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 here.

1. Limited Submissions:

Preproposals and rankings should be submitted via Purdue's InfoReady portal (https://purdue.infoready4.com/). Purdue's open limited submission competitions, templates, and limited submission policy may be found at https://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php. For any case in which the number of proposals allowed by the sponsor, the EVPRP will notify the PI(s) that an internal competition will be unnecessary. Questions should be addressed to EVPRPlimited@purdue.edu.

Limited Submission: NSF Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM) The main goal of the S-STEM program is to enable low-income students with academic ability, talent or potential to pursue successful careers in promising STEM fields. Ultimately, the S-STEM program seeks to increase the number of academically promising low-income students who graduate with a S-STEM eligible degree and contribute to the American innovation economy with their STEM knowledge. Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to institutions of higher education (IHEs) not only to fund scholarships, but also to adapt, implement, and study evidence-based curricular and co-curricular activities that have been shown to be effective supporting recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. Only two submissions are allowed regardless of whether lead or sub-awardee/consortium member.

Internal deadline: Preproposal due in InfoReady by October 23 (template)

Sponsor deadlines: February 20 – Tracks 2, 3 & Collaborative Planning Grants; March 28 – Track 1

Limited Submission: NSF Competition for the Management of Operation and Maintenance of the National Geophysical Facility

The NGF is designed to enable the research community to ask, and address, questions about a variety of Earth processes from local to global scales. NGF will operate global and regional networks of sensors; provide a lending library of instrumentation and support services to enable PI-led field experiments; support archiving, quality control, and delivery of geophysical data and data product development; and provide education, outreach, workforce development, and community engagement activities that serve a wide range of audiences. NGF will be a single facility, with a single operator that will succeed NSF's current geophysical facilities, the Seismological Facility for the Advancement of GEoscience (SAGE) and the Geodetic Facility for the Advancement of GEoscience (GAGE). Only one proposal is allowed per institution.

Internal deadline: Preproposal due in InfoReady by October 16 (template)

Sponsor deadlines: December 1 – LOI; June 13 – Full proposal

2. Selected Funding Opportunities:

NSF Ideas Lab: Personalized Engineering Learning (PEL) An Ideas Lab is an intensive meeting that brings together multiple diverse perspectives to focus on finding innovative cross-disciplinary solutions to a grand challenge problem. The goal of the Personalized Engineering Learning Ideas Lab is to extend engineering education research to enable advanced personalization in pedagogy and assessment in a K-12 or higher education context. The following broad areas have been identified as possible avenues to advance knowledge:

personalized engineering education, multimodal sensing for personalized learning systems and team-based personalized learning. This Ideas Lab aims to bring together experts from diverse scientific, engineering and education backgrounds to develop innovative technologies and solutions to achieve personalized learning for engineering education. Deadlines: November 29 – Preliminary proposal; May 8 – Full proposal

NSF Mathematical and Physical Sciences Ascending Faculty Catalyst Awards (MPS-AFCA) The purpose of the Mathematical and Physical Sciences Ascending Faculty Catalyst Awards (MPS-Ascend Faculty Catalyst Awards, MPS-AFCA) is to support successful MPS-Ascending Postdoctoral Research Fellows (MPS-Ascend Fellows) as they transition into tenure track (or equivalent) faculty positions at Institutions of Higher Education (IHE) in any scientific area within the purview of the five MPS Divisions: the Divisions of Astronomical Sciences (AST), Chemistry (CHE), Materials Research (DMR), Mathematical Sciences (DMS), and Physics (PHY). Deadline: Ongoing

NSF Dear Colleague Letter: Growing Post-Award Research Support and Service Infrastructure for Nationally Transformative Equity and Diversity Increasing capacity and access to post-award research support and service infrastructure is critical to lessen administrative burden and maximize participation in research activities. Through the NSF GRANTED program description funding opportunity (PD 23-221Y), NSF invites proposals for innovative approaches and ambitious projects that address the gaps, challenges, and opportunities for growth in post-award regulatory, financial, and administrative research support. All types of proposals are encouraged within this DCL. Ideas may take the form of research, implementation (e.g. model development and testing), and evaluation studies as well as conferences and workshops and planning projects. Deadline: January 9

NSF Dear Colleague Letter: Graduate Research Internships in Forensic Science and Criminal Justice Contexts (NSF-NIJ INTERN) Supplemental Funding Opportunity This NSF-NIJ INTERN Dear Colleague Letter (DCL) encourages submission of INTERN supplemental funding requests for graduate students who are currently supported on NSF-funded projects to pursue non-academic research internships in forensic science and criminal justice contexts. Examples of such contexts include but are not limited to public or private forensic laboratories or research and development units, nonprofit organizations focusing on forensic or criminal justice matters, law enforcement agencies, and the medico-legal and judicial systems. Deadline: On-going

NIH Developing novel theory and methods for understanding the genetic architecture of complex human traits. The goal of this NOFO is to support applications for novel theory and methods development that better delineate how genetic and non-genetic factors contribute to complex trait variation across individuals, families, and populations. Approaches should be interdisciplinary across the natural and social sciences, account for interdependencies across scales of biological, social, and ecological organization, and make extensive use of theory, simulations, and validation using available large-scale datasets.

<u>R01</u> Deadline: February 5
<u>R21</u> Deadline: February 16

NIH Single Cell Opioid Responses in the Context of HIV (SCORCH) Program: Data Mining and Functional Validation The purpose of this notice of funding opportunity (NOFO) is to support data mining of single cell data sets to identify cell types, transcripts, enhancers, or transcriptional networks that play a role in HIV/antiretroviral therapy (ART) or Substance Use Disorder (SUD)-relevant molecular responses, and/or to support functional validation studies (e.g. epigenomic or transcriptomic manipulation, high throughput secondary screening) to confirm or deny a biological role for one or more of the data-mined cell types, transcripts, enhancers, or transcriptional networks in HIV/ART and SUD molecular responses.

<u>R01</u> Deadline: August 13<u>R21</u> Deadline: August 13

NIH Health and Health Care Disparities Among Persons Living with Disabilities (R01) The purpose of this Notice of Funding Opportunity (NOFO) is to support novel and innovative research that examines and/or intervenes upon the underlying and multilevel causes, pathways, and factors adversely impacting the health and

well-being of persons living with one or more disabilities among populations experiencing health disparities. Deadline: February 5

NIH BRAIN Initiative: New Concepts and Early-Stage Research for Recording and Modulation in the Nervous System (R21) This NOFO seeks applications for unique and innovative recording and/or modulation technologies that are in the earliest stage of development, including new and untested ideas that are in the initial stages of conceptualization. Some projects may aim to increase recording or modulation capabilities by many orders of magnitude, while others may aim to improve the precision and selectivity of recording or modulation (also referred to as stimulation, perturbation, or manipulation). A wide range of modalities are appropriate including acoustic, chemical, electrical, magnetic, and optical, as well as the use of genetic tools. Deadline: June 18

DOD-DARPA Intensity-Squeezed Photonic Integration for Revolutionary Detectors (INSPIRED) The principal objective of the Intensity-Squeezed Photonic Integration for Revolutionary Detectors (INSPIRED) program is the development of optoelectronic detector modules that integrate squeezed-light measurement techniques into form factors comparable to commercial photodetector modules, thereby achieving sensitivity significantly beyond the quantum shot-noise limit. Such "squeezed-light detectors" will be transformative in advancing squeezed-light quantum measurement beyond laboratory environments as practical, general-purpose detector components that can be employed in diverse optical systems. Deadlines: October 20 – Abstract; December 13 - Proposal

DOD-DARPA Defense Sciences Office (DSO) Office-wide BAA The mission of the Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is to identify and create the next generation of scientific discovery to fuel innovation throughout the Agency and beyond. In support of this mission, the DSO Office-wide BAA invites proposers to submit innovative basic or applied research concepts or studies and analysis proposals that address one or more of the following technical thrust areas: (1) Novel Materials & Structures, (2) Sensing & Measurement, (3) Computation & Processing, (4) Enabling Operations, (5) Collective Intelligence, and (6) Emerging Threats. Deadline: Rolling deadlines through September 2024

DOE-EERE Solar-thermal Fuels and Thermal Energy Storage via Concentrated Solar-thermal Energy This FOA will implement two approaches to energy storage in concentrated solar-thermal (CST) systems: thermochemical storage via solar fuel production and local thermal energy storage (TES) for dispatchable energy. The two technologies will support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Deadlines: November 3 – Concept paper; January 12 – Full application

DOT Fueling Aviation's Sustainable Transition Grant ProgramThe purpose of the FAST Grant Program is to make grants available to eligible entities for projects that support sustainable aviation fuels and low-emission aviation technologies in line with the goals of the United States Aviation Climate Action Plan. By carrying out projects located in the United States that produce, transport, blend, or store SAF, or develop, demonstrate, or apply low-emission aviation technologies, the FAST program aims to reduce the greenhouse gas emissions associated with the aviation sector in line with the net-zero GHG by 2050 goal outlined in the U.S. Aviation Climate Action Plan. Deadline: November 27

NASA-ROSES Heliophysics Citizen Science Investigations H-CSI expands participation of citizen scientists in NASA heliophysics research, bringing unprecedented statistical power and new insights not realistically achievable by other means. This call solicits investigations that would develop and implement capabilities to augment and enhance NASA scientific data, knowledge, and capacity through voluntary observations, interpretations, or other direct participation by members of the general public centered on heliophysics science. Deadlines: November 15 – Step 1; January 26 – Step 2

NASA-ROSES Physical Sciences Informatics The goals of the PSI system are to: a) promote investigations making use of currently available experimental data resulting in more scientists participating in reduced-gravity research; b) allow new areas of research and discovery to occur more quickly through open access; and c) accelerate the "research to product or publication" timeline through the rapid sharing of data. The PSI system allows researchers access to the detailed experimental data obtained from flight research conducted as part of the Physical Sciences Research Program in support of NASA's Biological and Physical Sciences (BPS) Division. Deadlines: October 31 – Step 1; January 10 – Step 2

3. Anticipated Funding Opportunities

DOE Notice of Intent to issue Critical Materials Accelerator Funding Opportunity Announcement

NIH Notice of Intent to Publish a Funding Opportunity Announcement for Stephen I. Katz Early Stage Investigator Research Project Grant (R01)

NIH Notice of Intent to Publish a Funding Opportunity Announcement for Human Tumor Atlas (HTA) Research Centers (U01)

NIH Notice of Intent to Publish a Funding Opportunity Announcement for Pre-Cancer Atlas (PCA) Research Centers (U01)

NIH Notice of Intent to Publish a Funding Opportunity for The NCI Worta McCaskill-Stevens Career

Development Award for Community Oncology and Prevention Research (K12)

NIH Notice of Intent to Publish a Funding Opportunity Announcement for CCRP Initiative: NIH

Countermeasures Against Chemical Threats (CounterACT) Basic Research on Chemical Threats that Affect the

Nervous System (R01)

NIH Notice of Intent to Publish a Funding Opportunity Announcement for NHLBI Program Project Applications (P01)

4. Other:

DOE Request for Information Sustainable Aviation Fuel (SAF) Grand Challenge: Building Supply Chains

Purdue faculty and research staff: To directly receive this newsletter in your inbox, please sign up for the listserv here: https://lists.purdue.edu/mailman/listinfo/weeklyfundingopps. 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.