Dear Associate Deans for Research and Department Heads,

Please see below for a partial list of funding information that may be of interest to members of your faculty.

PLEASE NOTE: Pivot [formerly Community of Science (COS)] 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 <a href="https://example.com/here.">here</a>.

## 1. Limited Submissions:

Preproposals and rankings should be submitted via Purdue's InfoReady portal (<a href="https://purdue.infoready4.com/">https://purdue.infoready4.com/</a>). Purdue's open limited submission competitions, templates, and limited submission policy may be found at <a href="http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php">https://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php</a>. 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 <a href="mailto:EVPRPlimited@purdue.edu">EVPRPlimited@purdue.edu</a>.

Limited Submission: DOE-EERE Critical Materials Accelerator To bridge the gap between applied R&D and large-scale demonstration initiatives, AMMTO plans to fund prototyping and small-scale pilots in technologies important to the CMM supply chain to accelerate their deployment. Projects funded under this FOA will mature and validate technologies or processes proven at the bench scale to address critical material challenges in high impact areas. Topic areas include: Topic 1a – Critical Material Lean/Free Magnets for Clean Energy Technologies; Topic 1b – Motors and Drivetrains using Critical Material Lean/Free Magnets; Topic 2 – Improved Unit Operations of Processing and Manufacturing of Critical Materials; Topic 3 – Critical Material Recovery from Scrap and Post-Consumer Products; and Topic 4 – Reduced Critical Material Demand for Clean Energy Technologies. Only one submission is allowed per topic area.

Internal deadline: Preproposal due in InfoReady by December 13 (template)

Sponsor deadlines: January 5 – Concept paper; March 22 – Full application

Internal Coordination Required: Anticipated NIST Manufacturing USA Institute It is anticipated that a Manufacturing USA Institute, funded through NIST, will be established through a cooperative agreement process. NIST has not yet released a call nor publicly identified a focus area for the next Institute. It is anticipated to be open to a broad range of manufacturing areas. As significant planning is required to be competitive for these efforts, the Office of Research is requesting statements of interest from faculty in anticipation of the next solicitation release for this opportunity, especially given the significant internal and partner resources that will be required. Priority will be given to teams that respond to this internal coordination request. Proposed projects should not overlap with existing Institutes. Contact Bryan Boudouris (boudouris@purdue.edu) with questions or concerns.

Internal deadline: December 14

Sponsor deadline: TBD

## 2. Selected Funding Opportunities:

NSF Mind, Machine and Motor Nexus (M3X) The Mind, Machine and Motor Nexus (M3X) Program supports fundamental research that explores embodied reasoning as mediated by bidirectional sensorimotor interaction between human and synthetic actors. For the purposes of this program, embodiment is defined as the capacity to interact with physics-based environments. The following key concepts define the M3X program and therefore must be captured in any competitive proposal submitted to the program: Human and Synthetic Actors; Sensorimotor interaction; Embodied reasoning; and Physics-based environment. Deadline: On-going

NSF Dear Colleague Letter: NSF-Lemelson Initiative on Environmental and Social Sustainability in Engineering Education With this Dear Colleague Letter (DCL), the Directorate for Engineering of the National Science Foundation (NSF) notifies the research community of a collaboration with The Lemelson Foundation of a special topic focus to foster efforts that transform engineering education and address environmental and social sustainability. NSF invites proposals to the RFE program to address sustainability in engineering education. This special topic focus call seeks to support projects to transform engineering education so that all students encounter environmental and social sustainability principles as an integrated part of their education and are equipped with the tools needed to incorporate these principles into their future research, careers, and innovations. Deadline: On-going

NSF Dear Colleague Letter: Improving Undergraduate STEM Education – Adaptation, Implementation, and Dissemination (IUSE-AID) This Dear Colleague Letter (DCL) encourages STEM education communities to submit proposals to the Directorate for STEM Education's Improving Undergraduate STEM Education (IUSE:EDU) program (NSF 23-510) that focus on Adaptation and Implementation, and/or Dissemination of proven teaching strategies and learning materials reflecting advances in what is known about undergraduate STEM teaching and learning. Proposals that develop faculty expertise, implement educational innovations, adapt existing educational innovations for specific teaching and learning environments, and disseminate teaching and learning innovations beyond the scale of the efforts that created them are encouraged. Deadline: January 17

NSF Dear Colleague Letter: Mid-scale Research Infrastructure Incubators and Conferences for STEM Education Research with a Focus on Education Equity With this Dear Colleague Letter (DCL), the National Science Foundation's (NSF) Directorate for STEM Education (EDU) notifies the community of the continuing collaboration with the Bill & Melinda Gates Foundation, the Eric and Wendy Schmidt Fund for Strategic Innovation (Schmidt Futures), and the Walton Family Foundation to offer Incubator Research Coordination Network (RCN) proposal opportunities that support the development of mid-scale research infrastructure efforts, especially those that enable research on the assets and needs of those historically underrepresented in STEM and that lead to greater education equity. Deadline: March 15

NSF Dear Colleague Letter: National Discovery Cloud for Climate Opportunities

The National Discovery Cloud for Climate (NDC-C) is a National Science Foundation (NSF) initiative to pilot efforts to build an integrated national-scale cyberinfrastructure capable of supporting end-to-end climate research and education. NDC-C goals include the development, augmentation, and integration of the following in support of the climate research and education communities: Cyberinfrastructure middleware and front-end software systems to support access to and integration of distributed climate data, software, and computing resources; Data-centric cyberinfrastructure for publishing, discovering, accessing, and transferring climate research data; Cyberinfrastructure-based training and workforce development; and Cyberinfrastructure professional networks to support climate research and education communities. Deadline: Varies

NSF Dear Colleague Letter: Advancing education for the future AI workforce (EducateAI) The Directorates for Computer and Information Science and Engineering (CISE) and STEM Education (EDU) are launching the EducateAI initiative to support educators to make state-of-the-art, inclusive AI educational experiences available nationwide. With this Dear Colleague Letter (DCL), EDU and CISE encourage the submission of novel and high impact proposals that advance inclusive computing education that prepares preK-12 and undergraduate students for the AI workforce. Deadline: Varies

NIH Addressing Health and Health Care Disparities among Sexual and Gender Minority Populations

(RO1) The purpose of this Notice of Funding Opportunity (NOFO) is to support innovative observational and intervention-based research to identify and characterize the pathways and mechanisms through which health and health care disparities occur among sexual and gender minority populations of minoritized racial/ethnic and socio-economic statuses. Deadline: February 5

NIH Alcohol Research-Related Resource Award (R24) The purpose of the Resource-Related Research Projects (R24) grant is to support investigator-initiated resources designed to provide materials and services to support and advance biomedical, behavioral, and social health research on a national basis. An R24 resource grant mechanism is a non-hypothesis-driven activity to provide data, materials, tools, or services that are essential to making timely, high quality, and cost-efficient progress in a field. Hypothesis-driven research applications should not be submitted in response to this program announcement but to another mechanism that encourages this type of research. Deadline: January 25

NIH Advanced Development and Validation of Emerging Molecular and Cellular Analysis Technologies for Basic and Clinical Cancer Research (R33) This Notice of Funding Opportunity Announcement (NOFO) invites grant applications proposing exploratory research projects focused on further development and validation of emerging technologies offering novel capabilities for targeting, probing, or assessing molecular and cellular features of cancer biology for basic, clinical, or epidemiological cancer research. Deadline: April 1

Notice of Funding Opportunity (NOFO) solicits grant applications proposing exploratory research projects focused on the early-stage development of highly innovative technologies offering novel molecular or cellular analysis capabilities for basic, clinical, or epidemiological cancer research. The emphasis of this NOFO is on supporting the development of novel capabilities involving a high degree of technical innovation for targeting, probing, or assessing molecular and cellular features of cancer biology. Deadline: April 1

NIH Innovative Biospecimen Science Technologies for Basic and Clinical Cancer Research (R61) This Notice of Funding Opportunity (NOFO) solicits grant applications proposing exploratory research projects focused on the early-stage development of highly innovative technologies that improve the quality of the samples used for cancer research or clinical care. This includes new capabilities to address issues related to pre-analytical degradation of targeted analytes during the collection, processing, handling, and/or storage of cancer-relevant biospecimens. Deadline: April 1

NIH Resources to Promote Coordination and Collaboration across Deeply Phenotyped Longitudinal Behavioral and Social Studies of Aging (U24) The aim of the RDN will be to create infrastructure needed to promote and support coordination, collaboration, and innovation across deeply phenotyped longitudinal behavioral and social studies of aging. This NOFO calls for investigator teams to design an innovative network that will serve the field at large and advance collaboration and coordination among studies. Deadline: February 14

<u>DOE-OS High-Energy-Density Laboratory Plasma Science</u> The Office of Science and the NNSA within DOE will establish a joint program in high energy density laboratory plasmas (HEDLP) responsible for stewarding fundamental HEDLP science within the Department of Energy. The specific areas of interest are: 1. HED Hydrodynamics; 2. Radiation-Dominated Dynamics and Material Properties; 3. Nonlinear Optics of Plasmas and Laser-Plasma Interactions; 4. Relativistic HED Plasmas and Intense Beam Physics; and 5. Warm Dense Matter. Deadlines: December 21 – LOI; February 22 - Application

<u>USDA-NIFA Food Safety Outreach Program</u> The Food Safety Outreach Program will complement and expand the national infrastructure of the National Food Safety Training, Education, Extension, Outreach, and Technical Assistance Competitive Grants Program. The Food Safety Outreach Program will build upon that national infrastructure, with a sustained focus on delivery of customized training to members of the target audiences. Awardees will develop and implement food safety training, education, extension, outreach and technical assistance projects that address the needs of owners and operators of small to mid-sized farms, beginning farmers, socially-disadvantaged farmers, small processors, or small fresh fruit and vegetable merchant wholesalers. Deadline: February 13

<u>USDA-NIFA Organic Agriculture Research and Extension Initiative</u> The Organic Agriculture Research and Extension Initiative (OREI) seeks to solve critical organic agriculture issues, priorities, or problems through the integration of research, education, and extension activities. The purpose of this program is to fund projects that

will enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic agricultural products. Priority concerns include biological, physical, and social sciences, including economics. Deadline: February 15

USDA-NIFA Biotechnology Risk Assessment Research Grants Program (BRAG) The purpose of the Biotechnology Risk Assessment Research Grants Program (BRAG) program is to support the generation of new information that will assist Federal regulatory agencies in making science-based decisions about the effects of introducing into the environment genetically engineered organisms (GE), including plants, microorganisms — such as fungi, bacteria, and viruses — arthropods, fish, birds, mammals and other animals excluding humans. Investigations of effects on both managed and natural environments are relevant. The BRAG program supports applied and/or fundamental research relevant to environmental risk assessment, including biological risk, and the Federal regulatory process. Deadline: January 11 – LOI; February 29 - Application

<u>NASA-ROSES Carbon Monitoring System</u> NASA requests proposals for investigations that will advance products toward the CMS end goal: development of prototype carbon monitoring systems from an Earth's system perspective. Areas of interest include terrestrial, atmospheric, and aquatic realms. Deadlines: January 4 – Step 1; March 5 – Step 2

**DOC-NOAA Ocean and Coastal Carbon Observing Optimization Studies** The NOAA Ocean Acidification Program (OAP), in partnership with the Global Ocean Monitoring and Observing (GOMO) Program is soliciting proposals to optimize sampling strategies that improve carbonate chemistry observing systems co-developed with an observing data product end user that can inform real-time data delivery and forecasting of ocean acidification relevant parameters. The optimization design should be geared towards delivering the data needed to support the end user's specific decision support needs. Deadline: March 17

<u>Bill and Melinda Gates Foundation</u> The Grand Challenges family of initiatives fosters innovation to solve key health and development problems. Deadline: Varies

## 3. Anticipated Funding Opportunities

**DOE-NETL Notice of Intent to Issue FOA Carbon Management (Round 5)** 

## 4. Other:

<u>NSF Dear Colleague Letter: Build a Resilient Planet</u> This DCL highlights priority research areas and encourages submission of geoscience-related proposals focused on advancing knowledge, empowering communities and generating technological solutions that contribute to creating resilient communities.

NSF Dear Colleague Letter: Request for Information on Technologies to Enable Observations in Remote-Extreme Environments The goal of this DCL is to solicit ideas from the research community regarding what innovative technologies and solutions are needed to advance geoscience research and knowledge in remote-extreme environments. Technological advances should enable real-time and reliable sensing, communications, localization, navigation, and mapping of Earth, ocean, geospace, and atmospheric environments for scientific research in an environmentally responsible manner.

NSF Frequently Asked Questions (FAQs) for International Research Experiences for Students (IRES)

\*\*Purdue faculty and research staff: To directly receive this newsletter in your inbox, please sign up for the listserv here: <a href="https://lists.purdue.edu/mailman/listinfo/weeklyfundingopps">https://lists.purdue.edu/mailman/listinfo/weeklyfundingopps</a>. Only purdue.edu e-mail addresses will be accepted.\*\*

As always, we appreciate your sharing this information with your faculty. Please contact Sue Grimes (sgrimes@purdue.edu) with any questions or comments related to this e-mail.