register/WN_jSJ0HsX-SamSjtBr5e-1pw

