** To receive this newsletter directly to your inbox, please sign up for the listserv by emailing listserv@lists.purdue.edu. Leave the subject blank and in the message body type: subscribe Weeklyfundingopps [your_first_name] [your_last_name]. Only *purdue.edu* e-mail addresses will be accepted.** ***Previous newsletters can be accessed at:*** https://www.purdue.edu/research/oevprp/funding-and-grant-writing/funding/emails.php.

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. Please contact Sue Grimes (sgrimes@purdue.edu) with any questions.

1. <u>**Limited Submissions:**</u>

Preproposals should be submitted via Purdue's InfoReady portal (https://purdue.infoready4.com/). 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 OORlimited@purdue.edu.

Limited Submission: **NSF Designing Materials to Revolutionize and Engineer our Future (DMREF)** DMREF seeks to foster the design, discovery, and development of materials to accelerate their path to deployment by harnessing the power of data and computational tools in concert with experiment and theory. DMREF emphasizes a deep integration of experiments, computation, and theory; the use of accessible digital data across the materials development continuum; and strengthening connections among theorists, computational scientists, data scientists, mathematicians, statisticians, and experimentalists as well as those from academia, industry, and government. DMREF is committed to the education and training of a next-generation materials research and development (R&D) workforce; well-equipped for successful careers as educators and innovators; and able to take full advantage of the materials development continuum and innovation infrastructures that NSF is creating through partnership with other federal and international agencies. Proposals submitted to this solicitation must be directed by a team of at least two Senior/Key Personnel with complementary expertise. The proposed research must involve a collaborative and iterative "closed-loop" process wherein theory guides computational simulation, computational simulation guides experiments, and experimental observation further guides theory. Only *five* proposals are allowed per organization as lead.

Internal deadline: Preproposal due in InfoReady by December 2 (template)

Sponsor deadline: January 21 – February 4

Limited Submission: **W. M. Keck Foundation**   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 December 9 (template)

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

Limited Submission: [DoED NCER: Research Training Programs in The Education Sciences](link) Through the Research Training Programs in the Education Sciences Grant Program, IES aims to prepare individuals to conduct rigorous and relevant education research that advances knowledge within the field and addresses issues important to education policymakers and practitioners. This program offers several topics: Early Career Development and Mentoring Program for Education Research; Pathways Training Program (must partner with an MSI); Predoctoral Interdisciplinary Research Training Program in the Education Sciences; and Methods Training Program. Only ***one*** submission is allowed (as lead or partner) to the Pathways Training Program and only ***one*** submission is allowed to the Predoctoral Training Program. The Early Career Development and Mentoring Program is <u>not</u> limited.

Internal deadline: Preproposals due in InfoReady by December 9 (template)

Sponsor deadline: March 7

Internal Coordination Required: [DOC-NIST FY2024 CHIPS for America](link) The purpose of the CHIPS Research and Development (R&D) programs is to advance the development of semiconductor technologies and to enhance the competitiveness of the U.S. semiconductor industry. The CHIPS R&D programs address five cross-cutting issues that were identified through interactions with stakeholders and include: Access to facilities and equipment for late-stage R&D and prototyping; Advanced packaging and testing; Advanced metrology and characterization; Advanced manufacturing technology; and Workforce development. NIST will release a series of NOFOs under this program and it is anticipated that most, if not all, will be limited submission, including those where Purdue is a sub-awardee. **Based on the complexity of this program, all submissions involving Purdue as a participant will be coordinated through OOR at all stages (white paper and full submissions)** *including those participating as a sub-awardee*.

Internal deadline: Contact OORLimited@purdue.edu if interested in participating in any of these NIST opportunities

Sponsor deadline: On-going

2. **Selected Funding Opportunities**:

[***Purdue CFF Faculty Fellowship***](link) 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. [Read more about CFF Fellows](link). Deadline: February 3

[***Purdue Center for Families: Lorene Burkhart Award for Excellence in Research about Families***](link) 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 3

[***NSF Emerging Mathematics in Biology (eMB)***](link) The Emerging Mathematics in Biology (eMB) program seeks to stimulate the development of innovative mathematical theories, techniques, and approaches to investigate challenging questions of great interest to biologists and public health policymakers. It supports truly integrative 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

mathematical theories particularly from foundational mathematics, including the mathematical foundation of Artificial Intelligence/Deep Learning/Machine Learning (AI/DL/ML) enabling explainable AI or mechanistic insight. Deadline: March 3

[**NSF Dear Colleague Letter: Equitable and Transformative Approaches to Educating the Semiconductor Workforce (ETA-ESW)**](#) This DCL announces a cooperative activity between NSF and the Micron Foundation to stimulate transformative approaches to: (a) improve and impact education and training of the advanced memory manufacturing, microelectronics, and semiconductor workforce of the future; and (b) expand equitable opportunities and access to experiential learning programs in cleanrooms and other teaching laboratories. This DCL encourages submission of proposals through the following two NSF programs that support education and workforce development efforts at institutions of higher education: 1) Improving Undergraduate STEM Education (IUSE) for advanced semiconductor manufacturing industry; 2) Experiential Learning for Emerging and Novel Technologies (ExLENT) program for advanced semiconductor manufacturing industry. Deadline: Varies by program

[**NSF Dear Colleague Letter: Growing Research Compliance Support and Service Infrastructure for Nationally Transformative Equity and Diversity**](#) NSF invites proposals for innovative approaches and ambitious projects that address the gaps, challenges, and opportunities for growth in, and access to, institutional research compliance infrastructure. GRANTED-aligned project ideas may include but are not limited to capacity, capability, and infrastructure development to ensure compliance in the following areas: Research security; Regulatory compliance; Research ethics and integrity; Protection of research subjects; and Research data management. Deadline: On-going

[**NIH Laboratories to Optimize Digital Health (R01)**](#) NIMH seeks applications for innovative research projects to test strategies to increase the reach, efficiency, effectiveness, and quality of digital mental health interventions. This NOFO is intended to support the development of digital health test beds that leverage well-established digital mental health platforms, to rapidly refine and optimize existing evidence-based digital health interventions and conduct clinical trials testing digital mental health interventions that are statistically powered to provide a definitive answer regarding the intervention's effectiveness. Deadline: February 5

[**NIH Integrating Mental Health Care into Health Care Systems and Non-Health Settings in Low- and Middle-Income Countries (R01)**](#) This NOFO seeks implementation research projects focused on the integrating mental health services with chronic health care (for both communicable and non-communicable conditions) across various healthcare and non-healthcare settings (such as schools, places of worship, and community centers) in low and middle-income countries (LMICs). The objective is to develop, refine, and evaluate innovative strategies to facilitate the integration of mental health care with other services. Deadline: February 5

[**NIH-NCI Modular R01s in Cancer Control and Population Sciences (R01)**](#) This NOFO encourages applications for research in cancer control and population sciences. The overarching goal is to provide support to promote research efforts on novel scientific ideas that have the potential to substantially advance cancer research in statistical and analytic methods, epidemiology, cancer survivorship, cancer-related behaviors and behavioral interventions, healthcare delivery, and digital health and data science, and implementation science. Deadline: February 5

[**NIH-NCI Improving Care and Outcomes for Cancer Survivors from Sexual and Gender Minority (SGM) Populations (R01)**](#) Through this NOFO, the NCI intends to support the rigorous assessment of barriers to quality cancer treatment and follow-up care for sexual and gender minority (SGM) cancer survivors. This funding opportunity is intended to address a critical need for improved care delivery and outcomes for SGM cancer survivors. The goal is to address the disease burden in an underserved and understudied population that is at higher risk of poorer health outcomes. Deadline: February 5

NIH-NCI Microbial-based Cancer Imaging and Therapy - Bugs as Drugs NCI solicits grant applications proposing to utilize bacteria, archaebacteria, bacteriophages, or other non-oncolytic viruses and their natural products to study the underlying mechanisms of the complex interactions between microorganisms, tumors, and the immune system, and to explore their clinical potential for cancer imaging, therapeutics or diagnostics. Projects can focus on using microorganisms as anti-tumor agents, as activators of anti-tumor immunity, or as delivery vehicles for treatment, diagnosis, or imaging, complementing or synergizing with existing tools and approaches.

- [R01](#) Deadline: February 5
- [R21](#) Deadline: February 16

[**NIH-NCI Exploratory Grants in Cancer Control (R21)**](#) Through this NOFO, NCI encourages the submission of exploratory/developmental research grant (R21) applications that focus on different aspects of cancer control by modifying behavior, screening, and understanding etiologic factors contributing to the development of cancer, and developing ways to control cancer. The overarching goal is to provide support to promote the early and conceptual stages of research efforts on novel scientific ideas that have the potential to substantially advance population-based cancer research, such as the development of novel techniques, agents, methodologies, models, or applications that could have a major impact on a field of cancer research (e.g. epidemiologic, biomedical, behavioral, health care delivery or clinical). Deadline: February 16

[**NIH Advanced-Stage Development and Utilization of Research Infrastructure for Interdisciplinary Aging Studies (R33)**](#) This NOFO invites applications that propose to support advanced-stage development and utilization of novel research infrastructure to advance the science of aging in specific areas requiring interdisciplinary partnerships or collaborations. Through this award, investigators will endeavor to develop a mature and sustainable research infrastructure to support projects that address key interdisciplinary aging research questions. Deadline: July 2

[**NIH Research Infrastructure Development for Interdisciplinary Aging Studies (R61/R33)**](#) This Notice of Funding Opportunity (NOFO) invites applications that propose to develop novel research infrastructure that will advance the science of aging in specific areas requiring interdisciplinary partnerships or collaborations. Through this award, investigators will develop a sustainable research infrastructure to support projects that address key interdisciplinary aging research questions. Deadline: July 2

[**DOD DARPA Quantum Sensing of Neutrinos (QuSeN)**](#) DARPA is soliciting proposals for new, high sensitivity neutrino detectors. Proposed research should investigate innovative approaches that enable revolutionary advances in neutrino detection science, devices and systems. The Quantum Sensing of Neutrinos (QuSeN) program aims to develop neutrino detectors with greatly increased performance for detection of neutrinos from sources such as nuclear reactors and nuclear materials. Detectors will make use of neutrino – matter interactions that produce low energy nuclear recoils and athermal phonons in absorber materials with high neutron numbers at the (multi)-kilogram scale. Deadlines: November 25 – Abstract; January 20 - Proposal

[**DOE ARPA-E Disruptive DC Converters for Grid Resilient Infrastructure to Deliver Sustainable Energy**](#) The goal of DC-GRIDS is to enable the rapid expansion of the grid's capacity by making HVDC transmission systems cost-comparable with conventional AC technology. This will lead to higher grid resiliency, energy availability, performance, and lower deployment time. The program will also enable true multi-directional power routing with flexible interconnections between new and existing AC and direct current (DC) lines, making integration of sustainable energy sources faster and easier. The program has two technical categories: Category A: Novel submodules and modular high-voltage power electronic valves; and Category B: Technologies that enable highly compact multi-terminal converter stations. Deadlines: December 10 – Concept paper; TBD – Full application

[**BioMADE Project Call 5**](#) BioMADE periodically accepts white paper submissions for projects that contribute to building a sustainable, domestic, end-to-end bioindustrial manufacturing ecosystem. Projects that enable domestic bioindustrial manufacturing, develop technologies to enhance U.S. bioindustrial competitiveness, de-risk investment in relevant infrastructure, and expand the biomanufacturing workforce to realize the economic promise of industrial biotechnology are encouraged. This project call will include solicitations for projects related

to Technology and Innovation, Education and Workforce Development, and 4S (Safety, Security, Sustainability, and Social Responsibility). NSF and BioMADE encourage researchers to create integrated projects that span from MRL 1-3 levels typically supported by NSF all the way to MRL 4-7 levels supported by BioMADE. Two info and teaming webinars will be held on Nov 19 (Technology and Innovation at 1PM – Informational session and 3PM – Teaming session) & Nov 20 Education and Workforce Development (noon – Informational session and 3PM – Teaming session). Interested faculty should contact Lawrence Buja for more details and application support.

SHIC, FFAR and Port Checkoff H5N1 Risk to Swine Research Program The Swine Health Information Center (SHIC) has partnered with the Foundation for Food & Agriculture Research (FFAR) and the Pork Checkoff to fund a $4 million research program to enhance prevention, preparedness, mitigation and response capabilities for H5N1 influenza in the United States swine herd. SHIC, FFAR and the National Pork Board invite proposal submissions from qualified researchers for funding consideration to address H5N1 risk to swine research priorities described in the detailed Request for Research Proposals, including topic areas of: 1) vaccines, 2) clinical presentation, 3) mammary transmission, 4) surveillance, 5) introduction risks, 6) caretakers, 7) biosecurity, 8) pork safety, 9) production impact and 10) pig movements. Deadline: December 31

FFAR Efficient Fertilizer Consortium 2024 The Efficient Fertilizer Consortium (EFC) is accepting applications for field trials to evaluate the agronomic performance and environmental impact of enhanced efficiency fertilizers (EEFs) across a range of geographic locations, cropping systems, climates and soil types. Deadlines: December 11 – Pre-application; March 25 – Full application by invite

3. **Other:**

NSF Save the Date: Virtual Grants Conference December 9 – 12.