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: Agilent Early Career Professor Award (AECPA) Agilent is accepting nominations for their Early Career Professor Award. This program seeks to promote and encourage research excellence on topics of importance to Agilent and the world, to establish strong collaborative relationships with emerging academic leaders early in their career, and to build the prominence of Agilent as a sponsor of university research. Eligible candidates must hold a tenure-track faculty position, and be withing 12 years of completing a PhD or MD. Selection will be based on alignment with the focus topic — Contributions to environmental sustainability through development of green analytical technologies, methods, or laboratory working environments; Significant original research contributions enabling solutions of importance to Agilent and the world; and Innovation and outstanding potential for future research contributions. Up to **two** submissions are allowed per institution.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: February 23

Limited Submission: NSF Centers for Innovation and Community Engagement in Solid Earth Geohazards The Centers for Innovation and Community Engagement in Solid Earth Geohazards program supports university-based centers to advance research on the fundamental solid Earth processes that underpin natural hazards. Centers will catalyze, coordinate, and produce transformative research, lead innovation, and enable convergent approaches for systems-level insights that require the collective efforts of a large group of individuals. In 2024, the Program competition will support Center Operation awards intended to support the operation of a fully developed center addressing topics focusing on the fundamental processes that create solid Earth geohazards, such as earthquakes, volcanoes, landslides, and/or other solid Earth or tectonic processes. Only **one** proposal is allowed per institution as lead.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: March 15

Limited Submission: NIH Assessment of Climate at Institutions (ACt) Award (RC2) The objective of this Notice of Funding Opportunity (NOFO) is to solicit applications to conduct institutional climate assessments using validated survey instruments and to develop action plans for positive change in the recruitment, hiring, retention, and advancement of faculty, including those from groups underrepresented in biomedical and behavioral research. The plans for self-studies should lead to institutional culture change by identifying perceptions, attitudes, and concerns, about, for example, inequities, micro-aggressions, institutional racism, and bias. The self-studies should provide a foundation for the development of an action plan to enhance diversity,

equity, inclusion, and accessibility (DEIA) outcomes in the recruitment, hiring, retention, and advancement of faculty. Only **one** application per institution is allowed.

Internal deadline: Preproposal due in InfoReady by January 15 (template)

Sponsor deadline: July 1

Limited Submission: DOE-SC Bioimaging Research Approaches for the Bioeconomy & the Environment The DOE SC program in Biological and Environmental Research (BER), through its Bioimaging Research effort, hereby announces its interest in receiving innovative applications to advance fundamental research or use-inspired technologies of new bioimaging or sensing approaches. Fundamental research to enhance spatial and temporal resolution, measurement speed, long-term sample stability, selectivity, sensitivity, or chemical specificity of bioimaging technologies are desirable. Proposed research should demonstrate a comparative advantage over state-of-the-art techniques or identify biological characteristics that cannot currently be measured. Applications are solicited in the following subtopic areas: 1) fundamental imaging or sensing research from concept to validation or 2) evaluation of biological hypotheses or questions with feasible, use-inspired prototypes. Only two submissions are allowed per institution as lead.

Internal deadline: Preproposal due in InfoReady by December 18 (template)

Sponsor deadlines: January 9 – Pre-application; March 5 - Application

Limited Submission: DOS U.S. Embassy Tokyo PAS Annual Program Statement PAS Tokyo invites proposals for programs that strengthen cultural ties between the U.S. and Japan through cultural and exchange programming that highlights shared values and promotes bilateral cooperation. All programs must include an American cultural element, or connection with American expert/s, organization/s, or institution/s in a specific field that will promote increased understanding of U.S. policy and perspectives. Only one application is allowed per organization.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: March 31

Limited Submission: DOS-ECA Increase and Diversify Education Abroad for U.S. Students (IDEAS) Program The IDEAS Program advances the Bureau's objective of supporting mutual understanding between the people of the United States and other countries by building the institutional capacity of U.S. higher education institutions to increase and/or diversify U.S. study abroad in support of U.S. foreign policy goals. The FY 2024 IDEAS Program aims to increase and diversify study abroad through two main components, the administration of small grants and the implementation of capacity building initiatives for the U.S. higher education community. Only one proposal is allowed per institution.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: March 11

Limited Submission: DOS-ECA Study of the U.S. Institutes for Secondary Educators The SUSIs for Secondary Educators will provide multinational groups of experienced secondary-level educators with a deeper understanding of U.S. society, education, culture, values, and institutions. The program will be designed to strengthen curricula and improve the quality of teaching about the United States in secondary schools and academic institutions abroad. Two of the Institutes will be for teachers; one Institute will be for secondary-level education administrators and other educational professionals, including, but not limited to, curriculum developers, ministry of education officials, teacher trainers, and textbook writers. Each Institute will have a four-week academic residency at a U.S. academic institution and a one-week integrated study tour that will expose the participants to a community (or multiple communities) representing a culture and/or region distinct from that of their academic residency. Each Institute will host approximately 20 participants, for a total of approximately 60 foreign secondary educators across three Institutes. Only one application is allowed per institution.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: March 22

Limited Submission: USDA-NIFA Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program (WAMS) The purpose of this program is to support research, education/teaching, and extension projects that increase participation by women and underrepresented minorities from rural areas in STEM. NIFA intends this program to address educational needs within broadly defined areas of food and agricultural sciences. Applications recommended for funding must highlight and emphasize the development of a competent and qualified workforce in the food and agricultural sciences. WAMS-funded projects improve the economic health and viability of rural communities by developing research and extension initiatives that focus on new and emerging employment opportunities in STEM occupations. Projects that contribute to the economic viability of rural communities are also encouraged. Only two submissions are allowed per institution.

Internal deadline: Preproposal due in InfoReady by January 8 (template)

Sponsor deadline: February 9

2. Selected Funding Opportunities:

<u>Purdue SPARK (Supporting Partnering for Advanced Research teamwork)</u> A new round of support for teams pursuing large, competitive national center grants. A new round of applications for the SPARK (Supporting Partnering for Advanced Research teamwork) program is being accepted. To support interdisciplinary teams pursuing large center research grants, the SPARK program may provide up to \$100,000 to Purdue teams for critical development activities linked to external grant proposals of \$7 million or more. SPARK funding is in addition to internal resources offered, including project strategy, teaming, and assistance in proposal development. Full program details are available at the Office of Research website. Deadline: 5PM ET, February 15

NSF Emerging Mathematics in Biology (eMB) The eMB program seeks to stimulate fundamental interdisciplinary and potentially transformative research pertaining to the development of innovative mathematical/statistical/computational theories, tools, and modeling approaches to investigate challenging questions of great interest to biologists and public health policymakers. It supports research projects in mathematical biology that address challenging and significant biological questions through novel applications of traditional, but nontrivial, mathematical tools and methods or the development of new theories particularly from foundational mathematics and/or computational/statistical tools, including Artificial Intelligence/Deep Learning/Machine Learning (AI/DL/ML). Deadline: March 11

NSF Collaborative Research in Computational Neuroscience (CRCNS) Through the CRCNS program, the participating funding organizations support collaborative activities that span a broad spectrum of computational neuroscience research, as appropriate to the missions and strategic objectives of each agency. Two classes of proposals will be considered in response to this solicitation: Research Proposals describing collaborative research projects, and Data Sharing Proposals to support sharing of data and other resources. Domestic and international projects will be considered, including proposals seeking parallel international funding. Deadline: March 7

NSF Dear Colleague Letter: Broadening Participation in Computing (BPC) Supplemental Funding in Computer and Information Science and Engineering BPC supplements are intended to extend the reach of Broadening Participation in Computing plans. Awards with BPC plans from the following programs are eligible to request BPC Supplements: Medium and Large awards in the Computer and Information Science and Engineering (CISE): Core Programs in its Computer and Network Systems (CNS), Computing and Communication Foundations (CCF), and Information and Intelligent Systems (IIS) divisions; Medium and Frontiers awards in Secure and Trustworthy Cyberspace (SaTC); and Medium and Frontier awards in Cyber-Physical Systems (CPS). Deadline: March 31

NSF Dear Colleague Letter: Opportunities for Research and Education in the Critical-Zone (ORE-CZ2) This current announcement is intended to continue the inclusion of a broad spectrum of investigators in the quest to answer fundamental questions concerning Critical-Zone function. Accordingly, this DCL seeks proposals focused on research and education on Earth's Critical Zone that also contain one or more of the following characteristics: Develop education or outreach programs that are oriented towards increasing the participation of the full spectrum of talent in STEM, including faculty and students; and Enhance partnerships and collaboration with the current CZNet Thematic Clusters or leverage existing infrastructure of CZNet. Deadline: March 1

NIH Multidisciplinary Studies of HIV/AIDS and Aging This NOFO invites applications at the intersection of HIV and aging by proposing research that aims to meet the following objectives: 1) Improve the understanding of biological, clinical, and socio-behavioral aspects of aging through the lens of HIV infection and its treatment; and 2) Improve approaches for testing, preventing, and treating HIV infection, and managing HIV-related comorbidities, co-infections, and complications in different populations and cultural settings by applying current aging science approaches.

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

NIH Integrated Functional Mapping and Molecular Profiling of Cell Ensembles Encoding the Effects of Addictive Substances in Rodents (RO1) This notice of funding opportunity (NOFO) aims to support research programs that adopt innovative scalable technologies to inventory, register and molecularly profile distributed cell ensembles encoding the effects of addictive substances, across various stages of exposure (acute, chronic, withdrawal, abstinence, relapse). Emphasis is on approaches capable of integrating data generated through population-scale measurements of cellular activity dynamics in behaving rodents, with other granular data modalities, collected from the same cells at single-cell resolution, such as transcriptomic class, epigenetic state, connectivity and spatial localization. Deadline: February 21

NIH Undergraduate Research Education Program (UP) to Enhance Diversity in the Environmental Health

Sciences (R25) The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research. Deadline: February 14

NIH Notice of Special Interest: Health Influences of Gender as a Social and Structural Variable of Research on Women's Health (ORWH) and our Institute, Center, and Office (ICO) partners are issuing this Notice to highlight interest in receiving research and training grant applications focused on health impacts of gender-related social and structural variables. For this Notice, relevant domains of gender are gender roles and norms, gender relations, gender equity/inequity, gender equality/inequality, gender-related power dynamics, and structural sexism. Applications can consider one or more domains as they relate to health. Deadline: Varies

NIH Notice of Special Interest (NOSI): Availability of Administrative Supplements to NIGMS-Funded Awards for Building Cloud-Based Learning Modules This administrative supplement supports faculty investigators to work with cloud software engineers supported by the NIH to develop cloud-based biomedical data science training modules for topics including, but not limited to, the following: Protein structure and dynamics, including structure prediction, structure-based drug discovery and protein-protein interactions; Metabolomic and interactome mapping; Analysis of genetic variants, genome-wide association studies, population genetics, and quantitative trait analysis; Phylogeny and evolution; Microbiome, virome, and ecology of host-microbe interactions; and Data analysis, simulation, and modeling of complex biological systems. Deadline: February 15

<u>DOD Minerva Research Initiative – University Research</u> The Minerva Research Initiative emphasizes questions of strategic importance to U.S. national security policy. It seeks to increase the Department's intellectual capital in the social sciences and improve its ability to address future challenges and build bridges between the Department and the social science community. Minerva brings together universities and other research institutions around the world and supports multidisciplinary and cross-institutional projects addressing specific

interest areas determined by the Department of Defense. Topics of interest include: Topic 1: Societal Cohesion in Crisis; Topic 2: Considering Societal Resilience at Multiple Scales; Topic 3: Sociotechnical Adaptation to Climate, Food, and Water Stress; Topic 4: Social Impact of Technological Change; Topic 5: Parasocial Relationships, Social Media, and Radicalization; Topic 6: Temporal Orientation and Strategic Considerations; Topic 7: Evolving Contexts of Deterrence; and Topic 8: War Termination Processes and Prospects. Deadlines: January 16 – White paper; April 2 – Full application

DOE ARPA-E Grid-free Renewable Energy Enabling New Ways to Economical Liquids and Long-term Storage (GREENWELLS) The primary objective of the GREENWELLS program is the development of chemical reactors and supporting units that economically store at least 50% of incoming intermittent electrical energy in carbon-containing liquids. Technical approaches of interest include but are not limited to: (1) Dynamic Reactor Design; (2) Novel Catalyst Development and Optimization; (3) Manufacturing of Modular Reaction Systems; and (4) Transient Modelling and Process Optimization. Deadlines: January 25 – Concept paper; TBD – Full application

<u>USDA-NIFA Farm Business Management and Benchmarking Competitive Grants Program</u> The Farm Business Management and Benchmarking (FBMB) Competitive Grants Program provides funds for improving the farm management knowledge and skills of agricultural producers by maintaining and expanding a national, publicly available farm financial management database to support improved farm management. Deadline: February 7

<u>USDA-NIFA Children, Youth and Families At-Risk Sustainable Community Projects (CYFAR)</u> The CYFAR funding program seeks to improve the quality and quantity of comprehensive community-based programs for at-risk children, youth, and families supported by the Cooperative Extension System. The CYFAR program mission is to marshal resources of the Land-Grant and Cooperative Extension Systems to develop and deliver educational programs that equip limited resource families and youth who are at-risk for not meeting basic human needs with the skills they need to lead positive, productive, contributing lives. Deadline: February 15

<u>Challenge Grants Program (SPECA)</u> The SPECA program seeks to: (a) promote and strengthen secondary education and two-year postsecondary education in the food and agriculture sciences in order to help ensure the existence of a workforce in the United States that's qualified to serve the food and agriculture sciences system; and (b) promote complementary and synergistic linkages among secondary, two-year postsecondary, and higher education programs in the food and agriculture sciences in order to advance excellence in education and encourage more young Americans to pursue and complete a baccalaureate or higher degree in the food and agriculture sciences. Deadline: March 8

<u>USDA-NIFA Smith-Lever Special Needs Competitive Grants Program</u> This program supports innovative, education-based approaches to address disaster preparedness and specific responses related to disasters or disaster threats caused by natural, human-made, or technological hazards, or by other factors that contribute to the exposure or vulnerability of a community. The SLSNCGP requests proposals for two types of projects:1) Extension Standard Projects, and 2) Extension Planning Projects. Cost share match is required. Deadline: March

DoED-IES Education Research and Development Center Program Competition

IES supports national research
and development centers (R&D Centers) that are intended to contribute significantly to the solution of
education problems in the United States by engaging in research, development, evaluation, and national
leadership activities aimed at improving the education system, and ultimately, student achievement. Each of the
R&D Centers conducts a focused program of research in its topic area. In addition, each Center conducts
supplemental research within its broad topic area and provides national leadership in advancing evidence-based
practice and policy within its topic area. Topics of interest for FY24 include: Improving Rural Education; Using
Generative Artificial Intelligence to Augment Teaching and Learning in Classrooms; K–12 Teacher Recruitment
and Retention Policy; and Improving Outcomes in Elementary Science Education. Deadlines: January 18 – LOI;
March 7 - Application

3. **Other:**

DOE-NETL Request for Information: High-Efficiency Gasification for Clean Hydrogen Production

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.