November 6, 2024

** To receive this newsletter directly to your inbox, please sign up for the listserv by emailing listserv@lists.purdue.edu. 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.** ***Previous newsletters can be accessed at:*** https://www.purdue.edu/research/oevprp/funding-and-grant-writing/funding/emails.php.

Purdue's open limited submission competitions, templates, and limited submission policy may be found at http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php. Please contact Sue Grimes (sgrimes@purdue.edu) with any questions.

1. **Limited Submissions:**

   Preproposals should be submitted via Purdue's InfoReady portal (https://purdue.infoready4.com/). 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 OORlimited@purdue.edu.

   Limited Submission: ***NSF Innovations in Graduate Education Program (IGE)*** The Innovations in Graduate Education (IGE) Program is designed to encourage development and implementation of bold, new, and potentially transformative approaches to STEM graduate education training. The program seeks proposals that a) explore ways for graduate students in STEM master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers, or b) support research on the graduate education system and outcomes of systemic interventions and policies. The program addresses both workforce development, emphasizing broad participation, and institutional capacity-building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science organizations, and academic partners are encouraged. Only ***two*** proposals are allowed per organization *regardless of lead, non-lead or sub*.

   Internal deadline: Preproposal due in InfoReady by November 25 (template)

   Sponsor deadline: March 25

   Limited Submission: ***DOE-SC Environmental System Science (ESS)*** The goal of the ESS program in BER is to advance an integrated, robust, and scale-aware predictive understanding of terrestrial systems and their interdependent microbial, biogeochemical, ecological, hydrological, and physical processes. The ESS program scope advances foundational process knowledge with an emphasis on understudied ecosystems. This NOFO will consider applications that focus on measurements, experiments, field data, modeling, and synthesis to provide improved understanding and representation of ecosystems and watersheds in ways that advance the sophistication and capabilities of models that span from individual processes to Earth-system scales. This NOFO will encompass three Science Research Areas: 1) plant-soil-microbe interactions and their influence on belowground biogeochemical processes; 2) synthesis studies using existing data that address testing of ESS-relevant hypotheses and development of transferable insights into knowledge gaps for U.S. southeast coastal systems; and 3) synthesis studies on contributions and vulnerabilities of Earth system processes in marginal and degraded lands. Only ***one*** submission is allowed per institution.

   Internal deadline: Preproposal due in InfoReady by November 25 (template)

   Sponsor deadlines: January 16 – Pre-application; March 13 - Application

Internal Coordination Required: ***DOC-NIST FY2024 CHIPS for America*** The purpose of the CHIPS Research and Development (R&D) programs is to advance the development of semiconductor technologies and to enhance the competitiveness of the U.S. semiconductor industry. The CHIPS R&D programs address five cross-cutting issues that were identified through interactions with stakeholders and include: Access to facilities and equipment for late-stage R&D and prototyping; Advanced packaging and testing; Advanced metrology and characterization; Advanced manufacturing technology; and Workforce development. NIST will release a series of NOFOs under this program and it is anticipated that most, if not all, will be limited submission, including those where Purdue is a sub-awardee. **Based on the complexity of this program, all submissions involving Purdue as a participant will be coordinated through OOR at all stages (white paper and full submissions) *including those participating as a sub-awardee*.**

Internal deadline: Contact OORLimited@purdue.edu if interested in participating in any of these NIST opportunities

Sponsor deadline: On-going

2. **Selected Funding Opportunities**:

NSF Geosciences Open Science Ecosystem (GEO OSE) The Geosciences Open Science Ecosystem (GEO OSE) program seeks to realize the benefits of open science practices toward advancing research and education in the geosciences. To achieve this vision, the GEO OSE program encourages efforts to foster adoption of open, inclusive, and equitable scientific practices across geoscience domains. The program supports development of innovative open science approaches that advance geosciences research and education through leveraging expanding information resources and computing capabilities. The program also supports initiatives to strengthen the capacity of current and future geoscientists to access, utilize, and collaborate within the growing ecosystem of open science resources. Deadline: February 14

NSF Human-Environment and Geographical Sciences Program (HEGS) The objective of the Human-Environment and Geographical Sciences Program is to support basic scientific research about the nature, causes, consequences, or evolution of the spatial dimensions of human behaviors, activities, and dynamics as well as their interactions with environmental and social processes across a range of scales. Contemporary geographical research encompasses diverse research traditions and methodologies. Generally, successful HEGS proposals should describe clear and detailed plans for data collection (including sample selection if appropriate), justification for proposed methods, plans for data analysis, attention to confounding variables, and efforts to address biases (e.g., confirmatory biases, selection biases, etc.). Competitive HEGS proposals should substantiate the validity of findings and generalizability to broader contexts. Deadline: February 3

NIH CCRP Initiative: NIH Countermeasures Against Chemical Threats (CounterACT) Basic Research on Chemical Threats that Affect the Nervous System (R01) This NOFO invites applications for basic research to inform toxicology of chemical warfare agents and select toxic industrial chemicals and materials that have primary or secondary effects on the nervous system. These chemical threats are toxic compounds that have been identified by the United States Government (USG) as Chemicals of Concern (CoC) that could be deliberately or accidentally released into the civilian population. Research supported by this NOFO is expected to generate results that further elucidate mechanism(s) of toxicity of these agents and potential new targets for development of therapeutic/medial countermeasures that are effective in civilian mass exposure situations. Deadline: October 17

NIH Integration of Imaging and Fluid-Based Tumor Monitoring in Cancer Therapy (R01) Through this NOFO, the National Cancer Institute (NCI) seeks research project grant applications describing projects that integrate imaging and fluid-based tumor monitoring (liquid biopsy) assays during cancer therapy in patients to determine the optimal use of those modalities in the characterization of therapy response and/or emergence of resistance. Deadline: February 5

NIH Molecular Imaging of Inflammation in Cancer (R01) Through this NOFO, the National Cancer Institute (NCI) invites research grant applications for the development and application of current and emerging molecular imaging methods to gain fundamental insights into cancer inflammation *in vivo*. This NOFO encourages applications focused on developing integrated imaging approaches to investigate the role of inflammation in cancer through strong cross-discipline collaboration between cancer basic science researchers and imaging scientists. These collaborations are expected to advance the science and understanding of cancer inflammation interactions. Deadline: February 5

NIH NCI Clinical and Translational Exploratory/Developmental Studies (R21) Through this NOFO, the National Cancer Institute (NCI) intends to support preclinical and early phase clinical research, as well as correlative studies, directly related to advancements in cancer treatment, diagnosis, prevention, comparative oncology, symptom management, or reduction of cancer disparities. This includes (but is not limited to) development and testing of the following: new molecular agents or biologics for cancer treatment; management strategies for cancer-related symptoms or treatment-related toxicity; cancer screening or diagnostic tools, such as imaging techniques; cancer preventive agents or approaches; predictive and prognostic biomarkers for patient selection or stratification; clinically relevant *in vivo* or *in vitro* tumor models (including genetically engineered mouse models, patient-derived xenograft models, organoids, and cell lines); and strategies to address therapeutic outcome disparities among underserved populations. In addition to novel agents, new treatment strategies may involve repurposed agents or novel combinations of interventions (including radiation), based on established mechanisms of action. Deadline: February 13

NIH Dissemination and Implementation Research in Health (R21) The purpose of this FOA is to support studies that will identify, develop, and/or test strategies for overcoming barriers to the adoption, adaptation, integration, scale-up, and sustainability of evidence-based interventions, practices, programs, tools, treatments, guidelines, and policies. Studies that promote equitable dissemination and implementation of evidence-based interventions among underrepresented communities are encouraged. Deadline: February 16

NIH Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Neurotherapeutic Agent Characterization and In vivo Efficacy Studies (R61/R33) This NOFO provides funding to conduct pharmacodynamic, pharmacokinetic, and in vivo efficacy studies to demonstrate that proposed therapeutic agent(s) have sufficient biological activity to warrant further development to treat neurological disorders that fall under the NINDS mission. Therapeutic agents include small molecules or biologics. Deadline: February 18

NIH Enhancing Mechanistic Research on Precision Probiotic Therapies (R61/R33) The purpose of this NOFO is to support highly innovative mechanistic research to accelerate the development of effective precision probiotic interventions using a milestone-driven, biphasic award mechanism. It aims to identify, understand, and develop strategies to address barriers in precision probiotic interventions to account for the heterogeneity in humans that often causes inconsistent probiotic therapeutic responses. Specifically, this NOFO solicits applications that will characterize person-specific features affecting probiotic responses to identify subgroups of probiotic responders, which may then help enhance probiotic clinical outcomes. Deadline: June 2

NIH Engaging Loved ones in Recovery Processes to Enhance Recovery Capital and Outcomes (R61/R33) This NOFO seeks phased that address the role of support persons and loved ones in six focal areas: (1) developing interventions to enhance the well-being and coping skills among support persons; (2) enhancing knowledge of effective interventions for SUDs and reducing stigma, negative attitudes, and misconceptions among support persons; (3) testing enhancements to existing evidence-based interventions and practices to include engagement of support persons; (4) developing new interventions or adapting existing interventions to leverage support persons as lay interventionists; (5) developing and testing care navigation interventions and resources, particularly during care transitions; and (6) dyadic approaches to support engagement in evidence-based care when both parties have experienced or are experiencing a SUD. Deadline: February 27

NIH Combating Antibiotic-Resistant Bacteria Interdisciplinary Units (CARBIRUs) (P01) The purpose of this NOFO is to support multidisciplinary research programs focused on discovery to early development research to inform new approaches to prevent, diagnose, and treat antibiotic-resistant bacterial infections. Deadline: March 26

NIH NIA Academic Leadership Career Award (K07) The purpose of this NOFO is to provide support for established investigators who have the expertise and leadership skills to enhance aging and/or Alzheimer's Disease (AD) and AD-Related Dementias (ADRD) research capacity within their academic institution. Through this award, investigators will endeavor to develop research and educational infrastructure, mentorship, and career development activities in support of new or emerging areas of aging and/or AD/ADRD research. These may include, but are not limited to, courses, curricula, research support, pilot funding, travel awards, visiting scholars, or networks. Deadline: February 12

DOE-SC Atmospheric System Research (ASR) ASR supports research on key cloud, aerosol, precipitation, and radiative transfer processes that affect the Earth's radiative balance and hydrological cycle, especially processes that limit the predictive ability of regional and global models. This NOFO solicits research grant applications for observational, data analysis, and/or modeling studies that use BER-supported Atmospheric Radiation Measurement (ARM) user facility observations to improve understanding and model representation of: 1) Atmospheric processes from ARM's Coast-Urban-Rural Atmospheric Gradient Experiment (CoURAGE) and 2) High latitude and Southern Ocean atmospheric processes using ARM observations. All research supported by awards under this NOFO is intended to benefit the public through increasing our understanding of the Earth system. Deadline: January 7

DOD-NSWC-CRANE Broad Agency Announcement (BAA) for the Joint Airborne Mission Survivability IPT The JAMS IPT is a joint working group focused on defensive air survivability against modern air threats that are stressing ASE on current and future air platforms. The mission of JAMS is to maintain a warfighting advantage, by identifying, evaluating, and rapidly deploying innovative solutions for U.S. aircraft in emergent operational Areas of Responsibility (AORs), seizing upon opportunities that will benefit the services across the DoD. Broad areas of interest include: threat detection, fix, signature, defeat and assess. This announcement seeks revolutionary ideas and technology demonstrators that offer potential material solutions, M&S solutions, and T&E solutions at a TRL 3 or higher with a robust plan to achieve TRL 6. Deadlines: December 5 -White paper; January 17 – Briefing by invite

NASA 2025 Human Exploration Research Opportunities (HERO) Notice of Funding Opportunity – Appendix A
To expedite progress in various research areas in a short period of time, NASA is requesting proposals for short-term investigations or technology development projects that provide innovative approaches to any of the risks and associated knowledge gaps contained in the Human Research Program (HRP) Integrated Research Plan (IRP). These short-term investigations may provide initial results testing a new scientific approach, or they may provide the initial proof-of-concept for a new technology or method that has not yet been proven to address a risk or gap in the IRP. All short-term investigations are expected to produce novel scientific knowledge or technology development that can stand alone to address a risk or gap in the IRP, but these investigations may also provide the necessary preliminary results to justify a full proposal to a future NASA solicitation. Also, To attract new investigators and explore novel research ideas that might not be directly aligned with HRP's identified risks, HRP will accept for consideration Omnibus proposals in the **New Investigator** category on any aspect of human adaptation to spaceflight. Deadlines: December 2 – Step 1 proposal; March 11 – Step 2 proposal

NASA-ROSES Future Investigators in NASA Earth and Space Science and Technology (FINESST) Future Investigators in NASA Earth and Space Science and Technology (FINESST) solicits proposals from accredited U.S. universities and other eligible organizations for graduate student-designed and performed research projects that contribute to SMD's science, technology, and exploration goals. The Future Investigator (FI), i.e., the student, shall have the primary initiative to define the proposed FINESST research project and must be the primary author, with input or supervision from the proposal's Principal Investigator (PI), as appropriate. The

Future Investigator (FI) named on the proposal is primarily responsible for writing a FINESST proposal. Deadline: February 5

IN CTSI Early Career Investigator Awards in Clinical - Translational Research (K12) These awards are designed to provide promising early career faculty investigators the opportunity to be mentored in research-intensive, multi-disciplinary settings toward the goal of developing careers in clinical - translational research. Emphasis of the Indiana CTSI K12 Early Career Investigator Awards in Clinical - Translational Research are to move findings from basic laboratory and pre-clinical research toward the development of new treatment options or interventions or clinical trials to eventual dissemination or clinical implementation to studying population health outcomes and health metrics. Deadline: December 6

IN CTSI Indiana traumatic Spinal Cord & Brain Injury Research The overall objective of the Indiana Traumatic Spinal Cord & Brain Injury Research program is to foster and encourage research for the prevention, treatment and cure of spinal cord and traumatic brain injuries, including acute management, medical complications, rehabilitative techniques, and neuronal recovery. Collaborations are encouraged between Indiana-based researchers as well as with researchers located outside the state of Indiana, including researchers in other countries. Deadline: December 9

3. **Anticipated Funding Opportunities**

DOE Notice of Intent to Issue: Carbon Capture Research and Development and Front-End Engineering Design Studies for Power Generation and Industrial Point Sources

4. **Other:**

OOR Workshop: Managing Your Award – SPS Post-Award and Research Regulatory Affairs Presenters at this event will discuss Purdue's policies and processes related to the management of awards as well as issues for compliance that all researchers should know. The workshops will be held on **November 19, from 1:30-3PM in Stewart Center, room 202**. This workshop will be especially helpful to new faculty, but all faculty and full-time research staff are invited to attend. Topics to be covered in this session include:

- · Award management
- · Contract negotiation and management
- · Project reporting
- · Working with human research subjects
- · Working with laboratory animals
- · Research information assurance (including confidential information and export control regulations)
- · NSPM-33, Research Security regulations

Registration is required at: https://purdue.ca1.qualtrics.com/jfe/form/SV_3HRiZqepUkQAeNM