

RCA UPDATE

October 19, 2020

Funding Opportunity Edition

Changes to NIH R15 REAP Program

NIH has made a change to the institutional eligibility for the R15 Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate Schools. The calculation was changed to encompass total campus funding from NIH versus separating out the health professions schools and graduate schools. With this modification, overall NDSU NIH funding has exceeded the limit for the REAP program resulting in NDSU being ineligible. However, it is important to note that due to the great work of NDSU faculty, the 2020 federal fiscal year NIH awards were \$6.8M, bringing NDSU total NIH awards over the last 7 years to \$41.6M.

NDSU still remains eligible for the <u>NIH R15 AREA program</u>, which is open to faculty with a primary appointment that is not in a health professional school or graduate school. Resources for applying to NIH programs are available on the RCA website. The <u>NIH Ready Training program</u> offered is a virtual, self-paced course to help prepare an R01 or R-series submission. If you have any questions about this information, please contact ndsu.research@ndsu.edu.

ND EPSCoR Funding Opportunities

The North Dakota Established Program to Stimulate Competitive Research (ND EPSCoR) currently has two open calls for proposals:

ND NASA EPSCoR Supplemental Project Funding

Under this solicitation, funding will be awarded in the following focus areas that are designed to promote, develop, and expand NASA research in North Dakota in accordance with NASA's program:

- NASA 2017 <u>Strategic Technology Investment Plan</u>
- NASA 2018 Strategic Plan
- NASA 2020 <u>Technology Taxonomy</u>

Deadline: November 16, 2020; Noon

ND ACES Track-1 Emerging Area Seed Awards

The 2020-2025 ND EPSCoR National Science Foundation (NSF) Research Infrastructure Improvement (RII) Track-1 cooperative agreement, <u>New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES)</u>, has a mission to contribute to cancer research in ways that have state, national, and international ramifications and underpin sustainable activities for a trained and diverse workforce and informed populace and lead to future (beyond the scope of this project) efforts focused on new therapeutic solutions. To accomplish this, faculty from institutions across the state are participating in the Center for Cellular Biointerfaces in Science and Engineering (CCBSE).

The ND-ACES team recognizes several areas of spin-off and emerging research that may expand the reach and capacity of ND-ACES and increase the opportunity for sustainability. Thus, the Track-1 has a pool of funds available each year to support seed awards focused on high-risk, high-impact emerging areas or gaps in the current biosciences research. The RFP lists the following seven areas of interest:

- 1. Imaging Techniques for Cell Growth in Testbeds,
- 2. Inclusion of Additional Cell Types and Fluid Flow Conditions in Testbeds,

- 3. Innovation Pilot Funding and Translational Seed Research that Fit the CCBSE Mission,
- 4. New and Efficient Computational Techniques for Evaluation of Cancer Progression and Biology,
- 5. Multimedia Art Modules for Explaining CCBSE Science,
- 6. New Biomaterials in Tissue Engineering and Advanced Manufacturing of Biomaterials, and
- 7. Novel Biobased Specialty Crop Extracts for Anticancer Therapy Applications.

Deadline: November 16, 2020; Noon

University-Industry Demonstration Partnership

The University-Industry Demonstration Partnership (UIDP) is hosting Triple Helix Days **October 20-21**, which are designed to connect U.S. government program officers with UIDP members in an environment that both informs and catalyzes collaboration. NDSU is an institutional member of UIDP, so this event is free for NDSU faculty, staff, and students.

On both days, U.S. government program officers from diverse agencies will present sessions focused on a recurring funding solicitation in which companies and universities may collaborate as awardees, as subcontractors, or by making in-kind contributions.

Topics include:

- FFAR's Investment to Fund Actionable Food and Agriculture Research Solutions
- Doing Business with ONR and the Naval Accelerator
- Corporate and Academic Perspectives on the Pursuit of Federal Funding for U-I Collaborative Projects
- R&D Collaborations with the National Institute of Standards and Technology (NIST)
- DHS Science and Technology
- DARPA's Innovation Model
- Partners for Innovation Funding and Development Opportunities

Learn more and register >>

NDSU is an institutional member of UIDP, so anyone with an @NDSU.EDU email address can register for an account and access materials on the UIDP.org website along with getting reduced price or free access to their webinars.

Upcoming Limited Submission Program Deadlines

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

- NSF: Ethical and Responsible Research Notification Deadline: November 4, 2020
- HRSA: Behavioral Health Workforce Education and Training Notification Deadline: November 4, 2020
- NSF: Scholarships in STEM (S-STEM)
 Notification Deadline: November 10, 2020
- NEH: Preservation Assistance Grants
 Notification Deadline: November 18, 2020

FUNDING OPPORTUNITIES

- American Philosophical Society: Franklin Research Grants
- Bush Foundation: Community Innovation Grants
- EPA: Interventions and Communication Strategies to Reduce Health Risks of Wildland Fire Smoke Exposures
- EPA: Evaluation of Pollutants in Biosolids
- HRSA: Behavioral Health Workforce
- NEA: Translation Projects
- NEH: Preservation Grants
- NIH: Computational Approaches to Curation at Scale for Biomedical Research Assets

- NIH: Resolution of Inflammation in Environmentally Related Disease
- NSF Infrastructure Programs
- NSF: Ethical and Responsible Research
- NSF: Law and Science
- NSF: Principles and Practice of Scalable Systems
- NSF: Scholarships in STEM
- PepsiCo: Moisture Barriers for Packaging Dry Goods
- USDA-NIFA: New Investigator Grants

Looking for Collaborators? Search <u>Researcher</u> <u>Profiles</u> In Search of Equipment?
Check the NDSU Equipment
Database



Need to update your profile? Click here to learn how!

American Philosophical Society: Franklin Research Grants

<u>Franklin Research Grants</u> of up to \$6,000 will be awarded to help meet the costs of travel to libraries and archives for research purposes; the purchase of

microfilm, photocopies, or equivalent research materials; costs associated with fieldwork; or laboratory research expenses. PhD candidates are not eligible to apply, but the society is interested in supporting the work of young scholars who have recently received their doctorate.

These awards are not intended to meet the expenses of attending conferences or the costs of publication. Applications require two letters of support.

For complete program guidelines, FAQs, and application instructions, see the American Philosophical Society website.

Deadline: December 1, 2020

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Bush Foundation: Community Innovation Grants

<u>Community Innovation Grants</u> invest in great ideas and the people who power them. The grants support organizations coming together to solve community challenges. The Bush Foundation provides Community Innovation grants of \$10,000 to \$200,000. Grants under \$20,000 are available from intermediary partner organizations. The grants are flexible, and can be used to develop new ideas, test ideas already imagined, or spread proven ideas for more impact.

The Foundation is open to considering ideas on a range of issues, with an eye toward whether they could have truly transformative impact. They are looking for the ideas with the greatest potential to make the region better for everyone. The idea can be big in scale from the start or one that is starting small and could grow and spread. They are interested in ideas that inspire, equip, and connect people to lead change.

The Foundation prioritizes ideas that will make the region more equitable in opportunities and outcomes, especially for Black people, Indigenous people, people of color and/or people from rural communities. They are interested in proposals that address the conversations around racism and equality and/or the needs related to COVID-19.

Applications accepted year-round.

EPA: Interventions and Communication Strategies to Reduce Health Risks of Wildland Fire Smoke Exposures

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is <u>seeking applications</u> proposing research that will address behavioral, technical and practical aspects of interventions and communication strategies to reduce exposures and / or health risks of wildland fire smoke. Specifically, this request for applications seeks research that responds to one of the following research areas or integrates across the two research areas:

- 1. assess the effectiveness of various types of interventions in reducing exposures and associated health risks of wildland fire smoke exposure at the individual or community level; and
- 2. develop and assess the effectiveness of health risk communication strategies in supporting actions to reduce wildland fire smoke exposure.

In addition to regular awards, this solicitation includes the opportunity for early career awards. The purpose of the early career award is to fund research projects smaller in scope and budget by early career PIs.

Deadline: December 15, 2020

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EPA: National Priorities - Evaluation of Pollutants in Biosolids

The U.S. Environmental Protection Agency (EPA) is <u>seeking applications</u> proposing research that will provide the best available science needed to support states, municipalities, and utilities in determining potential risk from pollutants found in biosolids and developing standards and policies for biosolids management. Research under this program is intended to address multiple treatment scales including large publicly owned treatment works and mediumto small-scale wastewater treatment facilities.

Deadline: January 5, 2021

HRSA: Behavioral Health Workforce Education and Training (BHWET) Program for Professionals – Limited Submission Program

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

HRSA BHWET : Notify RCA by 11/04/2020, 5:00 p.m. if you are interested in submitting to this program.

The Health Resources and Services Administration (HRSA) is accepting applications for Fiscal Year (FY) 2021 for the <u>Behavioral Health Workforce Education and Training (BHWET) Program</u> for Professionals.

The purpose of the BHWET Program for Professionals is to develop and expand experiential training opportunities, such as field placements and internships, to improve the distribution and supply of the behavioral health workforce. The BHWET Program for Professionals emphasizes relationships with community-based partners (e.g., hospitals, crisis centers, state and local health departments, emergency departments, faith-based organizations, first responders, and judicial systems) to increase access to quality behavioral health services for populations across the lifespan in high need and high demand areas. A special focus is placed on demonstrating knowledge and understanding of the specific concerns for children, adolescents, and transitional-aged youth who are at risk for behavioral health disorders. Additionally, the BHWET Program for Professionals emphasizes interdisciplinary collaboration by utilizing team-based care in integrated behavioral health and primary care settings and recruiting a workforce that reflects participation in the institutions' programs of individuals and groups from different racial, ethnic, cultural, geographic, religious, linguistic, and class backgrounds, and different genders and sexual orientations, interested in serving high need and high demand areas.

LIMITED SUBMISSION: An institution may submit a maximum of one application.

NEA: Translation Projects – Prose, Poetry, or Drama

Through fellowships to published translators, the National Endowment for the Arts (Arts Endowment) <u>supports projects</u> for the translation of specific works of **prose**, **poetry**, or **drama** from other languages into English. The work to be translated should be of interest for its literary excellence and value. The Arts Endowment encourages translations of writers and of work that are not well represented in English, as well as work that has not previously been translated into English.

Deadline: January 13, 2021

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NEH: Preservation Assistance Grants for Smaller Institutions - Limited Submission Program

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NEH Preservation Assistance Grants : <u>Notify RCA</u> by 11/18/2020, 5:00 p.m. if you are interested in submitting to this program.

<u>Preservation Assistance Grants</u> help small and mid-sized institutions — such as libraries, museums, historical societies, archival repositories, cultural organizations, town and county records offices, and colleges and universities — improve their ability to preserve and care for their significant humanities collections. These may include special collections of books and journals, archives and manuscripts, prints and photographs, moving images, sound recordings, architectural and cartographic records, decorative and fine art objects, textiles, archaeological and ethnographic artifacts, furniture, historical objects, and digital materials. Allowable activities include:

- general preservation assessments;
- consultations with preservation professionals to address a specific preservation issue, need, or problem;
- purchase of storage furniture and preservation supplies;
- purchase of environmental monitoring equipment; and
- education and training.

LIMITED SUBMISSION: Only one application is allowed per applicant. Distinct collecting entities of a larger organization may apply under this announcement, such as the library and museum of a university or two historic sites within a historical society.

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NIH: Computational Approaches to Curation at Scale for Biomedical Research Assets (R01 Clinical Trial Not Allowed)

Through this opportunity [PAR-20-304], the National Institutes of Health (NIH) National Library of Medicine (NLM) wishes to accelerate the availability of and access to secure, complete data sets and computational models that can serve as the basis of transformative biomedical discoveries by improving the speed and scope of the curation processes.

Deadline: February 5, 2021



NIH: RESolution of InflammaTion in EnvirOnmentally Related diseasE (RESTORE) (R01)

The purpose of the RESTORE program [RFA-ES-20-013] is to advance understanding of the role of inflammation resolution pathways at the cellular and molecular level and how exposure to environmental pollutants interferes with these pathways resulting in exposure-induced chronic systemic inflammation and ultimately chronic disease conditions. The initial phase of this program is focused on understanding how chronic exposure to air pollution interferes with resolution of inflammation in pulmonary, cardiovascular, and metabolic systems and diseases.

Deadline: February 11, 2021



NSF Infrastructure Programs

The National Science Foundation has several open funding calls for infrastructure programs:

The Computer and Information Science and Engineering (CISE)
Community Research Infrastructure Program [NSF 20-610] funds the creation and enhancement of world-class research infrastructure that will specifically support diverse communities of CISE researchers pursuing focused research agendas in computer and information science and engineering.

Letter of Intent Deadline: December 15, 2020

The Mathematical Sciences Infrastructure Program [NSF PD 20-

<u>1260</u>] invites projects that support core research in the mathematical sciences, including: 1) novel projects supporting research infrastructure across the mathematical sciences community; 2) training projects complementing the Workforce Program, and 3) conference, workshop, and travel support requests that include cross-disciplinary activities or have an impact at the national scale. *Deadline: December 15, 2020*

The Mid-Scale Research Infrastructure (RI) Program [NSF 21-505] supports the design or implementation of unique and compelling RI projects. Mid-scale RI-1 implementation projects may include any combination of equipment, instrumentation, cyberinfrastructure, broadly used large-scale datasets, and the commissioning and / or personnel needed to successfully complete the project, or the design efforts intended to lead to eventual implementation of a mid-scale class project.

Pre-proposal deadline: January 7, 2021

The Directorate for Biological Sciences (BIO) has infrastructure programs in three tracks:

- Capacity [NSF 21-501] supports the implementation of, scaling of, or major improvements to research tools, products, and services that advance contemporary biology in any research area supported by NSF BIO.
- **Innovation** [NSF 21-502] supports research to design novel or greatly improved research tools and methods that advance contemporary biology in any research area supported by NSF BIO.
- Sustaining [NSF 21-503] supports the continued operation of existing research infrastructure that advances contemporary biology in any research area supported by NSF BIO.

NSF: Ethical and Responsible Research (ER2) – Limited Submission Program

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NSF ER2: Notify RCA by 11/04/2020, 5:00 p.m. if you are interested in submitting to this program.

Ethical and Responsible Research (ER2) [NSF 19-609] funds research projects that identify (1) factors that are effective in the formation of ethical STEM researchers and (2) approaches to developing those factors in all STEM fields that NSF supports. ER2 solicits proposals for research that explores the following: "What constitutes responsible conduct for research (RCR), and which cultural and institutional contexts promote ethical STEM research and practice and why?" Do certain labs have a "culture of academic integrity?" What practices contribute to the establishment and maintenance of ethical cultures and how can these practices be transferred, extended to, and integrated into other research and learning settings?" Factors one might consider include: honor codes, professional ethics codes and licensing requirements, an ethic of service and/or service learning, life-long learning requirements, curricula or memberships in organizations (e.g. Engineers without Borders) that stress responsible conduct for research, institutions that serve under-represented groups, institutions where academic and research integrity are cultivated at multiple levels, institutions that cultivate ethics across the curriculum, or programs that promote group work, or do not grade. Successful proposals typically have a comparative dimension, either between or within institutional settings that differ along these or among other factors, and they specify plans for developing interventions that promote the effectiveness of identified factors.

ER2 research projects will use basic research to produce knowledge about what constitutes or promotes responsible or irresponsible conduct of research, and how to best instill this knowledge into researchers and educators at all

career stages. In some cases, projects will include the development of interventions to ensure ethical and responsible research conduct.

LIMITED SUBMISSION: Only one proposal may be submitted by an eligible organization in which a member of their organization serves as the PI. There is no limit on the number of proposals under which an organization may be included as a non-lead collaborator or subawardee.

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NSF: Law and Science

The National Science Foundation (NSF) Law & Science Program [PD 21-128Y] considers proposals that address social scientific studies of law and law-like systems of rules, as well as studies of how science and technology are applied in legal contexts. The Program is inherently interdisciplinary and multimethodological. Successful proposals describe research that advances scientific theory and understanding of the connections between human behavior and law, legal institutions, or legal processes; or the interactions of law and basic sciences, including biology, computer and information sciences, STEM education, engineering, geosciences, and math and physical sciences. Scientific studies of law often approach law as dynamic, interacting with multiple arenas, and with the participation of multiple actors. Fields of study include many disciplines, and often address problems including, though not limited, to:

- Crime, Violence, and Policing;
- Cyberspace;
- Economic Issues;
- Environmental Science;
- Evidentiary Issues;
- Forensic Science:
- Governance and Courts:
- Human Rights and Comparative Law;
- Information Technology;
- Legal and Ethical Issues related to Science;
- Legal Decision Making;
- Legal Mobilization and Conceptions of Justice;
- Litigation and the Legal Profession;
- Punishment and Corrections:

- Regulation and Facilitation of Biotechnology (e.g., Gene Editing, Gene Testing, Synthetic Biology) and Other Emerging Sciences and Technologies;
- Use of Science in the Legal Processes.

Deadline: January 15, 2021

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NSF: Principles and Practice of Scalable Systems

The aim of the National Science Foundation (NSF) Principles and Practice of Scalable Systems (PPoSS) program [NSF 21-513] is to support a community of researchers who will work symbiotically across multiple disciplines to perform basic research on scalability of modern applications, systems, and toolchains. The intent is that these efforts will foster the development of principles that lead to rigorous and reproducible artifacts for the design and implementation of large-scale systems and applications across the full hardware / software stack. These principles and methodologies should simultaneously provide guarantees on correctness and accuracy, robustness, and security and privacy of systems, applications, and toolchains. Importantly, PPoSS specifically seeks to fund projects that span the entire hardware / software stack and will lay the groundwork for sustainable approaches for engineering highly performant, scalable, and robust computing applications.

Deadline for Planning Grants and Large Grants: January 25, 2021

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NSF: Scholarships in Science, Technology, Engineering, and Mathematics - Limited Submission Program

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NSF S-STEM: Notify RCA by 11/10/2020, 5:00 p.m. if you are interested in

submitting to this program.

A well-educated science, technology, engineering, and mathematics (STEM) workforce is a significant contributor to maintaining the competitiveness of the U.S. in the global economy. The National Science Foundation (NSF) S-STEM program (NSF 20-526) addresses the need for a high quality STEM workforce in STEM disciplines supported by the program and for the increased success of low-income academically talented students with demonstrated financial need who are pursuing associate, baccalaureate, or graduate degrees in STEM fields.

Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to Institutions of Higher Education (IHEs) to fund scholarships and to advance the adaptation, implementation, and study of effective evidence-based curricular and co-curricular activities that support recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. The S-STEM program encourages collaborations among different types of participating groups, including but not limited to partnerships among different types of institutions; collaborations of STEM faculty and institutional, educational, and social science researchers; and partnerships among institutions of higher education and business, industry, local community organizations, national labs, or other federal or state government organizations, if appropriate.

The program seeks to 1) increase the number of low-income academically talented students with demonstrated financial need obtaining degrees in S-STEM eligible disciplines and entering the workforce or graduate programs in STEM; 2) improve the education of future scientists, engineers, and technicians, with a focus on low-income academically talented students with demonstrated financial need; and 3) generate knowledge to advance understanding of how interventions or evidence-based curricular and co-curricular activities affect the success, retention, transfer, academic/career pathways, and graduation of low-income students in STEM.

Scholars must be low-income, academically talented students with unmet financial need who are enrolled in an associate, baccalaureate or graduate degree program, with a major in an S-STEM eligible discipline.

The STEM disciplines supported by the S-STEM program include:

biological sciences (except medicine and other clinical fields);

- physical sciences (including physics, chemistry, astronomy, and materials science);
- · mathematical sciences;
- · computer and information sciences;
- geosciences;
- engineering; and
- technology areas associated with the preceding disciplines.

LIMITED SUBMISSION: An Institution may submit one proposal (either as a single institution or as subawardee or a member of a Collaborative Research project) from each constituent school or college that awards degrees in an eligible field.

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PepsiCo: Moisture Barriers for Packaging Dry Goods

PepsiCo is seeking novel barrier layers and coatings for use with bio-based films that achieve moisture barrier requirements of packaged dry foods. Solutions of interest include:

- Highly-functional skin layers that can be co-extruded with our core resins in a blown or cast film line; skin layers are preferable to coating solutions;
- Highly-functional coatings that can be applied as a primer under metal using roll-to-roll coating methodologies;
- Highly-functional coatings that can be applied as a top coating over metal.

Read the full announcement >>

Deadline: December 6, 2020

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USDA-NIFA: New Investigator Grants

Through the USDA-NIFA Agriculture and Food Research Initiative (AFRI), applicants who meet eligibility requirements as a New Investigator can apply for

a seed grant or a New Investigator standard grant.

An individual who is beginning their career, does not have an extensive scientific publication record, and has fewer than five years postgraduate career-track experience (i.e., positions in which the individual's institution allows them to submit competitive grant applications as Project Director beyond a fellowship) can apply for a New Investigator Grant for research, education, and/or extension activities. The new investigator may not have received competitively awarded federal research funds as Project Director (PD), with the exception of pre- or postdoctoral grants or AFRI Seed Grants. However, if the applicant received Federal funding as Co-PD of previously awarded competitive grants, it will not count against their eligibility as a New Investigator. Eligibility requirements for a New Investigator Grant apply only to the PD and not to Co-PDs or collaborators.

Starting in FY 2021, two types of New Investigator Grants are available:

- New Investigator Standard Grant, which is an AFRI Standard Grant in all respects except that the Project Director meets the eligibility criteria for New Investigators.
- New Investigator Seed Grant, which is available under each program
 area priority within NIFA. Applications from New Investigators will be
 reviewed with other Seed Grant applications, with special consideration
 given to funding New Investigator Seed Grant applications.

AFRI Seed Grants provide funds to help investigators collect preliminary data through either domestic or international collaborations or to complete other preliminary activities to prepare for applying for future AFRI grants. They are not intended to fund stand-alone projects, but rather projects that will lead to further research in one of the AFRI-funded priority areas. Seed Grants are limited to a total of \$300,000 (including indirect costs) for up to two years and are not renewable. An individual applicant may submit only one Seed Grant as PD during the current fiscal year. New Investigators also may only receive one New Investigator Seed Grant as PD during their career.

Find out more about AFRI funding opportunities and program area priorities here; learn more about AFRI grant types (including New Investigator grants) here.

Have questions, ideas, or suggestions for the RCA Update?

Contact Us







The Office of Research and Creative Activity (RCA) sends weekly emails to NDSU faculty and staff to provide current information on various topics including funding opportunities, grant program changes, research resources, deadlines, notices, and training.

You are receiving this notification through the NDSU official employee listserv or sub-list. The official listserv refreshes after each pay period.

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