NSF Engineering CAREER Proposal Workshop

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Directorate for Engineering

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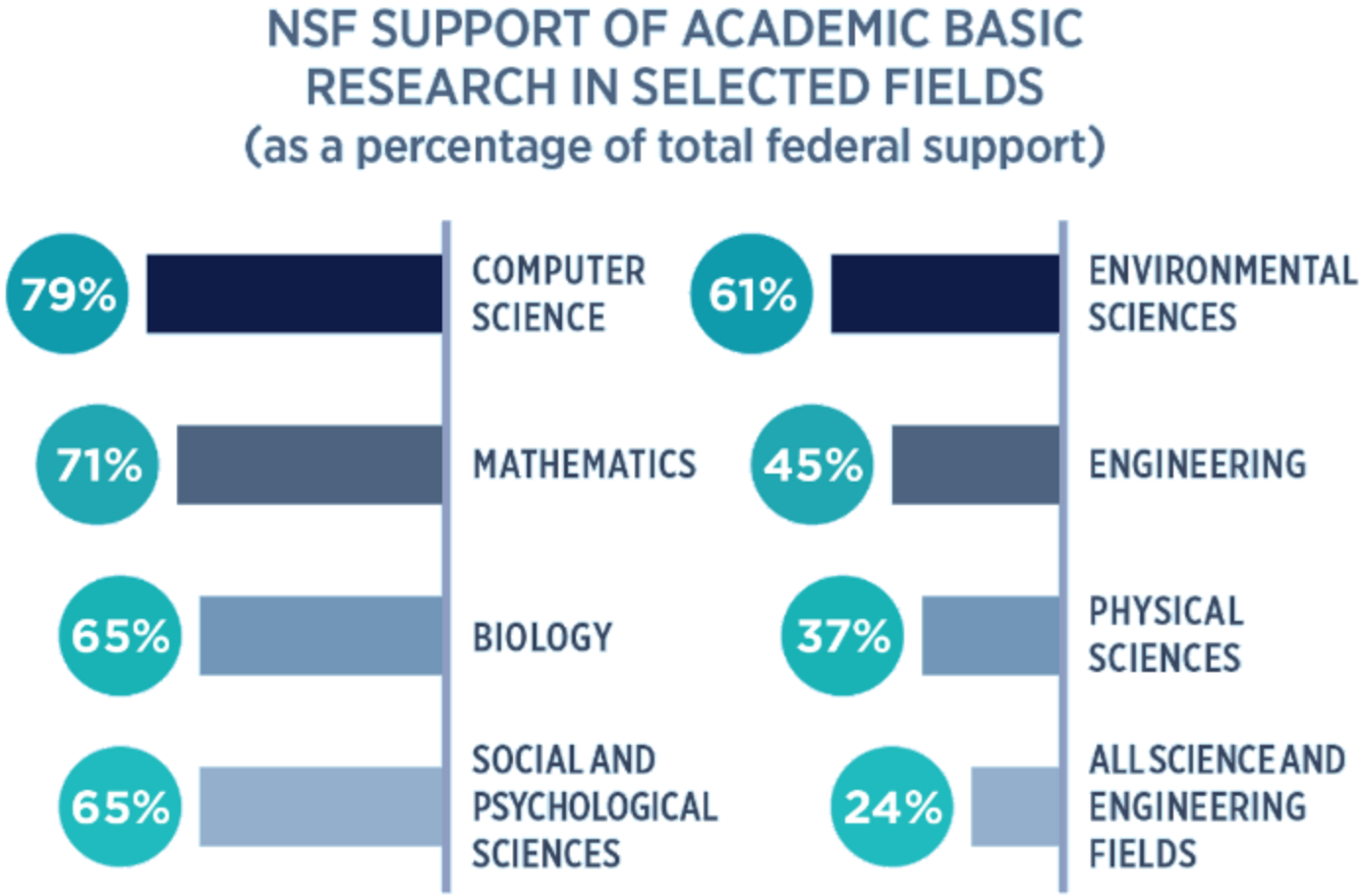
NSF Mission

To promote the progress of science, to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes

NSF Support for Fundamental Academic Research



Transforming our world for a better tomorrow

by driving discovery, inspiring innovation, enriching education, and accelerating access

- Propel transformational engineering impact
- Expand opportunities for people
- Catalyze purposeful partnerships

Scale: Single investigator to mid-size teams to centers and networks

Breadth: Single discipline through convergence research

Career stage: Undergraduate to grad to postdoc to early to middle to later career

Innovation cycle: Basic research through translational research

You are at the heart of our mission

NSF's MAJOR PRIORITIES

STRENGTHENING ESTABLISHED NSF

With **investments that expand the frontiers of knowledge and technology**.

INSPIRING MISSING MILLIONS

Using **interventions and capacity building** that enhance and broaden participation.

ACCELERATING TECHNOLOGY AND INNOVATION

Through innovative, **cross-cutting partnerships** and programs.

NSF Themes for FY 2024

Advance Emerging Industries

Build a Resilient Planet

Create Opportunities Everywhere

Strengthen Research Infrastructure

Faculty Early Career Development Program (CAREER)

CAREER-supported faculty have the potential to:

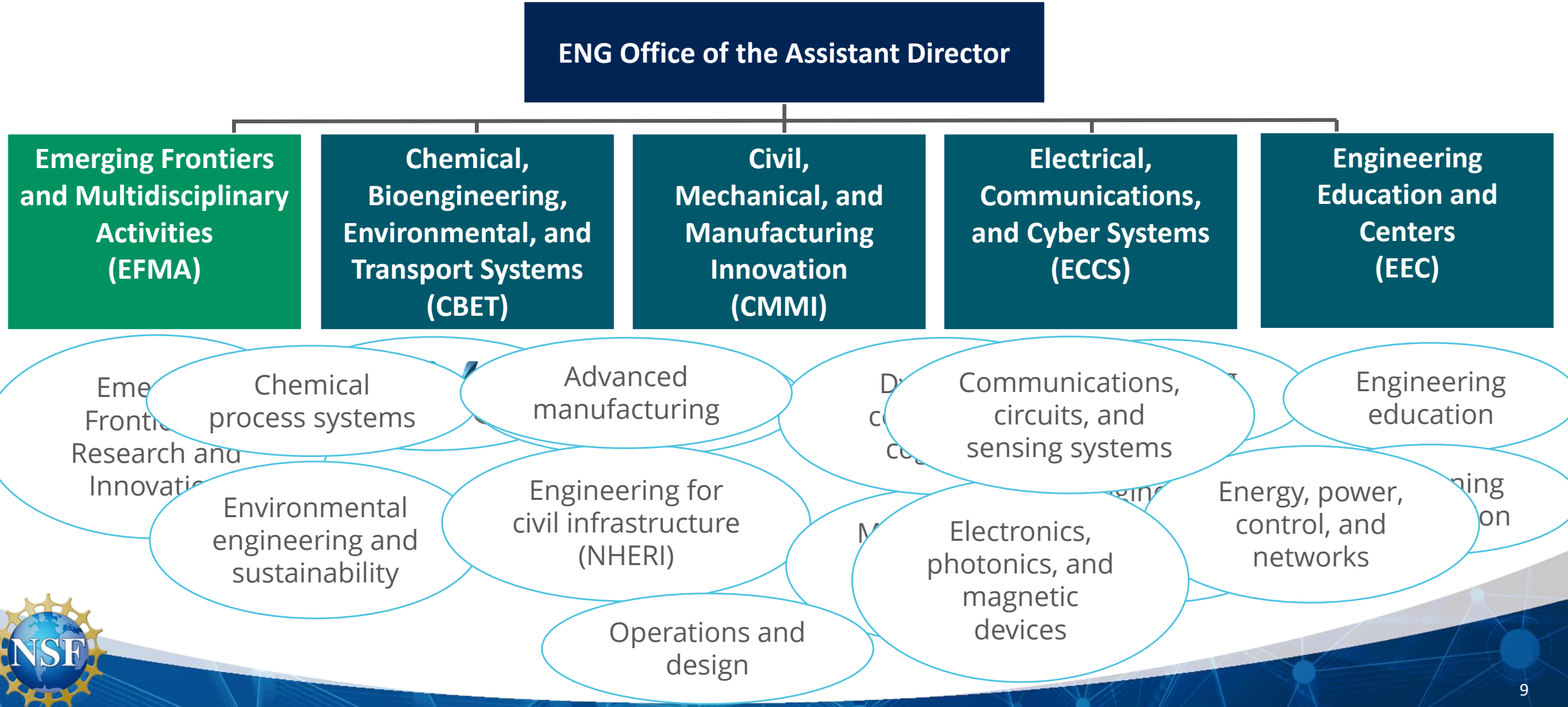
- serve as academic role models in research and education
- lead advances in the mission of their department or organization

CAREER activities build a foundation for a lifetime of leadership

5-year ENG CAREER award for $500K or more

NSF 22-586 CAREER deadline **July 26, 2023**

NSF Directorate for Engineering



Engineering Research Initiation

Supports new investigators as they initiate their research programs

Limited to investigators not affiliated with “very high research activity” R1 institutions

2-year ENG ERI award for up to $200K

NSF 22-595
ERI deadline
September 15, 2023

EArly-concept Grants for Exploratory Research (EAGER)

EAGER is a type of proposal used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches.

- May involve radically different approaches, apply new expertise, or engage novel disciplinary or interdisciplinary perspectives
- Requires a Concept Outline
- Up to 2 years and $300K
- *See PAPPG, Part 1, Chapter 1, F. Other Types of Proposals*

Rapid Response Research (RAPID)

RAPID is a type of proposal used when there is a severe urgency with regard to availability of or access to, data, facilities or specialized equipment

- Includes quick-response research on natural or anthropogenic events and similar unanticipated occurrences
- Requires a Concept Outline
- Up to 1 year and $200K
- *See PAPPG, Part 1, Chapter 1, F. Other Types of Proposals*

Research Infrastructure

Natural Hazards Engineering Research Infrastructure (NHERI), www.designsafe-ci.org

- 8 experimental facilities for extreme wind, water and earthquake events
- Modeling, simulation, and computational tools to manage, analyze, and understand critical data

National Nanotechnology Coordinated Infrastructure (NNCI), www.nnci.net

- 16 user facilities for academia, companies and government
- 2000+ fabrication and characterization tools and instruments

Network for Computational Nanotechnology (NCN), www.nanoHUB.org

- Cyber-resource for nanotechnology theory, modeling and simulation
- Research and education content nodes in nano-manufacturing and nano-bio

Broader Impacts

The Center for Advancing Research Impact in Society (ARIS) helps scientists and engineers engage with and demonstrate the impact of research in their communities and society

- builds capacity
- advances scholarship
- grows partnerships
- provides resources and training

www.researchinsociety.org

Diversity, Equity, Inclusion and Access

- Perform research
- Join and build the community
- Train and mentor students, post-docs and veterans
- Encourage career-life balance and varied paths
- Learn from colleagues

NSF INCLUDES National Network

www.includesnetwork.org

Future Engineering Research Directions

Engineering Research Visioning Alliance (ERVA) integrates input from our research community and stakeholders

- Academia, industry, professional societies, government, public

Communicates on nascent engineering opportunities and priorities

Strengthens connectivity and coordination

www.ervacommunity.org

NSF Virtual Grants Conference

https://nsfpolicyoutreach.com/

Become a Reviewer

- Understand the merit review process
- Learn how to write a good proposal
- Encounter leading-edge work
- Network with other experts
- Serve the science and engineering community

Reach out to Program Directors with your interests & biosketch

Opportunities to Engage

- Workshops, information sessions
- NSF Website – Funding Opportunities
- Continuous submission and application deadlines
- RFI, Metaprograms, DCLs, Solicitations
- Contact Program Directors

SIGN UP FOR UPDATES ›

Making the Most of this Workshop