Please see below for a partial list of funding opportunities.

PLEASE NOTE: Pivot E-mail Alerts, set up individually by faculty members, are Purdue's primary resource for timely funding information in all disciplines. More information about Pivot and other e-mail alert services and search tools may be found <u>here</u>.

** To receive this newsletter directly to your inbox, please sign up for the listserv by emailing <u>listserv@lists.purdue.edu</u>. Leave the subject blank and in the message body type: subscribe Weeklyfundingopps [your_first_name] [your_last_name]. Only *purdue.edu* e-mail addresses will be accepted.**

Please contact Sue Grimes (sgrimes@purdue.edu) with any questions.

1. Limited Submissions:

Preproposals and rankings should be submitted via Purdue's InfoReady portal (<u>https://purdue.infoready4.com/</u>). Purdue's open limited submission competitions, templates, and limited submission policy may be found at <u>http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php</u>. For any case in which the number of preproposals received is no more than the number of proposals allowed by the sponsor, the OOR will notify the PI(s) that an internal competition will be unnecessary. Questions should be addressed to <u>EVPRPlimited@purdue.edu</u>.

Limited Submission: <u>DOE-SC Energy Frontier Research Centers (EFRC)</u> The EFRC program brings together diverse world-class teams of scientists to perform basic research with a scope and complexity beyond what is possible in single-investigator or small-group awards. These multi-investigator, multi-disciplinary centers accelerate transformative scientific advances for the most challenging topics in materials sciences, chemical sciences, geosciences, and biosciences. New applications submitted in response to this FOA must propose fundamental scientific research within the BES mission-space that addresses priorities in one or more of the topics listed: Co-design of materials and processes to revolutionize microelectronics and/or QIS fabrication; and Environmental management. Only *two* submissions are allowed per institution as lead.

Internal deadline: Preproposal due in InfoReady by January 31 (template)

Sponsor deadlines: February 28 - Pre-application; May 8 - Application

Limited Submission: <u>DOE-SC EXPRESS: 2024 Exploratory Research for Extreme Scale Science</u> Extreme-scale science recognizes that disruptive technology changes are occurring across science applications, algorithms, computer architectures and ecosystems. Recent reports point to emerging trends and advances in high-end computing, massive datasets, visualization, and artificial intelligence on increasingly heterogeneous architectures. Significant innovation will be required in the development of effective paradigms and approaches for realizing the full potential of scientific computing from emerging technologies</u>. Proposed research should not focus on a specific science use case, but rather on creating the body of knowledge and understanding that will inform future advances in extreme-scale science. Topics of Interest include: Harnessing Technology Innovations to Accelerate Science through Visualization; Scalable Space-Time Memories for Large Discrete/Agent-Based Models; Neuromorphic Computing; Advanced Wireless; and Quantum Hardware Emulation. No more than *five* applications can be submitted per institution as lead.

Internal deadline: Preproposal due in InfoReady by January 31 (template)

Sponsor deadlines: February 29 – Pre-application; May 2 - Application

Internal Coordination Required: Military Health Systems Research Symposium (MHSRS) Travel Grant Program

The Office of Research is interested in supporting the development of collaborations between faculty and members of the DoD medical research community. Faculty (tenure-track/tenured and research) members on the West Lafayette campus are eligible to apply for this travel grant program.

Internal deadline: Applications due in InfoReady by February 5, 2024

External deadline: Abstracts are due to MHSRS on February 21, 2024

2. Selected Funding Opportunities:

<u>NSF Growing Convergence Research (GCR)</u> This GCR solicitation targets multidisciplinary teams who are embracing convergence research as a means of developing highly innovative solutions to complex research problems. GCR proposals are expected to be bold and address scientific or technical challenges and bottlenecks which if resolved have the potential to transform scientific understanding and solve vexing problems. Successful GCR projects are anticipated to lead to paradigm shifting approaches within disciplines, establishment of new scientific communities, or development of transformative technologies that have the potential for broad scientific or societal impact. Deadline: April 12

NSF Campus Cyberinfrastructure (CC)* The Campus Cyberinfrastructure (CC*) program invests in coordinated campus-level cyberinfrastructure improvements, innovation, integration, and engineering for science applications and distributed research projects. Projects that help overcome disparities in cyber-connectivity associated with geographic location, and thereby advance the geography of innovation and enable populations based in these locales to become more nationally competitive in science, technology, engineering, and mathematics (STEM) research and education are particularly encouraged. Science-driven requirements are the primary motivation for any proposed activity. Program areas include: Area (1) Data Driven Networking Infrastructure (Campus or Region), Area (2) Computing and the Computing Continuum (Campus or Region), Area (3) Network Integration and Applied Innovation (Small or Large), Area (4) Data Storage and Digital Archives, (Campus or Region), and Area (5) Strategy (Campus or Region). Deadline: April 22

NSF Dear Colleague Letter: Leveraging Innovations From Evolution (LIFE) With this DCL, the NSF seeks to catalyze research that leverages the full diversity and complexity of life to focus attention on the discovery of molecular and evolutionary mechanisms that have permitted organisms, over millions of years of evolution, to innovate and thrive, often in hostile and changing environments. By Leveraging Innovations From Evolution (LIFE), and bolstering computational tools and resources (e.g., biobanks, databases, and algorithms), NSF BIO seeks to speed discoveries of nature-based solutions that will benefit science and society. This DCL encourages proposals that use comparative approaches to identify evolutionary convergent adaptations to life's challenges and the mechanisms that underlie them. Proposals should include relevance of the proposed work to inform applications towards a sustainable global bioeconomy. Deadline: On-going

NSF Dear Colleague Letter: Research Experiences for Undergraduates (REU) and Research Experiences for Teachers (RET) Supplemental Funding in Computer and Information Science and Engineering The NSF Directorate for Computer and Information Science and Engineering (CISE) invites grantees with active CISE awards to submit requests for Research Experiences for Undergraduates (REU) Supplements and Research Experiences for Teachers (RET) Supplements. REU supplements help undergraduate students engage in meaningful research experiences in pursuit of their educational and career goals. To be eligible for this opportunity, a student must be a US citizen, US national or permanent resident of the US. RET supplements help K-14 science, technology, engineering, and mathematics (STEM) teachers engage in meaningful research experiences and translate the knowledge gained into their teaching practices. The focus of their research should be in CISE disciplines rather than on education or curriculum development. Deadline: March 31 <u>NIH Modular R01s in Cancer Control and Population Sciences (R01)</u> This Notice of Funding Opportunity (NOFO) encourages applications for research in cancer control and population sciences. The overarching goal is to provide support to promote research efforts on novel scientific ideas that have the potential to substantially advance cancer research in statistical and analytic methods, epidemiology, cancer survivorship, cancer-related behaviors and behavioral interventions, healthcare delivery, and digital health and data science, and implementation science. Deadline: June 5

<u>NIH Analytical Validation of a Candidate Biomarker for Neurological or Neuromuscular Disorders (U01)</u> The purpose of this notice of funding opportunity (NOFO) is to support rigorous analytical validation of method(s) used for measuring biomarkers for neurological and neuromuscular disorders for use in clinical trials or clinical practice. Applicants must justify the unmet need for the biomarker(s) and measurement methods and specify one or two context(s) of use for the biomarker(s). Activities supported include optimizing and evaluating the accuracy, precision, reportable range, and analytical sensitivity and specificity of the detection method across multiple sites and operators and establishing reference intervals and quality control procedures. Multi-site applications are expected but not required. Deadline: March 22</u>

<u>HHS-FDA Novel Approaches to Support Therapeutic Development in Ultra-Rare Cancers (U01)</u> The purpose of this NOFO is to encourage new approaches to support therapeutic development in ultra-rare pediatric and adult cancers, including molecularly-defined subsets of more common cancers. Deadline: March 25

DOD-AFOSR Fiscal Year 2024 Science, Technology, Engineering and Mathematics (STEM) Program AFOSR) seeks a broad range of applications for augmenting existing and/or developing innovative solutions that directly maintain and/or cultivate a diverse, world-class Science, Technology, Engineering and Mathematics (STEM) workforce to maintain the U.S. Air Force and Space Force's technological superiority. The goal of proposed efforts must provide solutions that establish, build, and/or maintain STEM educational pathways and workforce opportunities for diverse U.S. citizens directly relevant to AFOSR science and technology areas. AFOSR STEM topic areas include: Engineering and Complex Systems; Information and Networks; Physical Sciences; and Chemistry and Biological Sciences. Deadline: April 12

DOE-NETL Distribution Communication and Control Technologies Research, Development, and Demonstration This FOA seeks research, development, and demonstration activities that will yield new communications and control technologies to enhance the security of the electric distribution system, particularly with respect to the grid's capability to prevent, detect, and respond to inadvertent and/or malicious disruptions to critical information flows. A demonstration of the developed solution under the evolving system architecture including changes occurring on the grid edge—needs to be performed to validate electric utility acceptance. Deadline: March 18

DOE-GFO Small Innovative Projects in Solar: Concentrating Solar Power and Photovoltaics (SIPS: CSP & PV)

This Small Innovative Projects in Solar (SIPS) FOA solicits seedling R&D projects for both photovoltaic and concentrating solar thermal power technologies. The funding opportunity is designed to streamline the application process and to encourage applicants with a diverse range of backgrounds. Deadline: March 6

DOE-SC Research and Development for Next Generation Nuclear Physics Accelerator Facilities Accelerator R&D described in this FOA supports efforts essential to developing world-leading core competencies and transformative technologies that significantly advance the state-of-the-art accelerator capabilities, whether for new facilities or improving the performance of existing facilities. Accelerator R&D intended for this announcement should fall in the following general categories: Accelerator R&D that significantly advances the state-of-the-art accelerator capabilities of relevance to next generation machines for the study of nuclear physics; or Accelerator R&D that significantly advances the state-of-the-art accelerator capabilities of relevance to improving the performance of existing facilities studying nuclear physics. Deadline: March 4

DOE Marine Energy University Foundational R&D This FOA supports foundational research at domestic institutions of higher education, including Minority Serving Institutions (MSI), to address challenges faced by marine energy industries and spur innovation and development. This FOA will provide funding for foundational R&D activities to advance marine energy and offshore wind technologies, enabling broader utilization of ocean renewable energy sources through the following topic areas: 1. Publicly Available Marine Energy Data Analysis & Test Platform(s) to Produce Publicly Available Data; 2. Sustainable & Scalable Offshore Wind, Marine Energy, and Aquaculture; 3. Undergraduate Senior Design and/or Research Project; and 4. Open Topic Area. Deadlines: February 20 – Concept paper; April 22 – Full application

<u>USDA-NIFA Alfalfa Seed and Alfalfa Forage Systems</u> Alfalfa Seed and Alfalfa Forage System Program (ASAFS) will support the development of improved alfalfa forage and seed production systems. Proposals submitted to ASAFS should address one or more of the following priorities: (1) Improving alfalfa forage and seed yield through better nutrient, water and/or pest management; (2) Improving persistence of alfalfa stands by lessening biotic or abiotic stresses; (3) Improving alfalfa forage and seed harvesting and storage systems to optimize economic returns; (4) Improving estimates of alfalfa forage quality as an animal feed to increase forage usage in animal feeds; and/or (5) Breeding to address biotic and abiotic stresses that impact forage yield and persistence and the production of seed for propagation. Matching funds are required with some exceptions. Deadline: May 2

DoED Fulbright-Hays Group Projects Abroad (GPA) Program—Long-Term Projects The purpose of the Fulbright-Hays GPA Program is to promote, improve, and develop the study of modern foreign languages and area studies in the United States. The program provides opportunities for faculty, teachers, and undergraduate and graduate students to conduct group projects overseas. Long term projects include long-term advanced intensive language programs. Deadline: March 18

DoED Fulbright-Hays Group Projects Abroad (GPA) Program—Short-Term Projects The purpose of the Fulbright-Hays GPA Program is to promote, improve, and develop the study of modern foreign languages and area studies in the United States. The program provides opportunities for faculty, teachers, and undergraduate and graduate students to conduct group projects overseas. Short term projects include short-term seminars, curriculum development, or group research or study. Deadline: March 18

<u>NEH Fellowships</u> NEH Fellowships are competitive awards granted to individual scholars pursuing projects that embody exceptional research, rigorous analysis, and clear writing. Applications must clearly articulate a project's value to humanities scholars, general audiences, or both. Deadline: April 10

DOT Initiative on the Use of Steel Slag in Concrete and Cement This funding opportunity is expected to enhance the understanding and potential for using steel slag in concrete and cement and will support previous research studies under the FHWA. It will also help the U.S. DOT advance research and emerging technologies that support the Nation's goals to decarbonize the transportation sector by 2050, strengthen resilience of the Nation's transportation infrastructure, networks, and operations. Deadline: March 27

Paul G. Allen Institute 2024 Allen Distinguished Investigator

- <u>Membrane Biophysics</u> This initiative supports research that will develop new experimental approaches for probing the biophysics of cellular membranes to reveal essential aspects of the interplay between membrane form, function, and dynamics. Deadlines: February 14 – LOI; Full proposal by invite
- Organelle Communication This initiative supports research that will elucidate new biological principles associated with inter-organelle communication via membrane-membrane contact sites. Deadline: February 14 – LOI; Full proposal by invite

3. Other:

DOE Request for Information Receivers and Reactors for Concentrating Solar-Thermal Power Plants and Solar Industrial Process Heat DOE Request for Information (RFI): Offshore Wind National and Regional Research and Development Priorities

NSF Frequently Asked Questions (FAQs) for EFRI Biocomputing through EnGINeering Organoid Intelligence (BEGIN OI)