Oportunidades de Fondos Externos

Vicepresidencia de Recursos Externos ACADEMIC YEAR 2024-25 / VOLUME V



OCTOBER 15, 2024

UPR external funding success is of utmost importance to strengthen the connection between its investigators/faculty and funding entities who have the potential to sponsor their research and academic endeavors. This publication has been developed in order to summarize funding opportunities and promote the participation of faculty and collaborative research groups in their intent to apply for external funds. Such efforts are aligned with the UPR Strategic Plan 2017-2022: A New Era of Innovation and Transformation for Student Success; Certification 50 (2016-2017) of the Governing Board, December 19, 2016. Strategic Area: Research and Creative Work. Goal 2: Increase Applications for and awards of external funds for research and creative work.

SELECTED FUNDING OPPORTUNITIES

This is a selection of identified funding opportunities for the period ending 10/15/2024 and is in no way all-inclusive of funding opportunities available. Further information has been shared with External Resource Coordinators and Research Coordinators at each UPR campus.

INDEX

	<u>Pag</u>	<u>e</u>
1.	Behavioral & Integrative Treatment Development Program (R01 Clinical Trial Optional), NIH	2.
	Preservation Assistance Grants for Smaller Institutions, NEH.	
	NICHD Resource Program Grants in Bioinformatics (P41 Clinical Trial Not Allowed), NIH	
4.	Research Experiences and/or Mentoring Networks through Research Education to Enhance Clinician-Scientists' Participation in NIDCD's Research (R25 Clinical Trial Not Allowed), NIH	
_	Department of Army Energetics Basic Research Center, Combat Capabilities Development Command (DEVCOM)/Army	O
5.	Research Laboratory (ARL)/U.S. Army Research Office (ARO)	7
6.	Research Experiences and/or Mentoring Networks through Research Education to Enhance Clinician-Scientists' Participation in	
٠.	NIDCD's Research (R25 Clinical Trial Not Allowed), NIH.	
7.	Building Synthetic Microbial Communities for Biology, Mitigating Climate Change, Sustainability and Biotechnology (Synthetic	
	Communities), NSF	
8.	Sustaining Cultural Heritage Collections, NEH	2
9.	Personnel Development To Improve Services and Results for Children With Disabilities-Preparation of Special Education, Early	
	Intervention, and Related Services Leadership Personnel, Dept. of Education	4
10.	Field Initiated Projects Program (Research), Administration for Community Living	5
11.	Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science & Technology, Office of Naval Research	ı,
	DOD1	6
12.	Support for Conferences and Scientific Meetings (Parent R13 Clinical Trial Not Allowed), NIH	8
13.	Addressing Systems Challenges through Engineering Teams, NSF	9
14.	Occupational Safety and Health Education and Research Centers (T42), CDC	0.
	Building Synthetic Microbial Communities for Biology, Mitigating Climate Change, Sustainability and Biotechnology (Synthetic	
	Communities), NSF	.2
Sch	olarships and Fellowships	.3
	ecasted Opportunities	
Pro	posals Accepted Anytime	.4
Anr	ouncing Previous Important Funding Opportunities2	6

1. Behavioral & Integrative Treatment Development Program (R01 Clinical Trial Optional), NIH

Application Deadlines:

• Letter of Intent: 30 days prior to the application due date

• **Full Proposal:** February 5, 2025

Award Budget: budgets are not limited but need to reflect the actual needs of the proposed project

The purpose of this notice of funding opportunity (NOFO) is to encourage research grant applications on the development and testing of behavioral and integrative treatments for drug and alcohol use, misuse, and dependence. This NOFO reaffirms the continued commitment of the National Institute on Drug Abuse (NIDA) to major programs of research on behavioral and integrative treatments. The term "behavioral treatment" is used in a broad sense and includes but is not limited to psychotherapies, cognitive, relapse prevention, remediative, rehabilitative, skills training, counseling, family, and exercise therapies. Screening, brief, computerized, adherence, prevention interventions for HIV risk behaviors, and interventions that target therapist training and fidelity are included. Integrative refers to combinations with other treatments, including pharmacotherapies or other complementary approaches.

The objective of this announcement and its companion funding opportunity is to ensure sufficient emphasis and support for Stages I through III of behavioral and integrative treatment research. The supported studies will support translation of scientific knowledge into more efficient behavioral, combined behavioral and pharmacological, integrative, and complementary treatments so that they ultimately can be effectively transported from research to the community.

The development and testing of putative targets and mechanisms of behavior change, as well as the use and development of valid and reliable assessment tools are crucial to the three stages of treatment research supported under this initiative:

• Stage I (treatment generation, refinement) - encompasses all activities related to the creation of a new behavioral intervention, or the modification, adaptation, or refinement of an existing intervention (Stage IA), as well as feasibility and pilot testing (Stage 1B). Stage I may involve translational basic to applied (sometimes referred to as "T1") research. Stage I also may involve the modification or adaptation of interventions for ease of implementation in real-world settings. For example, projects can be conducted in research settings with research therapists/providers, but they also can be conducted in "real world" or community settings with community therapists/providers. One goal of a Stage I project is to provide necessary materials and information to proceed to a later phase Stage I, Stage II or Stage III project. An equally important goal is to obtain scientific knowledge of the processes that lead to behavior change (i.e., behavioral, cognitive, social, or biological change mechanism at multiple levels of analysis).

Stage I research is iterative and may involve: 1) identifying promising basic or clinical scientific findings relevant to the development or refinement of an intervention; 2) generating/ formulating theories relevant to intervention development and putative change mechanisms; 3) operationally defining, and standardizing new or modified principle-driven interventions; 4) initial or pilot testing of the intervention; 5) experimentally testing the mechanisms and principles of behavior change of the intervention; and 6) as necessary, further refining the intervention.

Stage I research can be conducted to generate, modify, refine, adapt, or pilot-test: 1) behavioral treatment interventions; 2) HIV prevention interventions; 3) medication adherence interventions; 4) components of a behavioral intervention; 5) therapist/provider training and supervision interventions; 6) interventions to ensure maintenance of the fidelity of intervention. The proposed study can be conducted prior to taking the intervention to an efficacy study, or after an intervention has proven efficacious.

• Stage II ("Efficacy") - research consists of experimental testing of promising behavioral interventions in research settings, with research-based therapists/providers while maintaining a high level of control necessary to establish internal validity. This treatment stage also involves examining mechanisms of behavior change. Stage II does not specify a particular research design. Testing of interventions may be done in randomized clinical trials but may also be conducted using other methodologies as appropriate (e.g., adaptive designs, multiple baseline single-case designs, A-B-A designs, etc.). Stage II studies may include exploration of intervention components, dose-

response, and theory-derived moderators.

Proceeding from Stage I to Stage II (or Stage III in the case of an intervention developed in or ready for a community setting) presumes that promising pilot data exist. If sufficiently strong evidence of promise does not exist, but if there is a good rationale for additional modification of the intervention, such modification can be proposed in a subsequent Stage I study.

• Stage III ("Efficacy in Real-World") - determines efficacy in community settings and with community therapists/providers. Although Stage III occurs in real-world settings, investigators should maintain a high level of control to establish internal validity. Proceeding directly from Stage I to Stage III requires Stage I research to be promising and requires the existence of methods to ensure fidelity of delivery of an intervention, along with therapist training materials (as required by the intervention).

Stage III does not specify a particular research design. Testing of interventions may be done in randomized clinical trials but may also be conducted using other methodologies (e.g., adaptive designs, multiple baseline single-case designs, A-B-A designs, etc.). Stage III studies may include examinations of intervention components, dose-response, and theory-derived moderators.

Stages I, II, and III all include a focus on theory-derived, targets/putative moderators, mediators, and change mechanisms that underlie the treatment, and studies that optimize combined, sequential, or integrated behavioral/pharmacological treatments.

Specific Areas of Research Interest

The overarching goal of this NOFO is to produce maximally efficacious behavioral interventions (individual and group) to treat substance use, promote medication/treatment adherence, and prevent HIV, and leverage new knowledge in neuroscience, new technologies and pharmacotherapies that may improve tangible outcomes of behavioral interventions. This NOFO underscores the importance of fostering research aimed at boosting intervention effects to produce targeted treatments across populations (including adolescents, pregnant women, individuals with comorbid psychiatric disorders) or populations with pain. Stages of treatment development will include Stage I, Stage II and Stage III efficacy studies (randomized clinical trials, adaptive designs, SMART designs, experimental therapeutics approach) of behavioral, combined, or integrated treatment interventions, adherence interventions, and prevention interventions for HIV risk behaviors. This includes treatment dose-response studies, and studies of the optimal sequencing of treatment, adherence, and HIV prevention interventions. Research on the treatment of SUDs involving illicit drugs, prescription medications, nicotine (including e-cigarette or vaping cessation), and multiple drugs. Of particular interest are studies that seek to determine basic mechanisms of behavior change, within the context of behavioral treatment research. Therefore, applicants are strongly encouraged to include (and if necessary, develop) measures of proposed mediators, moderators, and mechanisms of behavior change relevant to their intervention. This may include, for example, behavioral, cognitive, social, affective, and/or neurobiological targets.

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-24-299.html

2. Preservation Assistance Grants for Smaller Institutions, NEH

Application Deadlines: January 9, 2025

Anticipated Funding Amount: up to \$10,000, with an additional \$5,000 for non-contiguous states and jurisdictions (PR) for a duration of up to 18 months

Preservation Assistance Grants help small and mid-sized organizations preserve and manage humanities collections, ensuring their significance for a variety of users, including source communities, humanities researchers, students, and the public, by building their capacity to identify and address physical and intellectual preservation risks. The program encourages applications from institutions that have never received an NEH grant as well as community colleges, minority serving institutions (Hispanic-Serving Institutions, Historically Black Colleges and Universities, Tribal Colleges and

Universities), Native American tribes and tribal organizations, and Native Alaskan and Native Hawaiian organizations. Furthermore, NEH encourages applicants whose organizations or collections represent the contributions of historically excluded communities.

The program focuses on foundational activities in preservation and management of collections. Collections may include archives and manuscripts, prints and photographs, moving images, sound recordings, architectural and cartographic records, decorative and fine art objects, textiles, archaeological and ethnographic items, tribal collections, material culture, historical objects, special collections of books and journals, and digitized and born-digital materials. Supported activities should fall into the following general categories, though the lists of possible activities are not exhaustive:

• Preservation Assessments and Planning

- o General preservation assessments
- Digital preservation assessments
- Conservation assessments
- o Assessing environmental impacts of lighting systems or aging mechanical systems
- o Assessing collection documentation needs to identify an appropriate collection management system
- Foundational conversations and/or consultations with source communities represented in collections to determine culturally appropriate preventive care practices and/or initiate or develop accurate vocabularies and/or descriptions of collection items resulting in a processing guide or written report with actionable recommendations
- Consultations with scholars and subject matter experts to initiate or develop accurate vocabularies and/or descriptions of collection items resulting in a processing guide or written report with actionable recommendations
- O Development and revision of written plans, policies, and procedures such as emergency/disaster preparedness and response plans, digitization plans, storage plans, collection management plans, collecting plans, loan policies, and processing manuals

• Preventive Care

- O Purchase, shipping, and installation costs of storage and preservation supplies, including durable furniture and supplies (e.g., cabinetry, shelving units, storage containers, boxes, folders, and sleeves) for the purpose of rehousing collections for long-term storage or display, digital storage (e.g., external hard drives, RAID, NAS, LTO systems, and cloud-based storage), and discrete and reversible units to improve the environment (e.g., portable dehumidifiers, air conditioning units, UV filtering shades, and HEPA vacuums). Project expenses such as storage furniture, UV filters, or discrete units for air conditioning must demonstrate that they will not make irreversible changes to buildings.
- o Implementing and improving environmental monitoring and/or integrated pest management programs, including the purchase of necessary monitoring supplies and related tracking software
- Implementing and/or piloting environmentally sustainable preventive care strategies, which may have been recommended in previous preservation assessments or by a consultant, such as addressing water runoff systems to prevent moisture impacts on collections spaces or creating preservation microclimates for vulnerable collections
- Workshops and/or training for staff and volunteers that address preservation topics, which might include preservation and care of specific material types, care and handling of collections during rehousing and/or digitization, preservation standards for digital collections, disaster preparedness and response, integrated pest management, or an overview of the agents of deterioration

• Collections Management

- Initial steps that improve the management of collections and knowledge of the contents of collections, such as location and format surveys, inventories, updating condition reports, and/or other preparatory steps toward description of collections
- o Workshops and/or training courses for staff and volunteers that address intellectual control topics such as best practices for arrangement, description, and cataloging of collections

Program Outcomes and Outputs

The expected outcome for a Preservation Assistance Grant is increased organizational capacity to preserve and maintain access to humanities collections, so as to facilitate their use by the representative communities, scholars, and the public.

The outputs of a successful Preservation Assistance Grants for Smaller Institutions award may include, but are not limited to:

- General preservation assessment report
- Conservation assessment report
- Digital preservation assessment report
- Collection management policy
- Collection processing policy or manual
- Digitization policy or manual
- Environmental monitoring program or policy
- Emergency preparedness and/or response plan
- Rehoused collections
- Reduced UV exposure to collections
- Location or format survey
- Collection inventory
- Staff or volunteers trained in collections handling, collections management, or emergency response.

Link to Additional Information: https://www.grants.gov/search-results-detail/351936

3. NICHD Resource Program Grants in Bioinformatics (P41 Clinical Trial Not Allowed), NIH

Application Deadlines:

• Letter of Intent: 30 days prior to the application due date

• Full Proposal: January 25, 2025

Award Budget: range from \$500,000 to no more than \$1,750,000 per year for a maximum project period of five years

The purpose of this Notice of Funding Opportunity (NOFO) is to support the continued operation, maintenance, and dissemination of unique knowledge, data, and/or bioinformatics resources that are of major importance to the research community using animal models of embryonic developmental processes. These grants will support ongoing development and enhancement of the resources, user training and services, provision of community generated data storage and curation, wide dissemination of the tools and/or resources, and expansion of interoperability with other NIH bioinformatics resources.

Objectives

These Resource Program Grants in Bioinformatics are intended to support the continued availability, operation, improvement and maintenance of knowledge, data, digital information, bioinformatics tools and/or resources, user training and services, and wide dissemination of these tools or resources.

To qualify for support, knowledge or bioinformatics resources, such as software and algorithms, must be of demonstrable value toward advancing research utilizing animal model systems in the biomedical sciences and must also be of particular importance to those seeking to understand the biological basis of human and animal development and the etiology of structural congenital anomalies.

The resources must be sufficiently mature to have verifiable support from and utility for users within the developmental biology research community, operate according to FAIR data principles, and have a demonstrable national and international impact.

Examples of activities that Resource Program Grants in Bioinformatics are intended to support include but are not limited to:

- Efforts to curate and annotate unique collections of data, information, or knowledge that support learning and research utilizing animal model systems.
- Information and knowledge processing, including information extraction, integration of data from heterogeneous open access sources, event detection, and feature recognition within these datasets.
- Tools for analyzing large datasets, including genomic and proteomic data, data regarding gene and protein expression, and elements that regulate that expression in relation to cellular, anatomical, and/or developmental coordinates.
- Datasets and tools for analysis of gene regulatory networks, protein-protein interaction networks, epigenetic regulatory mechanisms, systems biological approaches, and other tools for understanding normal and abnormal biological function and/or development.
- Other unique datasets or information tools of demonstrable utility for biomedical research using animal models of developmental processes.
- Systems for knowledge representation, including simulations and virtual reality, retrieval tools and intelligent agents for scientific information related to developmental processes.
- Utilization of appropriate data standards for the model organism community being served, such as controlled vocabularies and ontologies.

Applicants are strongly encouraged to consult with the Scientific/Research Contact to ensure that the proposed project reflects the objectives of this NOFO and the programmatic interests of the NICHD.

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-24-301.html

4. Research Experiences and/or Mentoring Networks through Research Education to Enhance Clinician-Scientists' Participation in NIDCD's Research (R25 Clinical Trial Not Allowed), NIH

Application Deadlines: January 29, 2025

Award Amount: up to \$250,000 direct cost per year for a duration of up to five years

The overarching goal of this R25 program is to support educational activities that help recruit individuals with specific specialty or disciplinary backgrounds to research careers in biomedical, behavioral and clinical sciences.

To accomplish the stated over-arching goal, this NOFO will support educational activities with a primary focus on Research Experiences: Provide hands-on authentic research experiences that reflect intellectual contribution to the research project and for master's level and graduate students (including predoctoral health professional students, such as those seeking the Au.D. and M.D. degrees); for postdoctorates and early-to-mid career faculty to extend their skills, experiences, and knowledge base. In addition to hands-on research experiences, research experience programs are expected to incorporate complementary activities that support the participants' scientific development, such as scientific writing and presentation skills and scientific approaches for ensuring rigor and reproducibility. The nature of research experiences should be tailored to the needs and career levels of participants. It is expected that mentoring will be provided in conjunction with planned research experiences and participants will design individualized development plans (IDPs) that are compatible with their needs and experience. Additionally, programs that provide educational/research experiences that encourage the participation and productivity of investigators from diverse backgrounds (including from underrepresented groups, different educational backgrounds and research fields, different career stages, and/or geographic location) in carrying out research on NIDCD mission-relevant health disparities will be considered. Please note that consistent with NIDCD practice and applicable law, funded programs may not use the race, ethnicity, or sex of prospective program participants or faculty as an eligibility or selection criteria. NIDCD does not use the race, ethnicity, or sex of program participants or faculty candidates in the application review process or when making funding decisions.

• Mentoring Activities: Within the context of a mentoring network, activities may include, but are not limited to,

dedicated efforts at providing not only technical expertise, but advice, insight, and professional career skills to master's level and graduate students (including predoctoral health professional students, such as those seeking the Au.D. and M.D. degrees), postdoctorates and/or early-to-mid career faculty; facilitating scholarly writing and grantsmanship; promoting successful transitions from one career stage to another; providing leadership development; helping to identify potential collaborators; and helping to establish interdisciplinary collaborations in order to foster a career trajectory towards independent research. Additionally, the NIH realizes that quality mentorship is critical to the recruitment and retention of scientists in biomedical research. Therefore, this NOFO welcomes programs aimed at improving the caliber of mentorship. For example, workshops to educate mentors on establishing and sustaining effective research mentoring relationships (e.g. summer course or a workshop accompanying a NIDCD's mission-related scientific meeting in which case-based scenarios may be used to educate mentors on various relevant ethical, professional and cultural issues facing students today for example, effective communication and mentoring compacts, or addressing cultural awareness, among others). Also, the program intends to support innovative mentoring network programs within scientific and/or professional societies and organizations in NIDCD's research areas. Mentors from all demographic backgrounds should be encouraged to participate in the proposed program.

This R25 Program is a flexible and specialized initiative designed to foster the development of NIDCD's diverse clinician-scientist workforce, which may include, for example, clinicians across career stages, from varied clinical backgrounds, or from groups currently underrepresented in the biomedical sciences. For more information on some groups that are underrepresented in the biomedical sciences, see the Notice of NIH's Interest in Diversity (NOT-OD-20-031). Thus, NIDCD encourages applications from organizations that propose innovative research experiences in all NIDCD's research areas (hearing, balance, taste, smell, voice, speech, and language). This program will focus on factors that have been shown to affect recruitment and retention of clinicians in research such as research experiences, technical research skills and professional development, pathways in research careers, and strategies to become independent clinical research investigators.

Programs that target transitions and/or more than one career stage for research career advancement and progression are strongly encouraged. This initiative will support the development of collaborative research education partnerships that will increase participants' awareness and interest in NIDCD's research areas, develop participants' scientific knowledge and research skills that will allow them to progress and transition to more advanced research education and training activities.

NIDCD recognizes the heterogeneity of institutional/organizational settings and missions; therefore, the scope, purpose, and objectives of initiatives proposed in response to this NOFO are anticipated to be very diverse. NIDCD encourages applications that create partnerships (e.g., between research-intensive institutions and less research-intensive institutions; and/or institutions that have a documented historical mission to educating underrepresented students; and/or institutions that have a record of providing health care services to medically underserved communities; and/or academic or non-profit partnerships where health professionals might engage in research).

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-25-020.html

5. Department of Army Energetics Basic Research Center, Combat Capabilities Development Command (DEVCOM)/Army Research Laboratory (ARL)/U.S. Army Research Office (ARO)

Application Deadlines:

Whitepapers: January 6, 2025Full Proposals: April 7, 2025

Award Amounts: range from \$60k to \$250k per year for a base period of 24 months

The EBRC is a basic research program initiated by the Combat Capabilities Development Command/Army Research Laboratory/ARO. It focuses on areas of strategic importance to U.S. national security. It seeks to increase the Army's intellectual capital in energetic materials (EM) and improve its ability to address future challenges. The EBRC brings

together universities, research institutions, companies, and individual scholars and supports multidisciplinary and cross-institutional projects addressing specific topic areas determined by the Department of the Army (DA). The EBRC aims to promote research in specific areas of EMs and to promote a candid and constructive relationship between DA and the energetics research community.

Strong collaborations between DoD and academia are necessary to overcome challenges associated with achieving the desired goals. Some of these challenges include: developing methods and materials allowing for the manipulation of energy release rates; exploitation of structures and features across length scales, fundamental understanding of the initiation, break-up, and fragmentation during and after detonative energy release; and advanced models and experimental methodologies to capture the relevant chemistry and physics. Tackling these will require a large comprehensive cooperative effort (while also allowing for single effort exploratory efforts for high-risk concepts) with a strong emphasis on new material synthesis (that targets advanced performance) with related experimental and theoretical characterization, performance evaluation, and concept development to fully exploit the totality of available energy.

Specific Energetics Basic Research Center Thrusts

The purpose of this BAA is to solicit ideas across a wide range of disciplines, including chemistry, physics, materials science, and engineering. Discovery and innovation that enable the rapid and effective exploration and validation of novel energetic materials. These ideas should lead to and demonstrate significant advancements in the energy density, sensitivity, structural properties, synthesis, and prediction of properties and characteristics of energetic materials and energetic material systems.

Technical Thrusts - the technical scope of the initiative is defined along the following thrust areas:

- a. Novel materials and synthesis methods: For the purposes of this BAA, novel methods is meant to be a comprehensive term for concepts that can be clearly distinguished from traditional materials or approaches. Materials developed under this area will require advanced diagnostics to accurately and rapidly assess performance and survivability metrics, as well as requiring novel theoretical tools to guide synthesis chemists and aid in optimizing final materials. Sub-areas within in this thrust could include: inorganic chemistry, organic chemistry, structural energetics, next generation synthesis techniques, and radiation interactions for driving chemistry. Additional detail, challenges, and knowledge gaps, on these sub-areas are indicated below:
 - *Inorganic chemistry* includes the architecture and/or formulation of aluminum or other high energy metal or organometallic articles (including alloys, composites, coatings) to increase energy release rates.
 - *Organic chemistry* includes the architecture and/or formulation of energetic binders/plasticizers, and energetic materials for explosive and propellant applications.
 - Structural energetics includes exploring and synthesizing energetic materials targeting enhanced mechanical properties that can support significant loads with little deformation while maintaining high energy content and energy release rates.
 - Next generation synthesis techniques will consider the ability to scale up new and known compounds in new chemical spaces coupled with minimization of synthesis steps through the advancement of synthesis techniques.
 - Radiation interactions for driving chemistry include exploring the driving reaction chemistry towards specific pathways through radiation (microwave, visible, infrared, ultraviolet, etc.) or plasmas.
- b. Microstructure and geometry influence on energetic release: Research into the role microstructure and geometry play in the performance, response, and survivability of materials and formulations is crucial in maximizing gains in energetic material performance. Models and processing techniques developed under this line of effort will require advanced diagnostics to accurately and rapidly evaluate material characteristics, as well as requiring novel theoretical tools to gain fundamental understanding of the relevant physics and chemistry occurring across time and length scales. Sub-areas within in this thrust could include: exploiting microstructure in EM response; and energy focusing, geometry, and sequencing. Additional detail, challenges, and knowledge gaps, on these sub-

areas are indicated below:

- Exploiting microstructure in EM response includes understanding the role of microstructure on performance and the physical / mechanical properties required to enable engineering solutions to formulations and system level response.
- Focusing, geometry, and sequencing involves the exploration of novel geometries to exploit advanced materials geometries (possibly via advanced manufacturing techniques) and form-factors to maximize energy density and other performance gains through manipulation of large-scale interactions between different munition materials and material boundaries and interfaces.
- c. Advanced diagnostics and modeling: Research into advanced diagnostics and modeling is essential for characterization and understanding of the effects of novel chemistries, formulations, structures, and non-linear effects controlling performance and material response. Research will be driven to identification and fundamental understanding of factors controlling EM processes occurring through chemistries at extreme states, providing exploitable information leading to control the output of EM. Advances in diagnostics and modeling and simulation (M&S) are also needed for understanding of burning rate dependence on pressure to enable design of propellants with extended plateau burning behavior. Techniques developed under this thrust could be employed in a "fail early, fail fast" optimization approach to enable the rapid development of novel materials and concepts. Sub-areas within in this thrust could include: next generation diagnostics and advanced M&S. Additional detail, challenges, and knowledge gaps, on these sub-areas are indicated below:
 - *Next generation diagnostics* are needed to advance small-scale tests designed to correctly reflect large-scale performance and mechanical metrics (all performance metrics, stability, etc.).
 - Advanced modeling and simulation are needed to fully understand and subsequently enable tailoring of target materials, formulations, processing conditions, initiation, micro- and macro-structures, overall performance, and mechanical properties.

Link to Additional Information: https://www.grants.gov/search-results-detail/356583

6. Research Experiences and/or Mentoring Networks through Research Education to Enhance Clinician-Scientists' Participation in NIDCD's Research (R25 Clinical Trial Not Allowed), NIH

Application Deadlines: January 29, 2025

Award Amount: up to \$250,000 direct cost per year for a duration of up to five years

The overarching goal of this R25 program is to support educational activities that help recruit individuals with specific specialty or disciplinary backgrounds to research careers in biomedical, behavioral and clinical sciences.

To accomplish the stated over-arching goal, this NOFO will support educational activities with a primary focus on Research Experiences: Provide hands-on authentic research experiences that reflect intellectual contribution to the research project and for master's level and graduate students (including predoctoral health professional students, such as those seeking the Au.D. and M.D. degrees); for postdoctorates and early-to-mid career faculty to extend their skills, experiences, and knowledge base. In addition to hands-on research experiences, research experience programs are expected to incorporate complementary activities that support the participants' scientific development, such as scientific writing and presentation skills and scientific approaches for ensuring rigor and reproducibility. The nature of research experiences should be tailored to the needs and career levels of participants. It is expected that mentoring will be provided in conjunction with planned research experiences and participants will design individualized development plans (IDPs) that are compatible with their needs and experience. Additionally, programs that provide educational/research experiences that encourage the participation and productivity of investigators from diverse backgrounds (including from underrepresented groups, different educational backgrounds and research fields, different career stages, and/or geographic location) in carrying out research on NIDCD mission-relevant health disparities will be considered. Please note that consistent with NIDCD practice and applicable law, funded programs may not use the race, ethnicity, or sex of prospective program participants or faculty as an eligibility or selection criteria. NIDCD does not use the race, ethnicity,

or sex of program participants or faculty candidates in the application review process or when making funding decisions.

Mentoring Activities: Within the context of a mentoring network, activities may include, but are not limited to, dedicated efforts at providing not only technical expertise, but advice, insight, and professional career skills to master's level and graduate students (including predoctoral health professional students, such as those seeking the Au.D. and M.D. degrees), postdoctorates and/or early-to-mid career faculty; facilitating scholarly writing and grantsmanship; promoting successful transitions from one career stage to another; providing leadership development; helping to identify potential collaborators; and helping to establish interdisciplinary collaborations in order to foster a career trajectory towards independent research. Additionally, the NIH realizes that quality mentorship is critical to the recruitment and retention of scientists in biomedical research. Therefore, this NOFO welcomes programs aimed at improving the caliber of mentorship. For example, workshops to educate mentors on establishing and sustaining effective research mentoring relationships (e.g. summer course or a workshop accompanying a NIDCD's mission-related scientific meeting in which case-based scenarios may be used to educate mentors on various relevant ethical, professional and cultural issues facing students today for example, effective communication and mentoring compacts, or addressing cultural awareness, among others). Also, the program intends to support innovative mentoring network programs within scientific and/or professional societies and organizations in NIDCD's research areas. Mentors from all demographic backgrounds should be encouraged to participate in the proposed program.

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Programs that target transitions and/or more than one career stage for research career advancement and progression are strongly encouraged. This initiative will support the development of collaborative research education partnerships that will increase participants' awareness and interest in NIDCD's research areas, develop participants' scientific knowledge and research skills that will allow them to progress and transition to more advanced research education and training activities.

NIDCD recognizes the heterogeneity of institutional/organizational settings and missions; therefore, the scope, purpose, and objectives of initiatives proposed in response to this NOFO are anticipated to be very diverse. NIDCD encourages applications that create partnerships (e.g., between research-intensive institutions and less research-intensive institutions; and/or institutions that have a documented historical mission to educating underrepresented students; and/or institutions that have a record of providing health care services to medically underserved communities; and/or academic or non-profit partnerships where health professionals might engage in research).

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-25-020.html

7. Building Synthetic Microbial Communities for Biology, Mitigating Climate Change, Sustainability and Biotechnology (Synthetic Communities), NSF

Application Deadlines: February 3, 2025

Anticipated Funding Amount: range from \$8,000,000 to \$10,000,000 for 7 to 12 estimated number of awards

This solicitation seeks projects that focus on synthetic microbial communities. The projects may use a model synthetic community to better understand the fundamental biological principles underlying the formation, maintenance or functionality of natural communities and to understand a natural community's impact on the host, when applicable.

Projects that focus on the design and analysis of synthetic communities with novel capabilities are also eligible for submission. These projects may address fundamental biological principles at any scale, from the molecular to the ecosystem scale. By supporting this research, this solicitation aims to build a comprehensive biological knowledge base that scientists can use to rationally design synthetic microbial communities with novel applications in climate resiliency, sustainability, biotechnology and bio-manufacturing.

In the context of this solicitation, a synthetic microbial community is defined as a host-associated or free-living consortium of taxonomically different microbial species, which can be studied and co-cultured under well-defined and reproducible conditions, and has the potential for scalable production, if scalable production is the long-term goal. If the synthetic community is used as a model for a natural system, it must contain a subset of the microbial species found in the natural community and provide information about fundamental processes in the natural community. If the goal is to build a synthetic community with a novel composition and novel characteristics compared to its natural counterparts, the project must focus on the biological basis for the novel characteristics. For host-associated microbial communities that have distinct benefits to the host, microbial mechanisms that contribute to the impact of the community as a whole should be addressed. Organisms across multiple phyla and kingdoms, including bacteria, archaea, and eukaryotes such as fungi and micro-algae, may be used to generate the synthetic microbial community.

Proposals submitted in response to this solicitation must address one or more of the following themes: 1) use synthetic microbial communities to define the biological principles that govern the formation, dynamics, stability, and interactions in natural communities; 2) design synthetic microbial communities with novel capabilities, including novel impacts on a host, and study the biological basis for these capabilities; 3) define the functions of individual species within a synthetic community and their relationship to the properties of the community as a whole; 4) use synthetic microbial communities to characterize the ecological and evolutionary drivers that shape natural community patterns and dynamics.

In addition to addressing one or more of the themes noted above, competitive proposals should include the following: 1) a description of the synthetic microbial community's composition and an adequate justification for using a synthetic community over a natural community; 2) a description of how the chosen microbial community conforms to the solicitation-specific definition of a synthetic community; 3) a description of reproducible methodologies for co-culturing the microbes in the synthetic community and the potential for scalable production, if scalable production is the ultimate goal; 4) a careful consideration of the social, ethical, and bio-safety/security dimensions of the research. Proposals that fail or are unable to address any of these criteria are not appropriate for submission to this solicitation; the proposals may, however, be appropriate for a "core" program in MCB, DEB or IOS.

Investigations that are outside the scope of this synthetic microbial announcement include:

- a. Projects that aim to bio-engineer synthetic microbial communities with novel capabilities but do not investigate the biological processes that are responsible for these capabilities
- b. Projects that focus on the biological properties of a single microbial species or variants of a single species rather than a microbial community as defined in the solicitation
- c. Projects that aim to study natural microbial communities and are better suited for review by other core programs in MCB, DEB or IOS.
- d. Projects that would fall under US government policy on potential enhanced pandemic pathogens

Researchers are encouraged to contact Program Officers with questions and further clarifications regarding programmatic fit.

Link to Additional Information: https://new.nsf.gov/funding/opportunities/synthetic-communities-building-synthetic-microbial-communities-biology-mitigating/nsf25-501/solicitation

8. Sustaining Cultural Heritage Collections, NEH

Application Deadline:

• **Optional Draft:** December 5, 2024

• Full Proposal: January 10, 2025

Anticipated Funding Amount:

- **Planning:** up to \$50,000 for a duration of up to two years
- Implementation, Level I: up to \$100,000 for a duration of up to two years
- Implementation, Level II: up to \$350,000 for a duration of up to three years
 - Organizations located in a non-contiguous state or jurisdiction, including AK, HI, PR, GU, AS, VI, and NMI may request up to an additional \$10,000 for Planning, \$20,000 for Implementation Level I, and \$70,000 for Implementation Level II to cover increased consultants' travel costs as well as shipping and material costs.

The SCHC program supports environmentally sustainable preventive care strategies to reduce energy consumption and costs and to strengthen institutional resiliency in the face of increased risks due to global climate change. The program helps cultural heritage institutions (libraries, archives, museums, and historical organizations) meet the complex challenge of preserving diverse holdings of humanities collections for future generations.

The SCHC program supports environmentally sustainable preventive care, also referred to as preventive conservation or preservation, which includes measures and actions aimed at avoiding, minimizing, and slowing future deterioration or loss of cultural heritage collections, thereby sustaining them for future generations. Cultural heritage institutions may use SCHC awards to manage collections' environment, including aspects such as temperature, relative humidity, pollutants, and light; provide protective storage enclosures and systems for collections; and safeguard collections from theft, fire, floods, and other disasters. Recipients should use environmentally sustainable methods that reduce reliance on fossil fuels and improve institutional resiliency from current and future disasters.

To plan and implement environmentally sustainable preventive care, reduce carbon emissions, and increase resiliency against disasters and risks due to a changing climate, you should consider the various available guidelines for sustainable preventive care, methods for reducing energy use, and climate disaster mitigation methods (applying methods and strategies that best suit your collection, building, and local climate). You should also consider:

- the collection materials and associated risks and vulnerabilities due to disasters, climate change, and natural aging.
- the environmental impact of maintaining a preservation environment for collections by evaluating current and desired environmental conditions of the collection storage and/or display spaces.
- avoiding blanket environmental conditions for all objects.
- using passive methods and low energy solutions to improve the preservation environment of collections.
- the thermal and moisture buffering capacity of the building envelope housing the collection against external environmental conditions.
- the embodied carbon (the greenhouse gas emissions associated with extraction, production, transport, and manufacturing) and life cycle assessment (framework that accounts for all impacts of a product, from raw material extraction through the end of the product's life) of materials used for building renovations and housing collections favoring regenerative materials that have low or negative impacts on the environment.

Project Teams

SCHC Planning and Implementation Level II projects require a collaborative, multidisciplinary professional team appropriate to the level of funding requested and goals of the project. The team may consist of consultants and contracted professionals and should include members of your institution's staff. Team members might include cultural heritage professionals knowledgeable in environmentally sustainable preventive care strategies and/or disaster preparedness, architects, building engineers, conservation scientists, conservators, curators, and facilities managers, among others.

While Implementation Level I projects do not require multidisciplinary teams, the project team should have relevant expertise to meet the goals of the project. All SCHC projects must include a preservation/conservation professional who works with cultural heritage collections on the project team. You must identify all members of the team in the application, and they should work collaboratively throughout the planning and implementation processes.

Funding categories

- **Planning category** provides funding to develop and assess environmentally sustainable preventive care strategies in collection spaces. You might use a Planning award to plan, study, evaluate, examine, measure, and/or test:
 - o collection space temperature and relative humidity targets considering environmentally sustainable guidelines
 - passive (nonmechanical) and low-energy systems for managing environmental conditions such as:
 - preservation of microclimates
 - collection space and/or building envelope thermal and moisture buffering performance
 - collection space and/or building envelope air leaks
 - natural ventilation methods
 - o actively managed mechanical systems to achieve desired conditions along with energy and cost savings, such as:
 - adjusting the operating protocols for climate control systems (planned shutdowns, setbacks, seasonal setpoints)
 - reducing outside air intake
 - adjusting fan speeds
 - recommissioning or tuning small-scale climate control systems
 - replacing components of HVAC systems
 - energy consumption and greenhouse gas emissions
 - installation of on-site renewable energy sources
 - o lighting collection spaces that protect collections while improving energy efficiency and reducing heat load
 - o institutional resilience in the face of disasters resulting from current and future effects of climate change or other disasters such as:
 - risk assessment and mitigation
 - building performance during extended power outages or other emergency situations
 - landscaping to mitigate risks to buildings holding collections
- Implementation Level I category provides funding to implement environmentally sustainable preventive care projects that address specific, discrete preservation challenges that have been identified through an assessment. Level I awards support projects that derive from a general preservation needs assessment, risk assessment, or other targeted collections assessment conducted by internal or consulting professionals who have identified preservation challenges and priorities and prepared an assessment report or summary. You should apply for this level of funding if you are ready to implement small-scale environmentally sustainable preventive care measures as a result of such assessments.
- Implementation Level II category provides funding to implement environmentally sustainable preventive care projects. Projects may address large or multifaceted preservation challenges that have been identified through assessments. Projects must be informed by a planning phase conducted by a multidisciplinary collaborative professional team appropriate to the goals of the project such as architects, HVAC engineers, building engineers, lighting specialists, conservators, curators, facilities managers, and specialists in environmentally sustainable preventive care and/or disaster preparedness.

The primary differences between Implementation Level I and Implementation Level II are:

1) The scope and size of the project. Level I projects are typically smaller, distinct projects while Level II projects can be large and/or multifaceted.

2) **The planning pre-requisites.** Both levels require a preservation needs assessment or other focused assessment that informs the project. For Level II projects, that assessment should be performed by a multidisciplinary collaborative team appropriate to the project.

Program Outcomes and Outputs

The outcomes of a successful Planning award may include, but are not limited to:

- plans and specifications to reduce energy consumption and costs
- energy reduction test data
- environmentally sustainable collections management and preventive care plans
- assessments, reports, and/or modification plans for the building envelope
- and installation plans for climate control, lighting, security, and other building systems
- assessments, reports, and/or modification of collections storage systems
- plans to improve resiliency against disaster

The outcomes of a successful Implementation Level I or Implementation Level II award may include, but are not limited to:

- improved collections storage or display environment
- effective microclimates for vulnerable collections objects
- reduced energy consumption and costs
- improved lighting systems
- improved security
- reduced risk from disasters
- resiliency against climate change risks

Pre-Application Webinar: A pre-recorded webinar will be published on the program resource page by November 29, 2024.

Link to Additional Information: https://www.neh.gov/grants/preservation/sustaining-cultural-heritage-collections

9. Personnel Development To Improve Services and Results for Children With Disabilities-Preparation of Special Education, Early Intervention, and Related Services Leadership Personnel, Dept. of Education

Application Deadline: November 22, 2024

Award Information:

- Individual IHE: up to \$1,250,000 per project for a project period of 60 months
- Two IHE Group: \$2,500,000 per project for a project period of 60 months
- Three IHE Group: \$3,750,000 per project for a project period of 60 months

The purposes of this program are to (1) help address State-identified needs for personnel preparation in special education, early intervention, related services, and regular education to work with children, including infants and toddlers, with disabilities; and (2) ensure that those personnel have the necessary skills and knowledge, derived from practices that have been determined through scientifically based research and experience, to be successful in serving those children.

Priorities: This competition includes one absolute priority and two competitive preference priorities.

- **Absolute Priority:** Preparation of Special Education, Early Intervention, and Related Services Leadership Personnel.
 - O The purpose of this priority is to support doctoral degree programs to prepare and increase the number of personnel who are well-qualified for, and can act effectively in, leadership positions as researchers and

special education/early intervention/related services personnel preparers in IHEs, or as leaders in SEAs, LAs under Part C of IDEA, LEAs, or EIS programs, including increasing the number of multilingual leadership personnel and leadership personnel from racially and ethnically diverse backgrounds at the doctoral level in special education, early intervention, and related services. Proposed projects must be designed to prepare graduates to be well-qualified for, and act effectively in, leadership positions as researchers and special education/early intervention/related services personnel preparers in IHEs, or as leaders in SEAs, LAs, LEAs, or EIS programs. Projects must support a program that culminates in a doctoral degree (Ph.D. or Ed.D.).

- Eligible applicants include partnerships that are comprised of two or three IHEs with doctoral programs that prepare scholars and otherwise meet the eligibility requirements. For additional information regarding group applications, refer to 34 CFR 75.127, 75.128, and 75.129.
- Preparation programs that lead to clinical doctoral degrees in related services (e.g., a Doctor of Audiology degree or Doctor of Physical Therapy degree) are not included in this priority.
- To meet the requirements of this priority, an applicant must:
 - The proposed project would increase the number of leadership personnel who are well qualified to advance practice, policy, or research in the project's preparation focus area and how it will provide, or prepare others to provide, effective culturally and linguistically responsive instruction, interventions, and services that improve outcomes for children with disabilities.
 - The doctoral program to date has been successful in producing leadership personnel.
 - Scholar competencies to be acquired in the program relate to knowledge and skills
 needed by the leadership personnel in the project's proposed preparation focus area to
 provide, or prepare others to provide, effective culturally and linguistically responsive
 instruction, interventions, and services, including through distance education, that
 improve outcomes for children with disabilities.
- The Competitive Preference priorities are:
 - o Competitive Preference Priority 1: Applications from New Potential Grantees
 - Competitive Preference Priority 2: Promoting Equity in Student Access to Educational Resources and Opportunities

Link to Additional Information: https://www.govinfo.gov/content/pkg/FR-2024-10-08/pdf/2024-23255.pdf

10. Field Initiated Projects Program (Research), Administration for Community Living

Application Deadline:

• Letter of Intent: November 12, 2024

• Full Proposals: December 9, 2024

Award Amount:

• Year 1: up to \$250,000 for a project period of 36 months

The purpose of the Field Initiated (FI) Projects program is to develop knowledge, methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially those with the highest support needs.

In carrying out a research activity under a FI Projects research grant, a grantee must identify one or more hypotheses or research questions and, based on the hypotheses or research questions identified, perform an intensive, systematic study directed toward producing (1) new scientific knowledge or (2) better understanding of the subject, problem studied, or body of knowledge.

Invitational Priority: In FY 2025, there are nine invitational priorities of interest to the agency:

- 1. Research or development projects that address the needs, experiences, or outcomes of people with disabilities from underserved communities.
- 2. Research or development projects to explore or address the relationship between climate change and the needs, experiences, and outcomes of people with disabilities.
- 3. Research or development projects related to oral health among people with disabilities.
- 4. Research or development projects that focus on making airline travel accessible for people with disabilities.
- 5. Research or development projects that focus on improving the extent to which emergency and disaster preparedness plans and systems are accessible to, and responsive to the needs of, people with disabilities.
- 6. Research or development projects that focus on improving the experience and outcomes of people with disabilities as they interact with one or more components of the criminal justice system (e.g., police, courts, jails and prisons).
- 7. Research or development projects that focus on services, supports, or interventions for people with disabilities who experience Long COVID.
- 8. Research or development projects that focus on school experiences among children with disabilities.
- 9. Research or development projects that focus on social and built environments that facilitate fully inclusive play and participation among children with disabilities.

FI Projects research applicants must define the stage or stages of research that they propose to conduct. Any rigorous quantitative, qualitative, or mixed-methods research can be appropriate, depending on the hypothesis or research question being addressed by the applicant. NIDILRR does not have an absolute preference for one methodological approach or research stage. If the FI Projects grant is to conduct research that can be categorized under more than one stage including research that progresses from one stage to another, those stages must be clearly specified. These stages are: exploration and discovery, intervention development, intervention efficacy, and scale-up evaluation.

Link to Additional Information: https://www.grants.gov/search-results-detail/355458

11. Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science & Technology, Office of Naval Research, DOD

Application Deadlines:

- Letter of Intent: see below
- Full Proposal: January 14, 2025

Award Budget: funded amount and period of performance may vary depending on the technology area and the technical approach to be pursued

Office of Naval Research (ONR), ONR Global (ONRG), and Marine Corps Warfighting Lab (MCWL), are interested in receiving proposals for Long-Range S&T Projects that offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR, ONRG and MCWL's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines.

Office of Naval Research (ONR)

Technology areas that ONR is pursuing are provided at the ONR website at https://www.nre.navy.mil/our-research/onr-technology-and-research. Click on the technology area of interest for a brief description of that research area being pursued by ONR.

• NavalX - The NavalX Tech Bridge Network consists of 18 regional Tech Bridges including London and Japan. Each Tech Bridge has a small team of Tech Bridge directors who work with the local innovation ecosystem to source technology, host prize challenges, provide information about Navy business opportunities, and partner with local economic development organizations. They serve as technology scouts, local networking hubs, and connection points between startups and small business and Naval Warfare Centers and Labs. NavalX's Innovation Operations Support works directly with Sailors and Marines to understand capability needs in the context of their

everyday challenges. They then guide our search for and assessment of the best solutions from viable providers within our network. Through an innovative and agile approach to contracting and funding the Business of Innovation, NavalX supports customer-driven technology incubation for small businesses, startups, and nontraditional/dual-use technology companies.

To learn more about NavalX and opportunities for connecting with Tech Bridges or incubating capabilities that address critical warfighting gaps, visit: https://www.secnav.navy.mil/agility/Pages/newhome.aspx.

• White Papers: ONR utilizes FedConnect for the submission of white papers. FedConnect is a web portal that bridges the gap between government agencies and performers to streamline the process of doing business with the government. To access FedConnect go to https://www.fedconnect.net/FedConnect/default.htm.

Prior to preparing proposals, potential offerors are strongly encouraged to contact the ONR technical point of contact (TPOC), identified for each technology area.

ONR Global (ONRG)

ONRG serves as an external network facilitator for ONR headquarters and the Naval Research Enterprise by ensuring connections are maintained with the international science and technology community, the Naval Fleet/Forces, and our international partners, by deploying over 20 Science Directors in field offices around the world to liaise with scientists in their home countries. ONRG facilitates fundamental research efforts in the ONR technology areas indicated on the ONR website noted above, to address the needs of the Navy and Marine Corps and foster international partnerships with leading researchers around the world.

ONRG supports fundamental research seed grants, conferences, and workshops that foster collaboration between the U.S. Navy, and international scientists and technologists. To discuss your ideas for an international grant proposal, please contact a Science Director specializing in your field or located in your region by navigating to the ONRG website at https://www.nre.navy.mil/organization/onr-global.

• White Papers: Electronic submissions of white papers must be submitted directly to ONRG at usn.ncr.onrghq.list.grantsproposals@us.navy.milor to the relevant ONR Global Science Director (https://www.onr.navy.mil/media/document/onr-global-science-directors). Only electronic submissions will be accepted and reviewed.

Marine Corps Warfighting Lab (MCWL)

The MCWL utilizes concept-based experimentation as a primary means to explore both material and non-material solutions enabling warfighting concepts. The concept-based experimentation process provides the unique opportunity to assess the utility of experimental technologies employed in operational scenarios and environments. MCWL leverages ONR's S&T efforts to inform and support the concept-based experimentation process.

Amplifying instructions and additional information on the technology initiatives that MCWL is pursuing are provided at MCWL's Future Technology Office website at https://www.mcwl.marines.mil/Divisions/SnT/FTO/.

• White Papers: Electronic submissions of white papers addressing MCWL topics of interest should be sent to the following email accounts of the Future Technology Office: john.e.moore4@usmc.mil or Chandler.hirsch.ctr@usmc.mil . Only electronic submissions will be accepted and reviewed.

Link to Additional Information: https://www.grants.gov/search-results-detail/356605

12. Support for Conferences and Scientific Meetings (Parent R13 Clinical Trial Not Allowed), NIH

Application Deadlines: December 12, 2024

Award Budget: budgets are not limited but need to reflect the actual needs of the proposed project

The purpose of the NIH Research Conference Grant (R13) is to support high quality scientific conferences that are relevant to the NIH's mission and to the public health. A conference is defined as a symposium, seminar, workshop, or any other organized and formal meeting, whether conducted face-to-face or via the internet, where individuals assemble (or meet virtually) for the primary purpose to exchange technical information and views or explore or clarify a defined subject, problem, or area of knowledge, whether or not a published report results from such meeting. The NIH recognizes the value to members of the research community and all other interested parties in supporting such forums.

The NIH recognizes that the value of conferences is enhanced when persons from diverse backgrounds and perspectives are included in all aspects of conference/meeting planning and when attendees are assured of a safe, respectful, and inclusive environment free from discrimination, harassment, and other barriers that might prevent or inhibit one's participation. NIH encourages conference grant applicants to conduct outreach to and recruit prospective participants from diverse backgrounds, including those from underrepresented groups in the biomedical sciences, to promote a broad pool of individuals who may be involved in the planning and implementation, and ultimately, participation in the proposed conference. Per NIH Notice of Interest in Diversity NOT-OD-20-031, underrepresented groups include, for example, individuals from nationally (US) underrepresented racial and ethnic groups, individuals with disabilities, individuals from disadvantaged backgrounds, and women. Applications for NIH support of conferences and scientific meetings must include a plan to promote broad participation in all aspects of conference planning and implementation. These plans will be assessed during the scientific and technical merit review of the application. Though the proposed plans will not be scored individually, they will be considered in the overall impact score.

NIH is also committed to changing the culture of science to end sexual harassment and other forms of harassment, including harassment on the basis of race, color, national origin, sex (including gender identity, sexual orientation, or transgender status), disability, and age in NIH-funded activities. Harassment, in any form, is detrimental and presents obstacles that hinder an individual's ability to fully participate in science. Only in safe, respectful, and inclusive environments can individuals achieve their fullest potential and support the mission of the NIH. As stated in NOT-OD-15-152, Civil Rights Protections in NIH-Supported Research, Programs, Conferences and Other Activities, consistent with existing federal civil rights laws, it is expected that organizers of NIH-supported conferences and scientific meetings take steps to maintain a safe and respectful environment for all attendees by providing an environment free from all forms of discrimination and harassment, sexual or otherwise. It is expected that organizers of NIH-supported conferences employ strategies that seek to prevent or mitigate the effects of discrimination and harassment, sexual and otherwise. Per the NIH Grants Policy Statement 14.6.3 Plans to Promote Safe Environments at Conferences, conference grant applicants recommended for funding will be required to provide to NIH upon request as part of Just-In-Time (JIT) materials a "safety plan" that will be communicated to all conference/meeting attendees. Safety plans must include all of the following elements:

- Statement of commitment to provide a safe environment.
- Expectations of behavior o Including list of behaviors considered harassing (specific emphasis on harassment, sexual, racial, ethnic, or otherwise).
- Instructions on how to confidentially report alleged violations of the expectations of behavior to conference organizers.
- Description of how the organizers will assess allegations and the consequences for those who are found to violate the expectations of behavior.
- Information explaining that individuals who have questions, concerns or complaints related to harassment are also encouraged to contact the conference organizer or the HHS Office for Civil Rights (OCR).
- Information about how to file a complaint with HHS OCR (see OCR's webpage, Filing a Civil Rights Complaint).
- Information explaining that filing a complaint with the conference organizer is not required before filing a complaint of discrimination with HHS OCR, and that seeking assistance from the conference organizer in no way

- prohibits filing complaints with HHS OCR.
- Information explaining how individuals can notify NIH about concerns of harassment, including sexual harassment, discrimination, and other forms of inappropriate conduct at NIH-supported conferences (see NIH's Find Help webpage).

The website, NIH Support for Conferences and Scientific Meetings (https://grants.nih.gov/funding/activity-codes/R13), centralizes information regarding grants for scientific conferences.

Applicants are encouraged to look at the R13 Frequently Asked Questions for a list of common questions regarding the preparation and submission of conference grant applications.

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PA-25-080.html

13. Addressing Systems Challenges through Engineering Teams, NSF

Application Deadline: January 22, 2025

Award Information: range from \$1,000,000 to \$1,500,000 for a period of four years

The Electrical, Communications and Cyber Systems Division (ECCS) supports enabling and transformative engineering research at the nano, micro, and macro scales that fuels progress in engineering system applications with high societal impact. This includes fundamental engineering research underlying advanced devices and components and their seamless penetration in communications, sensing, power, controls, networking, or cyber systems. The research is envisioned to be empowered by cutting-edge computation, synthesis, evaluation, and analysis technologies and is to result in significant impact for a variety of application domains in healthcare, homeland security, disaster mitigation, telecommunications, energy, environment, transportation, manufacturing, and other systems-related areas. ECCS also supports new and emerging research areas encompassing 6G and Beyond Spectrum and Wireless Technologies, Quantum Information Science, Artificial Intelligence (AI), Machine Learning (ML), High-Performance Computing, and Big Data.

ECCS, through its ASCENT program, offers its engineering community the opportunity to address research issues and answer engineering challenges associated with complex systems and networks that are not achievable by a single principal investigator or by short-term projects and can only be achieved by interdisciplinary research teams. ECCS envisions a connected portfolio of transformative and integrative projects that create synergistic links by investigators across its three ECCS clusters: Communications, Circuits, and Sensing-Systems (CCSS), Electronics, Photonics and Magnetic Devices (EPMD), and Energy, Power, Control, and Networks (EPCN), yielding novel ways of addressing challenges of engineering systems and networks. ECCS seeks proposals that are bold and ground-breaking, transcend the perspectives and approaches typical of disciplinary research efforts, and lead to disruptive technologies and methods or enable significant improvement in quality of life.

- ASCENT supports fundamental research projects involving at least three collaborating PIs and co-PIs
- ASCENT proposals must highlight the engineering leadership focus of the proposal within the scope of ECCS programs.
- ASCENT proposals must articulate a fundamental research problem with compelling intellectual challenge and significant societal impact. The topic at the heart of the proposal must involve research areas of at least two of the three ECCS clusters (CCSS, EPMD, EPCN). Research proposals spanning three clusters are highly encouraged.
- ASCENT proposals must demonstrate the need for a concerted research effort by an integrated and interdisciplinary team, and strongly justify the interdisciplinary nature of the proposed work. They should include a timeline for research activities, with a strong justification of the explicit mechanisms for frequent communication between team members and effective assessment to achieve proposed goals.

Link to Additional Information: https://new.nsf.gov/funding/opportunities/ascent-addressing-systems-challenges-through-engineering-teams

14. Occupational Safety and Health Education and Research Centers (T42), CDC

Application Deadlines:

- Letter of Intent: 30 days prior to the application due date
- Full Proposal: December 17, 2024

Award Budget: up to \$9,000,000 in total costs for a duration of up to three years

Education and Research Centers (ERCs) are located in accredited academic institutions across the country. ERCs provide graduate, post-graduate degree and academic certificate training in core and allied disciplines of OSH. ERCs provide interdisciplinary research training to identify, assess, address, and improve OSH. Through outreach activities ERCs engage communities to increase awareness in OSH. Through comprehensive, integrated programs, ERCs improve the safety, health, and well-being of our nations workforce.

- Needs Assessment. ERCs must document that their proposed academic, research training, CE programs and outreach programs meet specific regional or national workforce needs and demands. Surveys of employers, alumni, participants (from CE and/or Outreach activities), and other stakeholders may be used to document these needs.
- Regional Presence. As centers of excellence in OSH training, education, and research training, ERCs serve as valuable regional and national resources. ERCs should demonstrate collaborative efforts by working with a diverse and broad range of organizations, institutions, businesses, federal, state, and / or local public health and regulatory agencies, labor, worker advocacy groups and professional associations. ERCs are strongly encouraged to engage diverse partners in their region and to facilitate synergistic approaches to OSH.

Applicants must identify other ERCs, NIOSH-supported Training Project Grants (TPGs) and other NIOSH-supported centers in their HHS Federal Region, and describe how they will collaborate and build OSH capacity, while avoiding overlap of services.

- Objectives / Outcomes. Centers may have different strengths, experiences, research training opportunities, capacities and focus areas on training, education, and outreach, but all should have objectives and outcomes that positively impact the US workforce. The objectives and outcomes should help NIOSH provide an adequate supply of highly qualified personnel to carry out the purposes of the OSH Act. NIOSH ERCs have a key role in helping meet this mandate and contribute to the NIOSH's core mission of providing leadership to prevent workplace injuries and illnesses.
- **Target Population.** Through the NIOSH ERCs a broad range of worker populations may be positively impacted. The applicant should clearly describe the potential public health impact of their ERC through their academic training, outreach, continuing education, and research training (if applicable).
- Collaboration / Partnerships. ERCs should have a regional presence through collaborations and partnerships with key stakeholders in OSH, such as professional associations, worker advocacy groups, businesses, industries, and public health agencies. ERCs should work with other institutions and organizations, including Minority Serving Institutions (MSIs) and other NIOSH supported training programs to have a positive impact on worker health, safety, and well-being.
- Evaluation/Performance Measurement. Each ERC must have an Evaluation and Planning Core to carry out the specific aims and objectives of the ERC and plan for new, dynamic situations to promote worker health, safety, and well-being. Evaluation activities should be center-wide and for each ERC component. The ERC should define the metrics that will be used to measure and track outputs and outcomes. Specific information on evaluation can be found at CDC's Office of Policy, Performance, and Evaluation.
- Translation Plan. When relevant to the goals of the ERC, applicants should describe how the findings and or

training may be used to promote, enhance or advance the translation of the research into practice or may be used to inform public health policy to move the OSH field forward. NIOSH has established the Research to Practice (r2p) approach to reduce or eliminate occupational illnesses and injury by increasing the transfer and translation of knowledge, interventions, and technologies into highly effective prevention practices and products in the workplace.

• Institutional Commitment. Institutional commitment and the sustainability of an ERC should be demonstrated. While the stability of an ERC may be enhanced by an institutional commitment of full-time faculty and administrative staff (ERC Center Director, Deputy Director and Program Directors), NIOSH recognizes the changing nature of work in academia. Justification should be provided if key personnel (ERC Center Director, Deputy Director, and Program Directors) are not full-time employees of the institution.

ERCs are comprised of required and optional components. The required components are:

- 1. **Academic Training Programs** There is a required minimum of 3 Academic Training Programs. At least 2 academic training programs must be from the core disciplines of IH, OHN, OM, or OS. Additional academic programs may be in either a core or an allied discipline. There should be no more than 10 academic programs proposed.
- 2. **Evaluation and Planning Core** includes Center Administration, Evaluation and Planning, Interdisciplinary Activities, Advisory Board, Executive Committee.
 - a. Emerging Issues Program optional under the Evaluation and Planning Core
- 3. **Continuing Education Program** supports activities that provide high-quality learning opportunities and professional growth to OSH practitioners and other allied disciplines.
- 4. **Outreach Program** supports activities with businesses, community groups, worker advocacy groups, local, state, and federal agencies, or other institutions within the region to implement innovative strategies that meet area needs in awareness and positively impact worker health, safety, and well-being.

Optional components include a Pilot Project Research Training Program and a Targeted Research Training Program.

Overall Description of an ERC

Centers will have different strengths, focus areas, experiences and capacities. NIOSH ERCs are essential to moving the OSH field forward. Developing highly skilled and knowledgeable OSH practitioners and researchers to advance worker health, safety and well-being is crucial to address issues that are multi-regional, national, and global in scope.

ERCs focus on the core OSH disciplines of IH, OHN, OM, and OS and must support at least 2 of the core disciplines through their academic training program. Allied disciplines are also offered through many of the ERCs. Allied disciplines include, but not limited to, occupational health psychology, Total Worker Health, mining safety, agricultural safety and health, and ergonomics.

ERCs serve as resources for our nation's workforce through continuing education and outreach in their region. ERCs have strong collaborations with professional associations, worker advocacy groups, businesses, industries and public health agencies.

Link to Additional Information: https://grants.nih.gov/grants/guide/rfa-files/RFA-OH-25-002.html

15. Building Synthetic Microbial Communities for Biology, Mitigating Climate Change, Sustainability and Biotechnology (Synthetic Communities), NSF

Application Deadline: February 3, 2025

Award Information: budgets are not limited but need to reflect the actual needs of the proposed project

This solicitation seeks projects that focus on synthetic microbial communities. The projects may use a model synthetic community to better understand the fundamental biological principles underlying the formation, maintenance or functionality of natural communities and to understand a natural community's impact on the host, when applicable. Projects that focus on the design and analysis of synthetic communities with novel capabilities are also eligible for submission. These projects may address fundamental biological principles at any scale, from the molecular to the ecosystem scale. By supporting this research, this solicitation aims to build a comprehensive biological knowledge base that scientists can use to rationally design synthetic microbial communities with novel applications in climate resiliency, sustainability, biotechnology and bio-manufacturing.

In the context of this solicitation, a synthetic microbial community is defined as a host-associated or free-living consortium of taxonomically different microbial species, which can be studied and co-cultured under well-defined and reproducible conditions, and has the potential for scalable production, if scalable production is the long-term goal. If the synthetic community is used as a model for a natural system, it must contain a subset of the microbial species found in the natural community and provide information about fundamental processes in the natural community. If the goal is to build a synthetic community with a novel composition and novel characteristics compared to its natural counterparts, the project must focus on the biological basis for the novel characteristics. For host-associated microbial communities that have distinct benefits to the host, microbial mechanisms that contribute to the impact of the community as a whole should be addressed. Organisms across multiple phyla and kingdoms, including bacteria, archaea, and eukaryotes such as fungi and micro-algae, may be used to generate the synthetic microbial community.

Proposals submitted in response to this solicitation must address one or more of the following themes:

- 1) use synthetic microbial communities to define the biological principles that govern the formation, dynamics, stability, and interactions in natural communities.
- 2) design synthetic microbial communities with novel capabilities, including novel impacts on a host, and study the biological basis for these capabilities.
- 3) define the functions of individual species within a synthetic community and their relationship to the properties of the community as a whole.
- 4) use synthetic microbial communities to characterize the ecological and evolutionary drivers that shape natural community patterns and dynamics.

In addition to addressing one or more of the themes noted above, competitive proposals should include the following:

- 1) a description of the synthetic microbial community's composition and an adequate justification for using a synthetic community over a natural community.
- 2) a description of how the chosen microbial community conforms to the solicitation-specific definition of a synthetic community.
- 3) a description of reproducible methodologies for co-culturing microbes in the synthetic community and the potential for scalable production, if scalable production is the ultimate goal.
- 4) a careful consideration of the social, ethical, and biosafety/security dimensions of the research.

Researchers are encouraged to contact Program Officers with questions and further clarifications regarding programmatic fit.

Link to Additional Information: https://new.nsf.gov/funding/opportunities/synthetic-communities-building-synthetic-microbial-communities-biology-mitigating/nsf25-501/solicitation

Scholarships and Fellowships

1. Earth Sciences Postdoctoral Fellowships (EAR-PF), NSF

Application Deadline: January 14, 2025

Anticipated Funding Amount: subject to availability of funds and the quality of proposals received

The Division of Earth Sciences (EAR) awards postdoctoral fellowships to recent recipients of doctoral degrees to conduct an integrated program of independent research and professional development that address scientific questions within the scope of EAR's disciplinary portfolio. The program supports researchers for a period of up to two years with fellowships that can be taken to an eligible host institution. The program is intended to recognize beginning investigators of significant potential and provide them with research experience, mentorship, and training that will help establish them in leadership positions in the Earth Sciences community. Postdoctoral fellows should pursue research in directions or with tools that will diversify the expertise they gained during their doctoral studies and research. The fellowship should also enable broadening of the fellow's professional network. For these reasons, applicants are strongly encouraged to seek opportunities outside of their doctoral institution and their organization at the time of submission.

Fellowships will include participation in a professional development program that emphasizes the development of mentoring skills. This program will coordinate the involvement of fellows in conferences and activities that are focused on increasing the engagement of underrepresented groups in science, technology, engineering, and mathematics (STEM). We encourage input and participation from the full spectrum of diverse talent that society has to offer.

Link to Additional Information: https://new.nsf.gov/funding/opportunities/ear-pf-earth-sciences-postdoctoral-fellowships/nsf25-500/solicitation

Forecasted Opportunities

1. Dangers and Opportunities of Technology: Perspectives from the Humanities, NEH

This program supports research that examines technology and its relationship to society through the lens of the humanities, with a focus on the dangers and/or opportunities presented by technology, broadly defined. NEH is particularly interested in projects that examine the role of technology in shaping current social and cultural issues.

Link to Additional Information: https://www.grants.gov/search-results-detail/356554

2. BRAIN Initiative: Brain Behavior Quantification and Synchronization- Next Generation Sensor Technology Development (U01 Clinical Trial Optional), NIH

The Brain Research through Advancing Innovative Neurotechnology's (BRAIN) Initiative intends to promote a new initiative by publishing a Notice of Funding Opportunity (NOFO) to solicit applications for research on the development and preclinical testing of novel sensors and bioelectronics that will improve our understanding of human and animal behavior as part of the Brain Behavior Quantification and Synchronization Program.

Link to Additional Information: https://www.grants.gov/search-results-detail/356542

3. Summer Stipends, NEH

The purpose of this program is to stimulate new research and publication in the humanities. Summer Stipends support continuous, full-time work on a humanities project for a period of two consecutive months. NEH funds may support recipients' compensation, travel, and other costs related to the proposed scholarly research.

Link to Additional Information: https://www.grants.gov/search-results-detail/356592

Proposals Accepted Anytime

- 1. Division of Environmental Biology, NSF https://new.nsf.gov/funding/opportunities/division-environmental-biology-deb/nsf24-543/solicitation
- 2. Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences, NSF <a href="https://beta.nsf.gov/funding/opportunities/computational-and-data-enabled-science-and-engineering-mathematical-and-data-enabled-science-and-enabled-sci
- 3. Condensed Matter and Materials Theory (CMMT), NSF https://www.nsf.gov/pubs/2022/nsf22610/nsf22610.htm#pgm desc txt
- 4. Division of Materials Research: Topical Materials Research Programs (DMR: TMRP), NSF https://www.nsf.gov/pubs/2022/nsf22609/nsf22609.htm
- 5. Research in the Formation of Engineers, NSF https://beta.nsf.gov/funding/opportunities/research-formation-engineers-rfe
- 6. Computer and Information Science and Engineering (CISE): Core Programs, NSF Small Projects https://www.nsf.gov/pubs/2022/nsf22631/nsf22631.htm
- 7. Manufacturing Systems Integration (MSI), NSF https://beta.nsf.gov/funding/opportunities/manufacturing-systems-integration-msi
- 8. Cybersecurity Innovation for Cyberinfrastructure (CICI), NSF https://www.nsf.gov/pubs/2023/nsf23532/nsf23532.htm
- 9. Division of Molecular and Cellular Biosciences Core Programs (MCB), NSF https://new.nsf.gov/funding/opportunities/division-molecular-cellular-biosciences-core/nsf24-539/solicitation
- Division of Integrative Organismal Systems Core Programs, NSF https://www.nsf.gov/pubs/2023/nsf23547/nsf23547.htm
- 11. Electronics, Photonics and Magnetic Devices (EPMD), NSF https://beta.nsf.gov/funding/opportunities/electronics-photonics-magnetic-devices-epmd-0
- 12. Plant Genome Research Program (PGRP), NSF https://www.nsf.gov/pubs/2023/nsf23559/nsf23559.htm#elig
- 13. Communications, Circuits, and Sensing-Systems (CCSS), NSF https://beta.nsf.gov/funding/opportunities/communications-circuits-sensing-systems-ccss-0
- 14. Fluid Dynamics, NSF https://beta.nsf.gov/funding/opportunities/fluid-dynamics-2
- 15. Biophotonics, NSF https://beta.nsf.gov/funding/opportunities/biophotonics-2
- 16. Environmental Sustainability, NSF https://beta.nsf.gov/funding/opportunities/environmental-sustainability-2
- 17. Particulate and Multiphase Processes, NSF https://beta.nsf.gov/funding/opportunities/particulate-multiphase-processes-2

- 18. Interfacial Engineering, NSF https://beta.nsf.gov/funding/opportunities/interfacial-engineering-0
- 19. Nanoscale Interactions, NSF https://beta.nsf.gov/funding/opportunities/nanoscale-interactions-0
- 20. Combustion and Fire Systems (CFS), NSF https://new.nsf.gov/funding/opportunities/combustion-fire-systems-cfs
- 21. Infrastructure Innovation for Biological Research (Innovation), NSF https://www.nsf.gov/pubs/2023/nsf23578/nsf23578.htm
- 22. Infrastructure Capacity for Biological Research (Capacity), NSF https://www.nsf.gov/pubs/2023/nsf23580/nsf23580.htm
- 23. Energy, Power, Control, and Networks (EPCN), NSF https://new.nsf.gov/funding/opportunities/energy-power-control-networks-epcn-0
- 24. Engineering of Biomedical Systems, NSF https://new.nsf.gov/funding/opportunities/engineering-biomedical-systems-0
- 25. Catalysis, NSF https://new.nsf.gov/funding/opportunities/catalysis-2
- 26. Process Systems, Reaction Engineering, and Molecular Thermodynamics, NSF https://new.nsf.gov/funding/opportunities/process-systems-reaction-engineering-molecular-2
- 27. Disability and Rehabilitation Engineering (DARE), NSF https://new.nsf.gov/funding/opportunities/disability-rehabilitation-engineering-dare-2
- 28. Cellular and Biochemical Engineering, NSF https://new.nsf.gov/funding/opportunities/cellular-biochemical-engineering-0
- 29. Facility and Instrumentation Request Process (FIRP), NSF https://www.nsf.gov/pubs/2023/nsf23602/nsf23602.htm
- 30. Research Infrastructure in the Social and Behavioral Sciences (RISBS), NSF https://new.nsf.gov/funding/opportunities/research-infrastructure-social-behavioral-sciences
- 31. Secure and Trustworthy Cyberspace (SaTC), NSF https://www.nsf.gov/pubs/2024/nsf24504.htm
- 32. Mind, Machine and Motor Nexus (M3X), NSF https://new.nsf.gov/funding/opportunities/mind-machine-motor-nexus-m3x
- 33. Cyberinfrastructure for Public Access and Open Science, NSF https://new.nsf.gov/funding/opportunities/cyberinfrastructure-public-access-open-science-ci
- 34. Multilateral Partnerships Leveraging Excellence (MultiPLEx), NSF https://new.nsf.gov/funding/opportunities/multiplex-multilateral-partnerships-leveraging-excellence

Announcing Previous Important Funding Opportunities

 Building Sustainable Software Tools for Open Science (R03 Clinical Trial Not Allowed), NIH Deadline: November 3, 2024 (LOI); December 4, 2024 (FP) https://grants.nih.gov/grants/guide/pa-files/PAR-24-204.html

2. Postdoctoral Research Fellowships in Biology (PRFB), NIH

Deadline: November 7, 2024

https://new.nsf.gov/funding/opportunities/postdoctoral-research-fellowships-biology-prfb/nsf24-593/solicitation

3. PFE: Research Initiation in Engineering Formation (PFE: RIEF), NSF

Deadline: November 12, 2024

https://new.nsf.gov/funding/opportunities/pfe-research-initiation-engineering-formation-pfe

4. Digital Humanities Advancement Grants, NEH

Deadline: November 13, 2024 (Optional Draft); January 9, 2025 (FP) https://www.neh.gov/grants/odh/digital-humanities-advancement-grants

5. Strengthening Program Evaluation Capacity: Building Evidence of Effectiveness of Strategies To Increase

Postsecondary Student Success, Department of Education

Deadline: November 14, 2024

https://www.govinfo.gov/content/pkg/FR-2024-08-15/pdf/2024-18275.pdf

6. National Science Foundation Research Traineeship Program, NSF

Deadline: November 14, 2024

https://new.nsf.gov/funding/opportunities/us-national-science-foundation-research/nsf24-597/solicitation

7. Museum Grants for American Latino History and Culture, IMLS

Deadline: November 15, 2024

https://www.imls.gov/grants/available/museum-grants-american-latino-history-and-culture

8. Mid-scale Research Infrastructure-1 (Mid-scale RI-1), NSF

Deadline: November 18, 2024 (Preliminary Proposal); March 19, 2025 (FP by invitation only) https://new.nsf.gov/funding/opportunities/mid-scale-research-infrastructure-1-mid-scale-ri-1

9. Education Activities for Responsible Analyses of Complex, Large-Scale Data (R25 - Clinical Trial Not Allowed),

NIH

Deadline: November 18, 2024 (LOI); December 18, 2024 (FP) https://grants.nih.gov/grants/guide/rfa-files/RFA-DA-25-039.html

10. Ethical, Legal, and Social Implications (ELSI) Congress, NIH

Deadline: November 19, 2024

https://grants.nih.gov/grants/guide/rfa-files/RFA-HG-24-028.html

11. Research Centers in Minority Institutions (RCMI) (U54 - Clinical Trial Optional), NIH

Deadline: November 19, 2024

https://grants.nih.gov/grants/guide/rfa-files/RFA-MD-24-012.html

12. Collaborative Research, NEH

Deadline: November 20, 2024

https://www.neh.gov/grants/research/collaborative-research-grants

13. Science and Technology Centers: Integrative Partnerships, NSF

Deadline: November 20, 2024 (Preliminary Proposal); June 2, 2025 (FP by invitation only)

https://new.nsf.gov/funding/opportunities/science-technology-centers-integrative/nsf24-594/solicitation

14. Training and Technical Assistance for Rural, Small and Tribal Municipalities and Wastewater Treatment Systems for Clean Water Act Prevention, Reduction, and Elimination of Pollution, EPA

Deadline: November 25, 2024

https://www.grants.gov/search-results-detail/356501

15. Biomedical Research Initiative for Next-Gen BioTechnologies - SynBio Control (BRING SynBio), NSF

Deadline: December 4, 2024

https://new.nsf.gov/funding/opportunities/bring-synbio-biomedical-research-initiative-next-gen-biotechnologies/nsf24-603/solicitation

16. Scholarly Editions and Translations, NEH

Deadline: December 4, 2024

https://www.neh.gov/grants/research/scholarly-editions-and-translations-grants

17. Molecular Foundations for Sustainability: Sustainable Polymers Enabled by Emerging Data Analytics, NSF Deadline: December 5, 2024 (LOI); January 16, 2024 (FP)

 $\underline{https://new.nsf.gov/funding/opportunities/molecular-foundations-sustainability-sustainable/nsf24-567/solicitation}$

18. Molecular Foundations for Biotechnology, NSF

Deadline: December 16, 2024

https://new.nsf.gov/funding/opportunities/mfb-molecular-foundations-biotechnology/nsf24-607/solicitation

19. NICHD Resource Program Grants in Bioinformatics (P41Clinical Trial Not Allowed), NIH

Deadline: December 23, 2024 (LOI); January 25, 2025 (FP)

https://grants.nih.gov/grants/guide/pa-files/PAR-24-301.html

20. Behavioral & Integrative Treatment Development Program (R01 Clinical Trial Optional), NIH

Deadline: January 5, 2025 (LOI); February 5, 2025 (FP)

https://grants.nih.gov/grants/guide/pa-files/PAR-24-299.html

21. Advancing Informal STEM Learning (AISL), NSF

Deadline: January 8, 2025

https://new.nsf.gov/funding/opportunities/advancing-informal-stem-learning-aisl/nsf24-601/solicitation

22. Pathways to Enable Open-Source Ecosystems (POSE), NSF

Deadline: January 14, 2025

https://new.nsf.gov/funding/opportunities/pose-pathways-enable-open-source-ecosystems/nsf24-

606/solicitation#pgm desc txt

23. Safety, Security, and Privacy of Open-Source Ecosystems (Safe-OSE), NSF

Deadline: January 14, 2025 (Preliminary Proposal): April 22, 2025 (FP)

https://new.nsf.gov/funding/opportunities/safe-ose-safety-security-privacy-open-source-ecosystems/nsf24-608/solicitation

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24. Translation Project Fellowships, NEA

Deadline: January 16, 2025

https://www.arts.gov/grants/translation-project-fellowships

25. Ethical and Responsible Research (ER2), NSF

Deadline: January 23, 2025

https://new.nsf.gov/funding/opportunities/er2-ethical-responsible-research/nsf24-604/solicitation

26. Focus on Recruiting Emerging Climate and Adaptation Scientists and Transformers, NSF Deadline: January 29, 2025 (Track 1); April 30, 2025 (Track 2) https://new.nsf.gov/funding/opportunities/focus-recruiting-emerging-climate-adaptation/nsf24-558/solicitation

27. Quantum Leap Challenge Institutes, NSF

Deadline: February 7, 2025 (LOI-required); March 7, 2025 (Preliminary Proposal-required): September 17, 2025 (FP – by invitation)

https://new.nsf.gov/funding/opportunities/quantum-leap-challenge-institutes-qlci/nsf24-599/solicitation

28. NIDCR Mentored Career Development Award to Promote Broad Participation in Research (K01 Independent Clinical Trial Not Allowed), NIH

Deadline: February 12, 2025

https://grants.nih.gov/grants/guide/pa-files/PAR-25-022.html

29. Summer Research Education Experience Program (R25 Clinical Trial Not Allowed), NIH Deadline: February 15, 2025 (LOI); March 18, 2025 (FP) https://grants.nih.gov/grants/guide/pa-files/PAR-24-204.html

30. Imaging - Science Track Award for Research Transition (I/START) (R03 Clinical Trial Optional), NIH Deadline: February 16, 2025 https://grants.nih.gov/grants/guide/pa-files/PAR-24-297.html

31. Discovery Research PreK-12 Program Resource Center on Transformative Education Research and Translation (DRK-12 RC), NSF

Deadline: February 28, 2025

 $\frac{https://new.nsf.gov/funding/opportunities/drk-12-rc-discovery-research-prek-12-program-resource-center/nsf24-602/solicitation?WT_mc_id=USNSF_25\&WT_mc_ev=click$

32. Science, Technology, Engineering and Mathematics (STEM), Office of Naval Research

Deadline: April 4, 2025

 $\frac{https://www.nre.navy.mil/work-with-us/funding-opportunities/onr-science-technology-engineering-and-mathematics-stem-program$

33. Cyber-Physical Systems (CPS), NSF

Submission Window Date(s): June 01, 2024 - May 31, 2025 (Small & Medium) https://new.nsf.gov/funding/opportunities/cyber-physical-systems-cps/nsf24-581/solicitation

34. Research and Development (RAD) Directed Energy (RD) University Assistance Instruments, Dept. of the Air Force, Air Force Research Lab

Deadline: until July 18, 2029 (Mandatory LOI); by invitation only (FP) https://www.grants.gov/search-results-detail/355499

35. Computer and Information Science and Engineering (CISE): Core Programs, Large Projects, NSF Submission Window Date(s): September 15, 2025 - September 29, 2025 https://new.nsf.gov/funding/opportunities/computer-information-science-engineering-core-0/nsf24-572/solicitation#elig



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