# NSF CAREER Program

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Directorate of Geosciences
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# The CAREER Program at NSF

- NSF's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education

- Presidential Early Career Awards for Scientists and Engineers (PECASE) are selected from among the most meritorious recent CAREER awardees

# Goals of the CAREER program

- To emphasize the importance NSF places on early development of academic careers
- 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 educators
- To encourage faculty and academic institutions to value and support the integration of research and education

# CAREER Guidelines and Deadlines

CAREER Program Solicitation
NSF **20-525**

Next Deadline Date:
Monday, July 26, 2021

CAREER Program Website:
www.nsf.gov/career

- Solicitation
- FAQs
- Division contacts
- Links to recent awards
- Webinars

# General Advice for Proposers

- Sign up for automated emails from NSF so that you receive notice of funding opportunities as soon as they are published.
  - Program solicitations
  - Dear Colleague Letters

- Read the Program Solicitation and the "Frequently Asked Questions" documents carefully before contacting program officers

- Volunteer to review proposals and serve on panels!!

- Know where your research "fits" at NSF

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# NSF Champions Research and Education Across All STEM Fields

Biological Sciences

Engineering

Mathematical & Physical Sciences

Computer & Information Science & Engineering

Geosciences

Integrative Activities

Education & Human Resources

Social, Behavioral & Economic Sciences

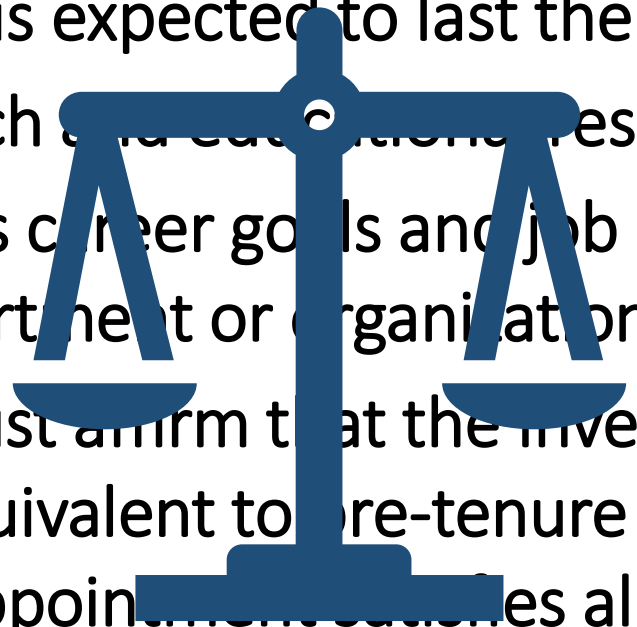
International Science and Engineering

# CAREER Eligibility

- Hold a doctoral degree by proposal deadline
- Hold at least a 50% tenure-track or equivalent position as an assistant professor by the deadline (July 26) to be eligible to apply.
- 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 Eligibility - Tenure-Track Equivalency

- ✓ In an appointment that is expected to last the five years of a CAREER grant.
- ✓ Have substantial research and education responsibilities.
- ✓ Project relates to the PIs 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 must explain how the faculty member's appointment satisfies all the above requirements of tenure-track equivalency.

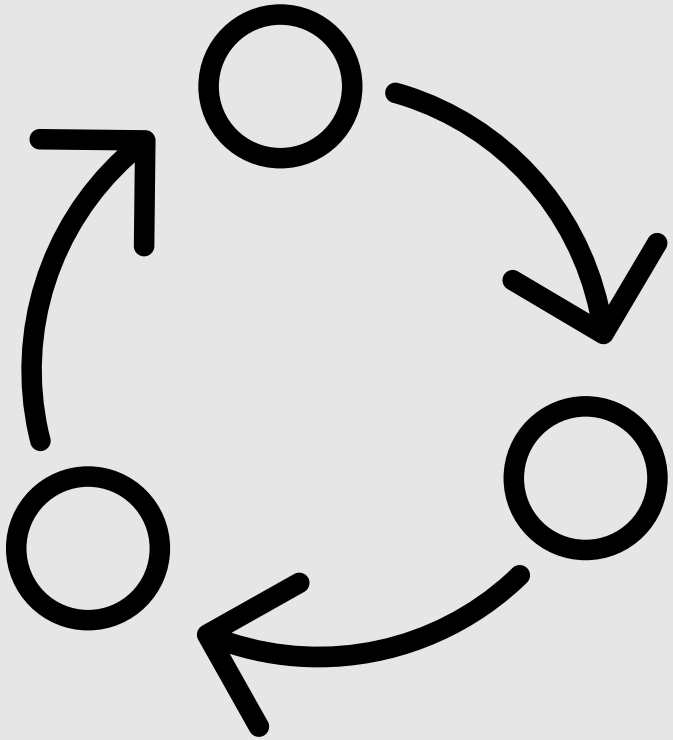


# CAREER Program Institutional Eligibility

- U.S. academic institutions that award degrees in fields supported by NSF
- U.S. Non-profit, non-degree-granting organizations 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

# How is a CAREER proposal different?

Excellence in Science



Integration of Science and Education

Excellence in Education

# CAREER or a regular research proposal?

- CAREER proposals are ***single-PI*** projects that include research and education activities that are integrated, innovative, and ambitious
- CAREER proposals require a Departmental support
- The CAREER program's aims are lofty – CAREER awards are a lot of work
- Are you at the right stage in your career to undertake the commitments of a CAREER award?
- Have you demonstrated commitment to both research and education?

# What is included in a CAREER proposal?

Cover Page

Proposal Summary

Project Description

Departmental Letter

Letters of Collaboration (if needed)

Budget

# Cover Page and Project Summary

- Cover Page - SINGLE PI only – no Co-PIs allowed!

- Project Summary:
  - Intellectual Merit – Focus on science/research; mention integration of education efforts

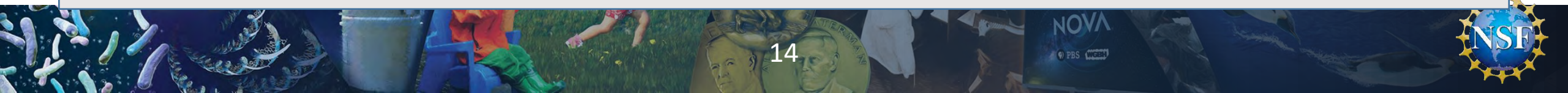
  - Broader Impacts – Focus on education activities; mention any societal benefits of scientific outcomes

# Project Description:

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

Different disciplinary fields and/or different organizations have different expectations; a wide range of research and education activities may be appropriate for the CAREER program.

You may wish to pursue an additional activity such as entrepreneurship, industry partnerships, or policy that enhances your research and education plan.



# Expectations for CAREER Vary 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, and/or Program.

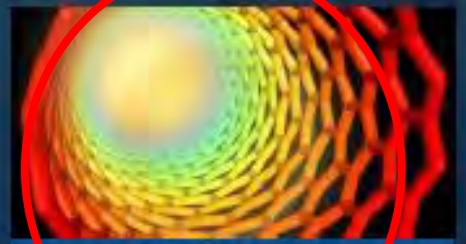
Expectations for scope of research and education activities vary with disciplinary community norms.

Talk to Division Contact(s) for more information

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

# NSF Champions Research and Education Across All STEM Fields

Biological Sciences



Engineering

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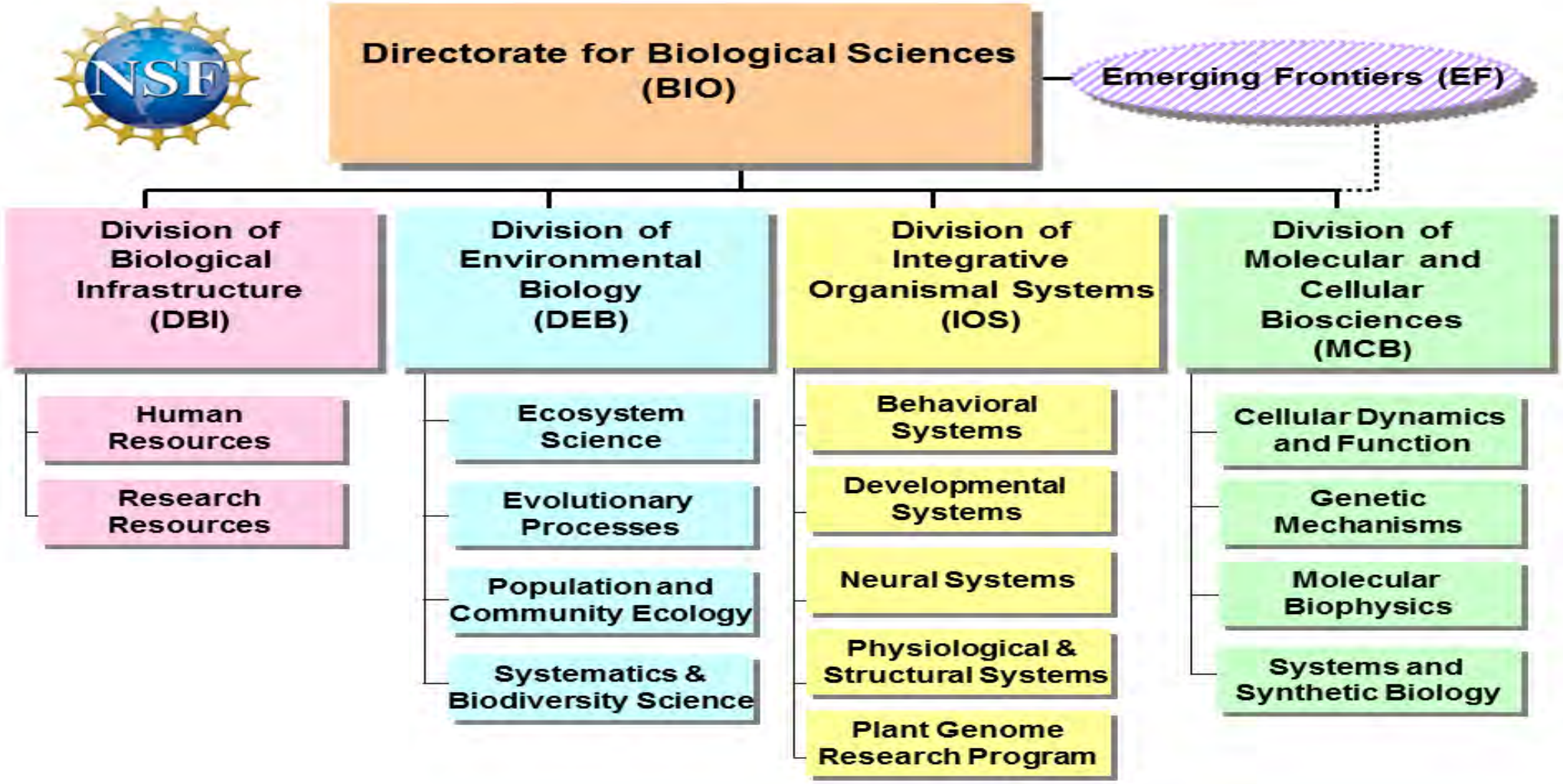

Directorate for Biological Sciences (BIO)
Emerging Frontiers (EF)
Division of Biological Infrastructure (DBI)
Human Resources
Research Resources
Division of Environmental Biology (DEB)
Ecosystem Science
Evolutionary Processes
Population and Community Ecology
Systematics & Biodiversity Science
Division of Integrative Organismal Systems (IOS)
Behavioral Systems
Developmental Systems
Neural Systems
Physiological & Structural Systems
Plant Genome Research Program
Division of Molecular and Cellular Biosciences (MCB)
Cellular Dynamics and Function
Genetic Mechanisms
Molecular Biophysics
Systems and Synthetic Biology

# Contact the Directorate/Division CAREER PO

- https://www.nsf.gov/crssprgm/career/contacts.jsp

- **DIRECTORATE FOR ENGINEERING (ENG)**

- **Directorate Contacts:**

- **Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET):** 703-292-8320

- **Division of Civil, Mechanical and Manufacturing Innovation (CMMI):** 703-292-8360

- **Division Electrical, Communications and Cyber Systems (ECCS):** 703-292-8339

- **Division of Engineering Education and Centers (EEC):** 703-292-8380

# Contact your disciplinary program officer(s)

- If you think you might fit in multiple programs or if you are uncertain about where to submit:
  - ➢Search the NSF awards database to find recent award abstracts from that program,
  - ➢send an email to the program officer with a short paragraph describing your research goals and ask if it appropriate for that program.
- See program solicitation for list of program officers

# Departmental Letter?

- 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?

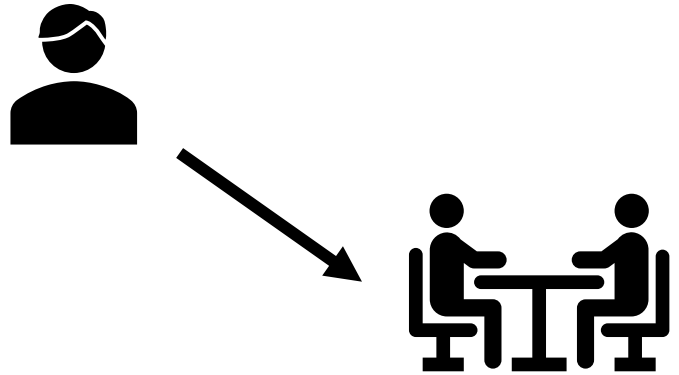
Letter should consist of a single-sentence statement of collaboration

- "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:

- 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 / Educational collaborations
- Mentoring of U.S. students at a foreign site, if applicable

# CAREER Program Personnel & Budgets



- Co-PIs on cover sheet are not allowed
- Requests for support of other senior personnel, consultants, or sub-awards are 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)

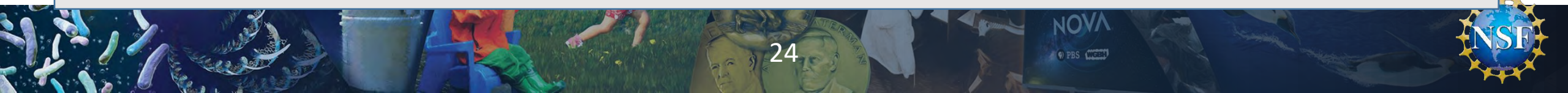
# Budgets: Award Size and Duration Differences

- Minimum of $400,000 and with a 5-year duration, 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.

# CAREER Budgets (con't)

- Programs may prefer to make awards with budgets close to the anticipated minimum size (check with your Program Officer)
- We know science costs money. Be accurate, be reasonable
- Know what NSF will pay for and will not pay for…talk to your program director + read the PAPPG (equipment? Travel? Facilities & logistics?)
- Use the "Budget Justification" pages to explain your costs (so important that it's now 5 pages)
- Ask for money to support your Educational Component & Broader Impacts



# Timeline for Proposal Submission

- The timelines are listed on the NSF website – START EARLY!!
- You can submit the proposal BEFORE the deadline!
- You can change the proposal up to the deadline

# Review Criteria for CAREER Proposals

Uses the NSF-wide review criteria of:

- 1) Intellectual Merit
- 2) 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 to carry out the proposed activities?

# We encourage you to contact Program Directors

Email the appropriate program officer(s) and ask if your research project fits their program

Your program director can:

- Confirm program fit
- Give advice on common proposal preparation errors
- Help you understand the review of a previous proposal
- Point you to resources you can use to help write a better proposal next time
- Give general guidance on good proposal writing

# Reminder! General Advice for Proposers

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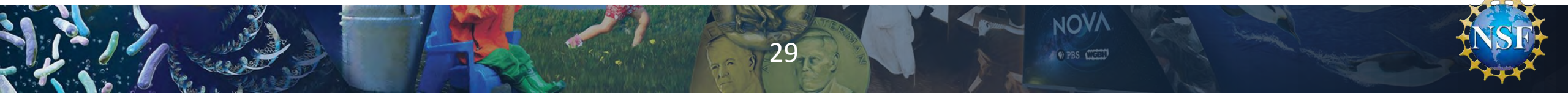
# Thank you for your interest in the CAREER program!

## Questions?