

The logo for the University of Maryland (UMD) is displayed in yellow text on a red rectangular background.

FUNDING ALERT

Notes

1. Weekly opt-in funding alert provided by the UMD-College Park Division of Research and [SSTI](#). Please feel free to forward this alert to colleagues.
2. If you have been forwarded this email and would like to receive this alert on a weekly basis, please fill out the following form: <http://go.umd.edu/fundingalert>.

SSTI (August 30)

New Federal R&D Funding Opportunities

Department of Defense

Vannevar Bush Faculty Fellowship

On behalf of the entire department, the Office of Naval Research seeks distinguished researchers for the purpose of conducting innovative basic research in areas of interest to the DoD and fostering long-term relationships between the Vannevar Bush Faculty Fellows and the DoD. The fellowships support innovative basic research ("bold and ambitious blue sky research") within academia, as well as opportunities intended to develop the next generation of scientists and engineers for the defense workforce. Proposals should be for single investigator research projects. Priority research areas are (other topics will be considered):

1. Applied Mathematics and Computational Science
2. Networks and Artificial Intelligence
3. Cognitive Neuroscience
4. Fundamentals of Bioengineering
5. Quantum Information Science
6. Electronics, Photonics and Quantum Materials
7. Engineered Materials and Structures

Awards:

\$24M-30 million available to support multiple five-year awards, each up to \$3 million.

Eligibility:

Only accredited US institutions of higher education with doctoral degree-granting programs.

Deadline:

10/28/2022

AwardsID(s):

N00014-22-S-F009

Links:

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=343231>

Department of Energy

R&D for Produced Water and Legacy Wastewaters Associated with Thermal Power Plants

The National Energy Technology Laboratory has issued a request for information (in possible design and anticipation of future solicitations for research proposals) to solicit feedback from industry members, investors, developers, academia, research laboratories, government agencies, potentially impacted communities and other stakeholders on potential projects under this topic (see project title), while considering environmental justice, energy transition, tribal, and other impacted communities. Information on concepts, processes, configurations, and systems related to the comments and specific questions included in the announcement are requested. Responses that address only a subset of the questions would still be helpful and are welcomed.

Deadline:

10/14/2022

AwardsID(s):

DE-FOA-0002795

Links:

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=343248>

The Hydrogen Shot and a University Research Consortium on Grid Resilience

The Office of Energy Efficiency and Renewable Energy invites concept proposals for either of two unique areas of interest: one with topic areas focused on supporting the DOE Hydrogen Shot on behalf of the Hydrogen and Fuel Cell Technologies Office and a second EERE-wide topic area focused on grid resilience through a university research consortium. There are five specific research topics between the two areas of interest:

1. Hydrogen and Fuel Cell Technologies in Support of Hydrogen Shot
 1. HydroGEN: Solar Fuels from Photoelectrochemical and Solar Thermochemical Water Splitting
 2. Development and Validation of Sensor Technology for Monitoring and Measuring Hydrogen Losses
 3. Materials-based H2 Storage Demonstrations
 4. M2FCT: High Performing, Durable, and Low-PGM Catalysts/Membrane Electrode Assemblies (MEAs) for Medium- and Heavy-duty Applications

2. Improving Electricity Grid Resilience
 1. University Research Consortium on Grid Resilience

Awards:

\$60.5 million available for up to 27 awards

Eligibility:

Unrestricted domestically

Deadline:

09/23/2022

AwardsID(s):

DE-FOA-0002792

Links:

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=343227>, <https://eere-exchange.energy.gov/Default.aspx?Search=2792&SearchType=>

Department of Health and Human Services

Blood Brain Barrier Response to Antibodies Targeting Beta-Amyloid

Multiple NIH Institutes invite basic disease-related molecular mechanisms applications that use age-appropriate beta-amyloid animal models to understand genetic, cellular, and molecular factors that result in adverse responses at and/or proximal to the blood-brain barrier due to passive anti-beta-amyloid immunotherapy. Characteristics of responsive applications include 1) Projects that are primarily focused on Alzheimers Disease; 2) Applications that investigate the adverse effect of anti-beta amyloid passive immunotherapy on, and proximal to, the blood-brain barrier and blood vessels; and 3) Applications that use in vivo models that are aged appropriately for the Alzheimers disease disorder(s) under investigation.

Awards:

3 awards from a pool of \$2.25 million

Eligibility:

Unrestricted Domestically

Deadline:

11/10/2022

AwardsID(s):

PAR-22-235

Links:

<https://grants.nih.gov/grants/guide/pa-files/PAR-22-235.html>

Cancer Adoptive Cellular Therapy Network

The National Cancer Institute invites applications to accelerate development, innovation and establishment of adoptive cellular therapy clinical trials for treatment of adult and child patients with solid tumors. The overall goal of this opportunity is translation of the tested cell therapy concepts to early phase clinical trials in pediatric cancer patients. Three funding

opportunities are available in this topic area, two vary by type of cancer (adult or pediatric). The third is for a single center award coordinate research activities among the other recipients (use RFA-CA-22-030). Exploratory development projects into adult cancers using clinical trials should apply through RFA-CA-22-028; All exploratory development projects must address at least 2 objectives that will advance a new cell therapy concept to clinical testing while also conducting research to advance the understanding and clinical use of cell therapies to treat adult cancer patients with solid tumors. Collaborative team members must consist of appropriate interdisciplinary expertise and capabilities across preclinical and/or translational science to achieve their scientific research objectives.

For pediatric cancer research projects, clinical trials are not allowed and respondents should use RFA-CA-22-029.

Funding levels and number of awards For each opportunity, applications are due October 28th, 2022.

Eligibility:

Unrestricted Domestically

Deadline:

10/28/2022

AwardsID(s):

RFA-CA-22-028, RFA-CA-22-029, RFA-CA-22-030

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-CA-22-028.html>, <https://grants.nih.gov/grants/guide/rfa-files/RFA-CA-22-029.html>, <https://grants.nih.gov/grants/guide/rfa-files/RFA-CA-22-030.html>

Catalyst Award for Early-Stage Investigators Pursuing Research on HIV Comorbidities, Coinfections, and Complications

Multiple NIH Institutes invite applications that support research from creative early stage investigators who propose highly innovative, pioneering studies with potential to open new areas of HIV/AIDS research related to coinfections, comorbidities, and complications. Projects should reflect new and novel scientific directions that are distinct from concepts and approaches being pursued in the investigator's research program or elsewhere. Projects must be consistent with the scientific priorities outlined by the NIH Office of AIDS Research.

Awards:

Multiple Awards are anticipated

Eligibility:

Unrestricted Domestically

Deadline:

05/01/2023

AwardsID(s):

PAR-23-024

Links:

<https://grants.nih.gov/grants/guide/pa-files/PA-23-024.html>

Drug Induced Liver Injury Network Clinical Centers

The National Institute of Diabetes and Digestive and Kidney Diseases invites applications for clinical centers for the Drug-Induced Liver Injury (DILI) Network. This opportunity seeks to continue the Drug Induced Liver Injury Network objectives in four main areas: 1) Clinical, biochemical, histologic and biologic characterization of DILI, including acute and chronic disease; ethnic and racial differences, genetic studies, cytokines and immunological profiling; 2) Ancillary studies and collaborations that would investigate basic mechanisms of liver injury due to specific drugs and provide insights into pathogenesis of DILI and potential targets for prevention and treatment. 3) Pilot/feasibility studies that would lay the groundwork for future studies on treatment of severe DILI including acute as well as chronic symptomatic cases; and, 4) Pharmacovigilance of recently approved prescription medications and public resource for accurate information on DILI.

Awards:

5 awards from a pool of \$1.8 million

Eligibility:

Unrestricted Domestically

Deadline:

10/27/2022

AwardsID(s):

RFA-DK-22-013

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-DK-22-013.html>

Exploratory/Developmental Grants Related to the World Trade Center Health Program

The National Institute for Occupational Safety and Health is soliciting exploratory and developmental research projects that support and facilitate the feasibility, development, and evaluation of methods, practices, interventions, and programs related to Lifestyle Medicine within the following clinical research areas:

- **Treatment Research:** Projects that develop and implement behavioral lifestyle interventions as an essential therapeutic approach to addressing chronic diseases certified by the Program, either as World Trade Center-related condition or medically associated condition; or
- **Program Evaluation:** Projects that evaluate World Trade Center Health Program Lifestyle medicine interventions, programs, and outcomes. Projects can focus on the identification of improved methods/procedures to organize, manage, finance, and deliver lifestyle health care interventions designed to prevent or mitigate the development or reoccurrence of various diseases/disorders.

Awards:

4-8 awards from a pool \$4 million

Eligibility:

Unrestricted Domestically

Deadline:

12/06/2022

AwardsID(s):

RFA-OH-23-001

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-OH-23-001.html>

HEAL Initiative: Translational Development of Diagnostic and Therapeutic Devices

Multiple NIH Institutes invite applications to develop clinical-grade prototype devices intended for use as safe, effective, and non-addictive diagnostics and treatments for pain or opioid use disorder (OUD). The goal of the program is to demonstrate treatment using credible neural targets for device-based interventions and/or diagnostics for pain or OUD, building upon the latest mechanistic knowledge about the anatomy and physiology of central, spinal, and peripheral pathways involved in pain or OUD. Projects must have a rigorous mechanistic biological rationale and scientifically sound assays to test the device. Supporting data must be provided that the mechanism of therapy, rehabilitation, or diagnosis has been demonstrated in humans.

Awards:

8-12 awards from a pool of \$6 million

Eligibility:

Unrestricted

Deadline:

11/14/2022

AwardsID(s):

RFA-EB-22-002

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-EB-22-002.html>

Maintaining Immunity after Immunization

The National Institute of Allergy and Infectious Diseases invites applications to promote research to improve our understanding of how vaccines against infectious agents lead to durable protective immunity. This initiative will support studies that define components and mechanisms of the immune system that determine such durability. Applications must propose the use of human cells/tissues to decipher the human response elicited through vaccination. Areas of research interest include, but are not limited to

1. Identification of the molecular components of innate and adaptive immune responses, such as immune receptors, metabolic changes, epigenetic modifications,

or signaling molecules that must be activated to maintain durable protective immunity;

2. Understanding of the crosstalk between components of innate and adaptive immunity leading to the induction/maintenance of durable immunity; and
3. Comparison of immune mechanisms/components that lead to protective immunity and are differentially elicited by natural infection versus by vaccination.

Awards:

5-8 awards from a pool of \$4.8 million

Eligibility:

Unrestricted

Deadline:

01/13/2023

AwardsID(s):

RFA-AI-22-055

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-AI-22-055.html>

National Research Service Award Institutional Research Training Grant

The Agency for Healthcare Research and Quality plans to fund a broad array of health services research training programs focused on promoting improvements in clinical and health systems' practices. These training programs are designed to provide didactic and/or experiential training for predoctoral and postdoctoral trainees interested in: 1) improving clinical practice or the health care system's ability to provide access to and delivery of high quality, high-value health care; and/or 2) providing policymakers with the ability to assess the impact of system changes on outcomes, quality, access to, cost, and use of health care service.

Awards:

Multiple awards from a pool of \$9 million

Eligibility:

Unrestricted Domestically

Deadline:

12/01/2022

AwardsID(s):

RFA-HS-22-010

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-HS-22-010.html>

NICHD Research Education Programs

The National Institute of Child Health and Human Development invites applications to develop and conduct short-term research education programs to improve the knowledge and research skills of biomedical and behavioral scientists conducting research in areas relevant to the mission of the National Institute of Child Health and Human Development, including

reproductive, developmental, behavioral, social, and rehabilitative processes that contribute to the health and well-being of newborns, infants, children, adults, families, and populations.

Areas of particular interest include:

1. Training in specialized research techniques, research methodology, data sets, or statistical approaches;
2. Training in advanced approaches to clinical, translational, or basic research, for instance, training in design and implementation of clinical trials or complex data collection projects;
3. Training in the use of model organisms or systems.

Awards:

Multiple Awards are anticipated

Eligibility:

Unrestricted Domestically

Deadline:

09/25/2022

AwardsID(s):

PAR-22-224

Links:

<https://grants.nih.gov/grants/guide/pa-files/PAR-22-224.html>

NIH Countermeasures Against Chemical Threats

Multiple NIH insititutes invite applications for basic research projects on chemical warfare agents, toxic industrial chemicals, and pesticides that have primary or secondary effects on the nervous system. Chemical threats are toxic compounds that could be used in a terrorist attack or accidentally released from industrial production, storage, or shipping. This opportunity does not support translational research on therapeutic development, nor does it support clinical research.

Awards:

6 awards from a pool of \$2.5 million

Eligibility:

Unrestricted Domestically

Deadline:

10/27/2022

AwardsID(s):

PAR-23-027

Links:

<https://grants.nih.gov/grants/guide/pa-files/PAR-23-027.html>

Optimization of Genome Editing Therapeutics for Alzheimer's Disease and Alzheimer's Disease-Related Dementias

Multiple NIH Institutes invite applications for the translation of new genome editing technologies for the development of treatments for Alzheimer's. The end goals of this opportunity is to provide the translational research community increased confidence in the efficacy and safety of novel genome editing technologies for Alzheimer's Disease. This opportunity invites applications from interdisciplinary Research Teams to integrate:

1. Identification and optimization of genome editing therapeutic lead(s) using Alzheimer's Disease-related in vitro and/or animal model(s) to improve in vivo editing efficiency, biodistribution, dose range, and safety profiles such as off-target effects and/or immune responses for the intended route of administration; and
2. Optimization of delivery system(s), process development, Chemistry, Manufacturing, and Control related activities intended for future Investigational New Drug-enabling studies.

Awards:

3 awards from a pool of \$3 million

Eligibility:

Unrestricted

Deadline:

11/30/2022

AwardsID(s):

RFA-NS-23-017

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-NS-23-017.html>

Physiomimetics and Organoids for Reproductive Health

The Eunice Kennedy Shriver National Institute of Child Health and Human Development invites grant applications to develop physiomic mimetic platforms and organoid culture systems for studies of the female reproductive tract and gametogenesis (both male and female) that can be used to uncover factors responsible for gynecological conditions and infertility. Projects of higher priority include, but are not limited to:

- Models that incorporate complex niche cells/architectures (such as vasculature, innate and adaptive immune cells, neural innervation, stroma, or healthy tissue types that border pathologies such as uterine fibroids or endometriosis);
- Projects that intentionally examine how cells/tissue from diverse populations affect the models developed.

For either opportunity, applications are due March 29th, 2023. Research Project Grants should use RFA-HD-23-024, with 4-5 awards anticipated from a pool of \$1.6 million. Exploratory Grant proposals should use RFA-HD-23-025; which may make 3 awards from a pool of \$900,000.

Eligibility:

Unrestricted

Deadline:

03/29/2023

AwardsID(s):

RFA-HD-23-024, RFA-HD-23-025

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-HD-23-024.html>, <https://grants.nih.gov/grants/guide/rfa-files/RFA-HD-23-025.html>

REsearch Across Complementary and Integrative Health Institutions

The National Center for Complementary and Integrative Health invites applications for REsearch Across Complementary and Integrative Health Institutions (REACH) virtual resource centers. REACH virtual resource centers will foster institutional partnerships and provide resources to support research activities and research training for faculty who work at accredited complementary and integrative health clinical institutions, such as: schools of acupuncture, chiropractic, osteopathy, naturopathy, physical therapy, and music and art therapy. The application must include letters of support from at least three different, accredited, complementary and integrative health clinical institutions who agree to partner with the REACH center to provide access for their faculty to the available resources, as well as plans to outreach and expand partnerships to additional institutions throughout the course of funding.

Awards:

2 awards from a pool of \$2.5 million

Eligibility:

Unrestricted Domestically

Deadline:

11/10/2022

AwardsID(s):

RFA-AT-23-007

Links:

<https://grants.nih.gov/grants/guide/rfa-files/RFA-AT-23-007.html>

The Metastasis Research Network (MetNet): MetNet Research Projects

The National Cancer Institute is soliciting applications proposing research projects that use integrative systems-level approaches to address a defined gap in metastasis research. Proposed projects should emphasize one of the central themes defined in the MetNet opportunity such as dormancy, early dissemination, cellular and/or physical microenvironment crosstalk, or mechanisms of responses by metastatic cells to therapies.

Awards:

Multiple Awards are anticipated

Eligibility:

Unrestricted

Deadline:

11/09/2022

AwardsID(s):

PAR-22-234

Links:

<https://grants.nih.gov/grants/guide/pa-files/PAR-22-234.html>

Department of Housing and Urban Development

HBCU Research Center of Excellence

The HUD Office of Policy Development and Research invites applications from Historically Black Colleges and Universities (HBCUs) to create Centers of Excellence (COEs) to advance the research priorities and specific topics of strategic interest outlined in HUD's 2022-26 Learning Agenda (links available in the announcement). Each COE should take a multidisciplinary approach to housing and community development research, and through innovative methods study the social and economic factors that create healthy communities. The research projects are intended to initiate an ongoing series of reports focused on housing, community, and economic development in underserved communities that can serve as national, local, or regional benchmarks and assist in support of COE(s) that expand the housing and community development research efforts at HBCUs. Ultimately, the purpose of the COE should be to influence policy at the local, state, and national levels, providing evidence-based innovative approaches to community development based on research it undertakes.

Awards:

3 multi-year awards from a pool of \$5.5 million

Eligibility:

Historically Black Colleges and Universities (HBCUs)

Deadline:

12/22/2022

AwardsID(s):

FR-6600-N-29F

Links:

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=343286>

National Science Foundation

Science and Technology Studies

The NSF Division of Social and Economic Sciences invites proposals field that investigate the conceptual foundations, historical developments and social contexts of science, technology, engineering and mathematics (STEM), including medical science. The Science and Technology Studies (STS) program is interdisciplinary, supporting proposals across a broad spectrum of research that uses historical, philosophical and social scientific methods to investigate STEM theory and practice. STS research may be empirical or conceptual; specifically, it may focus

on the intellectual, material or social facets of STEM including interdisciplinary studies of ethics, equity, governance and policy issues.

The STS program strongly encourages research that addresses complex socio-technical and techno-scientific problems from multiple perspectives that capture the different social facets of the problem. These social facets may include ethics, policy, governance, justice, equity, diversity, inclusion, race, gender, trust, reliability, risk and uncertainty, sustainability, user-centeredness, and globalization. The goal is to bring different disciplinary and interdisciplinary perspectives to the problem and thereby make use of a variety of theoretical frameworks and methodological approaches. Some examples of questions that address such problems may include, but are by no means limited to, the following:

1. How can emerging technologies such as machine learning systems, gene drives or quantum computers be developed and implemented so that they can benefit everyone? How are people interacting with these emerging technologies and how will they affect culture, society and norms?
2. What are the best approaches for maintaining and developing the built environment while respecting the natural environment as well as local cultures and values? What factors need to be considered to ensure that technologies work well within social and cultural contexts?
3. How can major technological shifts in energy, algorithm usage, transportation or communication be accomplished in ways that are transparent and consistent with societal values, engage diverse perspectives in all phases of development and benefit broad sectors of society?
4. How can justice, equity, inclusion and diversity (JEDI) impact STEM and change the practice and quality of STEM research?

Awards:

Up to 40 awards may be made from a pool of \$6.2 million.

Eligibility:

U.S. Institutions of Higher Education and U.S. non-profit and non-academic organizations.

Deadline:

02/02/2023

AwardsID(s):

NSF 22-629

Links:

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22629

U.S. Nuclear Regulatory Commission

University Nuclear Leadership Program

Through this single announcement, the U.S. Nuclear Regulatory Commission invites applications for three academically-centered individual grant opportunities:

- **Scholarships:** This is a three-year program with awards up to \$200,000 total costs (direct costs and facilities and administrative costs) for the project period. A

scholarship student may not receive more than \$20,000 over the 3-year period of the grant.

- **Fellowships:** This is a four-year program with awards up to \$400,000 for the project period. A post graduate student may not receive funding more than \$50,000 per year or exceed \$200,000 over a 4-year period.
- **Distinguished Faculty Advancement Program:** This a four-year program with awards up to \$600,000 total costs for the project period, provided that an additional \$100,000 is fully matched by the recipient. Other direct costs include but are not limited to course development, equipment, stipends, participation in professional society meetings, and preparation of papers, travel, and associated expenses. The base award is up to \$500,000. However, the NRC may increase the award amount to the extent that a portion of the award is matched dollar for dollar by the recipient.
- **Trade School and Community College Scholarships:** This is a two-year program with awards up to \$150,000.00 in total costs for the project period. A scholarship student may not receive more than \$5,000 per year or exceed \$10,000 over a 2-year period.

Trade Schools and Community Colleges are not eligible for Fellowships, or Distinguished Faculty Advancement grants.

Awards:

\$10 million may be available for multiple awards of varying sizes

Eligibility:

Only accredited U-based institutions of higher education.

Deadline:

10/20/2022

AwardsID(s):

31310022K0005

Links:

<https://www.grants.gov/web/grants/view-opportunity.html?oppId=343278>

New Challenges and Prize Competitions

LG & Nova Capital Alliance

Mission for the Future

LG is seeking emerging technology startups at all stages, large and small, to propose their ideas for collaboration for growth and partnerships with LG. Selected companies will have access to resources and up to \$100,000 for a joint product or concept development from LG and the NOVA Capital Alliance, along with access to LG's global infrastructure and supply chain to support their business ideas. This year's Partner Search expanded to new areas of collaboration in Digital Health, Metaverse & Gaming, ESG & Electric Mobility, Display Technologies, Smart Lifestyle and Open Innovation

Eligibility:

Unrestricted

Deadline:

10/06/2022

Links:

<https://ignova-missionforthefuture22.skild.com>

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