NDSU OFFICE OF RESEARCH AND CREATIVE ACTIVITY RCA UPDATE

May 1, 2023

ND Legislature passes bill for \$2,500,000 in research funding to NDSU

ND HB1003, recently passed by the ND Legislature and awaiting the Governor's signature, establishes a new funding opportunity of \$1,250,000 per year for two years to support research at NDSU.*

The Economic Diversification Research Fund is meant to support public, private and joint research projects that positively affect the diversification of the North Dakota economy. These projects should also broaden the economy from its traditional source of revenue by providing new value chains that support new job opportunities and enhanced financial growth for both the business and employees.

The NDSU Office of Research and Creative Activity challenges our researchers to leverage these funds across the NDSU research priorities of:

- Food, Energy and Water Security (FEWS)
- Cybersecurity, Computer Science and Software Engineering
- Life Sciences
- Entrepreneurship and Innovation

* guidelines not yet released

Learn more about this opportunity to grow your research at a presentation by VPR Colleen Fitzgerald:

- Morrill 103
- Friday, May 5 9:00am-9:50am
- Zoom: <u>https://ndsu.zoom.us/j/99842382481?pwd=cENIcGN5YVVKcm1qNWp</u> mNXdSRzITdz09

Complete results from Student Research Day 2023

Student Research Day at NDSU, held on April 18, 2023, is an annual event dedicated to giving undergraduate and graduate students a platform to showcase their research and creative works. A collaboration among NDSU EXPLORE, the Graduate Student Council, and Gamma Sigma Delta, Student Research Day provided faculty, staff, students, and community members with a view of the various types of student research happening at NDSU. This was the second year the three groups collaborated on the event.



75 undergraduate and 120 graduate student presenters representing disciplines from across the campus took part in the event. <u>Complete list of winning posters and oral presentations>></u>



Tschetter Named ND EPSCoR Executive Director

Jolynne Tschetter, PhD has been named Executive Director at the North Dakota Established Program to Stimulate Competitive Research (ND EPSCoR). From this role, Tschetter is responsible for the day-to-day operations, management and overall coordination of this statewide program to advance science, technology, engineering and mathematics (STEM) in education and the workforce. ND EPSCoR helps students, supports quality faculty, grows research infrastructure capacity and funds scientific projects that positively impact the state's economy and its



citizens. The ND EPSCoR Steering Committee evaluates and advises the program.

<u>Read more>></u>

2023 ND EPSCoR State Conference Winning Posters

Winning posters from both graduate and undergraduate students at the recent ND EPSCoR State Conference are now available online.

See all winning posters



NSF Research Experiences for Undergraduates

Interested in Hosting or Participating in an NSF Research Experiences for Undergraduates (REU) Site or Supplement? Join this session to learn how to get started.

Tuesday, May 16, 2023 / 1-2:30pm / Memorial Union Hidatsa Room

The National Science Foundation (NSF) supports intensive research by undergraduate students in any NSF-funded area of research through REU sites or supplements. The REU Sites engage a cohort of students in research projects related to a theme and REU Supplements engage students in research related to a new or ongoing NSF research award. An REU Site consists of a group of up to ten undergraduates who work in the research programs of the host institution and each student is associated with a specific research project where he / she works closely with the faculty and other researchers. Students are granted stipends and assistance with housing and travel.

This workshop will be led by the faculty PIs of two successful NSF REU sites on the NDSU campus. They will share their experiences and provide information and resources for where to start if you are interested in hosting or being a faculty mentor for an REU site or supplement.

Jennifer Momsen, PhD, is a professor in the department of biological sciences and leads an REU program in discipline-based education research.

Alexey Leontyev, PhD, is an assistant professor in the department of chemistry and biochemistry and leads an REU program in green chemistry.

<u>Register to attend >></u>

We're hiring:

WE'RE SEARCHING FOR OUR NEXT ASSOCIATE VICE PRESIDENT FOR RESEARCH AND FACULTY DEVELOPMENT
This person will play a vital role in NDSU's efforts to increase faculty success in securing external funding through the design and implementation of programmatic approaches to building faculty success in all the disciplines across campus as well as in interdisciplinary and convergent efforts.
We are especially looking for candidates with a proven track record in operationalizing effective research development program to support early career faculty success and to grow research leadership among mid-career and even senior faculty.
https://tinyurl.com/ymr523fb NDSU RESEARCH AND CREATIVE ACT
Learn more >>



NIH implemented a new Data Management and Sharing (DMS) policy on January 25, 2023 to promote the sharing of scientific data. One of the DMS policy outcomes for researchers is that all new NIH grant applications are required to have a DMS plan.

To help you create your own DMS plans, here are <u>samples</u> for the different institutes and centers as well as for different data sharing scenarios.

NIH is looking for peer reviewers

The National Institute of Health (NIH) is looking to expand the pool of peer reviewers with mental health researchers who can bring diverse perspectives to the peer review process. Find out why you might want to apply and how to get involved.

Learn how to get *involved* >>

Engagement Opportunity: NIH Issues RFI on Food is Medicine Research Opportunities

The National Institutes of Health (NIH) has released a request for information (RFI) seeking comments on Food is Medicine research programs, citing the recent White House National Strategy on Hunger, Nutrition, and Health as one of the drivers of a government-wide approach to improve nutrition security and

health outcomes. Other agencies involved in Food is Medicine initiatives, including the Centers for Medicare and Medicaid Services (CMS), Health Resources and Services Administration (HRSA), Agency for Healthcare Research and Quality (AHRQ), Department of Veterans Affairs (VA), U.S. Department of Agriculture (USDA) and Food and Drug Administration (FDA), are also receiving input from this RFI to inform their own research and healthcare programs.

The RFI is soliciting input specifically pertaining to research, including on research barriers and gaps, necessary technologies and models, and barriers to implementation; provision of services and activities, including staff and resource needs, addressing nutrition disparities, and leveraging food and nutrition assistance programs; community outreach and engagement, including how to effectively collaborate with community-based organizations, integrate cultural foods in assistance programs, and support local agriculture; education and training, including training needed for healthcare providers, community health workers, Cooperative Extension professionals, and other program staff; and coverage for services, including innovative financing models and reimbursement methods to scale Food is





Medicine programs.

Responses must be submitted to <u>https://rfi.grants.nih.gov/?s=6418bcd5d23bfe80540f6582</u> by June 30, 2023.



Effective April 24, 2023, the National Science Foundation (NSF) transitioned the Subawarding, Transferring or Contracting Out Part of an NSF Award request functionality from FastLane to Research.gov and decommissioned this request in FastLane. In-progress subawarding requests in FastLane as of April 21, 2023, were transferred to Research.gov. All notifications and requests submitted in FastLane are accessible in Research.gov. Award recipients can access the notifications and requests module in Research.gov via the Notifications & Requests link under Awards & Reporting on the Research.gov homepage (formerly known as the Research.gov "My Desktop" page) after signing into Research.gov. Please see the *Proposal & Award Policies & Procedures Guide* (PAPPG) <u>Chapter VII</u>, Research.gov <u>About</u> <u>Notifications and Requests</u> page, and <u>FastLane System Decommissioning</u> page for additional information.

Upcoming Important System-related Deadlines

FastLane

• Friday, September 29, 2023 (5:00 PM submitter's local time) is the last day to submit proposal file updates and budget revisions in FastLane, withdraw FastLane submitted proposals, and withdraw supplemental funding requests submitted in FastLane.

Friday, September 29, 2023 (11:00 PM Eastern Time) is the last day to access
FastLane submitted and in-progress letters of intent, proposals, and
supplemental funding requests. See the FastLane Decommissioning page
and Instructions to Access and Download/Print FastLane Letters of Intent,
Proposals and Supplemental Funding Requests for details.

Research.gov and Grants.gov

- Friday, October 20, 2023 (5:00 PM submitter's local time) is the last day to submit the NSF fillable PDF format for the biographical sketch and current and pending (other) support.
- Proposers currently may prepare the biographical sketch and current and pending (other) support using either <u>SciENcv</u> or the fillable PDFs.
- Please see the NSF <u>biographical sketch</u> and <u>current and pending (other)</u> <u>support</u> websites for more information.

Policy-related questions should be directed to **policy@nsf.gov**.

NSF Website Updates

The U.S. National Science Foundation recently rolled out significant updates to our website intended to make it easier for you to find the information you're interested in.

Here's what has changed:

- NSF's new website, previously called beta.nsf.gov, is now <u>new.nsf.gov</u>.
- We've updated our homepage and site navigation to better connect you to the information you care about.
- We've updated our pages for <u>funding seekers</u> and <u>awardees</u> to provide clearer guidance.
- We've created new "Focus Area" landing pages that showcase some of our funding priorities.



Upcoming Events at a Glance

- 2023 NSF Engineering CAREER Proposal Workshop May 8, 12 PM – May 12 6PM, 2023 | Learn More >>
- NSF Workshop for NSF Directorate for STEM Education CAREER Applicants May 11, 2023 | Learn More >>
- NSF Virtual Grants Conference
 June 5, 2PM June 8, 4PM, 2023 | Learn More >>



November 28-30, 2023; Washington DC

Entering its eleventh year, the annual Defense TechConnect (DTC) Summit, colocated with the Fall SBIR/STTR Innovation Conference and Operational Energy and Logistics Summit (OE&L), brings together defense, private industry, federal agency, and academic leadership to accelerate state-of-the-art technology solutions for the military and national security. This year's key focus areas include but are not limited to **energy, climate, cyber, biodefense, space, advanced manufacturing**, and **5G**.

<u>Learn more >></u>

OPEN HOUSE

CORROSION & COATINGS APPLIED RESEARCH LAB (CCARL)

On May 4th, 2023, you are invited to an open house and lab tour at the NDSU Corrosion & Coatings Applied Research Lab (CCARL) in R1 (1735 NDSU Research Park Dr Fargo).

The CCARL research goals include understanding and advancing integrate corrosion coating formulation with applications in the following areas: corrosion prevention solutions, high-temperature materials, tough and strong coatings, healable and reversible coatings, and robust surfaces.

This is your opportunity to learn about the work of Dr. Qi and his undergraduate and graduate students.

Agenda

- 10:00 12:00: Open house
 R1, Room 148/154 (with cookies and coffee)
- 11:00 12:00: Lab tours/demos R1, Room 170/172

Xiaoning Qi is an assistant professor in NDSU Coatings and Polymeric Materials. As a principal investigator and materials scientist with more than 15 years of coating research and development experience, Xiaoning also has commercial experience with top companies in the coating industry. His current research interests include:

- Corrosion mitigation through anti-corrosive materials.
- Corrosion detection and material service life prediction.









- Application of 2D materials (graphene, MXene, etc.)
- Self-healing/healable coatings (micro-encapsulation and reversible chemistry).
- Coating for extreme conditions (high temperature, abrasion-resistant, and durable surfaces).

Funding Opportunities

- DARPA: Tellus
- DHHS: Leading Edge Acceleration Projects in Health Information Technology
- DOJ: Visiting Fellows Program
- EDA: STEM Talent Challenge
- <u>NASA: University Leadership Initiative</u>
- NIH: National Institute for Occupational Safety and Health Programs
- <u>NIH: NOSI RNA Modifications in Cancer Biology</u>
- <u>NIH: Time-Sensitive Research Opportunities in Environmental Health Sciences</u>
- NIH: Understanding Expectancies in Cancer Symptom Management
- NIST: Measurement Science and Engineering Research Grant Programs
- NSF: Cultural Anthropology Program Senior Research Awards
- <u>NSF: Dear Colleague Letter Availability of Earth Observation Data for NSF-Funded</u>
 <u>Researchers</u>
- <u>NSF: Human Networks and Data Science</u>
- <u>NSF: Research Traineeship Program (NRT) LIMITED</u>
- NSF: Research Training Groups in the Mathematical Sciences
- Spencer Foundation: Vision Grants for Education Research
- <u>Stanley Smith Horticultural Trust: Stanley Smith Horticultural Trust LIMITED</u>
- The Organic Center: Organic Center FFAR joint Organic Research Program
- The Organic Center: Organic Training for Agricultural Professionals

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 <u>ndsu.researchdev@ndsu.edu</u> by **close of business** on the notification deadline date.

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

- NSF: Research Traineeship Program (NRT) Notification deadline: 05/10/2023
- <u>Mathers Foundation: Grant Program (STEM)</u> Notification deadline: 05/17/2023
- <u>Stanley Smith Horticultural Trust: Stanley Smith Horticultural Trust</u> Notification deadline: 05/10/2023
- <u>NIH: Director's Early Independence Awards (DP5 Clinical Trial Optional)</u> Notification deadline: 06/07/2023

There are a number of limited submission grant programs with upcoming agency deadlines for which we did not receive any notifications of interest. 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.

<u>NSF: IUSE/ Professional Formation of Engineers: Revolutionizing Engineering</u>
 <u>Departments</u>

Deadline: 05/10/2023 (Two-Year track only)

- <u>NIH: Alzheimer's Disease Research Centers</u> LOI deadline: 05/14/2023
- <u>NEH: Infrastructure and Capacity Building Challenge Grants</u> Deadline: 05/17/2023
- <u>NIH: Collaborative Program Grant for Multidisciplinary Teams</u> Deadline: 05/26/23 (LOI due 30 days prior to application due date)
- NSF: Expanding Al Innovation through Capacity Building and Partnerships Deadline: 06/26/2023

- NSF: Building the Prototype Open Knowledge Network (Proto-OKN) Deadline: 06/20/2023
- <u>NIH: Enhancing Science, Technology, EnginEering, and math Educational</u> <u>Diversity (ESTEEMED) Research Education Experiences</u> LOI Deadline: 05/07/2023
- <u>NEA: Grants for Arts</u> Deadline: 07/06/2023

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DARPA Tellus

The Defense Advanced Research Projects Agency (DARPA) <u>Tellus program</u> will explore the development of a platform Methodology for the rapid and modular design of microbebased sensing systems to include tailoring of input stimuli and output signals, biologicallyencoded signal processing, and response times. The microbial devices that are developed must be able to transduce detected stimuli into a variety of output signals (e.g., photons, colorimetric changes, chemicals, electric current, mechanical actuation) that are measurable by conventional "receiver" devices (e.g., optoelectronic, photonic, imaging, electrode). Classes of stimuli will include both chemical and physical, with emphasis on sensor

functionality across many different environments and conditions.

As remote environmental monitoring for existing and emerging threats, pollutants, or changing conditions is an area of DoD/national security interest, microbial sensing systems that are capable of detecting stimuli and/or relaying output signals at a distance and can operate unattended for long durations are

desired. Tellus is a 2.5-year, single phase program focused on developing a Methodology that will enable rapid design, building, and testing of microbial sense-and-respond devices for environmental monitoring.

Deadline: Abstract May 18, 2023; 3PM

DHHS: Leading Edge Acceleration Projects (LEAP) in Health Information Technology

The goal of the <u>LEAP</u> in Health IT funding opportunity is to address well-documented and fast emerging challenges inhibiting the development, use, or advancement of well-designed, interoperable health IT, which are scalable across the health care industry. Solutions are expected to further a new generation of health IT research and inform the development, implementation, and refinement of standards, methods, and techniques for overcoming major barriers and challenges in an innovative fashion as they are identified.

In fiscal year 2023, ONC is soliciting applications pursuant to the LEAP in Health IT funding opportunity for projects that address one of the following areas of interest:

• Area 1: Exploring the Use of Advanced Fast Healthcare Interoperability Resources (FHIR[®]) Capabilities

• Area 2: Identifying Data Quality Improvements for USCDI Data Elements

Deadline: June 12, 2023

DOJ: Visiting Fellows Program

<u>This solicitation</u> will prioritize people with lived experience who bring knowledge and critical perspectives to help the Department of Justice (DOJ) Bureau of Justice Assistance (BJA) reach and resonate with those impacted by the criminal justice system.

With this solicitation, BJA seeks to invest in current and future leaders in the criminal justice field to advance priority national policy issues and offer cross-developmental opportunities for the Department of Justice (DOJ) staff and criminal justice practitioners and researchers. Awards made under the BJA Visiting Fellows Program will fund fellowships for a period of 24 months, including a "residency" period of 9 to 12 months when the fellow will be expected to commit a significant portion of their time to the fellowship and have an opportunity to work closely with BJA staff members both virtually and with some portion of their time working onsite at BJA in Washington, D.C.

The purpose of each fellowship is to make important policy and programmatic contributions in a criminal justice focus area. Fellows will collaborate with BJA and DOJ staff members to provide critical outreach, data, research, and subject matter expertise to

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inform the development of new BJA strategies, policies, and programs to benefit the field.

Deadline: June 13, 2023

EDA STEM Talent Challenge

The Economic Development Administration (EDA) Office of Innovation & Entrepreneurship is seeking applications from eligible applicants to create and implement innovative science, technology, engineering, and mathematics (STEM) work-based learning models (such as Registered Apprenticeships) that complement their respective region's innovation economy. The <u>STEM Talent Challenge</u> seeks to develop or expand regional workforce capacity to support high-growth, high-wage entrepreneurial ventures, industries of the future, and other innovation—driven businesses that have a high likelihood of accelerating economic competitiveness and job creation in their respective regions and in the United States.

A 1:1 match is required for this opportunity.

Deadline: June 12, 2023

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NASA: University Leadership Initiative (ULI)

The NASA <u>University Leadership Initiative</u> provides the opportunity for university teams to exercise technical and organizational leadership in proposing unique technical challenges, defining interdisciplinary solutions, establishing peer review mechanisms, and applying innovative

teaming strategies to strengthen the research impact. By addressing the most complex challenges associated with Aeronautics Research Mission Directorate's (ARMD) strategic thrusts, universities will accelerate progress toward achievement of high impact outcomes while leveraging their capability to bring together the best and brightest minds across many disciplines.

In this solicitation, NASA's University Innovation (UI) Project is seeking proposals for work in the following six topic areas:

Topic 1: Safe, Efficient Growth in Global Operations (Strategic Thrust 1)

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Topic 2: Innovation in Commercial Supersonic Aircraft (Strategic Thrust 2)
Topic 3: Ultra-Efficient Subsonic Transports (Strategic Thrust 3)
Topic 4: Safe, Quiet, and Affordable Vertical Lift Air Vehicles (Strategic Thrust 4)
Topic 5: In-Time System-Wide Safety Assurance (Strategic Thrust 5)
Topic 6: Assured Autonomy for Aviation Transformation (Strategic Thrust 6)

Deadline: Notice of Intent July 6, 2023

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NIH: National Institute for Occupational Safety and Health (NIOSH) Programs

NIOSH has recently released two program announcements. The purpose of the programs are:

- 1. to develop an understanding of the risks and conditions associated with occupational diseases and injuries,
- 2. to explore methods for reducing risks and preventing or minimizing exposure to hazardous conditions in the workplace, and
- 3. to translate significant scientific findings into prevention practices and products that will effectively reduce work-related illnesses and injuries.

NIOSH Small Research Grant Program R03 [PAR-18-797]

R03 research grants support small research projects that can be carried out in a short period with limited resources.

NIOSH Exploratory/Developmental Grant Program R21 [PAR-18-798]

R21 grants support the early and conceptual stages of research projects that assess the feasibility of novel areas of investigation, examine new experimental systems with the potential to enhance occupational safety and health research or practice, or apply unique and innovative uses of existing methods to explore new scientific areas.

Standard deadlines apply. Upcoming Deadlines: June 16, October 16...

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NIH: NOSI - RNA Modifications in Cancer Biology

Through this Notice of Scientific Interest (NOSI) [NOT-CA-23-060], the National Cancer Institute intends to stimulate research on the role of RNA modifications in the area of

cancer biology. Despite the recognition that RNA modifications and editing exert a substantial impact on gene expression and function, there is a lack of mechanistic insights into the dynamic regulation of RNA modifications and their de-regulation as drivers of cancer formation. A better understanding of the extent, diversity, and crosstalk between different types of RNA modification, and the elucidation of the molecular players that read and interpret the modification code are needed to reveal the mechanisms of RNA modifications that underly cancer formation and the cancer phenotype.

Submit applications for this initiative using one of the following Notice of Funding Opportunities (NOFOs) or any reissues of these announcements through the expiration date of this notice.

<u>PA-20-195</u> - NIH Exploratory/Development Research Grant Program (Parent **R21** Clinical Trial Not Allowed)

First Available Due Date: June 16, 2023

PAR-23-058 - NCI Small Grants Program for Cancer Research for Years 2020, 2021, and 2022 (NCI Omnibus **R03** Clinical Trial Optional) *First Available Due Date: June 20, 2023*

<u>RFA-CA-23-002</u> - Innovative Molecular and Cellular Analysis Technologies for Basic and Clinical Cancer Research (**R61** Clinical Trial Not Allowed) *First Available Due Date: September 1, 2023*

<u>RFA-CA-23-003</u> - Advanced Development and Validation of Emerging Molecular and Cellular Analysis Technologies for Basic and Clinical Cancer Research (**R33** Clinical Trial Not Allowed) *First Augilable Due Date: Sentember 1, 2022*

First Available Due Date: September 1, 2023

<u>RFA-CA-23-014</u> - Development of Innovative Informatics Methods and Algorithms for Cancer Research and Management (**R21** Clinical Trial Optional) *First Available Due Date: June 13, 2023*

<u>RFA-CA-23-015</u> - Early-Stage Development of Informatics Technologies for Cancer Research and Management (**U01** Clinical Trial Optional) *First Available Due Date: June 13, 2023*

NIH: Time-Sensitive Research Opportunities in Environmental Health Sciences (R21 Clinical Trial Not Allowed)

This funding opportunity announcement (FOA) [RFA-ES-23-004] is intended to support novel environmental health research in which an unpredictable event or policy change provides a limited window of opportunity to collect human biological samples or environmental exposure data. The primary motivation of the FOA is to understand the consequences of natural and human-made disasters, emerging environmental public health threats, and policy changes in the U.S. and abroad. A distinguishing feature of an appropriate study is the need for rapid review and funding, substantially shorter than the typical NIH grant review/award cycle, for the research question to be addressed and swiftly implemented.

Upcoming Deadlines: June 1, August 1, October 2...

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NIH: Understanding Expectancies in Cancer Symptom Management (R01 Clinical Trial Required)

This Notice of Funding Opportunity (NOFO) [PAR-23-155] will solicit mechanistic research that aims to understand how and why expectancy effects occur in a cancer context, elucidate their role in cancer symptom management, and identify patients, symptoms, cancer sites, and contexts in which expectancy effects can be leveraged to improve cancer outcomes. The program is particularly interested in applications that enroll individuals and groups from populations historically underrepresented or excluded from biomedical and behavioral research.

Projects will be required to employ the experimental medicine approach (for more information on this approach, see the <u>NIH Science of Behavior Change Initiative</u>), which involves:

- 1. identifying target mechanisms that can be engaged by manipulating one or more factors
- 2. identifying appropriate and validated measures that can reliably capture change in the target mechanism; and

3. identifying a particular outcome that should change as a function of the change in the target expectancy.

Planned analyses should evaluate whether the expectancy target(s) can be leveraged to change cancer symptoms, by demonstrating that the factors can influence a measure of the expectancies, that the expectancy measures are associated with symptom(s), and that the change produced in the expectancy measures is associated with changes in the symptom(s).

Upcoming Deadlines: June 15, October 5...

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NIST: Measurement Science and Engineering (MSE) Research Grant Programs

The National Institute of Standards and Technology's (NIST) mission is to drive innovation and industrial competitiveness through measurement science and standards by cultivating a culture of belonging that integrates diversity, equity, inclusion, and accessibility in all ways of working. One component of this mission is NIST's ongoing effort to develop a diverse, world-class pool of scientists and engineers to engage in NIST's measurement science and standards research, and to support the development of a general population that understands and appreciates measurement science and standards.

NIST is <u>soliciting applications</u> for the following NIST grant programs:

- 1. the Associate Director for Innovation and Industry Services (ADIIS)
- 2. the Associate Director for Laboratory Programs (ADLP)
- 3. the Communications Technology Laboratory (CTL)
- 4. the Engineering Laboratory (EL)
- 5. Fire Research (FR)
- 6. the Information Technology Laboratory (ITL)
- 7. the International and Academic Affairs Office (IAAO)
- 8. the Material Measurement Laboratory (MML)
- 9. the NIST Center for Neutron Research (NCNR)
- 10. the Physical Measurement Laboratory (PML)
- 11. the Special Programs Office (SPO)
- 12. the Standards Coordination Office (SCO)

NSF: Cultural Anthropology Program Senior Research Awards

The primary objective of the Cultural Anthropology Program [NSF 23-581] is to support fundamental, systematic anthropological research and training to increase understanding of the causes, consequences and complexities of human social and cultural variability. The Cultural Anthropology Program welcomes proposals from researchers in all sub-fields of cultural anthropology and research at any temporal or spatial scale. Methodologies and approaches employed may include ethnographic field research, surveys, remote sensing, the collection of bio-markers, experimental research inside or outside of laboratory settings, archival research, the analysis of materials collections and extant data bases, mathematical and computational modeling and other research tools as appropriate for the proposed research. The overarching research goals should be to produce empirically grounded findings that will be generalizable beyond particular case studies and contribute to building a more robust anthropological science of human society and culture.

Deadline: August 15, 2023

NSF: Dear Colleague Letter – Availability of Earth Observation Data for NSF-Funded Researchers

Recent developments in satellite and sensor technology have led to unprecedented advances in the resolution, extent, and frequency of Earth observations. High spatial and temporal resolution capabilities now allow for the investigation of crucial research questions across several Earth system science education and research themes. Yet, many of these datasets have previously been unavailable for research purposes because they are generated by commercial providers. This Dear Colleague Letter (DCL) [<u>NSF 23-</u>092] announces the availability of high-quality commercial Earth observation data to NSF-funded researchers at no additional cost through the National Aeronautics and Space Administration (NASA) Commercial SmallSat Data Acquisition (CSDA) Program.

Through the CSDA Program, all NSF-funded researchers have access to a vast array of datasets. An overview of the CSDA program can be found here: <u>https://www.earthdata.nasa.gov/esds/csda</u>

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To request access, please fill out the form located at:

<u>https://csdap.earthdata.nasa.gov/signup/</u>. You will need to include your active NSF grant number on the form (a seven-digit number), the contact information for the managing NSF Program Officer for the award, and a description of how the requested remote sensing data would be used to support your NSF-funded project.

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NSF: Human Networks and Data Science (HNDS)

The Human Networks and Data Science program (HNDS) [NSF 23-568] supports research that enhances understanding of human behavior by leveraging data and network science research across a broad range of topics. HNDS research will identify ways in which dynamic, distributed, or heterogeneous data can provide novel answers to fundamental questions about individual or group behavior. HNDS is especially interested in proposals that provide data-rich insights about human networks to support improved health, prosperity, and security.

HNDS has two tracks:

1. Human Networks and Data Science – Infrastructure (HNDS-I). Infrastructure proposals will address the development of data resources and relevant analytic techniques that support fundamental Social, Behavioral and Economic (SBE) research. Successful infrastructure proposals will construct, within the financial resources provided by the award, databases or relevant analytic techniques and produce a finished product that will enable previously impossible data-intensive research in the social sciences. The databases or techniques should have significant impacts, either across multiple fields or within broad disciplinary areas, by making possible new types of data-intensive research in the SBE sciences.

Deadline: August 3, 2023

2. Human Networks and Data Science – Core Research (HNDS-R). Core research proposals will advance theory in a core SBE discipline by the application of data and network science methods. This includes the leveraging of large data sets with diverse spatio-temporal scales of measurement and linked qualitative and quantitative approaches, as well as multi-scale, multi-level network data and techniques of network analysis. Supported projects are expected to yield results that will enhance, expand, and transform theory and methods, and that generate

novel understandings of human behavior – particularly understandings that can lead to significant societal benefits or opportunities. HNDS-R encourages core research proposals that make innovative use of NSF-supported data networks, databases, centers and other forms of scientific infrastructure including <u>those</u> <u>developed by HNDS-I (formerly RIDIR) projects</u>.

Deadline: July 13, 2023

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NSF: Research Traineeship Program (NRT) – LIMITED

<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.

<u>Notify RCA</u> by May 10, 2023, 5pm, if you are interested in submitting to this program.

The National Science Foundation (NSF) Research Traineeship (NRT) program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary or convergent research areas, through a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. Proposals are requested that address any interdisciplinary or convergent research theme of national priority, with special emphasis on <u>Artificial Intelligence</u> (AI), <u>Quantum Information Science and Engineering</u> (QISE), and the six research areas within <u>NSF's 10 Big Ideas</u>: Harnessing the Data Revolution (HDR); The Future of Work at the Human-Technology Frontier (FW-HTF); Navigating the New Arctic (NNA); Windows on the Universe: The Era of Multi-Messenger Astrophysics (WoU); The Quantum Leap: Leading the Next Quantum Revolution (QL); and Understanding the Rules of Life: Predicting Phenotype (UROL). The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. The program encourages proposals that involve strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners.

ELIGIBILITY CONSIDERATIONS:

- NDSU is only eligible for the Track 1 program.
- Participation includes serving as a lead organization or non-lead organization on any proposal.
- Organizations participating only as evaluators on projects do not count toward the limitation.

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NSF: Research Training Groups in the Mathematical Sciences (RTG)

The long-range goal of the Research Training Groups in the Mathematical Sciences (RTG) [NSF 23-579] program is to strengthen the nation's scientific competitiveness by increasing the number of well-prepared U.S. citizens, nationals, and permanent residents who pursue careers in the mathematical sciences, be they in academia, government, or industry. A significant part of this goal is to directly increase the proportion and the absolute number of U.S. students at the RTG sites who pursue graduate studies and complete advanced degrees in the mathematical sciences. It is anticipated that RTG projects also will serve as national models for research training in the mathematical sciences. Activities with potential impact beyond the directly-supported students and beyond the institutions receiving RTG funds will be key strengths in proposals. Collaborative proposals involving different types of programs and having the potential to develop innovative approaches to research training in the mathematical sciences are welcome. For such collaborative efforts, the lead institution must grant a doctoral degree in mathematical sciences.

The RTG program supports efforts to improve research training by involving undergraduate students, graduate students, postdoctoral associates, and faculty

members in structured research groups anchored in a coherent research program. The activities need not be focused on a particular research problem; rather, it is expected that group participants will be united by common topical interests. The groups may include researchers and students from different departments and institutions, but the researchbased training and education activities must be based in the mathematical sciences. RTG projects are expected to vary in size, scope, and proposed activities, as well as in their plans for organization, participation, and operation. However, research groups supported by RTG will include vertically-integrated activities that span the entire spectrum of educational levels from undergraduates through postdoctoral associates.

Deadline: August 8, 2023

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Spencer Foundation: Vision Grants

The <u>Vision Grants</u> program funds the collaborative planning of innovative, methodologically diverse, interdisciplinary research on education that contributes to transforming education systems for equity. Vision Grants are research planning grants to bring together a team, for 6 to 12 months, to collaboratively develop ambitious, largescale research projects focused on transforming educational systems toward greater equity. This program takes as core that visionary, interdisciplinary, and collaborative research projects require time, space, and thoughtfulness to incubate and plan. Different from many of other programs, the proposal does not yet need to be a fully fleshed out research plan. Proposals are identifying a research topic, scope for impact, process and a team that will lead to a fully fleshed out research plan by the end of the grant period.

Vision Grants will provide planning funds for teams to develop proposals for research projects that:

- Are focused on key challenges and opportunities that have the potential for increasing equity in education
- Engage across disciplines and/or research methods
- Collaborate with practitioners, policymakers, and communities (and other stakeholders)
- Have clear sightlines to transformational change through research at a systemic level

Deadline: Intent to Apply August 15, 2023 12PM

Stanley Smith Horticultural Trust: Stanley Smith Horticultural Trust – LIMITED

<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.

<u>Notify RCA</u> by May 10, 2023, 5pm, if you are interested in submitting to this program.

The <u>Stanley Smith Horticultural Trust</u> seeks to fund projects that will further ornamental horticulture through organization pursuing the following activities:

Research

The Advancement of Research in ornamental horticulture and publications of results

- Trial/evaluation gardens of selected plants in a region
- Discerning appropriate cultural techniques and practices
- Laboratory freezer for DNA samples

Public Gardens

Assisting in the creation, development, preservation and maintenance of gardens accessible to the public for educational purposes

Ornamental Plants

Promotion of the environmentally responsible introduction, cultivation, and distribution of plants which have ornamental horticultural value

Publications

Assisting in the publication of books or other works relating to ornamental horticulture

Education

Informal and/or formal educational activities that further ornamental horticulture

- Classes and workshops on developing and maintaining home gardens
- Garden signage that notes cultural requirements, water- or fire-wise properties, or aesthetic attributes of plants
- Horticultural internships
- Construction or remodeling of educational facilities

LIMITED SUBMISSION: Universities/Institutions are limited to one application submission per year.

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The Organic Center: Organic Center - FFAR joint Organic Research Program

The <u>Organic Center and FFAR</u> seek projects that connect below and above ground ecosystem health and farm profitability, with specific examination of the relationship between soil health and crop/animal productivity, or climate change resilience.

Applications that address the following will receive preference:

- 1. Contributes to the understanding of connectivity between below and above ground ecosystem health and farm profitability.
- 2. Relies on innovative, systems-based approaches with cross-discipline collaboration throughout project development and implementation.
- 3. Integrates diversity, equity, and inclusion into the project design, development, and communication.
- 4. Engages organic farmers in the development, implementation, and/or evaluation of the project.
- 5. Serves the public good by making data open and accessible to the public and includes at least one open-access publication submission.
- 6. Has a strong history of serving under-represented farmers, and demonstrate a critical lens in exploring systemic barriers.
- 7. Increases tools for and success of organic dairy farmers, particularly in the Northeastern Region of the U.S.

Deadline: Pre-applications June 1, 2023

The Organic Center: Organic Training for Agricultural Professionals

The Organic Center and FFAR seek applicants for this <u>Funding Opportunity</u> that have used an innovative approach to delivering content and have demonstrated impacts in improving education and extension to organic farmers.

Applications that address the following will receive preference:

- Has a record of accomplishment in contributing to training farming community groups, farmer-leaders, and agricultural professionals in organic agronomic, certification and record-keeping, and profitability guidance.
- 2. Contributes to the goal of increasing organic agriculture, and aiding organic farmers and farmers interested in transitioning to organic.
- 3. Is dedicated to farmer accessibility to agronomic professionals that are trained in organic production.
- 4. Demonstrates partnerships with different sectors (private, non-government organizations (NGO), governments, academia and other stakeholders) such that programs may be scalable and applicable across agricultural regions.
- 5. Engages organic farmers in the development, governance, oversight, and/or evaluation of educational and training programs. 6. Is committed to diversity, equity, and inclusion in their internal policies and farmer/trainer audiences.
- 6. Has a strong history of serving under-represented farmers, and demonstrate a critical lens in exploring systemic barriers.
- 7. Increases tools for and success of organic dairy farmers, particularly in the Northeastern Region of the U.S.

A match equal to or greater than the funding request is required for this grant.

Deadline: Pre-applications June 1, 2023

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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>.

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



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.

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to: Equal Opportunity Specialist, Old Main 201, 701-231-7708 or Title IX/ADA Coordinator, Old Main 102, 701-231-6409.

We collectively acknowledge that we gather at NDSU, a land grant institution, on the traditional lands of the Oceti Sakowin (Dakota, Lakota, Nakoda) and Anishinaabe Peoples in addition to many diverse Indigenous Peoples still connected to these lands. We honor with gratitude Mother Earth and the Indigenous Peoples who have walked with her throughout generations. We will continue to learn how to live in unity with Mother Earth and build strong, mutually beneficial, trusting relationships with Indigenous Peoples of our region.