

RCA UPDATE

July 26, 2021

Funding Opportunity Edition

RCA Funding Opportunities

RCA has opened applications for two funding programs:

Research Development Travel and Conference Support Awards help defray expenses for faculty presenting at national conferences (virtual or on-site) or for supporting travel to visit archives or special collections. As this pool of funding is limited, please consider allowing individuals who do not have other sources of travel funding to apply for this opportunity.

Research Support Services Awards help defray the costs of support services required for research, creative, or scholarly activity. For example, funds may be used in one of the NDSU Core Facilities, another recharge / service center, or for transcription services.

More information and application instructions are posted on the [RCA website](#).

ND EPSCoR Opportunities

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

Emerging Areas Seed Awards: ND EPSCoR seeks to provide emerging areas seed

awards of up to \$25,000 to researchers in areas of emerging high impact and transformative research related to the Center for Cellular Biointerfaces in Science and Engineering ([CCBSE](#)). Eligible applicants are not currently associated with the 2020-2025 ND-ACES cooperative agreement and did not receive a 2021 ND-ACES emerging seed award. Please see the [Request For Applications](#) for details.

Application Deadline: Noon, September 1, 2021

ND NASA EPSCoR Supplemental Project Funding (NDSU Only): The goal of NASA EPSCoR, an EPSCoR-like program, is to provide seed funding that will enable jurisdictions / states to develop an academic research enterprise directed toward long-term, self-sustaining, nationally competitive capabilities in aerospace and aerospace-related research. Please see the [Request for Proposals](#) for details.

Deadline: Noon on July 29, 2021

NDSU Foundation: Impact Fund

The NDSU Foundation Grants Committee is accepting applications for the 2021 Impact Fund Grant Program, which provides funding for projects that make a significant impact on excellence and the educational experience for students at NDSU. The Impact Fund Grant Program offers grants of \$20,000 to \$75,000 and is supported by annual contributions from alumni and friends of the University. Applications are accepted from faculty, staff, and recognized student groups. For additional information and to apply, go to:

<https://www.ndsufoundation.com/impact-fund>.

Deadline: August 2, 2021

Upcoming Limited Submission Program Deadlines

[Limited submission grant programs](#) 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 nds.researchdev@nds.edu.

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

- [HRSA: Promoting Resilience and Mental Health Among Health Professional Workforce](#)
First to Notify
- [NIH: Faculty Institutional Recruitment for Sustainable Transformation \(FIRST\) Program: FIRST Cohort](#)
Notification Deadline: 07/28/2021
- [NSF: 2024 American National Election Study Competition](#)
Notification Deadline: 07/29/2021
- [NSF: Major Research Instrumentation \(MRI\)](#)
Notification Deadline: 9/29/2021

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 [Limited Submissions page](#). 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.

- [NEA: Our Town](#)
Deadline: 08/05/2021
- [NEA: American Rescue Plan Grants to Organizations](#)
Deadline: 08/12/2021
- [NSF: Germination of Research Questions for Addressing Critical Societal Challenges](#)
Letter of Intent deadline: 08/27/2021
- [NIH: Director's Early Independence Awards](#)
Deadline: 09/03/2021
- [NSF: Research Traineeship Program \(NRT\)](#)
Deadline: 09/06/2021
- [NIH: Bridges to the Baccalaureate](#)
Notification Deadline: 09/27/2021
- [NEH: Infrastructure and Capacity Building Challenge Grants](#)
Deadline: 09/28/2021

FUNDING OPPORTUNITIES

- [Bayer Crop Sciences: Digital Tools for Collecting, Transmitting, and Analyzing Agronomic Data](#)
- [Bayer Crop Sciences: Sustainably Protecting Crops While Preserving Natural Habitats](#)
- [Cisco Research Center](#)
- [DHHS: Administration for Community Living - Field Initiated Development Projects](#)
- [EPA: Water Innovation, Science, Engagement to Advance Water Reuse](#)
- [HRSA: Promoting Resilience and Mental Health Among Health Professional Workforce - LIMITED](#)
- [Library of Congress: Community Collections Grants - LIMITED](#)
- [NIH: Research on the Ethical Implications of Advancements in Neurotechnology and Brain Science](#)
- [NIH: Molecular Imaging of Inflammation in Cancer](#)
- [NIH: NIAID Research Education Program Advancing the Careers of a Diverse Research Workforce](#)
- [NSF / NIH / USDA: Ecology and Evolution of Infectious Diseases](#)
- [NSF: Computational and Data-Enabled Science and Engineering \(CDS&E\)](#)
- [NSF: Division of Environmental Biology](#)
- [NSF: Major Research Instrumentation \(MRI\) - LIMITED](#)
- [NSF: Research on Emerging Technologies for Teaching and Learning](#)
- [Pardee Foundation: Cancer Research](#)
- [Spencer Foundation: Small Research Grants on Education](#)

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 [SPIN page](#) on the RCA website. If you have questions, please contact ndsu.researchdev@ndsu.edu.

Bayer Crop Sciences: Digital Tools for Collecting, Transmitting, and Analyzing Agronomic Data

Bayer Crop Sciences is seeking digital tools for collecting, transmitting and analyzing data, and data platforms for measuring and predicting agronomic performance.

Solutions of interest include:

- novel phenotyping and modeling tools for early detection and quantification of insects, nematodes and diseases or modeling tools for plant growth and development in response to abiotic stresses;
- machine learning and data modeling tools that provide actionable insights and recommendations for efficient use of crop inputs, e.g. for soil application scripting;
- precision technologies to ensure compliance with regulatory requirements, such as in-field chemical residue measurement;
- artificial intelligence applications in active ingredient discovery and optimization processes;
- novel approaches for yield estimation;
- novel approaches for root phenotyping, especially non-destructive methodologies.

[See full Request for Proposals >>](#)

Brief (1-page) proposals due August 31, 2021

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Bayer Crop Sciences: Sustainably Protecting Crops While Preserving Natural Habitats

Bayer Crop Sciences is seeking novel approaches and technologies that sustainably protect crops while preserving natural habitats.

Solutions of interest include:

- traits that improve nutrient and water use efficiency or increase carbon sequestration in row crops, fruits and vegetables;

- novel approaches to optimize, identify and validate gene or protein expression, activity and regulation;
- novel approaches to discover and optimize native crop genes;
- novel approaches to increase genetic diversity / variation in crops;
- novel approaches for reducing insect and nematode damage or reducing fungal growth and symptoms;
- novel approaches for increasing tolerance to herbicide applications and / or lower weed pressure;
- controlled-release technologies for active ingredients and biologicals.

[See full Request for Proposals >>](#)

Brief (1-page) proposals due August 31, 2021

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Cisco Research Center Funding Opportunities

Cisco Research Center funds research projects related to improving the Internet, adjacent technologies, and networking. Current requests for proposals include:

- Natural Language Processing;
- Cybersecurity in Emerging Tech Areas;
- Contactless Supply Chain;
- Tech for Healthcare.

[View the full list of open opportunities >>](#)

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DHHS: Administration for Community Living - Field Initiated Development Projects – Forecasted Opportunity

This is a forecasted opportunity: [HHS-2022-ACL-NIDILRR-IFDV-0007](#)

The purpose of the Field Initiated Projects program is to generate new knowledge through research or to develop methods, procedures, and rehabilitation technologies that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and self-sufficiency of people with disabilities, especially people with the highest support needs. In carrying out a development activity under a

Field Initiated Projects development grant, a grantee must use knowledge and understanding gained from research to create materials, devices, systems, methods, measures, techniques, tools, prototypes, processes, or intervention protocols that are beneficial to the target population.

Estimated Post Date: October 7, 2021

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EPA: Water Innovation, Science, Engagement to Advance Water Reuse

The U.S. Environmental Protection Agency (EPA), is seeking applications proposing to accelerate water innovation, information availability, and engagement to advance clean and safe water reuse goals, promote better understanding of the Nation's water and wastewater treatment and infrastructure, and enhance the availability and efficient use of water resources through water reuse. This request for applications (RFA) [[EPA-G2021-ORD-E1](#)] is intended to address multiple water reuse sources and applications to support national efforts to reduce technological and institutional barriers for expanded water reuse.

Cost-share is required for this program.

Deadline: September 29, 2021

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HRSA: Promoting Resilience and Mental Health Among Health Professional Workforce – Limited Submission Program

[Limited submission grant programs](#) 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 Promoting Resilience: [Notify RCA](#) if you are interested in submitting to this program. Approval to submit will be given to the first to notify.

The Health Resources & Services Administration (HRSA) has released a notice of funding opportunity for the following program: Promoting Resilience and Mental Health Among Health Professional Workforce [[HRSA-22-110](#)]. The purpose of this program is to provide support to entities providing health care, health care providers associations, and Federally Qualified Health Centers (FQHCs), taking into consideration the needs of rural and medically underserved communities, to establish, enhance, or expand evidence informed or evidenced-based programs or protocols to promote resilience, mental health, and wellness among their providers, other personnel, and members, collectively known as the “Health Workforce.”

LIMITED SUBMISSION: Multiple applications from an organization are not allowable.

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Library of Congress: Of the People - Widening the Path - Community Collections grants to Organizations – Limited Submission Program

[Limited submission grant programs](#) 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.

LOC Community Collections: [Notify RCA](#) if you are interested in submitting to this program. Approval to submit will be given to the first to notify.

Through a gift from the Andrew W. Mellon Foundation, the Library of Congress will support a [multiyear initiative that entails public participation in the creation of archival collections](#). Specifically, the Library seeks to award grants to support contemporary cultural documentation focusing on the culture and traditions of

diverse, often underrepresented communities in the United States. These projects will result in archival collections preserved at the American Folklife Center and made accessible through the Library of Congress' web site. The major goals of this grant program are to enable communities to document their cultural life and experiences from their own perspectives, while enriching the Library's holdings with diverse materials featuring creativity and knowledge found at the local level. As such, successful applications will come from individuals closely affiliated with the community they propose to document.

The following list is meant to inspire, but not limit, possibilities with regards to cultural documentation projects applicants might propose. Projects could include a combination of interviews, still photography, digital video, field notes, or other forms of documentation:

- Exploration of a community festival or other culturally-meaningful celebration through interviews with organizers and participants, audio-visual documentation of activities affiliated with the event (including planning, set up, and post-event activity), and any ephemera or material culture;
- Seasonal or periodic documentation of institutions or gathering places, such as farmers markets, informal social hang-outs, craft fairs, or other periodic spaces that might serve as anchors or markers of community;
- Community-centric reflection on emergent cultural forms or practices, such as creative or artistic activity that have developed as responses to shared collective experience of widespread recent phenomena such as the COVID-19 pandemic, social justice movements, or economic change;
- Broad examination of community-specific cultural practices that can serve as markers of various aspects of identity, such as practices around death or bereavement, life milestones, or transition into different modes or phases of living; transmission of language or other intangible aspects of heritage; or informally learned aspects of communication that help cohere a social group;
- Oral history of a neighborhood or other type of geographically-delimited community that tracks change and continuity from the perspective of residents, both long-term and newly arrived.

LIMITED SUBMISSION: An eligible applicant organization may submit only one application under this announcement.

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NIH: BRAIN Initiative - Research on the Ethical Implications of Advancements in Neurotechnology and Brain Science (R01 Clinical Trial Optional)

Guided by the goals established in [BRAIN 2025: A Scientific Vision](#) and reinforced by the [Advisory Council to the Director Working Group on BRAIN 2.0 Neuroethics Subgroup](#), this Funding Opportunity Announcement (FOA) [[RFA-MH-21-205](#)] from the NIH Brain Research through Advancing Innovative Neurotechnologies® (BRAIN) Initiative is intended to support efforts addressing core ethical issues associated with research focused on the human brain and resulting from emerging technologies and advancements supported by the BRAIN Initiative. This FOA encourages research project grant applications from multi-disciplinary teams focused on key ethical issues associated with BRAIN Initiative supported research areas. Efforts supported under this FOA are intended to be both complementary and integrative with the transformative, breakthrough neuroscience discoveries supported through the BRAIN Initiative.

Deadline: October 13, 2021

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NIH: Molecular Imaging of Inflammation in Cancer (R01 Clinical Trial Not Allowed)

The purpose of this Funding Opportunity Announcement (FOA) [[PAR-21-294](#)] is to invite research grant applications (R01) for the development and use of current and emerging molecular imaging methods to gain fundamental insights into cancer inflammation *in vivo*.

The motivation for this initiative is that much of current imaging research into the role of inflammation in cancer is largely based on *in vitro* and *ex vivo* methods with limited utilization of imaging approaches that could lead to significant new insights relevant to

dynamic cancer and inflammation interactions. Utilization of molecular imaging probes in pre-clinical and clinical investigations for precise temporal resolution at the molecular and cellular level are valuable approaches for identification and characterization of *in vivo* inflammatory cellular physiology in cancers and of molecular changes in response to treatment.

This FOA encourages applications that focus on developing integrated imaging approaches to interrogate the role of inflammation in cancer through strong cross-field collaboration between cancer basic science researchers and imaging scientists. These collaborations are expected to advance science and understanding of cancer inflammation interactions.

Standard dates apply. Upcoming deadlines: October 5, 2021; February 5, 2022

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NIH: NIAID Research Education Program Advancing the Careers of a Diverse Research Workforce (R25 Clinical Trial Not Allowed)

The National Institutes of Health (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 (FOA) [[PAR-21-258](#)] from the National Institute of Allergy and Infectious Diseases (NIAID) will support creative educational activities with a primary focus on:

- Courses for Skills Development
- Research Experiences
- Mentoring Activities

Deadline: September 10, 2021

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NSF / NIH / USDA: Ecology and Evolution of Infectious Diseases

The National Science Foundation (NSF), the National Institutes of Health (NIH), and the U.S. Department of Agriculture (USDA), support the Ecology and Evolution of Infectious

Diseases (EEID) program [[NSF 20-585](#)] for research on the ecological, evolutionary, and social drivers that influence the transmission dynamics of infectious diseases. The central theme of submitted projects must be the quantitative or computational understanding of pathogen transmission dynamics. The intent is discovery of principles of infectious disease transmission and testing mathematical or computational models that elucidate infectious disease systems. Projects should be broad, interdisciplinary efforts that go beyond the scope of typical studies. They should focus on the determinants and interactions of transmission among any host species, including but not limited to humans, non-human animals, and / or plants. This includes, for example, the spread of pathogens; the influence of environmental factors such as climate; the population dynamics and genetics of reservoir species or hosts; the feedback between ecological transmission and evolutionary dynamics; and the cultural, social, behavioral, and economic dimensions of pathogen transmission. Research may be on zoonotic, environmentally-borne, vector-borne, or enteric pathogens of either terrestrial or aquatic systems and organisms, including diseases of animals and plants, at any scale from specific pathogens to inclusive environmental systems. Proposals for research on disease systems of public health concern to developing countries are strongly encouraged, as are disease systems of concern in agricultural systems. Investigators are encouraged to develop the appropriate multidisciplinary team, including for example, anthropologists, modelers, ecologists, bioinformaticians, genomics researchers, social scientists, economists, oceanographers, mathematical scientists, epidemiologists, evolutionary biologists, entomologists, parasitologists, microbiologists, bacteriologists, virologists, pathologists or veterinarians, with the goal of integrating knowledge across disciplines to enhance our ability to predict and control infectious diseases. The EEID competition broadly welcomes, but does not require, that projects include international collaborators.

Deadline: November 17, 2021

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NSF: Computational and Data-Enabled Science and Engineering (CDS&E)

Large-scale simulations and the ability to accumulate massive amounts of data have revolutionized science and engineering. The goal of the CDS&E meta-program [[PD 21-8084](#)] is to identify and capitalize on opportunities for major scientific and engineering breakthroughs through new computational and data-analysis approaches and best practices. The CDS&E meta-program supports projects that harness computation and data

to advance knowledge and accelerate discovery above and beyond the goals of the participating individual programs. The intellectual drivers may be in an individual discipline, or they may cut across more than one discipline in various Divisions and Directorates. A CDS&E proposal should enable and / or utilize development and adaptation of advances in research and infrastructure in computational and data science.

Areas of emphasis for CDS&E vary by program. Programs involved include:

- Division of Mathematical Sciences;
- Division of Civil, Mechanical and Manufacturing Innovation;
- Division of Chemical, Bioengineering, Environmental, and Transport Systems;
- Office of Advanced Cyberinfrastructure;
- Division of Electrical, Communications and Cyber Systems;
- Division of Astronomical Sciences;
- Division of Chemistry; and
- Division of Materials Research.

The CDS&E meta-program is not intended to replace existing programs that support projects involving computation or the analysis of large or complex data sets using established methods. Rather, proposals submitted to the CDS&E meta-program must have a significant component of computational or data science that goes well beyond what would normally be included in these programs.

Deadlines vary by program.

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NSF: Division of Environmental Biology

The National Science Foundation (NSF) [Division of Environmental Biology \(DEB\)](#) [Core](#) supports research and training on evolutionary and ecological processes acting at the level of populations, species, communities, and ecosystems. DEB encourages research that elucidates fundamental principles that identify and explain the unity and diversity of life and its interactions with the environment over space and time. Research may incorporate field, laboratory, or collection-based approaches; observational or manipulative studies; synthesis activities; phylogenetic discovery projects; or theoretical approaches involving analytical, statistical, or computational modeling. Proposals should be submitted to the core clusters:

- [Ecosystem Science Cluster \(ES\)](#)

- [Evolutionary Processes Cluster \(EP\)](#)
- [Population and Community Ecology Cluster \(PCE\)](#)
- [Systematics and Biodiversity Science Cluster](#)

DEB also encourages interdisciplinary proposals that cross conceptual boundaries and integrate over levels of biological organization or across multiple spatial and temporal scales.

Full proposals accepted anytime

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NSF: Major Research Instrumentation (MRI) – Limited Submission Program

[Limited submission grant programs](#) 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 MRI : [Notify RCA](#) by 9/29/2021, 5:00 p.m. if you are interested in submitting to this program.

The National Science Foundation Major Research Instrumentation (MRI) Program [[NSF 18-513](#)] serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific / engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and / or not appropriate for support through other NSF programs. **Cost sharing of precisely 30% of the total project cost is required.**

Based on the NSF 18-513 solicitation, an MRI proposal may request support for either the acquisition or development of a research instrument.

- Track 1: Track 1 MRI proposals are those that request funds from NSF greater than or equal to \$100,000 and less than \$1,000,000. Two proposal submissions are allowed per organization.
- Track 2: Track 2 MRI proposals are those that request funds from NSF greater than or equal to \$1,000,000 up to and including \$4,000,000. One proposal submission is allowed per organization.

LIMITED SUBMISSION: The MRI program requires that an MRI-eligible organization may, as a performing organization, submit or be included as a significantly funded subawardee in *no more than three MRI proposals*. Each performing organization is limited to a maximum of three proposals in the “Tracks” as defined above, with no more than two submissions in Track 1 and no more than one submission in Track 2.

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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 socio-emotional 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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Pardee Foundation: Cancer Research

The [Elsa U. Pardee Foundation](#) funds research to investigators in United States non-profit institutions proposing research directed toward identifying new treatments or cures for cancer. The Foundation funds projects for a one year period which will allow establishment of capabilities of new cancer researchers, or new cancer approaches by established cancer researchers. It is anticipated that this early stage funding by the Foundation may lead to subsequent and expanded support using government agency funding. Project relevance to cancer detection, treatment, or cure should be clearly identified. By design, there are no limits set on the grant amount that can be requested. It must be reasonably and clearly supported by the scope of the project outlined in the application.

Upcoming deadlines: August 31, 2021; December 31, 2021

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Spencer Foundation: Small Research Grants on Education

The [Small Research Grants Program](#) supports education research projects that will contribute to the improvement of education, broadly conceived, with budgets up to \$50,000 for projects ranging from one to five years. The Foundation accepts applications three times per year.

This program is “field-initiated” in that proposal submissions are not in response to a specific request for a particular research topic, discipline, design, method, or location. The goal for this program is to support rigorous, intellectually ambitious and technically sound research that is relevant to the most pressing questions and compelling opportunities in education.

Deadline: September 1, 2021; noon

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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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