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FUNDING OPPORTUNITY MATRIX

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UNIVERSITY OF HOUSTON
CENTER-LEVEL READINESS MATRIX

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FUNDING OPPORTUNITY MATRIX

The following matrix provides an overview of federal funding opportunities aligned with the groups identified for support. The matrix is meant to assist in proactively planning and aligning recurring funding opportunities with institutional priorities. This matrix is not meant to be exhaustive, and opportunities are presented in random order. The matrix is grouped into the following three sections:

1. **Early-Career Opportunities:** For early career faculty who are beginning to build their grants portfolio.
2. **Center-Level Preparation Opportunities:** For mid-career faculty who are developing their grants experience for an eventual center-level opportunity.
3. **Center-Level Opportunities:** For experienced faculty and teams of faculty who are ready to pursue a center-level opportunity.

Abbreviations

AFOSR	Air Force Office of Scientific Research
ARO	Army Research Office
BAA	Broad Agency Announcement
CDC	Centers for Disease Control
CDMRP	Congressionally Directed Medical Research Programs
DOD	Department of Defense
DARPA	Defense Advanced Research Projects Agency
DOE	Department of Energy
DOED	Department of Education
FOA	Funding Opportunity Announcement
IES	Institute of Education Sciences (Department of Education)
NASA	National Aeronautics and Space Administration
NIFA	National Institute of Food and Agriculture
NIH	National Institutes of Health
NSF	National Science Foundation
ONR	Office of Naval Research
USDA	United States Department of Agriculture
YIP	Young Investigator Program

EARLY-CAREER OPPORTUNITIES

Agency	Program	Solicitation	Funding Limits	Program Overview
NSF	Faculty Early Career Development Program (CAREER)	Annually	$400K-$500K	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.
NSF	Computer and Information Science and Engineering Research Initiation Initiative (CRII)	Annually	$175K	This program supports early-career scientists in computer and information science and engineering who lack access to adequate organizational or other resources, enabling them to undertake exploratory research and develop collaborations and innovative approaches. Investigators may not submit a CRII proposal in the same calendar year as an NSF CAREER Award proposal.
DOE	DOE Early Career Research Program	Annually	Minimum $875K per award for 5 years for Institutes of Higher Education	Early career researchers may apply to one of eight Office of Science program offices: Advanced Scientific Computing Research; Biological and Environmental Research; Basic Energy Sciences; Fusion Energy Sciences; High Energy Physics; Nuclear Physics; Accelerator R&D and Production; and Isotope R&D and Production.
NASA	Early Career Faculty – Space Technology Mission Directorate	Annually	$600K	Research topics are set annually. The Earth Science program for early career scientists and engineers are solicited every 2-3 years.
NIH	NIH Director's Early Independence Awards (DP5)	Annually, due September 6, 2023	$250,000 per year for up to 5 years	Part of the High-Risk, High-Reward Research program, the award supports outstanding junior scientists with the intellect, scientific creativity, drive, and maturity bypass the traditional postdoctoral training period to launch independent research careers.
NIH, CDC	Early Career Development Mechanisms: DP2, R25, various K programs	Every Year with due dates in February, June, October.	Varies	Early career researchers are about to transition - or have recently moved - to fully independent positions as investigators, faculty members, clinician scientists, or scientific team leaders in industry. New Investigators at NIH are those that have not successfully competed for a major independent research award such as a research project (R01) grant.

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NIFA	Agriculture and Food Research Initiative | Foundational Program New Investigator Grants	Annually	Varies by program	The Agriculture and Food Research Initiative (AFRI) is the nation's leading competitive grants program for the food and agricultural sciences. Focus areas are plant health, production, and products; agricultural systems and technology; food science; and farming and ranching business and economics.
DOD	Air Force (AFOSR) Young Investigator Program (YIP)	Annually	Up to $450K	The program objective is to foster creative basic research in science and engineering; enhance early career development of outstanding young investigators; and increase opportunities for the young investigator to recognize the Air Force and Space Force mission and related challenges in science and engineering.
DOD	Army Research Office (ARO) Young Investigator Program (YIP)	Annually	Up to $360K	ARO funds basic research proposals from educational institutions, nonprofit organizations and private industry to increase fundamental knowledge and understanding in the chemical, life, physical, engineering, materials, mechanical, computing, information, network, mathematical, earth, and social sciences, related to long-term national security needs.
DOD	Congressionally Directed Medical Research Programs (CDMRP) Career Development Award	Annually	Varies by program	CDMRP funds the full pipeline of research development, including basic, translational, and clinical research, by investing in groundbreaking research and targeting critical gaps.
DOD	DARPA Young Faculty Award (YFA)	Annually	Up to $500K	The YFA program provides funding, mentoring and industry and DoD contacts to awardees early in their careers so they may develop their research ideas in the context of national security needs. A wide range of interdisciplinary topics are accepted.
DOD	Office of Naval Research (ONR) Young Investigator Program (YIP)	Annually	Up to $500K	From the development of sophisticated computer algorithms for aircraft and ship electronics to the fielding of lightweight armor for the Marine Corps, ONR's five science and technology departments coordinate and execute naval research investment priorities.
IES	Statistical and Research Methodology in Education: Early Career Grants	Annually	$225K	The National Center for Special Education Research (NCSER) aims to prepare individuals to conduct rigorous and relevant special education and early intervention research that advances knowledge within the field and addresses issues important to education policymakers and practitioners.

CENTER-LEVEL PREPARATION OPPORTUNITIES

Agency	Program	Solicitation	Funding Level	Program Overview
NIH	Research Project Grant Program (R01)	New grant applications due: February 5, June 5, and October 5.	$2.5M	Provides support for health-related research and development based on the missions to the stated program interests of one or more of the NIH Institutes and Centers.
NIH	Collaborative Program Grant for Multidisciplinary Teams (RM1)	New grant applications due: February 5, June 5, and October 5.	$1.5M	Designed to support highly integrated research teams of three to six Program Directors/Principal Investigators (PDs/PIs) to address ambitious and challenging research questions that are within the mission of NIGMS. Project goals should not be achievable with a collection of individual efforts or projects. Collaborative program teams are expected to accomplish goals that require considerable synergy and managed team interactions. Teams are encouraged to consider far-reaching objectives that will produce major advances in their fields.
NSF	Research Coordination Networks	Proposals Accepted Anytime	$500K	Supports networks that foster communication and new collaborations among scientists, engineers and educators who share a common interest in a new or developing area of science or engineering.
NIH	Multiproject Grants (P and U mechanisms) U18 Research Demonstration: Cooperative Agreements U19 Research Program: Cooperative Agreements P20 Exploratory Grants	Annually	Varies by Institutes and Centers, typically from $2M upwards	NIH multiproject grants share the following features: At least two interrelated research related to a theme with each capable of standing on its own scientific merit but complementing one another; Collaboration and interaction among projects and investigators to achieve a common goal; and Synergy among projects.
NIH	Exploratory Grants for Climate Change and Health Research Center Development (P20 Clinical Trial Optional)	November 2023	Up to $1.75M	This program will support the development of a transdisciplinary research environment to sustain a program of fundamental and applied research to examine the impacts of climate change on health and to develop action-oriented solutions to protect the health of individuals, communities, and nations from the hazards posed by climate change.

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NIH	P60 Comprehensive Center	Annually	Varies by Institutes and Centers	To support a multipurpose unit designed to bring together into a common focus divergent but related facilities within a given community. It may involve other locally available resources, such as hospitals, computer facilities, regional centers, and primate colonies. Usually includes the following objectives: to foster biomedical research and development at both the fundamental and clinical levels; to initiate and expand community education, screening, and counseling programs; and to educate medical and allied health professionals concerning the problems of diagnosis and treatment of a specific disease.
NIH	U01 Research Project--Cooperative Agreements	Annually	No specific dollar limit unless specified in FOA	To support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his or her specific interest and competencies.
NSF	Accelerating Research through International Network-to-Network Collaborations (AccelNet)	Fall, Annually	$1M	The program seeks to foster high-impact science and engineering by providing opportunities to cooperatively identify and coordinate efforts to address knowledge gaps and research needs, through strategic linkages among U.S. research networks and complementary networks.
NSF	Future of Work at the Human-Technology Frontier: Core Research (FW-HTF)	Offered Spring 2023, Unknown future dates	$1M-$2M	Supports research on the interaction of technology and people in the workplace, with a focus on the design of intelligent technologies and work organization that improves the quality of work, ensures worker safety, and enhances societal impact.
NSF	Mid-Career Advancement (MCA)	Spring, Annually	Varies across disciplinary research programs.	The MCA program offers an opportunity for scientists and engineers at the mid-career stage (see restrictions under Additional Eligibility Information) to substantively enhance and advance their research program and career trajectory. MCA support is expected to help lift the constraints to reduce workload inequities and enable a more diverse scientific workforce (more women, persons with disabilities, and individuals from groups that have been underrepresented) at high academic ranks.
NSF	Accelerating Research Translation (ART)	Offered Spring 2023, Unknown future dates	$6M	The primary goals of this program are to build capacity and infrastructure for translational research at U.S. Institutions of Higher Education (IHEs) and to enhance their role in regional innovation ecosystems. In addition, this program seeks to effectively train graduate students and postdoctoral researchers in translational research, benefiting them across a range of career options.
NSF	Planning Grants for Engineering Research Centers (ERC)	Not available for 2023, Unknown future dates	$100K	The ERC program intends to support planning activities leading to convergent research team formation and capacity-building within the engineering community. This planning grant solicitation is designed to

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				foster and facilitate the engineering community's thinking about how to form convergent research collaborations.
NSF	Partnerships for International Research and Education (PIRE)	Not available for 2023, Unknown future dates	$1.5M	The PIRE competition invites visionary, ambitious, interdisciplinary, use-inspired research proposals that address scientific challenges related to climate change and/or clean energy. Requires active participation of stakeholders outside of academia.
NSF	Environmental Convergence Opportunities in Chemical, Bioengineering, Environmental, and Transport Systems (ECO-CBET)	January, Annually	$1.5M-$1.7M	The ECO-CBET solicitation requires fundamental research activities that confront vexing environmental engineering and sustainability problems by developing foundational knowledge underlying processes and mechanisms such that the design of innovative new materials, processes, and systems is possible. A key objective of the solicitation is to encourage dialogue and tightly integrated collaborations wherein members of the chemical process systems, transport phenomena, and bioengineering research communities engage with environmental engineering and sustainability experts to spark innovation and arrive at unanticipated solutions.
NSF	Integrative Strategies for Understanding Neural and Cognitive Systems (NCS)	Annually, but unknown future dates	$1M-$1.5M	Supports interdisciplinary research in four focus areas: neuroengineering and brain-inspired designs; individuality and variation; cognitive and neural processes in complex environments; and data-intensive cognitive science and neuroscience. This program calls for innovative, convergent, boundary-crossing proposals that can best capture those opportunities and map out new research frontiers.
NSF	Research on Emerging Technologies for Teaching and Learning (RETTL)	Annually	$850K	This program funds exploratory and synergistic research in emerging technologies (to include, but not limited to, artificial intelligence (AI), robotics, and immersive or augmenting technologies) for teaching and learning in the future. The scope of the program is broad, with special interest in diverse learner/educator populations, contexts, and content, including teaching and learning in science, technology, engineering, and mathematics (STEM) and in foundational areas that enable STEM (e.g., self-regulation, literacy, communication, collaboration, creativity, and socio-emotional skills).
NSF	Dear Colleague Letter: Enhancing Engineering Technology and Advanced Semiconductor Manufacturing Technician Education (ETSTE)	ATE: October 05, 2023 S-STEM: February 19, 2024	ATE: Track 1: $350K Track 2: $650K Track 4: Planning Grant $70K Track 5: $150K-$800K S-STEM: Track 1: $750K	Supports transformative approaches to improve and impact advanced manufacturing technician education and workforce development for (a) semiconductor manufacturing and/or (b) semiconductor manufacturing and design through cooperative activity between NSF and Intel Corporation.

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DOE	Climate Resilience Centers	Unknown future dates	$1M	CRCs will leverage ongoing DOE climate science and capabilities that exist at currently supported DOE national laboratories and universities, and build two-way engagement between DOE funded research and community stakeholders for improved climate resilience responses.
DOE	Continuation of Solicitation for the Office of Science Financial Assistance Program	Annually Due September 30, 2023	Maximum award size $5M for up to 5 years.	Researchers may apply to one of eight Office of Science program offices: Advanced Scientific Computing Research; Biological and Environmental Research; Basic Energy Sciences; Fusion Energy Sciences; High Energy Physics; Nuclear Physics; Accelerator R&D and Production; and Isotope R&D and Production.
DOD	DoD Army BAA for Fundamental Research	Rolling 5-year BAA	$500K-$2M	Seeks proposals for scientific research in mechanical sciences, mathematical sciences, electronics, computing science, physics, chemistry, life sciences, materials science, network science, and environmental sciences.
DOD	Development Command Army Research Laboratory (DEVCOM ARL) BAA for Basic and Applied Scientific Research	Rolling 5-year BAA	$500K-$2M	Seeks proposals for research based on the following S&T campaigns: Computational Sciences, Materials Research, Sciences for Maneuver, Information Sciences, Sciences for Lethality and Protection, Human Sciences, and Assessment and Analysis.
DOD	Research Interests of the Air Force Office of Scientific Research (AFOSR)	Rolling 5-year BAA	$300K-$1.5M	Solicits proposals for basic research to foster revolutionary scientific breakthroughs enabling the Air Force, Space Force and U.S. industry to produce world-class, militarily significant, and commercially valuable products. Relevant Topic Areas: Physical and Biological Sciences; Human Performance and Biosystems
DOD	BAA for Navy and Marine Corps Science and Technology	Fall, Annually	$500K-$2M	Seeks proposals that offer potential for advancement and improvement of Navy and Marine Corps operations.
DOD	U.S. Army Corps of Engineers ERDC Broad Agency Announcement	Rolling 5-year BAA	$500K-$2M	Research conducted in the broad fields of interest to the U.S. Army Engineer Research and Development Center (ERDC). Some research areas are: hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, water quality, dredged material, treatment of hazardous waste, wetlands, infrastructure and environmental issues for installations, computer science, telecommunications, energy, materials and structures, engineering, environmental and ecological processes, land and heritage conservation.
DOD	U.S. Army Research Institute for the Behavioral and Social Sciences BAA for Basic, Applied, and Advanced Research	Rolling 5-year BAA	Recent Notices: $350K-$600K	Funds basic research, applied research, and advanced technology development that can improve human performance and Army readiness.

CENTER-LEVEL OPPORTUNITIES

Agency	Program	Solicitation	Funding Level	Program Overview
NIH	Multiproject Grants (P and U Mechanisms) P30 Center Core Grants P50, U54 Specialized Center	Annually	Varies by Institutes and Centers, typically from $5M upwards	NIH multiproject grants share the following features: At least two interrelated research related to a theme with each capable of standing on its own scientific merit but complementing one another; Collaboration and interaction among projects and investigators to achieve a common goal; and Synergy among projects. Specialized Centers (P50) support any part of the full range of research from basic to clinical; they may involve ancillary supportive activities such as protracted patient care necessary to the primary research.
NIH	P60 Comprehensive Center	Annually	Varies by Institutes and Centers	To support a multipurpose unit designed to bring together into a common focus divergent but related facilities within a given community. Objectives: to foster biomedical research and development at both the fundamental and clinical levels; to initiate and expand community education, screening, and counseling programs; and to educate medical and allied health professionals concerning the problems of diagnosis and treatment of a specific disease.
NASA	Space Technology Research Institutes (STRI)	Spring 2024 [Every 2 years]	~$15M per award for 5 years	An STRI is intended to research and exploit cutting-edge advances in technology with the potential for revolutionary impact on future aerospace capabilities. Integrated, multidisciplinary solutions are sought, as opposed to groups of loosely connected single-discipline solutions. Example products include design tools, models, databases and associated analysis tools, fabrication and characterization methods, or other technical advancements.
DOE	Energy Frontier Research Centers (EFRCs)	Winter 2023 [Every 2 years]	$8M-$16M	Brings together diverse world-class teams of scientists to perform energy relevant, basic research with a scope and complexity beyond what is possible in single investigator or small-group awards.
NSF	Materials Research Science and Engineering Centers (MRSEC)	Summer 2024 [Every 3 years]	2-IRG:$18M 3-IRG: $27M	Supports university-based centers that collaborate with industry and other sectors on multidisciplinary materials research and education.

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NSF	Engineering Research Centers (ERC)	Spring 2024 [Every 2 years]	~$26M per award for 5 years, $3.5M for year 1 (Gen 4)	Supports high-risk, high-payoff research centers focused on advancing engineered systems technology and education through multidisciplinary, cross-sector partnerships, and delivering value with positive societal impact. Each ERC has interacting foundational components that go beyond the research project, including engineering workforce development (EWD) at all participant stages, diversity and a culture of inclusion (DCI) where all participants gain mutual benefit, and value creation within an innovation ecosystem (IE) that will outlast the lifetime of the ERC.
NSF	Biology Integration Institutes (BII)	February 2025 [Every 2 years]	$15M per award for 6 years	Biology Integration Institutes (BII) support diverse and collaborative teams of researchers investigating questions that span multiple disciplines within and beyond biology. The goal is to stimulate creative integration of disparate fields using innovative experimental, theoretical, and modeling approaches to discover underlying principles operating across multiple levels of life, from molecules to cells, organisms, species, ecosystems, biomes and the entire Earth.
NSF	Science and Technology Centers: Integrative Partnerships (STC)	Fall 2024 [Every 2-3 years]	$60M	Supports exceptionally innovative, complex research and education projects that focus on creating new scientific paradigms, establishing entirely new scientific disciplines and developing transformative technologies which have the potential for broad scientific or societal impact.
NSF	Centers for Chemical Innovation (CCI)	Spring 2023, Annually	Phase I: $5.4M Phase II: $20M	Supports Phase 1 and Phase 2 research centers focused on major, long-term chemical research challenges.
NSF	National Artificial Intelligence Research Institutes	Fall 2023 Annually	$16M-$20M	Supports institutes focused on long-term, high-reward AI research, with themes including next-generation cybersecurity, neural and cognitive foundations of AI, climate-smart agriculture and forestry, trustworthy AI, and AI-augmented learning.
NSF	NSF Physics Frontiers Centers (PFCs)	Spring 2025 [Every 3 years]	$6M-$30M	Supports research centers, institutes, or large group efforts in any area of physics where the projects significantly advance the frontiers of physics and are best addressed by the collective efforts of a large group.
NSF	Regional Innovation Engines (RIE) Track II	FY 2024-FY 2025 timeframe for Type-2 proposals	$160M	Harnesses the nation's science and technology research and development enterprise and regional-level resources. NSF Engines can catalyze robust partnerships rooted in scientific and technological innovation to positively impact the economy within a

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				geographic region, address societal challenges, and advance national competitiveness.
NSF	Mathematical Sciences Research Institutes	Every 5 years	$12.5M-$25M	Supports institutes that advance research in the mathematical sciences, increase the impact of the mathematical sciences in other disciplines, and expand the talent base engaged in mathematical research in the United States.
NSF	Dear Colleague Letter: Enhancing Engineering Technology and Advanced Semiconductor Manufacturing Technician Education (ETSTE)	ATE: October 05, 2023 S-STEM: February 19, 2024	ATE Center: $15M S-STEM: Track 3: $5M	Advanced Technological Education (ATE) and Scholarships in Science, Technology, Engineering, and Technology (S-STEM) awards support transformative approaches to improve and impact advanced manufacturing technician education and workforce development for (a) semiconductor manufacturing and/or (b) semiconductor manufacturing and design through cooperative activity between NSF and Intel Corporation.
NSF	Centers for Innovation and Community Engagement in Solid Earth Geohazards	March 2024 Annually	Track II: $15M	Centers focus on addressing major, fundamental science challenges for understanding solid Earth geohazards, primarily those related to faulting, volcanoes, mass movements, and other dynamic processes.
NSF	Global Centers (GC)	Unknown future dates	Track 1: $5M	An ambitious new program to fund international, interdisciplinary collaborative research centers that will apply best practices of broadening participation and community engagement to develop use-inspired research on climate change and clean energy. This program will prioritize research collaborations fostering team science, community-engaged research, and use knowledge-to-action frameworks.
ARPA-H	https://www.nre.navy.mil/education-outreach/sponsored-research/university-research-initiatives/muriAdvanced Research Projects Agency for Health (ARPA-H) BAA	Open until March 14, 2024	To be determined	Focus areas: Health Science Futures; Scalable Solutions; Proactive Health; Resilient Systems. Proposals are expected to use innovative approaches to enable revolutionary advances in science, technology, or systems, and will develop groundbreaking new ways to tackle health-related challenges through high potential, high-impact biomedical and health research. Proposals cannot address policy changes, traditional education and training, center coordination, or infrastructure construction.
DOD	Multidisciplinary Research Program of the University Research Initiative (MURI)	Q1 2023 Annually	$6.25M-$7.5M	Involves teams of researchers investigating high priority topics and opportunities that intersect more than one traditional technical discipline. For many military problems this multidisciplinary approach serves to stimulate innovations, accelerate research progress and expedite transition of results into naval applications.