Please see below for a partial list of funding opportunities.

PLEASE NOTE: Pivot 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 <u>here</u>.

** To receive this newsletter directly to your inbox, please sign up for the listserv by emailing <u>listserv@lists.purdue.edu</u>. 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.**

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

1. Limited Submissions:

Preproposals and rankings should be submitted via Purdue's InfoReady portal (<u>https://purdue.infoready4.com/</u>). Purdue's open limited submission competitions, templates, and limited submission policy may be found at <u>http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php</u>. 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 <u>EVPRPlimited@purdue.edu</u>.

Limited Submission: <u>USDA-NIFA Equipment Grant Program</u> The Equipment Grant Program (EGP) serves to increase access to shared-use special purpose equipment/instruments for fundamental and applied research for use in the food and agricultural sciences programs at institutions of higher education, including State Cooperative Extension Systems. The program seeks to strengthen the quality and expand the scope of fundamental and applied research at eligible institutions, by providing them with opportunities to acquire one major piece of equipment/instruments that support their research, training, and extension goals and may be too costly and/or not appropriate for support through other NIFA grant programs. The EGP does not support the acquisition of suites of equipment to outfit research laboratories /facilities or to conduct independent experiments simultaneously. Similarly, the EGP does not fund common, general purpose ancillary equipment that would normally be found in a laboratory and/or is relatively easily procured by the organization or through other NIFA grant programs. Rather, it is intended to help fund items of equipment that will upgrade infrastructure. Moreover, EGP does not fund research projects, including research that uses the equipment acquired with support from the program nor does it support the operation and maintenance of facilities. Only *two* submissions are allowed per institution.

Internal deadline: Preproposal due in InfoReady by February 5 (template)

Sponsor deadline: May 3

Limited Submission: <u>DOE-SC Data Reduction for Science</u> The principal focus of this FOA is to support applied mathematics and computer science approaches that address one or more of the identified PRDs. Research proposed may involve methods primarily applicable to high-performance computing, to scientific edge computing, or anywhere scientific data must be collected or processed. Significant innovations will be required in the development of effective paradigms and approaches for realizing the full potential of data reduction for science. Proposed research should not focus only on particular data sets from specific applications, but rather on creating the body of knowledge and understanding that will inform future scientific advances. Only *two* applications are allowed as lead.

Internal deadline: Preproposal due in InfoReady by January 29 (template)

Sponsor deadlines: March 19 – Pre-application; May 7 - Application

Limited Submission: FFAR 2024 New Innovator in Food & Agriculture Research Award The New Innovator Award seeks to promote career advancement of highly creative and promising new scientists who intend to make a long-term career commitment to research in food and agriculture and bring innovative, ground-breaking research initiatives and thinking to bear on problems facing food and agriculture. Within the scope of the New Innovator Program, investigators will have the freedom to explore new avenues of inquiry that arise during their research. Therefore, FFAR is interested in the program of research to be explored and its impact as opposed to a list of very specific aims. Projects must address at least one of FFAR's research priority areas: cultivating thriving production systems, sustaining vibrant agroecosystems, and bolstering health food systems. Eligible applicants must be tenure-track or equivalent faculty hired on or after August 1, 2020. Preference will be given to those within eight years of receiving a PhD or equivalent. Applicants should <u>not</u> have received previous significant research funding (three to five years of support, \$1M or more in funding, or similar career development awards). Only **one** application is allowed per institution.

Internal deadline: Preproposal due in InfoReady by February 5 (template)

Sponsor deadlines: February 21 – Nomination; April 3 – Full application

2. Selected Funding Opportunities:

NSF Algorithms for Threat Detection The Algorithms for Threat Detection (ATD) program supports research on new approaches to leveraging massive spatiotemporal datasets to analyze and understand spatiotemporally distributed phenomena. Program objectives include improved representation of complex spatiotemporal dynamics and the development of advanced computational algorithms that can process massive data in near real-time to rapidly, reliably, and securely identify aberrant phenomena and render actionable predictions about potential threats indicated by such phenomena. The ATD program will support research projects in two topical areas: 1. Projects that aim to develop novel mathematical, statistical and computational algorithms for rapid, reliable and secure analysis of massive spatiotemporal datasets, at scale; and 2. Projects that develop mathematical theory to guide the application of advanced artificial intelligence to processing massive spatiotemporal data. Deadline: April 10

HHS-FDA Opportunities:

- <u>Developing PBPK Model-Based Mechanistic IVIVCs for Long Acting Injectable Suspensions and</u> <u>Implants (U01)</u> Deadline: March 31
- Integrating Machine Learning with Computational Fluid Dynamics Models of Orally Inhaled Drug <u>Products (U01)</u> Deadline: March 31
- Identification of Drug-related and Formulation-Related Factors that Result in Alcohol Dose Dumping of Modified Release Oral Drug Products (U01) Deadline: March 31
- <u>Utilizing Real-World Data and Algorithmic Analyses to Assess Post-Market Clinical Outcomes in</u> <u>Patients Switching Amongst Therapeutically Equivalent Complex Generic Drug Products and Reference</u> <u>Listed Drugs (U01)</u> Deadline: March 31
- Improving Predictability of Food-Drug and Drug-Drug Interaction Risks by Utilizing In Vitro Simulated Gastrointestinal Dissolution Model for High-Risk Oral Drug Products (U01) Deadline: March 31
- <u>Synthesis and Biological Activity Assessment of Different Diastereomers in siRNA Drug LEQVIO</u> (Inclisiran) (U01) Deadline: March 31
- <u>Evaluating the Cutaneous Pharmacokinetics of Topical Drug Products Using Pharmacokinetic</u> <u>Tomography (U01)</u> Deadline: March 31

DOE ARPA-E Creating Hardened and Durable Fusion First Wall Incorporating Centralized Knowledge

(CHADWICK) The primary objective of the CHADWICK program is the development of new first-wall materials that will significantly improve the commercial viability of nuclear fusion. Commercial materials with known high-temperature resistance will often see severe embrittlement and swelling under irradiation. Materials that exhibit high irradiation resistance may show low thermal conductivity or high activation. Finding a material that has the most optimized performance for a fusion first wall is a major scientific and engineering challenge. The

multi-objective optimization of new materials will challenge the scientific community to use the latest tools to solve the longstanding problem of finding a material that can survive in a fusion environment. Technical categories of interest include: Plasma-facing component materials; structural materials; capabilities teams; and category and team logistics. Cost-sharing is required at 5% of TPC. Deadline: February 13 – Concept paper; TBD – Full application

<u>USDA-NIFA Agricultural Genome to Phenome Initiative</u> AG2PI focuses on collaborative science engagement that intends to develop a community of researchers across both crops and animals that will lay the foundation for expanding knowledge concerning genomes and phenomes of importance to the agriculture sector of the United States. Success of the initiative will inform approaches to understanding how variable weather, environments, and production systems interact with genetic diversity present in crops and animals to impact growth and productivity. This will provide greater accuracy in predicting crop and animal performance under variable conditions and more efficient selection of well-adapted, superior genotypes that farmers and ranchers can produce. A one-to-one cost share match is required, with exceptions. Deadline: May 30

<u>USDA-NIFA Beginning Farmer and Rancher Development Program</u> The primary goal of BFRDP is to help beginning farmers and ranchers in the United States and its territories enter and/or improve their successes in farming, ranching, and management of nonindustrial private forest lands, through support for projects that provide education, outreach, and technical assistance to give beginning farmers and ranchers the knowledge, skills, and tools needed to make informed decisions for their operations and enhance their sustainability. A match at 25% is required, with exceptions. Deadline: April 4

<u>USDA-NIFA Higher Education Challenge Grants Program</u> The purpose of the Higher Education Challenge Grants Program including curriculum, faculty, scientific instrumentation, instruction delivery systems, and student recruitment and retention, to respond to identified state, regional, national, or international educational needs in the food and agricultural sciences, or in rural economic, community, and business development. Deadline: March 5

<u>USDA-NIFA Rural Health and Safety Education Competitive Grants Program</u> The RHSE program proposals are expected to be community-based outreach education programs, such as those conducted through Human Science extension outreach that provide individuals and families with: information as to the value of good health at any age; information to increase individual or family's motivation to take more responsibility for their own health; information regarding rural environmental health issues that directly impact human health; information about and access to health promotion and educational activities; and training for volunteers and health services providers concerning health promotion and health care services for individuals and families in cooperation with state, local, and community partners. Deadline: March 14

<u>USDA-NIFA Veterinary Services Grant Program</u> The Veterinary Services Grant Program (VSGP) is designed to support education and extension activities and practice enhancement initiatives that will enable veterinarians, veterinary students, veterinary technicians, and veterinary technician students to gain specialized skills and provide practices with additional resources (e.g., equipment, personnel) needed to more effectively mitigate veterinary service shortages in the U.S. Ultimately, this program will bolster the capacity of private practitioners to provide food animal veterinary services in designated rural veterinarian shortage situations. The purpose of VSGP is to develop, implement, and sustain veterinary services and relieve veterinarian shortage situations in the U.S., which includes insular areas, Deadline: March 21

<u>UL Research Institute Discoveries in Safety Grants Program</u> UL Research Institutes (ULRI) Discoveries in Safety Grants Program funds research that aligns with our mission of building a safer and more sustainable world. Six funding opportunities are now open. Proposal topics include: Eco-Remediation and Energy Storage; Emerging Chemical Threats to Human and Environmental Health; Increased Safety for Large-scale Lithium-Ion Battery Systems; Independent Digital Risk Assessment; Innovative Research Leading to the Reduction of Thermal and Chemical Fire Exposures to Firefighters; and Persistence and Effectiveness in Safety and Sustainability Science

Education. A <u>webinar</u> will be held on January 17 at 1PM EST with University Industry. Demonstration Partnership. Deadlines: February 16 – LOI; May 10 – Proposal

<u>Gordon & Betty Moore Foundation - Moore Fellows in Material Synthesis</u> The funding opportunity is part of the foundation's Emergent Phenomena in Quantum Systems Initiative (EPiQS), which aims to catalyze breakthroughs in the science of quantum materials. The strategic intent of this fellowship funding is to strengthen materials synthesis efforts at leading U.S. universities and to enable talented early-career researchers to establish robust synthesis research programs in their new academic labs. Applicants should be outstanding early-career scientists whose primary research expertise and interests are in synthesis of quantum materials, in either the bulk or thin-film forms. All synthesis techniques will be considered. Strong preference will be given to candidates interested in the basic science of quantum materials, rather than practical applications. The candidates should have started their tenure-track appointments at a U.S. university in 2021 or later. Deadlines: February 16 – LOI; Full proposal by invite

3. Other:

REMINDER: Office of Research Workshop: NSF CAREER January 30; 1-3PM; STEW 218ABC The Office of Research is hosting a workshop for faculty in all disciplines who are interested in writing a proposal for the NSF CAREER program. CAREER eligible faculty are untenured, assistant professors who have not submitted more than two previous, unsuccessful NSF CAREER proposals. Prior to the workshop, participants should read the NSF CAREER solicitation and FAQs available at: <u>https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503214</u>. Registration is required at: <u>https://purdue.ca1.qualtrics.com/jfe/form/SV_be0zkhfDTwawih0</u>.