

RCA UPDATE

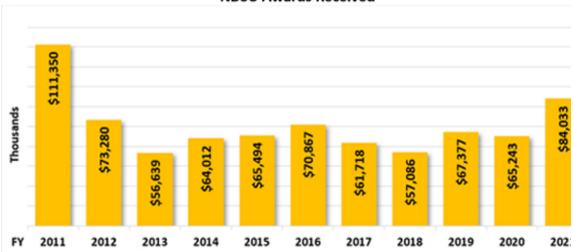
September 7, 2021

Funding Opportunity Edition

NDSU FY2021 Awards Received Hits High Mark

The results are in and the total external awards received has reached the second highest amount in more than a decade. Along with an equally strong R&D Expenditures number, NDSU research is on a positive trajectory. The Office of Research and Creative Activity is proud to support these notable efforts by NDSU's research community through improvements in efficiency, such as launching the centralized online system Novelution to support the research administration processes, and by delivering a wide variety of programming specific to the needs of our research community. In FY21, more than 85% of RCA's appropriated operating budget supported campus research, scholarly activities, and programs.

NDSU Awards Received



NDSU R&D Expenditures



Notes: Between 2012 and 2013 changed methodology to include research appointment salaries not paid by grants. 2020 data has been accepted by NSF with publication anticipated late 2021.

Read more about RCA FY2021 activity >>

FUNDING OPPORTUNITIES

- CDMRP: Traumatic Brain Injury and Psychological Health
- Dakota Cancer Collaborative on Translational Activity
- DoD: ONR STEM Program
- DoD: Young Investigator Program
- FAA: Aviation Research Grants Program
- Fahs-Beck Fund: Social Science Grants
- ND EPSCoR: STEM Research, Education, and Outreach
- NDSU Institute for Regional Studies: Gunlogson Award
- NIH: Basic Research in Cancer Health Disparities
- NIH: NCI Youth Enjoy Science
- North Central SARE: Research and Education Grants
- NSF / NIH: Smart Health and Biomedical Research
- NSF DCL: Persons with Disabilities STEM Engagement and Access
- NSF: Cyber-Physical Systems
- NSF: Research on Emerging Technologies for Teaching and Learning
- Spencer Foundation: Research-Practice Partnerships in Education
- Wenner-Gren Foundation: Research Grants in Anthropology

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. Email notifications of interest to ndsu.researchdev@ndsu.edu.

If you identify a limited submission opportunity that is not on the list below, please notify ndsu.researchdev@ndsu.edu.

• NIH R25: Genome Research Experiences to Attract Talented Undergraduates into the Genomics Field to Enhance Diversity

Notification Deadline: 9/15/2021

VentureWell Faculty Grants

Notification Deadline: 09/15/2021

NSF: Major Research Instrumentation (MRI)

Notification Deadline: 9/29/2021
 Retirement Research Foundation
 Notification Deadline: 9/29/2021

• NSF: Innovations in Graduate Education

Notification Deadline: 09/30/2021

There are a number of limited submission grant programs with upcoming agency deadlines for which we did not receive any notifications of interest. A full list of those programs is available on the <u>Limited Submissions page</u>. For these programs, marked "First to Notify," approval to move forward with a full proposal submission to the funder will be given on a first come, first served basis. Email notifications of interest to ndsu.researchdev@ndsu.edu.

NSF: 2024 American National Election Study Competition

Letter of Intent Deadline: 09/20/2021

• NIH: Faculty Institutional Recruitment for Sustainable Transformation (FIRST)

Program: FIRST Cohort
Deadline: 09/24/2021

• Johnson & Johnson: Women in STEM2D Scholars - in Science, Math,

Manufacturing, or Design Categories

Deadline: 09/27/2021

• NIH: Bridges to the Baccalaureate

Deadline: 09/27/2021

• NEH: Infrastructure and Capacity Building Challenge Grants

Deadline: 09/28/2021
Arts Midwest: GIG Fund Deadline: 10/5/2021

• USDA-NRCS: Conservation Outreach - Racial Equity and Justice Conservation

Deadline: 10/25/2021

Looking for more funding opportunities?



RCA subscribes to SPIN by InfoEd Global, a database of more than 40,000 funding opportunities. Through this subscription, SPIN is free for current NDSU faculty, staff,

and students.

For more information and to access this database, visit the <u>SPIN page</u> on the RCA website. If you have questions, please contact <u>ndsu.researchdev@ndsu.edu</u>.

CDMRP: Traumatic Brain Injury and Psychological Health

The Department of Defense (DoD) Congressionally-Directed Medical Research Program (CDMRP) <u>Traumatic Brain Injury and Psychological Health Research Program</u> has a number of open funding opportunities, including:

- Focused Program Award
- Idea Development Award
- Investigator-Initiated Research Award
- Translational Research Award

Deadlines vary by award.

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Dakota Cancer Collaborative on Translational Activity

The goal of the Dakota Cancer Collaborative on Translational Activity (DaCCoTA) is to stimulate growth of expertise and engagement in cancer-related clinical and translational research (CTR) in the Dakota region.

The <u>DacCoTA Pilot Projects Program</u> has released new requests for applications for the following pilot grant awards:

- **Feasibility Pilot Grants** These awards of up to \$60,000 (direct + indirect costs) are intended to provide support to allow a clinician / non-clinician team to form around a novel cancer-related hypothesis.
- Ready-to-Go Pilot Grants These awards of up to \$120,000 (direct + indirect costs) are intended for those projects with significant existing preliminary data in support of a novel clinical / translational cancer-related hypothesis. These projects should ideally be ready for extramural submission within a year and / or be able to demonstrably improve health outcomes.
- **Community Engagement Pilot Grants** These awards are intended for projects addressing priority areas determined by key stakeholder groups. Proposals should address cancer disparities in either:
 - o Colorectal cancer screening, stage and diagnosis, treatment, and mortality,
 - o Tobacco-related cancers (Lung, CRC, etc.), or
 - o Breast cancer screening, stage at diagnosis, and mortality.

The <u>Professional Development Core</u> is currently seeking proposals for the following funding mechanisms:

- Daccota Scholars Program: The purpose of this award is to stimulate the development of new CTR investigators. Awardees will receive salary support (50% FTE plus fringe) that guarantees a minimum of 50% protected research time for the project and up to \$50,000 in annual research support for up to 5 years.
- Clinical Research Opportunities Program: This program provides 20% release time (up to NIH cap) to community-practicing, hospital-based clinicians to allow for participation in training activities and collaboration in cancer-focused CTR. The goal of the program is to begin to shift translational cancer research in the Upper Midwest to an enterprise informed by the patient.

Letter of Intent deadline: October 30, 2021 Full application deadline: January 17, 2022

DoD: Office of Naval Research STEM Program

The Office of Naval Research (ONR) seeks a broad range of applications for augmenting existing and / or developing innovative solutions that directly maintain and / or cultivate a diverse, world-class Science, Technology, Engineering and Mathematics (STEM) workforce to maintain the U.S. Navy and Marine Corps' technological superiority. The goal of proposed efforts must provide solutions that establish, build, and / or maintain STEM educational pathways and workforce opportunities for diverse U.S. citizens directly relevant to ONR science and technology areas.

As the capacity of the Department of the Navy (DoN) Science and Technology (S&T) workforce is interconnected with STEM education and outreach, ONR recognizes the need to support efforts that can jointly improve STEM student outcomes and align education and outreach efforts with Naval S&T current and future workforce needs. This announcement [N00014-21-S-F005] explicitly encourages projects that improve the capacity of education systems and communities to create impactful STEM educational experiences for students of all ages and the naval-related workforce. Projects must aim to increase engagement in STEM, from students to the current workforce, and enhance people with needed Naval STEM skills, knowledge and abilities. ONR encourages applications to utilize current STEM educational research for informing project design and advancing STEM careers and opportunities of naval relevance.

This opportunity will remain open through March 2022.

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DoD: Young Investigator Program

The Office of Naval Research (ONR) is interested in receiving proposals for its Young Investigator Program (YIP) [N00014-21-S-F008]. ONR's Young Investigator Program seeks to identify and support academic scientists and engineers who are in their first or second full-time tenure-track or tenure-track-equivalent academic appointment, who have received their PhD or equivalent degree on or after January 1, 2014, and who show exceptional promise for doing creative research.

Proposals addressing research areas which are of interest to ONR Program Officers will be

considered. See a full list here.

Applicants are *strongly encouraged* to contact the appropriate Program Officer who is the point of contact for a specific technical area to discuss their research ideas before submitting a proposal. A list of most Program Officers and their contact information can be found <u>here</u>.

Please see full text of the funding opportunity announcement for more details.

Deadline: October 29, 2021

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FAA: Aviation Research Grants Program

The <u>FAA Aviation Research Grants Program</u> encourages and supports innovative, advanced research of potential benefit to the long-term growth of civil aviation and commercial space transportation. The pursuit of basic and applied research in scientific and engineering disciplines that have the potential to further knowledge and understanding on a broad front of emerging technologies is crucial to the realization of this goal. The intent is to encourage applied research and development to enhance technology assimilation, transfer, and development in the FAA. The FAA encourages the submission of proposals that embrace the entire spectrum of physical, chemical, biological, medical, psychological, mathematical, and engineering sciences.

Topics of interest include:

- 1. Capacity and Air Traffic Control Technology;
- 2. Communications, Navigation, and Surveillance;
- 3. Aviation Weather;
- 4. Airports;
- 5. Aircraft Safety Technology;
- 6. Human Factors and Aviation Medicine;
- 7. Systems Science / Operations Research; and
- 8. Unmanned Aircraft System (UAS) Unmanned Traffic Management (UTM), Class E Upper Airspace Traffic Management (ETM), and Urban Air Mobility (UAM).

Fahs-Beck Fund: Social Science Grants

Through the <u>Faculty / Post-Doctoral Grant Program</u>, grants of up to \$25,000 are available to help support the research of faculty members or post-doctoral researchers of accredited universities or colleges in the United States and Canada.

Areas of interest for funding are: studies to develop, refine, evaluate, or disseminate interventions and preventive / intervention to address social, psychological, behavioral or public health problems affecting children, adults, couples, families, and communities with outcomes that have the potential add to the knowledge base for services and program development. Community engaged research is highly valued.

Studies must focus on the United States and / or Canada or comparative studies between the United States and / or Canada and other countries.

Deadline: November 1, 2021

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ND EPSCoR: STEM Research, Education, and Outreach - NDSU-specific solicitation

The ND EPSCoR State Office has released a Request for Proposals that is only open to faculty at the NDSU campus. Proposals are accepted in the following categories:

- 1. educational / instructional equipment;
- 2. equipment repair;
- 3. undergraduate research;
- 4. seed awards for faculty to collect preliminary data for the preparation of federal STEM proposals;
- 5. external proposal review for large, collaborative and interdisciplinary STEM efforts;
- 6. seed awards for faculty and students to engage K-12 in STEM outreach activities;

- 7. development of online / virtual modules for STEM courses;
- 8. seed awards for community-based STEM outreach; and
- 9. electronic STEM data sets.

Please see the Request for Proposals for details.

Deadline: September 30, 2021, noon

See also the state-wide Request for Proposals.

Deadline: September 21, 2021, noon

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NDSU Institute for Regional Studies: Gunlogson Award

The NDSU Institute for Regional Studies solicits proposals for funds of up to \$5,000 from the Gunlogson Endowment to support research and creative activity related to the fund's purposes:

- Supporting the archives and publications of the North Dakota <u>Institute for Regional</u>
 <u>Studies</u>;
- Advancing general university outreach through Institute-related activities; and
- Enhancing NDSU's land-grant mission though projects that preserve the cultural history of the region.

While projects that meet any of these three purposes will be considered, preference is given to projects that propose to use the archives of the Institute for Regional Studies and / or publish with the NDSU Press. Funds are jointly awarded by the NDSU Libraries and the College of Arts, Humanities and Social Sciences.

Any scholar working with Institute archival materials, doing work related to the cultural history of the region, and / or proposing to publish with the NDSU Press is eligible to apply for funding. This includes, but is not limited to, tenure-track and tenured faculty, visiting scholars, professors of practice, and graduate students. Up to three awards are made each year.

Proposals should include:

- 1. A cover page with the title of the project and contact information for each applicant. Applicant name(s) should not appear on subsequent pages of the proposal, but the proposal's title and page numbers should be included on each page.
- 2. An abstract of no more than 150 words summarizing the narrative, the work plan, and the budget.
- 3. A narrative of up to 1000 words outlining:
 - the research question(s) or project focus;
 - o the project's place in contemporary scholarly conversations;
 - how the project's objectives align with the Gunlogson fund's purposes, including how the Institute's archival materials may inform the research or creative work; and
 - o methods that will shape the project.
- 4. A work plan of no more than 350 words, including:
 - a timeline for completion of the proposed work (starting January 15 and concluding by December 15);
 - a plan for disseminating the proposed work, with preference given to projects that would be submitted to the NDSU Press for possible publication; and
 - a plan for using these funds to seed external research funding (as applicable).
- 5. A budget and budget rationale of no more than one page.

Proposals should be submitted to Jenna Reno (<u>jenna.reno@ndsu.edu</u>). *Deadline: September 17, 2021.*

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NIH: Basic Research in Cancer Health Disparities

The National Institutes of Health (NIH) National Cancer Institute encourages grant applications from investigators interested in conducting basic, mechanistic research into the biological / genetic causes of cancer health disparities. These grants will support innovative studies designed to investigate biological / genetic bases of cancer health disparities, such as

- mechanistic studies of biological factors associated with cancer health disparities,
- the development and testing of new methodologies and models, and
- secondary data analyses.

This opportunity is also designed to aid and facilitate the growth of a nationwide cohort of scientists with a high level of basic research expertise in cancer health disparities research who can expand available resources and tools, such as biospecimens, patient derived models, and methods that are necessary to conduct basic research in cancer health disparities.

- [PAR-21-322] R01 (Clinical Trial Not Allowed)
- [PAR-21-323] R21 (Clinical Trial Not Allowed)
- [PAR-21-324] R03 (Clinical Trial Not Allowed)

<u>Standard deadlines apply</u>; the first deadlines for these funding opportunities are in October.

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NIH: National Cancer Institute (NCI) Youth Enjoy Science Research Education Program (R25 Clinical Trial Not Allowed)

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research

To accomplish the stated over-arching goal, this funding opportunity announcement [RFA-CA-21-020] will support creative educational activities with a primary focus on Research Experiences, Curriculum or Methods Development, and Outreach.

The NCI's mission is to conduct and support research, training, health information dissemination, and other programs with respect to cancer. This funding opportunity seeks

to facilitate the education of students from diverse backgrounds underrepresented in biomedical research who will become knowledgeable about cancer, and available to focus on cancer later in their careers. With the aim of enhancing the pool of individuals from underrepresented backgrounds interested in pursuing a career in biomedical research via early intervention strategies, the NCI Youth Enjoy Science (YES) Program will support efforts to create and maintain an institutional program to engage grades 6-12 and / or undergraduate students from underrepresented populations in cutting edge cancer research experiences. The proposed institutional programs may also provide research experiences for the grade 6-12 teachers and undergraduate faculty members who serve underrepresented student populations. The specific goals are to inspire interest in biomedical sciences, help envision research as a career path, and strengthen practical research and career skills. In alignment with these goals, institutions may develop unique programs that capitalize on their research strengths and are responsive to their target populations.

Deadline: October 28, 2021

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North Central Sustainable Agriculture Research and Education (SARE) Grants

The North Central Region SARE (NCR-SARE) <u>Research and Education (R&E) Grant Program</u> is a competitive grant program for researchers and educators involved in projects that explore and promote environmentally sound, profitable, and socially responsible food and / or fiber systems. Research and Education grant awards range from \$10,000 to \$250,000, and projects may last up to 36 months or may choose to propose a long-term project.

Research and Education projects include a strong outreach component and significant farmer / rancher or other end-user involvement from the inception of the idea through the implementation of the project. Many projects are interdisciplinary and / or multi-institutional, involving a broad range of agricultural interests. Project coordinators in the past have explored sustainable agriculture under the following topics:

- sustainable pest and weed management;
- marketing and local food systems;
- water quality and nutrient management;

- systems research;
- high tunnels and season extension;
- crop diversification;
- cover crops and soil health;
- small ruminants / poultry / cattle;
- pastured livestock / grazing systems;
- pollinators and biodiversity; and
- urban agriculture.

Pre-proposal deadline: October 7, 2021

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NSF / NIH: Smart Health and Biomedical Research in the Era of Al and Advanced Data Science

The purpose of this interagency program solicitation [NSF 21-530] is to support the development of transformative high-risk, high-reward advances in computer and information science, engineering, mathematics, statistics, behavioral and / or cognitive research to address pressing questions in the biomedical and public health communities. Transformations hinge on scientific and engineering innovations by interdisciplinary teams that develop novel methods to intuitively and intelligently collect, sense, connect, analyze and interpret data from individuals, devices and systems to enable discovery and optimize health. Solutions to these complex biomedical or public health problems demand the formation of interdisciplinary teams that are ready to address these issues, while advancing fundamental science and engineering.

Deadline: November 10, 2021

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NSF DCL: Persons with Disabilities – STEM Engagement and Access (PWD-SEA)

With this Dear Colleague Letter (DCL) [NSF 21-110], the National Science Foundation (NSF) Directorate for Education and Human Resources (EHR), with leadership from the Division

of Human Resource Development (HRD), seeks to increase the engagement of persons with disabilities in Science, Technology, Engineering, and Mathematics (STEM) fields and STEM education. Educating, preparing, and supporting persons with all types of disabilities, and of all ages, improves the skills of our nation's current and future STEM workforce, as well as improves the prospects for all Americans to learn, work, and contribute to U.S. leadership in science and engineering discovery and innovation. A wide range of disability types are recognized in this DCL including, but not limited to, deafness or hearing loss; blindness or visual impairment; physical, mental health, medical or other health-related disabilities; and neurodiverse conditions (e.g., dyslexia, autism spectrum disorders, learning disabilities).

This DCL particularly encourages submission of new proposals, or requests for supplemental funding to existing awards, to support existing or new access to and engagement in STEM learning, research, and workforce development at proposing or awardee organizations for students, postdoctoral scholars, or faculty and staff with disabilities. New proposals or supplemental funding requests to existing awards may also request support for the inclusion of persons with disabilities as participants.

Proposers are encouraged to discuss new proposals, that will support access and engagement for persons with disabilities in STEM, with the relevant program before submission.

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NSF: Cyber-Physical Systems

Cyber-physical systems (CPS) are engineered systems that are built from, and depend upon, the seamless integration of computation and physical components. Advances in CPS will enable capability, adaptability, scalability, resiliency, safety, security, and usability that will expand the horizons of these critical systems.

The CPS program [NSF 21-551] aims to develop the core research needed to engineer these complex CPS, some of which may also require dependable, high-confidence, or provable behaviors. Core research areas of the program include control, data analytics, and machine learning including real-time learning for control, autonomy, design, Internet of Things (IoT), mixed initiatives including human-in- or human-on-the-loop, networking, privacy, real-time systems, safety, security, and verification. By abstracting from the

particulars of specific systems and application domains, the CPS program seeks to reveal cross-cutting, fundamental scientific and engineering principles that underpin the integration of cyber and physical elements across all application domains. The program additionally supports the development of methods, tools, and hardware and software components based upon these cross-cutting principles, along with validation of the principles via prototypes and testbeds. This program also fosters a research community that is committed to advancing education and outreach in CPS and accelerating the transition of CPS research into the real world.

NSF is working closely with multiple agencies across the federal government, including DHS; DOT; NIH; and USDA-NIFA.

Proposals for three classes of research and education projects—differing in scope and goals—are supported through the CPS program:

- **Small** projects may request a total budget of up to \$500,000 for a period of up to 3 years. They are well suited to emerging new and innovative ideas that may have high impact on the field of CPS.
 - There is no deadline for Small projects.
- **Medium** projects may request a total budget ranging from \$500,001 to \$1,200,000 for a period of up to 3 years. They are well suited to multi-disciplinary projects that accomplish clear goals requiring integrated perspectives spanning the disciplines. *There is no deadline for Medium Projects.*
- Frontier projects must address clearly identified critical CPS challenges that cannot be achieved by a set of smaller projects. Furthermore, Frontier projects should also look to push the boundaries of CPS well beyond today's systems and capabilities. Funding may be requested for a total of \$1,200,001 to \$7,000,000 for a period of 4 to 5 years.

Deadline: December 15, 2021

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NSF: Research on Emerging Technologies for Teaching and Learning

The purpose of the Research on Emerging Technologies for Teaching and Learning (RETTL) program [NSF 20-162] is to fund exploratory and synergistic research in emerging

technologies (to include, but not limited to, artificial intelligence (AI), robotics, and immersive or augmenting technologies) for teaching and learning in the future. The program accepts proposals that focus on learning, teaching, or a combination of both. The scope of the program is broad, with special interest in diverse learner / educator populations, contexts, and content, including teaching and learning in science, technology, engineering, and mathematics (STEM) and in foundational areas that enable STEM (e.g., self-regulation, literacy, communication, collaboration, creativity, and socioemotional skills). Research in this program should be informed by the convergence (synthesis) of multiple disciplines: e.g., learning sciences; discipline-based education research; computer and information science and engineering; design; and cognitive, behavioral, and social sciences. Within this broad scope, the program also encourages projects that investigate teaching and learning related to futuristic and highly technological work environments.

Deadline: October 18, 2021

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Spencer Foundation: Research-Practice Partnerships in Education

The <u>Research-Practice Partnership (RPP) Grants Program</u> is intended to support education research projects that engage in collaborative and participatory partnerships with project budgets up to \$400,000 and durations of up to three years.

The Spencer Foundation views partnerships as an important approach to knowledge generation and the improvement of education, broadly construed. Over the long term, the Foundation anticipates that research conducted by RPPs will result in new insights into the processes, practices, and policies that improve education for learners, educators, schools, universities, families, and communities.

Letter of Intent deadline: November 10, 2021, noon

Wenner-Gren Foundation: Research Grants in Anthropology

Post-Ph.D. Research Grants are awarded to individuals holding a Ph.D. or equivalent degree to support individual research projects. The program contributes to the Foundation's overall mission to support basic research in anthropology and to ensure that the discipline continues to be a source of vibrant and significant work that furthers our understanding of humanity's cultural and biological origins, development, and variation. The Foundation supports research that demonstrates a clear link to anthropological theory and debates, and promises to make a solid contribution to advancing these ideas. There is no preference for any methodology, research location, or subfield. The Foundation particularly welcomes proposals that employ a comparative perspective, can generate innovative approaches or ideas, and / or integrate two or more subfields.

The maximum amount of the Post-Ph.D. Research Grant is US \$20,000. Grants are for research expenses. Applicants can apply regardless of institutional affiliation, country of residence, or nationality. There is no time limit on the duration of the grant and funding may be requested to cover distinct research phases (for example, two summers) if this is part of the research design.

Deadline: November 1, 2021

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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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