**NSF CAREER General Guidelines**

**About**

 The NSF Faculty Early Career Development (CAREER) grant supports 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 is considered NSF’s most prestigious award and only tenure-track (untenured) assistant professors are eligible. Successful proposals will articulate…

1. An innovative, rigorous research plan that specifies significance, clear objectives, and feasibility.
2. A well-integrated education plan with specific activities, impact on students, and methods for evaluation and assessment.
3. A strong broader impacts section that shows how the research will be disseminated and impact society.
4. And a clear narrative that discusses the applicants career goals and motivation for the research.

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| General Information |
| NOFO | [NSF 22-586](https://www.nsf.gov/funding/opportunities/career-faculty-early-career-development-program/nsf22-586/solicitation)  |
| Due Dates | Submissions are due the fourth Wednesday in July. |
| Project Period | 5 years |
| Budget Limit | CAREER awards provide a minimum of $400,000-$500,000 (depending on the directorate) over 5 years, including indirects. PIs should consult with the program officer for their directorate to discuss maximum budget limits. |

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| Formatting Information |
| Document | PDF only |
| Font type and size | Arial, Courier New, Palatino Linotype at a font size of 10 points or larger; or Times New Roman or Computer Modern, 11 points or larger. |
| Margins | Minimum 1 inch on all sides. |
| Other formatting  | [Link to additional formatting instructions.](https://www.nsf.gov/pubs/policydocs/pappg22_1/index.jsp) |

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| Required Proposal Documents |
| Project Summary | (1 page) Concise description of the project including sections for titled Overview, Intellectual Merit, and Broader Impacts.1. Overview: Provide a description of the project’s activities along with a statement of the project’s objectives and methods.
2. Intellectual Merit: Explain the innovative nature of the project, how it will advance knowledge in the research field, and describe how success will be assessed.
3. Broader Impacts: Explain how the research will more broadly benefit society. This could include detailing contributions to STEM education, enhancement of research infrastructure, preparation of the scientific workforce, or improvement of scientific literacy.
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| Project Description | (15 pages) The Project Description section should contain a well-argued and specific proposal for activities that will, over a 5-year period, build a firm foundation for a lifetime of contributions to research and education in the context of the Principal Investigator's organization. The proposed project should aim to advance the employee's career goals and job responsibilities as well as the mission of the department or organization.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.

Successful applicants will propose creative, effective research and education plans, along with strategies for assessing these components. The proposed activities should help applicants develop in their careers as both outstanding researchers and educators. While excellence in both education and research is expected, activity of an intensity that leads to an unreasonable workload is not. The research and educational activities do not need to be addressed separately if the relationship between the two is such that the presentation of the integrated project is better served by interspersing the two throughout the Project Description.*Education Activities* – The education component of the proposal 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 and consistent with the career goals of the PI. Some examples are: incorporating research activities into undergraduate courses; teaching a graduate seminar on the topic of the research; designing innovative courses or curricula; providing mentored international research experiences for U.S. students; linking education activities to industrial, international, or cross-disciplinary work; supporting teacher preparation and enhancement; 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; implementing innovative methods for evaluation and assessment; or creating cyberinfrastructure that facilitates involvement of the broad citizenry in the scientific enterprise. Education activities may also include designing new or adapting and implementing effective educational materials and practices. Such activities should be consistent with research and best practices in curriculum, pedagogy, and evaluation. Proposers may build on, or otherwise meaningfully participate in, existing NSF-supported activities or other educational projects ongoing on campus.See the solicitation for further guidance on proposals that involve cross-disciplinary, crosssector, scientific software development, international/global dimensions, polar field work, and seagoing facilities. |
| References Cited | (no page limit) Complete listing of the references cited in the Research Strategy. |
| Biosketches | (5 pages per person) Required for the PI. No Co-PIs are permitted in CAREER awards. Should include both research and educational activities and accomplishments. Must adhere to [specific biosketch formatting requirements](https://www.nsf.gov/funding/senior-personnel-documents#biographical-sketch-0bd). Should be prepared using [SciENcv](https://www.ncbi.nlm.nih.gov/sciencv/).  |
| Synergistic Activities | (1 page) Required for the PI. Must include a list of up to five distinct examples that demonstrates the broader impact of the individual's professional and scholarly activities (both research and education) that focus on the integration and transfer of knowledge as well as its creation.Examples may include:* innovations in teaching and training;
* contributions to the science of learning;
* development and/or refinement of research tools;
* computation methodologies and algorithms for problem-solving;
* development of databases to support research and education;
* the participation of groups underrepresented in STEM;
* participation in international research collaborations;
* participation in national and/or international standards development efforts;
* and service to the scientific and engineering community outside of the individual's immediate organization.
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| Current & Pending Support | (no page limit) Required for the PI. Should adhere to [specific formatting requirements](https://www.nsf.gov/funding/senior-personnel-documents#current-and-pending-other-support-5db). Should be prepared using [SciENcv](https://www.ncbi.nlm.nih.gov/sciencv/). |
| Collaborators and Other Affiliations | Provide information about collaborators and other affiliations for the PI. Must use [COA template](https://www.nsf.gov/bfa/dias/policy/coa/coa_template.xlsx). |
| Facilities, Equipment, and Other Resources | (no page limit) A detailed description of the facilities (lab, computer, animal) and resources (supplies, space, time, funding) that support the capability to complete the proposed research.  |
| Budget | For most Directorates, the CAREER award is expected to total a minimum of $400,000 for the 5-year duration, including indirects. Awards for proposals to the Directorate for Biological Sciences (BIO) or the Directorate for Engineering (ENG) are expected to total a minimum of $500,000 for the 5-year duration. Review the previous CAREER awards [here](https://www.nsf.gov/awardsearch/advancedSearchResult?PIId=&PIFirstName=&PILastName=&PIOrganization=&PIState=&PIZip=&PICountry=&ProgOrganization=&ProgEleCode=&BooleanElement=All&ProgRefCode=1045&BooleanRef=All&Program=&ProgOfficer=&Keyword=&AwardNumberOperator=&AwardAmount=&AwardInstrument=&ActiveAwards=true&OriginalAwardDateOperator=&StartDateOperator=&ExpDateOperator=) to determine the award range for the program you’re targeting typically funds. You can also ask the PO what the typical award size is. Awards for proposals to the Directorate for Computer and Information Science and Engineering are expected to support one month of PI salary per year, one graduate student per year, and two trips per year; this may vary depending on individual circumstances, e.g., if the PI already has salary support.Budgets should be drafted by the PI, refined and approved by ORSP, and submitted to the NSF by ORSP.  |
| Budget Justification | (limit 5 pages) Provides a detailed breakdown of proposed spending in each category as well as a justification supporting the numbers provided in each budget category. |
| Data Management Plan | (limit 2 pages) Detail how the data generated by the proposed research will be managed. Specifically describe the types of data expected, policies for accessing the data, and plans for archiving the data. |
| Departmental Letter | (limit 2 pages) The letter should demonstrate an understanding of, and a commitment to, the effective integration of research and education as a primary objective of the CAREER award. Must include the department chair’s name, title, and signature. Must contain the following elements:* A statement to the effect that the PI is eligible for the CAREER program. For non-tenure-track faculty, the Departmental Letter must affirm that the investigator's appointment is at an early-career level equivalent to pre-tenure status, pursuant to the eligibility criteria specified above. Further, for non-tenure-track faculty, the Departmental Letter must clearly and convincingly demonstrate how the faculty member satisfies all the requirements of tenure-track equivalency as defined in the eligibility criteria specified in this solicitation.
* 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; and
* A description of a) the relationship between the CAREER project, the PI's career goals and job responsibilities, and the mission of his/her department/organization, and b) 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.

Note that the Department Letter should not be construed as a Letter of Support for the PI and should address only the items listed above. |

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| If Applicable/Optional Proposal Documents |
| Mentoring Plan | (1 page) Required for proposals requesting funding support for post-docs or graduate students. Must describe the mentoring activities that will be provided to all post-docs and graduate students supported by the proposal if awarded. |
| Letters of Collaboration | If the project involves collaborative arrangements of significance, these arrangements should be documented through letters of collaboration. Letters of collaboration should be limited to stating the intent to collaborate and should not contain endorsements or evaluation of the proposed project. Letters of collaboration should follow the single-sentence format:“If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the 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.” |