Please see below for a partial list of funding opportunities of interest to faculty and full-time research staff. **The list is not intended for students.**

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>HHS ARPA-H Personalized Regenerative Immunocompetent Nanotechnology Tissue</u> (<u>PRINT</u>) The PRINT program aims to transform organ biofabrication by leveraging recent advances in 3D bioprinting, cell manufacturing, biomaterials, modeling, and tissue engineering. The platform will use patientmatched organ biofabrication to restore normal human organ function for the kidney, heart, or liver. Technical areas include: TA1: Generation of all necessary organ cell types (Phase I); TA2: Large scale manufacturing of organ cell types (Phase I & II); and TA3: Organ Biofabrication and in vivo testing (Phase I and II). Performers must submit proposals that address all TAs (TA1 – 3) for one (1) of the target organs (i.e., kidney, heart, or liver). ARPA-H will host a Proposer's Day on May 28 at 9AM ET. Only **one** proposal is allowed as lead and additional **one** as sub. If not leading, then **two** are allowed as sub.

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

Sponsor deadlines: May 28 – Solution Summary; July 8 – Proposal

Limited Submission: <u>Robarts Research Institute: Taylor Prize</u> The J. Allyn Taylor International Prize in Medicine (Taylor Prize) is one of Canada's most prestigious medical research prizes. The prize, which is awarded annually by our School and the Robarts Research Institute, offers a cash prize of \$50,000. The theme of this year's prize is "The Science of Aging." We're seeking nominations for leading scientists who are driving important discoveries, innovations or breakthroughs in aging-related medical science and research. Only one submission is allowed.

Internal deadline: Preproposal due in InfoReady by April 22 (template)

Sponsor deadline: May 1

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 <u>OORLimited@purdue.edu</u> if interested in participating in any of these NIST opportunities

Sponsor deadline: On-going

2. Selected Funding Opportunities:

<u>HHS ARPA-H Engineering Of Immune Cells Inside The Body (EMBODY)</u> ARPA-H is seeking to bring the technology behind genetically engineered cells, which have provided therapeutic benefit for the treatment of a number of diseases, including some cancers (e.g. CAR-T cell treatment). ARPA-H recognizes that the development of these therapies is technically complex, requires substantial patient participation, and are limited by lengthy wait times during which eligible patients may die or becoming ineligible while waiting for their cell therapy treatment. Also, the cost per dose is prohibitively high, and less than 2 percent of U.S. hospitals have the infrastructure, expertise, and experience to offer these treatments. The program hopes to make immune therapies more affordable, easily accessible at any U.S. hospital, and to eliminate the multi-week wait time, with a focus on two technical areas. Technical area 1 focuses on cell-specific delivery methods and the development of programmable and controllable genetic material. Technical area 2 supports advanced production and validation methods, including reducing manufacturing cost, improving quality control, and developing predictive preclinical models of the human immune system. Performers must submit proposals that cover both TAs. ARPA-H will host a Proposer's Day on April 18 at 11AM ET. *Only commercial organizations may propose as the prime awardee.* Faculty can join teams via the <u>Teaming Page</u>. Deadlines: May 28 – Solution Summary; July 8 – Proposal

<u>NIH Protective Strategies to Reduce Amyloid Related Imaging Abnormalities (ARIA) After Anti-Amyloid Beta</u> <u>Immunotherapy (R01)</u> This notice of funding opportunity (NOFO) will support mechanistic investigations to better understand the cellular and molecular mechanisms that underlie brain blood vessels responses to passive anti-beta-amyloid immunotherapy that result in amyloid-related imaging abnormalities (ARIA). The goal is to establish an understanding of molecular mechanisms that can be targeted to protect the BBB, and thus the brain blood vessels, during therapeutic interventions that target beta-amyloid. Deadline: October 4

<u>NIH Using Neuromodulation to Characterize the Continuum of Pathophysiology Between Substance Use and</u> <u>Mental Health Disorders (R01)</u> This NOFO seeks applications from the SUD and MHD research communities that coordinate efforts to characterize the effects of neuromodulation on brain circuits and behaviors relevant to both SUD and MHD. To accomplish this goal, studies would specify inclusion/exclusion criteria to capture variance in both SUD and MHD symptoms. Further, studies would include measures of engagement of circuitlevel targets in response to neuromodulation and dimensional measures of cognition and behavior relevant to both SUD and MHD. This research approach uses circuit dynamics to understand neurobehavioral function and to develop ecologically valid and descriptive models of the shared and discrete dysfunction across these conditions. Deadline: August 15

<u>NIH Neuropathological Interactions Between COVID-19 and ADRD (R01)</u> This NOFO will solicit R01 applications that propose studies in animal, cell culture, and/or human tissue models to elucidate the mechanisms by which COVID-19 interacts with and/or modulates AD/ADRD-relevant phenotypes. Either the model itself or the experimental readouts will be required to incorporate AD/ADRD risk factors, pathologies, or relevant comorbidities. Deadline: October 4

<u>NIH Feasibility Trials of the NIH Music-based Interventions Toolkit for Brain Disorders of Aging (R34)</u> These early stage clinical trials will generate evidence supporting the validity of the NIH MBI Toolkits guiding principles as well as the necessary pilot data to assess the feasibility of the design for a subsequent clinical efficacy or effectiveness study (or pragmatic clinical trial) using music-based interventions in the context of brain disorders of aging, including but not limited to Alzheimers disease and Alzheimers disease-related dementias, Parkinsons disease, and stroke. The data collected should address gaps in scientific knowledge in order to facilitate development of a competitive large-scale clinical trial. Deadline: June 20

DOE MACRO - Mixed Algae Conversion Research This FOA is funded by two DOE offices: EERE's Bioenergy Technologies Office (BETO) and FECM's Carbon Conversion Program. Under this FOA, applications are sought that use anthropogenic carbon dioxide emissions in the cultivation process and then convert macro and/or micro algae into low carbon products. Conversion for agricultural products such as animal feed are of particular interest. All types of algae may be of interest to this FOA, subject to the topic-specific requirements described in each Topic Area. Topic Area 1: Conversion of Seaweeds to Low-Carbon Fuels and Bioproducts and Topic Area 2: Conversion of Algal Biomass for Low-Carbon Agricultural Bioproducts. An informational webinar will be held on April 17 at 1PM ET. Deadlines: May 10 – Concept paper; June 27 – Full application

DOD-DARPA BAA Structures Uniquely Resolved to Guarantee Endurance (SURGE) SURGE will develop methods to predict part life directly from data collected during additive manufacturing (AM) in a way that is transferable across disparate machines, materials, locations, and geometries. Research will merge in-situ sensing technologies, process modeling, and microstructure-based fatigue life methods to quantify the useful life of manufactured hardware. Predictions will be backed by extensive experimental validation demonstrating a new paradigm for efficient part qualification. Proposed research must investigate innovative approaches that enable revolutionary advances in distributed AM capability. Deadlines: May 9 – Abstract; July 1 - Proposal

<u>NASA Early Stage Innovations (ESI24)</u> The ESI Appendix challenges universities to examine the theoretical feasibility of new ideas and approaches that are critical to making science, space travel, and exploration more effective, affordable, and sustainable. It is the intent of the STRG Program and this Early Stage Innovations opportunity to foster interactions between NASA and the awarded university Principal Investigators (PIs)/teams. Deadlines: May 9 – NOI; June 6 - Proposal

<u>Simons Foundation 2024 SFARI Pilot</u> The goal of the Pilot Award is to provide early support for exploratory ideas considered higher risk but with the potential for transformative results, particularly those with novel hypotheses for autism. This funding mechanism is particularly suitable for investigators new to the autism field, though we encourage applicants to consult with experts in autism research to ensure their projects are relevant to the human condition. We encourage applications that propose research to link genetic or other ASD risk factors to molecular, cellular, circuit or behavioral mechanisms and set the stage for development of novel interventions, including work in human subjects. Deadline: June 13

3. Anticipated Funding Opportunities

DOE Notice of Intent: Smart Manufacturing Technologies for Material and Process Innovation Funding Opportunity Announcement

4. Other:

OOR and Purdue for Life Webinar: MacArthur 100&Change Informational Session The MacArthur Foundation is expected to release their MacArthur <u>100&Change</u> Program in Spring 2024. Given the breadth of this program and specific type of project they fund, the Office of Research and Purdue for Life will host an informational webinar on Tuesday April 23 from 10-10:45am ahead of the release. The award is expected to provide a \$100 million grant to fund a single proposal that promises real and measurable progress in solving a critical problem. Projects must be philanthropic and have a plan for sustainability. This session will cover details of the program and outline how faculty can start planning for submission.

To register for the informational session, please visit:

https://purdue.ca1.qualtrics.com/jfe/form/SV_cPfMMym0ZVB8kke.

<u>NSF Frequently Asked Questions (FAQs) for NSF Responsible Design, Development, and Deployment of</u> <u>Technologies (ReDDDoT)</u>

<u>NSF Request for Information: Use Cases to Inform a Future National Secure Data Service</u> Response due by June 14