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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. **Limited Submissions:**

    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: DOE-SC Artificial Intelligence and Machine Learning Applied to Nuclear Science and Technology The DOE SC program in Nuclear Physics (NP) hereby announces its interest in receiving applications for research and development (R&D) efforts directed at artificial intelligence (AI) and machine learning (ML) for autonomous optimization and control of accelerators and detectors of relevance to current or next generation NP accelerator facilities and scientific instrumentation, as well as applications applying AI/ML to advance nuclear physics computations. Major areas of research may include, for example: Efficient extraction of critical and strategic information from large complex data sets; Development and implementation of digital twins for future colliders; Efforts to address the challenges of autonomous control and experimentation; Efficient operation of accelerators and scientific instruments; Deployment of AI for reduction of large and/or complex experimental data; and Development of software to enable data-driven discovery of new physics. Only ***three*** applications are allowed per institution as lead.

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

    Sponsor deadlines: November 14 – LOI; January 14 - Application

    Internal Coordination Required: DOC-NIST FY2024 CHIPS for America 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**:

NSF Addressing Systems Challenges through Engineering Teams (ASCENT) ECCS, through its ASCENT program, offers its engineering community the opportunity to address research issues and answer engineering challenges associated with complex systems and networks that are not achievable by a single principal investigator or by short-term projects and can only be achieved by interdisciplinary research teams. ECCS envisions a connected portfolio of transformative and integrative projects that create synergistic links by investigators across its three ECCS clusters: Communications, Circuits, and Sensing-Systems (CCSS); Electronics, Photonics and Magnetic Devices (EPMD); and Energy, Power, Control, and Networks (EPCN), yielding novel ways of addressing challenges of engineering systems and networks. Deadline: January 22

NIH Epidemiologic Research on Emerging Risk Factors and Liver Cancer Susceptibility The purpose of this Funding Opportunity Announcement (FOA) is to promote epidemiologic research investigating novel and innovative hypotheses on emerging risk factors (biological, environmental, and social) and their interplay with established risk factors (e.g., viral hepatitis) associated with the development of liver cancer (hepatocellular carcinoma and other histological subtypes) in the United States.
- *R01* Deadline: February 5
- *R21* Deadline: February 16

NIH Revision Applications for Validation of Biomarker Assays Developed Through NIH-Supported Research Grants (R01) Through this Notice of Funding Opportunity (NOFO), the National Cancer Institute (NCI) encourages revision applications (formerly called "competing revisions") from currently funded NCI R01 research projects. The applicants should propose projects that are expected to accelerate the pace of translation of NCI-supported methods/assays/technologies (referred to as "assays") to the clinic. Specifically, the focus of applications submitted in response to this NOFO should be on the adaption and clinical validation of molecular/cellular/imaging markers for cancer detection, diagnosis, prognosis, monitoring, and prediction of response in treatment, as well as markers for cancer prevention and control. Deadline: February 14

NIH New Therapeutic Strategies for Genital Herpes (R21/R33) The purpose of this notice of funding opportunity (NOFO) is to stimulate the development of new treatments for genital herpes that suppress shedding and lesion formation and reduce transmission. This NOFO invites applications that propose research into a broad range of therapeutic approaches, including but not limited to development of new or improved antivirals, monoclonal antibodies, therapeutic vaccines, and gene editing technologies for treatment of people living with genital herpes. Deadline: January 31

NIH Human Brain Single-cell Genomics Explorer (U24) The NIH Blueprint for neuroscience is soliciting applications to pilot the establishment of an integrated resource for users to explore, analyze, and download processed deidentified human brain single-cell transcriptomics and epigenomics data that is harmonized across reference and disease datasets. The resource will generate a unified cell type taxonomy and provide users with a draft annotatable cell-type nomenclature and the ability to map community generated single cell omics data to the taxonomy. This pilot will lay the groundwork for an expanded and sustained effort to increase utility and accessibility of human cell-type classification data across multiple NIH consortia. Deadline: February 14

NIH Assay Validation of High Quality Markers for Clinical Studies in Cancer (UH2/UH3) Through this Notice of Funding Opportunity (NOFO), the National Cancer Institute (NCI) invites applications to support the validation of molecular/cellular/imaging markers and assays for cancer detection, diagnosis, prognosis, monitoring, and prediction of response or resistance to treatment, as well as markers for cancer prevention and control. This NOFO will support investigator-initiated research for both analytical, and clinical validation of assays to be used in cancer treatment, control, or prevention trials supported by the NCI. Deadline: February 14

[NIH Notice of Special Interest (NOSI): Developing and Evaluating Evidence-Based Practice for Users of Augmentative and Alternative Communication (AAC)](#) The purpose of this NOSI is to encourage those with expertise in communication disorders to pursue research in collaboration with users of augmentative and alternative communication (AAC) using one of two approaches: (1) community-engaged research or (2) user-centered design. Both of these strategies include AAC users and their families/caregivers through the process. Applications are expected to lead to the development and evaluation of (1) valid and reliable measures of communication that can be used in research and clinical practice; and (2) evidence-based practices to improve effective communication between AAC users and their communication partners. Deadline: February 5

[DOD FY25 Minerva Research Initiative University Research Program](#) The Minerva Research Initiative (Minerva) 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. The Minerva program aims to promote research in specific areas of social science and to promote a candid and constructive relationship between DoD and the social science academic community. Topics of interest include: Topic 1: Societal Cohesion and Conflict; Topic 2: Advancing Influence Measurement(s); Topic 3: Arctic at the Polar Crossroads; Topic 4: Cultural Resilience, Climate, and Human Security in Oceania; Topic 5: Social Impact of Technological Change; and Topic 6: Deterrence and Competition across Military and Civilian Spheres. Deadlines: November 29 – White paper; February 28 – Full application

[DOE-SC Genomics - Enabled Understanding and Advancing Knowledge on Plant Gene Function(s)](#) This NOFO solicits applications for "Genomics - Enabled Understanding and Advancing Knowledge on Plant Gene Function(s)" to effectively design bioenergy crops by developing approaches to: a) understand regulatory elements, biological mechanisms and develop predictive models for dissecting multigene traits and their component parts that govern plant growth under different growing conditions, biochemical and signaling pathways; b) understand genetic components and molecular mechanisms underlying plant regeneration/organogenesis in tissue culture to improve heterologous DNA transfer to germlines of bioenergy crops; and c) understand genetic and molecular mechanisms that will reduce the cycle time for out-crossing energy crops (e.g. self-incompatibility) to speed development of new plant feedstocks underpinning a more broader and more competitive U.S. bioeconomy. Deadline: February 10

[NASA-ROSES U.S. Contributions to Ariel Preparatory Science](#) The US-CAPS program element is established to solicit proposals from the U.S. community for investigations that will complement the ongoing activities of the Ariel Science Consortium. This initial U.S. Community participation call is strongly oriented toward gathering data (e.g., time series photometry, high resolution imaging, high resolution spectroscopy, and precision radial velocity) necessary for confirmation of exoplanet candidates, determination of masses and orbits of previously known exoplanets, and stellar characterization. Proposals must be science-driven and address compelling scientific questions in one or more of the foregoing areas within the context of the Ariel working group target lists associated with this call. Deadlines: December 12 – LOI; February 4 - Application

3. **Other:**

[DOE ARPA-E Request for Information: Plant Genetic Engineering for Energy Applications](#) Responses due by November 11

[DOE ARPA-E Request for Information (RFI) - Three-Dimensional Characterization of the Subsurface by Advanced Modeling and Sensing Techniques](#)