August 16, 2023

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.inforeadv4.com/). 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. For any case in which the number of preproposals received is no more than 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 Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES)*** NSF INCLUDES is a comprehensive, national initiative to enhance U.S. leadership in science, technology, engineering, and mathematics (STEM) discovery and innovation, focused on NSF's commitment to ensuring accessibility and inclusivity in STEM fields. The vision of NSF INCLUDES is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the diversity of the Nation's population. More specifically, NSF INCLUDES seeks to motivate and accelerate collaborative infrastructure building to advance equity and sustain systemic change to broaden participation in STEM fields at scale. Significant advancement in the inclusion of groups that have historically been excluded from or under-served in STEM will result in a new generation of STEM talent and leadership to secure the Nation's future and long-term economic competitiveness. NSF offers support for five types of projects that connect and contribute to the National Network: (1) Design and Development Launch Pilots, (2) Collaborative Change Consortia, (3) Alliances, (4) Network Connectors, and (5) Conferences. An organization may serve as a lead organization on only **one** proposal.

   *Internal deadline:* Preproposal due in InfoReady by August 28 (template)

   *Sponsor deadlines:* October 24 – Alliances and Network Connectors; October 30 - Conferences

2. **Selected Funding Opportunities**:

   ***NSF Division of Physics: Investigator-Initiated Research Projects (PHY)*** The Division of Physics (PHY) supports physics research and the preparation of future scientists in the nation's colleges and universities across a broad range of physics disciplines that span scales of space and time from the largest to the smallest and the oldest to the youngest. The Division is comprised of disciplinary programs covering experimental and theoretical research in the following major subfields of physics: Atomic, Molecular and Optical Physics; Elementary Particle Physics; Gravitational Physics; Integrative Activities in Physics; Nuclear Physics; Particle Astrophysics; Physics at the Information Frontier; Physics of Living Systems; Plasma Physics; and Quantum Information Science. This solicitation covers three possible award types: individual investigator and group awards with standard time cycles; mid-scale research infrastructure awards; and awards that anticipate long-term support.
   Deadline: Varies

   ***NSF Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science*** The purpose of this interagency program solicitation is to support the development of transformative high-risk, high-reward advances in computer and information science, engineering, mathematics, statistics, behavioral and/or cognitive research to address pressing questions in the biomedical and public health communities.

Transformations hinge on scientific and engineering innovations by interdisciplinary teams that develop novel methods to intuitively and intelligently collect, sense, connect, analyze and interpret data from individuals, devices and systems to enable discovery and optimize health. Solutions to these complex biomedical or public health problems demand the formation of interdisciplinary teams that are ready to address these issues, while advancing fundamental science and engineering. Deadline: November 9

***NIH Assay development and screening for discovery of chemical probes, drugs or immunomodulators (R01)*** Through this NOFO, the National Cancer Institute (NCI) solicits applications for identification of small molecules that function to elucidate the biology of disease as chemical probes or function as agonists or antagonists of disease target(s) for therapy or immunotherapy. The NOFO is intended to support discovery research for the identification of validated hits relevant to health-related outcomes of participating NIH Institutes. Stages of discovery research covered by this NOFO include: 1) assay development for specific biological targets and disease mechanisms relevant to the mission of participating NIH Institutes with the intent to screen for small molecule compounds that show potential as probes for use in advancing knowledge about the known targets, identifying new targets, or as pre-therapeutic leads; 2) screen implementation high throughput target-focused approaches or moderate throughput phenotypic- and fragment-based approaches to identify initial screening hits; 3) hit validation, including implementation of secondary assays that are orthogonal to the primary assay, advanced cheminformatics analysis and initial medicinal chemistry inspection to prioritize the hit set, and follow-up assays to characterize mode and mechanism of action of the validated hits; 4) hit-to-lead optimization, including SAR to optimize target engagement, selectivity and to minimize chemical liabilities, ADME, PK and PD studies, and, if appropriate, in vivo modeling to test efficacy or biological effects. Deadline: October 5

***NIH Neural and Non-Neural Mechanisms Underlying Gait as a Preclinical Marker for Alzheimers Disease and Alzheimers Disease-Related Dementias (R01)*** The purpose of this Notice of Funding Opportunity (NOFO) is to invite applications that investigate the neural and/or non-neural mechanisms that underlie the association between gait and cognition in aging and Alzheimer's disease and Alzheimer's disease-related dementias (AD/ADRD). Elucidating these mechanisms would help inform the potential use of changes gait as an early biomarker of AD/ADRD or inform the design of early interventions for AD/ADRD. To achieve these goals, it will be necessary to facilitate a team science approach by bringing experts together from various relevant disciplines, such as gerontology, neurology, neuropsychology, neurophysiology, neuroscience, neuroimaging, exercise physiology and physical therapy. Deadline: November 3

***NIH Population Approaches to Reducing Alcohol-related Cancer Risk (R01)*** This Notice of Funding Opportunity (NOFO) aims to support research on interdisciplinary population approaches to increasing awareness of the relationship between alcohol and cancer risk, understanding and changing social norms related to alcohol consumption, developing and/or evaluating alcohol policy approaches, and the development, testing, and implementation of population-level interventions to reduce alcohol-related cancer risk. Applications that address multiple levels of consumption, such as moderate and heavy drinking, are of particular interest, as well as those focusing on alcohol use disorder (AUD) from the perspective of cancer prevention and control. Proposals addressing understudied areas are encouraged, as is attention to underrepresented minority (URM) populations experiencing cancer and alcohol-related disparities such as American Indian, Alaskan Native, and sexual and gender minority populations. Deadline: February 5

***NIH Understanding and Mitigating Health Disparities experienced by People with Disabilities caused by Ableism (R01)*** The goal of this NOFO is to encourage research to understand the impact of ableism on health outcomes. Research on the underlying mechanisms by which ableism adversely influences the health of persons with disabilities (PWD), as well as developing and/or testing interventions at a community or health systems level to mitigate adverse health effects of ableism are high priority. Deadline: November 29

***NIH Community-Engaged Health Equity Research in Neuroscience Initiative*** This NOFO solicits applications for planning grants to assess feasibility and/or determine best practices to conduct community-engaged health equity research in neurological disorders with populations that experience health disparities (HDPs). If successful, these planning grants would support, enable and/or lay the groundwork for future clinical studies or

trials. In addition to posing a research question related to addressing health disparities in neurological disorders, applicants must also be filling a gap in 1) Engagement with one or more HDP communities; and/or 2) Multidisciplinary research team expertise in neurological disorders, health disparities research and/or community-engaged research. Expected outcomes would advance understanding of drivers of health disparities and barriers to neurological health equity and establish collaborative research teams, including community partners, with appropriate expertise in community engagement with HDPs, health disparities research and neurological disorders.

- ***R01*** Deadline: October 4
- ***R34*** Deadline: October 4

***DOD-DARPA Synthetic Quantum Nanostructures (SynQuaNon)*** The Defense Sciences Office (DSO) at the Defense Advanced Research Projects Agency (DARPA) is soliciting innovative research proposals in the area of synthetic quantum materials that enable enhanced functionalities or novel capabilities for quantum information science (QIS). In particular, the SynQuaNon program aims to develop and benchmark novel routes to enhanced superconducting (SC) nanoelectronic devices based on electronic metamaterials. It is anticipated that successful performers in this program will combine innovations in functional materials engineering with device-scale benchmarking and characterization to demonstrate quantum nanoelectronic devices with enhanced performance and improved size, weight, and power (SWaP) metrics. A Proposers Day will be held on August 18. Deadlines: August 25 – Abstract; October 10 – Full proposal

***DOD Bilateral Academic Research Initiative (BARI) Social Science Program*** This NFO is for the Bilateral Academic Research Initiative Pilot Program (BARI), which is jointly sponsored by the US Office of the Secretary of Defense (OSD) and the Economic and Social Research Council (ESRC) as part of United Kingdom Research and Innovation (UKRI). The BARI program addresses high risk basic research as an international collaboration. This research should attempt to understand new phenomena or produce discoveries that would impact understanding societal resilience in relation to social influence and information campaigns. The goal of the program is to produce significant scientific breakthroughs with far reaching consequences in understanding and influencing behavior below the threshold of armed conflict, specifically in relation to countering influence that leads to socio-economic and political instability. Proposals focused on specific devices or components are beyond the scope of this NFO. Deadlines: September 15 – White paper; October 31 – Full proposal

***DOD Adversarial Resilient Cyber Effects for Decision Dominance Collaborative Research Program (ARCEDD-CRP)*** Research to expand theoretical and scientific understanding of cyberspace windows of superiority (CWoS), such that one can rapidly and reliably identify, predict, and create these windows to provide military and civil leadership with multiple courses of action. We also want to discover novel knowledge and advance the scientific foundations of multidomain cyber deception, cyber resilience, and machine learning for cybersecurity applications. To this end, we intend to fund collaborative research in two research thrusts: 1) Explore and define CWoS, and 2) Adversarial Resilient Cyber (ARC). Each of these research thrusts has separate but related topics. Deadline: October 13

***NASA-ROSES Cryospheric Science*** The Cryospheric Sciences Program supports investigations of polar ice, including the Antarctic and Greenland ice sheets, polar glaciers, and sea ice in the Arctic and Southern Oceans, that are based on satellite and airborne remote sensing. The program seeks to improve our understanding of cryospheric processes, link the cryosphere to the global climate system, and/or advance predictive capabilities. Deadlines: September 12 – NOI; October 12 - Proposal

***NASA-ROSES GLOBE Implementation Office*** The Earth Science Division of NASA's Science Mission Directorate solicits proposals for an organization or a team(s) of multiple organizations to host the GLOBE Implementation Office (GIO) and collaborate with NASA in the implementation of GLOBE, with the objective of strengthening the programmatic support for GLOBE and enhancing the value of GLOBE to its worldwide community of students, educators, scientists, citizen scientists, and partners (hereinafter referred to as the GLOBE Community). Deadlines: October 6 – Step 1; December 20 – Step 2

***NASA-ROSES Astrophysics Decadal Survey Precursor Science*** The Astrophysics Decadal Survey Precursor Science (ADSPS) program supports research in areas related to the recommendations from the National Academy of Science and Engineering report, "Pathways to Discovery in Astronomy and Astrophysics for the 2020s" for 1) a large Infrared/Optical/Ultraviolet space mission to search for biosignatures from nearby exoplanets and to perform transformative astrophysics investigations, 2) a large Far Infrared mission, and 3) a large X-ray mission. Research proposals to ADSPS should describe how scientific progress in the areas being investigated will either reduce the design and development risk for one or more of these future large missions or help to define the requirements such missions must meet to enable transformative discoveries. Deadlines: March 29 – NOIs; April 26 - Proposal

***NASA-ROSES General Observer – Cycle 1*** The Imaging X-ray Polarimetry Explorer (IXPE) is a mission designed to measure polarization of X-ray sources in the 2–8 keV band. Following the completion of IXPE's prime mission in January 2024, NASA is initiating a General Observer (GO) program. The IXPE GO Program solicits proposals for investigations in any area of astrophysics (not constrained to address IXPE's prime science areas). Deadlines: September 18 – NOI; October 18 - Proposal

3. **Other:**

***EVPRP Workshop: Finding Funding, Limited Submissions, and Proposal Submission*** This workshop will take place on Wednesday, September 5 from 1:30PM to 3:00PM, in Stewart Center, room 202. Topics to be covered in this session include: Resources for finding and tracking funding opportunities; the limited submission process; proposal support provided by Pre-Award Services; budget preparation and review; and understanding facilities and administration rate (F&A). This workshop is open to all faculty but will be particularly helpful for new faculty. Registration is required at: https://purdue.ca1.qualtrics.com/jfe/form/SV_b8wNY7ME8D9mGUe

****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.