National Science Foundation

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Finding Funding - NSF Directorates

- Computer & Information Sciences and Engineering (CISE) http://www.nsf.gov/dir/index.jsp?org=CISE
- Education and Human Resources (EHR) http://www.nsf.gov/dir/index.jsp?org=EHR
- Integrative Activities (OIA) - https://www.nsf.gov/dir/index.jsp?org=OIA
NSF Program

• Each Directorate has a list of programs they fund
• Select any program to find...
  – Summary of the Program
  – Program Solicitation
  – Deadline Dates
  – Contact Information
  – Frequently Asked Questions
  – Webinars
  – List of previous awards
Finding Funding with NSF

Each Directorate has a list of programs they fund. Select any for details.
Review Awards

Review previous awards for subject, funding amount, etc.
Sample Cover Page of a Solicitation

Faculty Early Career Development Program (CAREER)
Includes the description of NSF Presidential Early Career Awards for Scientists and Engineers (PECASE)

PROGRAM SOLICITATION
NSF 20-525

REPLACES DOCUMENT(S):
NSF 17-537

Program Solicitation Number

NSF Directorates and Offices providing funding for this opportunity

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):
August 11, 2020
July 26, 2021
Fourth Monday in July, Annually Thereafter

Due Date
Solicitation – Eligibility Information

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Institutions of Higher Education (IHEs) - Two- and four-year IHEs (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Special Instructions for International Branch Campuses of US IHEs: If the proposal includes funding to be provided to an international branch campus of a US institution of higher education (including through use of subawards and consultant arrangements), the proposer must explain the benefit(s) to the project of performance at the international branch campus, and justify why the project activities cannot be performed at the US campus.

- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

Who May Serve as PI:

A Principal Investigator (PI) may submit only one CAREER proposal per annual competition. In addition, a Principal Investigator may not participate in more than three CAREER competitions. Proposals that are not reviewed (i.e., are withdrawn before review or are returned without review) do not count toward the three-competition limit.

Limit on Number of Proposals per Organization:

There are no restrictions or limits.

Limit on Number of Proposals per PI or Co-PI: 1

An eligible Principal Investigator may submit only one CAREER proposal per annual competition.
Solicitation Project Description

The Cover Sheet:

- **Program Solicitation Number.** FastLane users: Select the CAREER program solicitation number shown at the beginning of this solicitation from the drop-down menu. Research.gov Users: Select the CAREER program solicitation number in Step 1 of the Prepare New Proposal Wizard (Funding Opportunity). Grants.gov users: The program solicitation will be pre-populated by Grants.gov on the NSF Grant Application Cover Page.
- **NSF Unit of Consideration.** Select at least one specific core program from the drop-down list in FastLane as the NSF program(s) to consider the proposal. Research.gov users: Select at least one specific core program in Step 2 of the Prepare New Proposal Wizard (Where to Apply). Grants.gov users should refer to Section VI.1.2. of the NSF Grants.gov Application Guide for specific instructions on how to designate the NSF Unit of Consideration. For assistance in determining which program(s) to choose, refer to the NSF Guide to Programs, which provides descriptions of NSF research-supporting programs.
- **Project Title.** The project title must begin with "CAREER:" and follow with an informative title.
- **Co-PIs.** No co-PIs are permitted on the Cover Sheet.

Project Description:

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 may not exceed 15 pages.

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.
Program Contacts

VIII. AGENCY CONTACTS

General inquiries regarding this program should be made to:

- Division CAREER contacts listed on the CAREER web page at: https://www.nsf.gov/crssprgm/career/contacts.jsp
- Faculty Early Career program, telephone: (703)292-5111, email: nsf-ccc@nsf.gov

For questions related to the use of FastLane or Research.gov, contact:

- FastLane and Research.gov Help Desk: 1-800-673-6188
  FastLane Help Desk e-mail: fastlane@nsf.gov.
  Research.gov Help Desk e-mail: rgov@nsf.gov

For questions relating to Grants.gov contact:

- Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: support@grants.gov.

CAREER Directorate and Division Contacts:
https://www.nsf.gov/crssprgm/career/contacts.jsp
Where are the Directions?

- **Proposal & Award Policies & Procedures Guide (PAPPG)**
  - Part I is NSF’s proposal preparation and submission guidelines
  - Part II is NSF’s award and administration guidelines
  - Released every year

Collaboration with Single Proposal vs Collaborative Proposal with Multiple Organizations

• Submission of a collaborative proposal from one organization – Lead submits entire proposal and makes subawards to partners. PI uploads all Biosketches, C&P, Collaborators, Budget, etc.

• Submission of a collaborative proposal from multiple organizations – Each partner uploads their own documents and receives an award directly from NSF
## Collaborative Proposal Submitted from Multiple Organizations

### Lead Organization
- Cover sheet
- Biographical Sketch(es)
- Budget & Budget Justification
- Current & Pending Support
- Facilities, Equipment & Other Resources
- Collaborators & Other Affiliations
- **Project Summary**
- Project Description
- References
- Data Management Plan
- Postdoctoral Mentoring Plan

### Non-lead Organization(s)
- Cover Sheet
- Biographical Sketch(es)
- Budget & Budget Justification
- Current and Pending Support
- Facilities, Equipment & Other Resources
- Collaborators & Other Affiliations

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Proposal Documents

• Project Summary
• Project Description
• References
• Biographical Sketch
• Current and Pending Support
• Collaborators & Other Affiliations
• Facilities, Equipment & Other Resources
• Letters of Support
• Budget Justification
• Data Management Plan
• Postdoc Training Plan
• Suggested Reviewers
• Check the RFP for additional documents
Project Summary

• research.gov will display three separate text boxes (headings not required)
  – Overview: Description of the activity and brief description of objectives and methods
  – Intellectual Merit: Potential of the proposed activity to advance knowledge
  – Broader Impacts: Potential of the proposed activity to benefit society and contribute to the achievement of specific, desired social outcomes

• Allows you to upload a pdf document if you have special characters – do not to exceed 1 page (4700 characters)

• Proposals that do not separately address the overview and both merit review criteria within the 1 page will be returned without review

• Read the RFP – sometimes they ask for additional information

• Remember, the Project Summary Is Not an Abstract
Project Description

• Proposers should address:
  – what they want to do,
  – why they want to do it,
  – how they plan to do it,
  – how they will know if they succeed, and
  – what benefits could accrue if the project is successful

• Required Sections
  – Results from Prior NSF Support
  – Broader Impacts

Be sure to check your program RFP for specific requirements
Results of Prior NSF Support

- Submit for PI and all Co-PIs
- If PI has more than one, submit the one closest to the current proposal
- Information for the past 5 years, including current funding, even if it is for unrelated work or there was no salary support
- NSF award number, amount, period of support, title
- Summary of the results of the completed work, including accomplishments related to Intellectual Merit and Broader Impacts
- Publications resulting from the NSF award
- Evidence of research products and their availability
- If current proposal is for renewed support, a description of the relation of the completed work to the proposal
- No more than 5 pages

*Reviewers will be asked to comment on quality of prior work*
Broader Impacts

• How well does the activity advance discovery and understanding while promoting teaching, training, and learning? (Integration of education with research required of all NSF proposals)
• Should be related to your research project
• How well does the proposed activity broaden the participation of underrepresented groups?
• To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?
• Will the results be disseminated broadly to enhance scientific and technological understanding?
• What may be the benefits of the proposed activity to society?
Characteristics of Good Broader Impacts

• Include strategy to achieve impact
• Have a well-defined set of expected outcomes
• Include evaluation of impact
• Make results meaningful and valuable
• Make consistent with technical project tasks
• Have detailed plan of activities
• Provide rationale to justify activities
• May add budget for broader impact activities
Facilities, Equipment & Other Resources

• Describe the facilities and equipment to do your proposed work
• Reviewers use to assess the adequacy of the resources available to perform the effort
• Describe only those resources that are directly applicable
• Include off-site facilities if used
• Include non-funded collaborations (include a letter of support)
Letters of Support

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 and Other Resources section of the proposal."

• 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
Budget Justification

• Each proposal must contain a budget for each year of support requested. The budget justification must be no more than five pages per proposal.

• The amount for indirect costs should be calculated by applying the current negotiated indirect cost rate(s) to the approved base(s), and such amounts should be specified in the budget justification. Specify rate and amount.

• For proposals that contain a subaward(s), each subaward must include a separate budget justification of no more than five pages.
Data Management Plan

• All proposals are required to include, as a supplementary doc, a Data Management Plan of up to two pages.
  • The types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
  • Standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
  • Policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
  • Policies and provisions for re-use, re-distribution, and the production of derivatives; and
  • Plans for archiving data, samples, and other research products, and for preservation of access to them.

• https://www.nsf.gov/bfa/dias/policy/dmp.jsp
• Data Management Plan Tool - https://dmptool.org/
Postdoc Mentoring Plan

• Proposals that include funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals.

• Provide career counseling, training in the preparation of grant proposals, or training in responsible professional practices.

• Develop publications and presentations.

• Offer guidance on techniques to improve teaching and mentoring skills.

• Provide counseling on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas.
Biographical Sketch

- Up to 3 pages
- Professional Preparation
- Appointments
- Products – only 10 allowed
  - 5 closely related to the project
  - 5 other significant
- Synergic Activities – broader impact of scholarly work

- NSF fillable PDF - file:///C:/Users/jrmcs/Downloads/biosketch.pdf
Current and Pending Support

- PI, Co-PIs, and senior personnel
- Ongoing projects and proposals, including the proposed project
- Include unfunded projects with time commitment
- All sources of funding must be listed (federal, state, local or foreign government agencies, public or private foundations, industrial/commercial organizations)
- Concurrent submission of a proposal to other organizations will not prejudice review of the proposed project
- You must submit all the pages – research.gov will delete extra pages
- You MUST use an NSF approve format - https://www.nsf.gov/bfa/dias/policy/cps.jsp
- NSF fillable PDF - file:///C:/Users/jrmcs/Downloads/cps.pdf
SciENcv Help


• SciENcv Tutorial
  https://www.youtube.com/watch?v=PRWy-3GXhtU&feature=youtu.be

• SciENcv Help
• https://www.ncbi.nlm.nih.gov/books/NBK154494/
Collaborators & Other Affiliations

• You must list in separate tables
  – Advisors and Advisees
  – Personal, family, business relationships
  – Editorial Boards, Editor-in-chief, Co-editors
  – Co-authors, collaborators on projects

• You MUST use the NSF Template
  
  https://www.nsf.gov/bfa/dias/policy/coa.jsp
Review Criteria

• Every NSF proposal is evaluated using two overarching review criteria
  – Intellectual Merit
  – Broader Impacts

• May be program specific criteria – check your RFP
Review Elements

• The following elements considered in the review for both criteria:
• What is the potential for the proposed activity to
  – Advance knowledge and understanding within its own field or across different fields (Intellectual Merit)?
  – Benefit society or advance desired societal outcomes (Broader Impacts)?
• To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
• Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
• How well qualified is the individual, team, or institution to conduct the proposed activities?
• Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?
## Funding Rates by Directorate - 2019

<table>
<thead>
<tr>
<th>Directorate</th>
<th># of Awards</th>
<th>Funding Rate</th>
<th>Funding Amount</th>
<th>Time to Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>1,053</td>
<td>34%</td>
<td>174,102</td>
<td>5.5 months</td>
</tr>
<tr>
<td>Computer Information Sciences/Eng</td>
<td>2,009</td>
<td>23%</td>
<td>160,612</td>
<td>5.7 months</td>
</tr>
<tr>
<td>Education &amp; Human Resources</td>
<td>844</td>
<td>22%</td>
<td>199,929</td>
<td>5.5 months</td>
</tr>
<tr>
<td>Engineering</td>
<td>2,388</td>
<td>26%</td>
<td>127,012</td>
<td>4.7 months</td>
</tr>
<tr>
<td>Geosciences</td>
<td>1,539</td>
<td>38%</td>
<td>148,568</td>
<td>6.7 months</td>
</tr>
<tr>
<td>Mathematical &amp; Physical Sciences</td>
<td>2,414</td>
<td>30%</td>
<td>114,600</td>
<td>6.8 months</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>877</td>
<td>23%</td>
<td>81,512</td>
<td>5.5 months</td>
</tr>
<tr>
<td>NSF Overall</td>
<td>11,251</td>
<td>27%</td>
<td>$133,333</td>
<td>5.7 months</td>
</tr>
</tbody>
</table>
NSF Proposal & Award Process

**Phase I**
1. Opportunity Announced
2. Proposal Submitted
3. Proposal Review

**Phase II**
4. Reviewers Selected
5. Peer Review
6. Program Officer Recommendation
7. Division Direction Review

**Phase III**
8. Business Review
9. Award Finalized
Resources

- Proposal & Award Policies & Procedures Guide
- NSF Strategic Plan for Fiscal Years 2018-2022
  [https://www.nsf.gov/about/performance stratégic_plan.jsp](https://www.nsf.gov/about/performance/strategic_plan.jsp)
- Report to the NSB on Merit Review
- Fiscal Year 2022 Budget Request
- NSF Current & Pending Support
Research.gov
Fastlane is being discontinued, you will need to submit your proposal through research.gov

Video on using research.gov