

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 <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 OOR will notify the PI(s) that an internal competition will be unnecessary. Questions should be addressed to [EVPRPlimited@purdue.edu](mailto:EVPRPlimited@purdue.edu).

**Limited Submission: [HHS ARPA-H Antigens Predicted for Broad Viral Efficacy through Computational Experimentation \(APECx\)](#)** The APECx program aims to create a toolkit to enable accurate chimeric and broadly efficacious vaccine Ag discovery through predictive modeling, high-throughput functional experimentation, and protein engineering. To fundamentally transform the vaccine research and development (R&D) sector, APECx will develop an innovative viral Ag prediction pipeline for broad efficacy by combining expedited experimental protein structure and function determination with high-throughput Ag screening. This will be enhanced with structural and functional prediction and protein modeling algorithms. Product developers will contribute to modeling tool evaluation from the start of the program to ensure discoveries satisfy the translational requirements. Only **one** submission is allowed as lead.

*Internal deadline:* Preproposal due in InfoReady by November 20 ([template](#))

*Sponsor deadlines:* December 1 – Abstract; January 19 - Proposal

**Limited Submission: [HHS ARPA-H Resilient Extended Automatic Cell Therapies \(REACT\)](#)** ARPA-H is soliciting innovative proposals for research and development (R&D) in therapeutic development and affordability and improving the way patients manage their own health. In the first program track, recent advances in synthetic biology, materials, and bioelectronics will be integrated to form an implantable **Living Pharmacy**. In the second program track, a similar implantable device will be constructed to act as a **Living Sentinel**. This device will use cells to detect a key biomarker of disease. Only **one** submission is allowed as lead.

*Internal deadline:* Preproposal due in InfoReady by November 20 ([template](#))

*Sponsor deadlines:* November 30 – Abstract; TBD - Proposal

### 2. **Selected Funding Opportunities:**

**[NSF Emerging Frontiers in Research and Innovation \(EFRI\): Biocomputing through EnGINeering Organoid Intelligence \(BEGIN OI\)](#)** The EFRI Biocomputing through EnGINeering Organoid Intelligence (BEGIN OI) solicitation supports foundational and transformative research to advance the design, engineering, and fabrication of organoid systems that are capable of processing information dynamically while interfacing with non-living systems. The EFRI program seeks proposals with potentially transformative ideas that represent an opportunity for a significant shift in fundamental engineering knowledge with strong potential for long term impact on national needs or a grand challenge. An informational webinar will be held sometime in November – exact date TBD. Deadlines: January 17 – LOI; February 22 – Full proposal

***NIH In Vivo High-Resolution Imaging for Inner Ear Visualization*** This funding opportunity aims to support the development of in vivo high-resolution structural and functional imaging technologies for the living human inner ear. Proposed projects should focus on improving the resolution of current imaging techniques or developing new imaging techniques that can visualize inner ear structures in vivo with significantly greater detail and accuracy than currently possible. Both structural and functional aspects, including visualizing dynamic elements are important to the development of new and improved techniques. Projects may also focus on developing new imaging probes or contrast agents that can enhance visualization of the inner ear structures.

- [R01](#) Deadline: February 1
- [U01](#) Deadline: February 1

***HHS-FDA Developing PBPK Model-Based Mechanistic IVIVCs for Long Acting Injectable Suspensions and Implants (U01)*** The objective of this research proposal is to develop physiologically based pharmacokinetic (PBPK) model-based mechanistic in vitro in vivo correlations (IVIVCs) for two major types of long acting injectables (LAIs) such as crystalline suspensions and polymer-based implants by considering their distinct characteristics. The goal of the project is to develop a bottom-up mechanistic PBPK model for these two LAI categories by accounting for the influence of critical formulation attributes of each LAI drug product type to predict its in vivo release mechanism. The model formulation parameters and relevant physiology should be informed with suitable in vitro and in vivo experiments. Deadline: January 15

***HHS-FDA Integrating Machine Learning with Computational Fluid Dynamics Models of Orally Inhaled Drug Products (U01)*** The purpose of this grant is to develop a methodology to integrate machine learning with computational fluid dynamics models of orally inhaled drug products to promote alternative BE studies to enhance and accelerate the development and approval of generic ODPs. Deadline: March 31

***DOD FY25 Defense University Research Instrumentation Program (DURIP)*** This announcement seeks proposals from universities to purchase equipment and instrumentation in support of research in areas of interest to the DoD. DoD interests include the areas of research supported by the [Army Research Office \(ARO\)](#), the [Office of Naval Research \(ONR\)](#), and the [Air Force Office of Scientific Research \(AFOSR\)](#). Deadline: February 16

***DOD-AFRL Lab-to-Orbit: Accelerating the Development and Testing of Materials for Low Earth Orbit*** This program is anticipated to be a single phase consisting of a 36 month base technical effort with a 24 month optional period, plus 3 months for the final report. The technical effort of the program will focus on development of a combined computational and experimental approach for materials discovery and development low-earth-orbit applications through strong, organic collaborations between the Recipient and USAF researchers. The program will seek to grow these collaborations by funding graduate students at the Recipient institution(s) performing exceptional basic research in materials problem spaces to advance materials for space and spacecraft systems. Research under this program should produce actionable, quantifiable information that furthers fundamental knowledge of materials systems. Cost share is expected. Deadlines: December 20 – White paper; TBD – Proposal by invite

***DOE-NETL Bipartisan Infrastructure Law (BIL) Grid Resilience and Innovative Partnerships (GRIP)*** The GRIP program will provide funding to modernize the American electric grid and to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice. Universities are eligible under Topic Area 2: Smart Grid Grants. Cost share of at least 50% is required. Deadlines: January 12 – Concept paper; April 17 – Full application

***DOE ARPA-E Inspiring Generations of New Innovators to Impact Technologies in Energy 2024 (IGNIITE 2024)*** (IGNIITE) program is designed to support a new cohort of early-career innovators to develop the most disruptive and unconventional ideas into transformative new technologies across the full spectrum of energy applications. This announcement is purposefully broad in technical scope, but eligibility is limited to early-career researchers. Awards under this program may take the form of exploratory research that provides the agency with information useful for the subsequent development of focused technology programs. Alternatively, awards may

support proof-of-concept research for a particular new technology in an area not currently supported by the agency. Deadlines: January 5 – Concept paper; TBD – Full application

**[Google Research Scholar Program](#)** The Research Scholar Program provides unrestricted gifts to support research at institutions around the world, and is focused on funding world-class research conducted by early-career professors. Applicants must be a full-time assistant, associate, or professor at a university or degree-granting research institution and must have received their PhD within seven years of submission. Proposals should fall under one of the following areas of interest to Google in Computer Science and related fields: algorithms and optimization, fundamental and applied science, health research, human-computer interaction, machine learning and data mining, machine perception, natural language processing, networking, privacy, quantum computing, security, software engineering and programming languages, systems (hardware and software). Deadline: November 30

### 3. **Anticipated Funding Opportunities**

**[NSF Dear Colleague Letter: Medical / Health Cyber Physical Systems Proposals](#)**

**[NIH Spotlight on Humanities in Higher Education](#)**

**\*\*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](mailto:sgrimes@purdue.edu)) with any questions or comments related to this e-mail.