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 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 EVPRPlimited@purdue.edu.

Limited Submission: DOE-OS Environmental System Science (ESS) The BER ESS program goal is to advance an integrated, robust, and scale-aware predictive understanding of terrestrial systems and their interdependent microbial, biogeochemical, ecological, hydrological, and physical processes. To support this goal, the program uses a systems approach to develop an integrative framework to elucidate the complex processes and controls on the structure, function, feedbacks, and dynamics of terrestrial systems, that span from molecular to global scales and extend from the bedrock through the soil, rhizosphere, and vegetation to the atmosphere. The ESS program scope advances foundational process knowledge with an emphasis on understudied ecosystems. Supported research emphasizes ecological and hydro-biogeochemical linkages among system components and characterization of processes across interfaces (e.g., terrestrial-aquatic, coastal, urban) to address key knowledge gaps and uncertainties across a range of spatial and temporal scales. Incorporation of scientific findings into process and system models is an important aspect of the ESS strategy, both to improve predictive understanding as well as to enable the identification of new research questions and directions. Only one application is allowed per institution as lead.

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

Sponsor deadline: December 29 – Pre-application; February 29 – Application.

Limited Submission: <u>W. M. Keck Foundation</u> The W. M. Keck Foundation's Medical Research Program and Science & Engineering Program seek to support high-risk/high-impact projects in fields of biological science, physical science, and engineering. Eligible projects should meet all the following criteria:

- Focus on important and emerging areas of research
- Have potential to develop breakthrough technologies, instrumentation or methodologies
- Are innovative, distinctive and interdisciplinary
- Demonstrate a high level of risk due to unconventional approaches, or by challenging the prevailing paradigm
- Have the potential for transformative impact, such as the founding of a new field of research, the
 enabling of observations not previously possible, or the altered perception of a previously intractable
 problem
- Does not focus on clinical or translational research, treatment trials, or research for the sole purpose of drug development
- Medical projects should be platform-based not disease specific
- Falls outside the programmatic priorities of public funding agencies (correspondence reflective of such is required for internal review and by Keck)
- Demonstrates that Keck is essential to the project's success

Keck does *not* fund: therapy and/or clinically-oriented projects, drug development, diagnostic test development, immunological studies, projects with a specific disease focus (such as cancer, HIV, diabetes, etc.), or translational research. For this opportunity, Purdue is allowed to submit **one** nomination to the Medical Research Program and **one** nomination to the Science and Engineering Program

Internal Deadlines: Preproposals due in InfoReady by November 20 (template)

Sponsor Deadlines: May 1 (Keck's project discussion period runs from January 1 to February 15)

DOS-ISN Opportunities The following opportunities are offered through the Dept of State's Bureau of International Security and Nonproliferation. All are restricted to **one** submission per institution.

- Nonproliferation Scientist Engagement Program
- Addressing the Impacts of Proliferator State Advanced Conventional Weapons (ACW)
- Countering WMD Threats in Iraq
- FY24 Protecting Semiconductor and CHIPS Technology
- Identifying and Mitigating Russian Chemical and Biological Threat (RCBT)
- Advancing Nuclear Safety, Security, and Nonproliferation through the FIRST Program
- Supporting Partner Implementation of Russia Sanctions
- Countering North Korean and Iranian WMD, Missile, and UAS Proliferation
- <u>Countering the People's Republic of China Military Civil Fusion (MCF) Strategy and Balancing Risks and</u> Rewards of Emerging Technologies with WMD Applications
- Global Biosecurity Engagement Activities
- Roadmap to Rebuild, Modernize, and Decarbonize the Ukraine Steel Industry with Secure and Safe Small Modular Reactors (SMR)
- Chemical Security Program
- Program to Build Partner Capabilities to Address Russian Malign Influence
- <u>Nuclear Expediting the Energy Transition (NEXT) One Stop Shop for Small Modular Reactor (SMR)</u>
 <u>Support Program</u>

Internal Deadlines: Preproposals due in InfoReady by November 20 (template)

Sponsor Deadline: January 31

2. Selected Funding Opportunities:

<u>Purdue CFF Faculty Fellowship</u> The Center for Families awards one faculty fellowship of up to \$10,000 to support a faculty member who is engaged in research focused on family processes or policies, broadly defined. Faculty from all departments are encouraged to apply. CFF Faculty Fellows are a valued resource at the Center for Families. <u>Read more about CFF Fellows</u>. Deadline: February 5

<u>Purdue CFF Burkhart Award for Excellence in Research about Families</u> The Burkhart Award recognizes outstanding family research being conducted by Purdue Faculty. Nominations are required for award consideration. The award recipient will receive \$500. Faculty from all departments are encouraged to apply. Deadline: February 5

NSF Secure and Trustworthy Cyberspace (SaTC) The goals of the SaTC program are to protect and preserve the growing social and economic benefits of cyber systems while ensuring security and privacy. The RDSP identified six areas critical to successful cybersecurity research and development: (1) scientific foundations; (2) risk management; (3) human aspects; (4) transitioning successful research into practice; (5) workforce development; and (6) enhancing the research infrastructure. Deadline: On-going

<u>NSF Research Experiences for Teachers (RET) in Engineering and Computer Science</u> The Research Experiences for Teachers (RET) in Engineering and Computer Science program supports authentic summer research experiences for K-14 educators to foster long-term collaborations between universities, community colleges,

school districts, and industry partners. With this solicitation, the Directorates for Engineering (ENG) and Computer and Information Science and Engineering (CISE) focus on a reciprocal exchange of expertise between K-14 educators and research faculty and (when applicable) industry mentors. Deadline: January 29

NSF/CASIS Collaboration on Tissue Engineering and Mechanobiology on the International Space Station to Benefit Life on Earth The Divisions of Chemical, Bioengineering and Environmental Transport (CBET) and Civil, Mechanical, and Manufacturing Infrastructure (CMMI) in the Engineering Directorate of the National Science Foundation (NSF) are partnering with the Center for the Advancement of Science in Space, Inc. (CASIS) to solicit research projects in the general fields of tissue engineering and mechanobiology that can utilize the International Space Station (ISS) National Lab to conduct research that will benefit life on Earth.

Deadlines: January 15 – Feasibility Review Form; March 15 - Proposal

NIH Understanding the Impact of Healthcare System and Clinician Factors on Disparities in Maternal Morbidity and Mortality (R01) The purpose of this Notice of Funding Opportunity (NOFO) is to support multidisciplinary and innovative intervention research to understand and address maternal morbidity and mortality in the United States, particularly but not exclusively among racial and ethnic minority, socioeconomically disadvantaged, and underserved rural populations, with a focus on understudied healthcare factors. Deadline: February 5

NIH Development of Candidate Radiation/Nuclear Medical Countermeasures (MCMs) (U01) The purpose of this notice of funding opportunity (NOFO) is to support investigator-initiated research at all stages of development that is specifically focused on the development of medical countermeasures (MCMs) to mitigate/treat injuries arising from radiation exposure during a public health emergency. This funding opportunity will support the development of novel approaches within the radiation research area that may be considered for future licensure by the FDA. Deadline: January 26

NIH Resource Center for Cannabis and Cannabinoid Research (U24) The purpose of this notice of funding opportunity (NOFO) announcement is to support the development and maintenance of a Resource Center for Cannabis and Cannabinoid Research through a cooperative agreement funding mechanism (U24). Such a Center will address challenges and barriers to conducting research on cannabis and its constituents as well as to enable researchers to successfully generate more rigorous scientific evidence across a variety of research domains in both basic and clinical research. The Center is expected to be a focal point for researchers entering the cannabis research space and to support the development and establishment of research tools and studies that will improve upon and eventually change the landscape of cannabis research. Deadline: April 16

NIH Notice of Special Interest (NOSI)—Administrative Supplements to Recognize Excellence in Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship

This administrative supplement recognizes the crucial role that engaged, active mentors play in the development of future leaders in the biomedical research enterprise. This NOSI encourages PD/PIs to promote DEIA and mentorship broadly and as such differs from a Diversity Supplement (PA-23-189). The latter is designed to support research experiences for individuals from diverse backgrounds, including those from underrepresented groups, through the career continuum from high school to the faculty level. In contrast, this NOSI focuses on mentors who have dedicated their time and effort and made significant contributions, based on evaluation data and publications, to DEIA to apply for an administrative supplement to further their personal research and/or mentoring activities. Deadline: February 16

NIH Engineering and Preclinical Development of Biological Products that Eliminate HIV-infected Cells (UG3/UH3) The purpose of this Notice of Funding Opportunity (NOFO) is to support the late-stage engineering and preclinical development of innovative biological products that safely and specifically kill HIV-infected cells. Products of interest include but are not limited to broadly neutralizing antibodies (bNAbs), their derivatives, and other soluble, antibody-like molecules. Deadline: March 13

HHS ARPA-H Biomedical Data Fabric Toolbox ARPA-H aims to advance next-generation software tools to synthesize and speed the use of health research data, with early use cases in cancer and a partnership with the National Cancer Institute. ARPA-H is soliciting innovative proposals for research and development (R&D) in data integration and usability technologies. Proposed R&D should investigate innovative software approaches that enable revolutionary advances in the collection and usability of biomedical datasets that originate from thousands of different research labs, clinical care centers, and other sources of data in order to accelerate technical innovation across the health ecosystem. Deadline: November 28

<u>DOD-DARPA Information Innovation Office (I2O) Office-wide</u> This Broad Agency Announcement (BAA) seeks revolutionary research ideas for topics not being addressed by ongoing I2O programs or other published solicitations. Potential proposers are highly encouraged to review the current I2O programs and solicitations to avoid proposing efforts that duplicate existing activities or that are responsive to other published I2O solicitations. A Proposer's Day will be held on November 2 at 9AM ET. Deadlines: September 27, 2024 – Abstract; October 29, 2024 - Proposal

DOD-DARPA Strategic Technology Office (STO) Office-wide

This solicitation seeks revolutionary research ideas for topics not being addressed by ongoing STO programs or other published solicitations. DARPA's Strategic Technology Office (STO) is seeking innovative ideas and disruptive technologies that provide the U.S. military and national security leaders trusted, disruptive capabilities to win in all physical domains (Air, Space, Sea, and Land) and across the spectrum of competition, from deterrence to high-end peer combat. STO seeks to carry out DARPA's mission of creating high-risk, high-reward "breakthrough" technologies with a focus on ambitious, difficult, and revolutionary projects that achieve significant changes or fundamental shifts in technical capabilities and give our warfighters new ways to fight. Deadline: On-going through October 31, 2024

DOT-FHWA Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment Federal funding is available for eligible entities to deploy, operate, document, and showcase integrated, advanced roadway deployments featuring applications enabled by interoperable wireless connectivity (among vehicles, mobile devices, and smart infrastructure) that substantially and quantitatively improve system safety, enhance traveler mobility, improve efficiency of goods movement, mitigate environmental impacts, and address disparities in transportation equity. There will be a webcast on November 15 at 1PM ET. Deadline: January 17

DOI-FWS Great Lakes Fish and Wildlife Restoration Act FY 2024 All funded proposals must address one or more of the following goals: (1) Proposal will restore and maintain self-sustaining fish and wildlife resources. (2) Proposal will minimize the impacts of contaminants on fishery and wildlife resources. (3) Proposal will protect, maintain and, where degraded and destroyed, restore fish and wildlife habitat, including the enhancement and creation of wetlands that result in a net gain in the amount of those habitats. (4) Proposal will stop illegal activities adversely impacting fishery and wildlife resources. (5) Proposal will restore threatened and endangered species to viable, self-sustaining levels. 6) Proposal will protect, manage, and conserve migratory birds. Deadline: January 4

<u>NEH Sustaining Cultural Heritage Collections</u> This program helps cultural institutions meet the complex challenge of preserving large and diverse holdings of humanities materials for future generations by supporting environmentally sustainable preventive care measures that mitigate deterioration, prolong the useful life of collections, reduce energy consumption, and strengthen institutions' ability to anticipate and respond to disasters. Deadline: January 12

<u>FoodShot Global Challenge: Water, the Essential Input</u> In this 2023 FoodShot, we consider the water cycle as a whole and seek innovations that protect water as an essential limited resource for both water and land-based food and agriculture. This FoodShot will also consider how water cycles interact with our previous FoodShots related to soil health, precision protein and bioactive foods. Deadline: December 1

3. Anticipated Funding Opportunities

NIH Notice of Intent to Publish a Funding Opportunity Announcement for Center of Excellence for Systems Modeling of Infection and Immunity across Biological Scales (U54)

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.