NDSU RESEARCH AND CREATIVE ACTIVITY RESEARCH AND CREATIVE ACTIVITY

May 15, 2023

NDSU Vice President for Research and Creative Activity Serving on National Research Board

Colleen Fitzgerald, NDSU vice president of research and creative activity, is currently serving as a member of the executive committee of the Association of Public and Land-grant Universities (APLU) Council on Research (COR).

APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities in the U.S., Canada, and Mexico. It has members from more than 250 public research universities, land-grant institutions, state university systems, and



affiliated organizations. In addition, nine Canadian and five Mexican public research universities are members of APLU.

COR is one of APLU's nine core boards and convenes vice presidents and chancellors of research from major public universities across the nation to coordinate methods of growing and improving the shared research mission of their institutions. It supports the development of initiatives to strengthen research and teaching and promotes research collaboration among universities and industry. COR also engages with federal lawmakers and agency officials to advance policies on a national level, and it serves as a forum to share knowledge and findings on key issues impacting APLU members and their campuses.

The COR executive committee oversees activities of the Council, and its chair sits on the APLU Board of Directors. As a member, Fitzgerald sees a great opportunity to strengthen NDSU's research enterprise through collaborations with her APLU colleagues. "As part of the overall campus transformation NDSU is undertaking, it is a critical time for us to draw upon the best practices of our peer and aspirational peers, especially R1 land-grant universities," she said.

"NDSU's rich history of researching and developing innovative solutions for society's problems and reaching the pinnacle of success as the region's lone R1 institution was an accomplishment," said NDSU President David Cook. "But to reach the next level and truly unlock our potential we need to study the strategies other R1 institutions have implemented."

COR executive committee members serve for three years.

North Dakota Economic Diversification Research Fund

The higher education funding bill passed by the ND legislature and signed by Governor Burgum includes a new Economic Diversification Research Fund that provides \$5 million in total to NDSU (\$2.5 million each year of the biennium) for research grants.

The fund is aimed to provide grants that meet these criteria:

- Stimulate economic activity across the state through innovation of new technology, concepts, and products
- Promote job creation and career and wage growth
- Enhance health care outcomes

- Address loss of revenue and jobs in communities with economies that depend primarily on the fossil fuel industry
- Provide experiential learning opportunities for students

While the appropriated funds could be available to NDSU as early as July 1, 2023, the State Board of Higher Education (SBHE) must first approve guidelines for the program prior to any funds being disbursed for research.

You are invited to join NDSU VPR Colleen Fitzgerald in a learning session/open forum about the Economic Diversification Research Fund on Thursday, May 25 at 10:00am.

<u>Zoom link >></u>

RCA IED Director Candidates Open Forums

The Vice President for Research and Creative Activity (RCA) is hosting candidates for the Director of Innovation and Economic Development (IED). The Director for IED will design, lead, and manage economic development, leverage opportunities for industry partnerships, and nurture and advance the entrepreneurial (pre-) startup ecosystem. The Director will play a vital role in RCA to strategically leverage and align campus and regional resources, opportunities, and assets in order to foster and support economic development, startups and entrepreneurship, and innovative efforts campus- and state-wide. This position is one of three complementary roles that RCA is filling.

Review the full position description >>

Three applicants for this position will each give 20-minute presentations on their vision for innovation and economic development at NDSU, and how it aligns with the President's key focus area of prioritizing NDSU's R1 Carnegie classification status

as a top research institution. Q&A will follow the presentations. We invite you to attend either in person or online:

- Will Cromarty
 Monday, May 22, 2023 | 10:00am | NDSU Memorial Union Nueta

 <u>Resume</u>
 Zoom
- Mark Vaux
 Tuesday, May 23, 2023 | 10:00am | NDSU Memorial Union Nueta

 <u>Resume</u>
 <u>Zoom</u>
 <u>Cuetta Cuetta cu</u>
- Cynthia Graffeo
 Wednesday, May 24, 2023 | 10:00am | NDSU Memorial Union Nueta
 <u>Resume</u>
 <u>Zoom</u>

These presentations will be recorded.

To provide feedback on these candidates, please use this <u>feedback form</u>, which will be open through **5pm on Wednesday, May 31, 2023.**

Important federal compliance notice for PIs: Telecommunications and video surveillance services or equipment

Section 889 of the FY2019 National Defense Authorization Act (NDAA) addresses the Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment. This prohibition applies to all awards made to NDSU from federal sources. All Federal awards include requirements pertaining specifically to the purchase or use of certain telecommunications equipment (including video surveillance equipment), components, or services.

Under Section 889, NDSU is prohibited from using award funds for purchasing such equipment, components for such equipment, or services from certain restricted vendors, their subsidiaries and affiliates. These restricted vendors are:

- Huawei Technologies Company
- ZTE Corporation
- Hytera Communications Corporation
- Hangzhou Hikvision Digital Technology Company
- Dahua Technology Company

Purchasing uses Visual Compliance to screen for purchases from these vendors. However, when purchasing these items using an Amazon Business Account or P-Card, it is the responsibility of the PI to ensure that no equipment, component, or service is purchased from the restricted vendors identified above using federal award funds.

In addition to the purchase of certain telecommunications equipment or services produced by the restricted vendors, Section 889 prohibits NDSU from using such equipment or services, even if the use is not in the performance of work under a federal contract. Use of any equipment, video surveillance equipment, components or services purchased from the restricted vendors must be stopped immediately.

If you have questions concerning the purchase of telecommunications equipment, video surveillance equipment, components, or services, please contact Stacey Winter in Purchasing at 701-231-8954.

If you identify the use of such equipment or services, please contact Val Kettner in Sponsored Programs Administration at 701-231-9608.

Award Recipients from January - March 2023

Congratulations to all award recipients from January, February, and March 2023!

Download the complete lists:

- January 2023: PDF | Excel
- February 2023: PDF | Excel
- March 2023: PDF | Excel

The awards listed are externally funded projects.

See Award Reports from previous months >>



Research Development and Grant Writing News

The Research and Creative Activity office holds a subscription to Research Development and Grant Writing News, a monthly newsletter full of helpful tips and information about funding agencies and writing successful grant proposals.

Here are some articles you will find in the April 2023 edition:

- NEH Infrastructure/Capacity-Building Challenge
 Grants NEH Challenge grants are different from other NEH grants and fellowships. We discuss those differences.
- Editing the Research Narrative for Importance When writing your research narrative, it's important to remember that space and the reviewer's attention span are both limited. We discuss how to determine the relative hierarchy of importance of information to be included in the research narrative.

| Research Development & Grant Writing Newsletter | | | |
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- U.S. Biotechnology and Biomanufacturing: The White House Vision for a Whole-of-Government Approach – The White House Office of Science and Technology Policy has released a report describing goals for the National Biotechnology and Biomanufacturing Initiative, coauthored by DOE, USDA, Dept. of Commerce, DHHS, and NSF. We provide an overview of research goals laid out by the various agencies.
- **Congressionally Directed Medical Research Programs** *CDMRP funds disease-focused research, but it's organized very differently compared to NIH. We provide an overview of CDMRP research programs.*
- **CDMRP Program Funding Opportunities** We list CDMRP funding opportunities and provide links for more information.
- Fully Respond to the ARPA-(H)eilmeier Questions ARPA-H, our newest federal research funding agency held a webinar on April 4th. We provide an overview of the topics covered.
- How a Good Website Can Help Faculty Win Grants We discuss why faculty should maintain a good research website (reprinted from the May 2015 issue).
- Mission Agency Common Denominators This article covers common features of mission agencies (reprinted from the May 2018 issue.

You can access <u>these and many more articles</u> on the RCA website (requires NDSU log-in).



The National Academies of Sciences, Engineering, and Medicine recently released a report on "Integrating Public and Ecosystem Health Systems to Foster Resilience: A Workshop to Identify Research to Bridge the Knowledge-To-Action Gap."

Held in September 2022, the workshop's purpose was to inform the development of a research agenda aimed at bridging the knowledge-to-action gap related to integrating public and ecological health to foster resilience.

The workshop report is free to <u>download</u>. Additional details on the program can be found <u>here</u>.

NATIONAL ACADEMIES

Integrating Public and Ecosystem Health Systems to Foster Resilience A Workshop to Identify Research to Bridge the Knowledge-to-Action Gap



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.



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Learn how to get *involved* >>

LEWIS-BURKE

A S S O C I A T E S $_{\scriptscriptstyle\rm LLC}$

Large federal funding opportunities overview

This annual report produced by Lewis-Burke provides information about center-level funding opportunities across federal agencies. With appropriations for fiscal year (FY) 2023 finalized and signed into law in December 2022 and agencies implementing programs supported through the *Infrastructure Investment and Jobs Act* (IIJA), the *CHIPS and Science Act of 2022*, and the *Inflation Reduction Act of 2022* (IRA), many federal funding opportunities are anticipated over the near term, often with accelerated proposal submission and review timelines.

Solicitations for many center-level programs across federal agencies are currently out, being reviewed, or planned to be released later in 2023. These upcoming center-level opportunities are categorized by:

- 1. Recently announced/anticipated new center-level funding opportunities
- 2. New opportunities under development
- 3. Opportunities authorized, but not funded
- 4. New opportunities included in the President's budget request for FY 2024

The report includes more detail and comprehensive information on the status and timing of flagship funding opportunities across federal agencies in Appendix 1.

Read the report (requires NDSU log-in).



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>

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>

Upcoming Events at a Glance

- NSF Research Experiences for Undergraduates (REU) Workshop Tuesday, May 16, 2023 / 1-2:30pm / Memorial Union Hidatsa Room | Learn More >>
- NSF Virtual Grants Conference June 5, 2PM - June 8, 4PM, 2023 | Learn More >>
- Notice of Informational Webinar for NIH Research Enhancement award (R15) Programs

Thursday, June 15, 2023 / 1:30-2:30pm | Learn More >>

Funding Opportunities

- <u>DoD: Broad Agency Announcement Army Research Institute for the Behavioral</u> and Social Sciences for Basic, Applied, and Advanced Scientific Research
- DoD: Congressionally Directed Medical Research Programs
- DoD: Young Investigator Program
- DOE: Energy Improvement in Rural or Remote Areas
- John Templeton Foundation: Funding Areas
- NEH: Media Projects
- NEH: Public Humanities Projects

- <u>NIH: Cutting-Edge Technologies for Translational Science</u>
- NSF: Biofoundries LIMITED
- <u>NSF: Combustion and Fire Systems</u>
- NSF: Decision, Risk, and Management Sciences
- <u>NSF: Infrastructure Innovation for Biological Research</u>
- <u>NSF: Robert Noyce Teacher Scholarship Program</u>
- USDA: Agriculture and Food Research Initiative Education and Workforce
 Development

Upcoming Limited Submission Program Deadlines

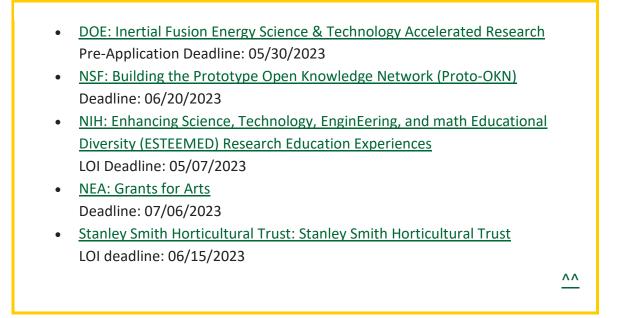
<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.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

- <u>Mathers Foundation: Grant Program (STEM)</u> Notification deadline: 05/17/2023
- NSF: Biofoundries Notification deadline: 05/31/2023
- <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>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



DoD: Broad Agency Announcement - Army Research Institute for the Behavioral and Social Sciences for Basic, Applied, and Advanced Scientific Research

This Broad Agency Announcement (<u>BAA</u>), which sets forth research areas of interest to the United States Army Research Institute for the Behavioral and Social Sciences (ARI), is issued under the Federal Acquisition Regulation (FAR), which provides for the acquisition of basic and applied research and that part of development not related to the development of a specific system or hardware procurement through the competitive selection of proposals.

ARI is the Army's lead agency for the conduct of research, development, and analyses for Army readiness and performance via research advances and applications of the behavioral and social sciences that address personnel, organization, and Soldier and leader development issues. Programs funded under this BAA include basic research, applied research, and advanced technology development that can improve human performance and Army readiness.

Basic Research Areas of Interest:

Science of Measurement of Individuals & Collectives

Topics of interest include, but are not limited to, psychometrics for modeling dynamic

data, measurement theory for dynamic constructs, context-sensitive measures of adaptability and flexibility, and embedded assessments of individual and group attributes.

Understanding Multilevel and Organizational Dynamics

Topics of interest include, but are not limited to, non-linear models for assessing team processes, process-oriented models of individual and group dynamics, modeling dynamic organizational restructuring, and models of complex multi-layered organizations.

Context of Behavior in Military Environments

Topics of interest include, but are not limited to, developing leadership theory for complex organizations, identifying external factors that impact social and decision-making processes, understanding multilevel contextual effects on organizational behavior, and models for strategically activating organizationally relevant identities.

Formal and Informal Learning and Development

Topics of interest include, but are not limited to, understanding the role of narratives in learning, individual and collective mental models of learning experiences, non-linear models of learning and development, and models of development across the career span. *Deadline: April 30, 2028*

DoD: Congressionally Directed Research Programs (CDMRP)

The Department of Defense has a series of Congressionally Directed Medical Research Programs available with the following deadlines:

Orthotics and Prosthetics Outcomes Research Program (OPORP)

Pre-application deadline: June 27, 2023

Prostate Cancer Research Program (PCRP) Pre-application deadlines: June 22, June 29, August 3

Traumatic Brain Injury and Psychological Health Research Program (TBIPHRP) *Pre-application deadlines: June 8, June 15*

For a full list of CDMRPs please follow this link: https://cdmrp.health.mil/funding/prgdefault ٨٨

DoD: Young Investigator Program

The Fiscal Year 2024 Air Force Young Investigator Research Program [<u>YIP</u>] intends to support early in career scientists and engineers who have received Ph.D. or equivalent degrees by 1 April 2016 or later showing exceptional ability and promise for conducting basic research. The program objective is to foster creative basic research in science and engineering; enhance early career development of outstanding young investigators; and increase opportunities for the young investigator to recognize the Air Force and Space Force mission and related challenges in science and engineering.

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White Paper Deadline: June 12, 2023

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DOE: Energy Improvement in Rural or Remote Areas

The Department of Energy (DOE) Energy Improvements in Rural or Remote Areas (ERA) Program [DE-FOA-0003045] aims to fund clean energy projects with three specific goals:

- Deliver measurable benefits to energy customers in rural or remote areas by funding replicable energy projects that lower energy costs, improve energy access and resilience, and/or reduce environmental harm;
- Support new rural or remote energy system models using climate-resilient technologies, business structures that promote economic resilience, new financing mechanisms, and/or new community engagement practices; and
- 3. Build clean energy knowledge, capacity, and self-reliance in rural America.

Pre-application deadline: July 13, 2023; 4pm

John Templeton Foundation: Funding Areas

The John Templeton Foundation has a variety of Funding Areas for which they receive Online Funding Inquiries (OFIs).

The Funding Areas are:

Character and Virtue Development

This area funds research to advance the science and practice of character, with a focus on moral, performance, civic, and intellectual virtues such as humility, gratitude, curiosity, diligence, and honesty.

Culture and Global Perspectives

Supported work will draw from a range of fields and intellectual traditions looking to better understand the role of culture in our lives, how our cultures change, and the ways in which religions, values, customs, and institutions might help address global challenges. They are currently giving special attention to research and projects in cultural evolution, Islam science and society, and areas where these themes might overlap, such as in science-technology studies.

Human Sciences

The department supports basic and applied scientific research projects from within the social, behavioral, and cognitive sciences, especially those that seek to increase enthusiasm within the academy for neglected topics.

Individual Freedom and Free Markets

The Individual Freedom & Free Markets Funding Area supports education, research, and outreach projects to promote individual freedom, free markets, free competition, and entrepreneurship.

Life Sciences

What is life, and what are its limits? How did it originate, and what fundamental mechanisms allow for the startling novelty of form and function? What processes led to the evolution of humanity, and can we predict future evolutionary outcomes?

The Life Sciences portfolio supports research and engagement projects on such questions. The Foundation is particularly interested in applications that seek novel and fundamental insights into the meaning and significance of life processes, by which we can better understand humanity's place within nature.

Mathematical and Physical Sciences

In the Mathematical and Physical Sciences funding area, the Foundation supports research seeking to shed light on the fundamental concepts of physical reality. They also explore the interplay between these sciences and broader human experience.

Philosophy & Theology

At the John Templeton Foundation, the Philosophy & Theology Department supports research and catalyzes conversations that promise to build on wisdom contained within the world's philosophical and theological traditions, in order to enhance our understanding of the world and how to live well within it. The Department is especially interested in research that engages substantively and critically with the sciences, including robust interdisciplinary collaborations in which philosophical or theological understanding informs and is informed by the findings and methods of the sciences.

Public Engagement

The Foundation funds projects within the following six subcategories.

- 1. Documentary and Video
- 2. Radio and Podcast
- 3. Grants for Writers and Print Projects
- 4. Events
- 5. <u>Thought Leadership</u>
- 6. <u>Programming for College Students</u>

Deadline: For all Funding Areas an OFI is due August 18, 2023

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NEH: Media Projects

The National Endowment for the Humanities (NEH) <u>Media Projects program</u> supports the development, production, and distribution of radio programs, podcasts, documentary films, and documentary film series that engage general audiences with humanities ideas in creative and appealing ways. Projects must be grounded in humanities scholarship and demonstrate an approach that is thoughtful, balanced, and analytical. Media Projects offers two levels of funding: Development and Production.

Optional draft deadline: July 5, 2023 Full proposal deadline: August 9, 2023

NEH: Public Humanities Projects

The National Endowment for the Humanities (NEH) <u>Public Humanities Projects program</u> supports projects that bring the ideas of the humanities to life for general audiences through public programming. Projects must engage humanities scholarship to analyze significant themes in disciplines such as history, literature, ethics, and art history. Awards support projects that are intended to reach broad and diverse public audiences in nonclassroom settings in the United States. Projects should engage with ideas that are accessible to the general public and employ appealing interpretive formats.

Public Humanities Projects supports projects in three categories (Exhibitions, Historic Places, and Humanities Discussions), and at two funding levels (Planning and Implementation). Proposed projects may include complementary components: for example, a museum exhibition might be accompanied by a website or mobile app.

Deadline: August 9, 2023

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NIH: Awards Supporting Cutting-Edge Technologies for Translational Science (ASCETTS) (R21 Clinical Trials Not Allowed)

The National Center for Advancing Translational Sciences (NCATS) invites applications for the Awards Supporting Cutting-Edge Technologies for Translational Science (ASCETTS) Notice of Funding Opportunity (NOFO) [PAR-23-177] to foster investigator-initiated development of highly innovative technologies to address barriers, limitations, or bottlenecks in translational science – particularly for therapeutic development. This program will support the early-stage proof of concept, high-risk and potentially highreward studies for feasibility and exploratory technology development, which can transform or significantly improve the efficiency of therapeutic development to achieve NCATS ultimate goals - more treatments to all people more quickly. The research proposed should be for the development of technology that can break new ground or extend present technology toward new directions or novel applications.

NSF: BioFoundries to Enable Access to Infrastructure and Resources for Advancing Modern Biology and Biotechnology (BioFoundries) – 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 31, 2023, 4pm, if you are interested in submitting to this program.

BioFoundries [NSF 23-585] is an infrastructure program from the National Science Foundation (NSF) that is designed to accelerate advances in the biological sciences, chemical biology, biotechnology, and bioengineering via access to modern infrastructure, technology, and capacity. BioFoundries will provide the intellectual, technical, digital, and physical frameworks needed for tight integration of technology innovations and applications with foundational interdisciplinary research and training, by:

- serving as access points for new biological technologies, workflows, processes, automations, and knowledgebases to enable transformative discoveries;
- catalyzing new innovations and transformative discoveries by supporting inhouse and external user-initiated research programs that take full advantage of technological and methodological advances;
- continuing to develop novel technologies, workflows, processes, automations, and knowledgebases that are both forward-looking and userresponsive;
- increasing the reproducibility of life science discoveries and data and knowledge sharing capabilities;

- 5. training the next generation of the scientific workforce; and
- 6. facilitating pathways to translation.

LIMITED SUBMISSION: One (1) per organization as lead institution.

NSF: Combustion and Fire Systems

The goal of the Combustion and Fire Systems program [PD-23-1407] is to create new knowledge to support advances in clean energy, climate change mitigation, a cleaner environment and public safety.

The program endeavors to create fundamental scientific knowledge that is needed for safe, clean and useful combustion applications and for mitigating the effects of fire. The program aims to identify and understand the controlling basic principles and to use that knowledge to create predictive capabilities for designing and optimizing practical combustion devices and understanding fire.

Important outcomes for this program include:

- Broad-based tools experimental, theoretical, and computational that can be applied to a variety of problems in combustion technologies and fire;
- Science and technology for clean and efficient generation of power;
- Discoveries that enable clean environments (for example, by reduction in combustion-generated pollutants); and
- Enhanced public safety and climate change mitigation through research on wildland and building fire growth, inhibition, and suppression.

Deadline: Proposals accepted ANYTIME

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NSF: Decision, Risk, and Management Sciences

The National Science Foundation (NSF) Decision, Risk and Management Sciences (DRMS) Program [PD 23-1321] supports scientific research directed at increasing understanding and effectiveness of decision making by individuals, groups, organizations and society. DRMS supports research with solid foundations in theories and methods of the social and behavioral sciences. This social and behavioral science research should advance knowledge, address fundamental scientific and societal issues and have strong broader impacts. DRMS funds disciplinary and interdisciplinary research, doctoral dissertation research improvement grants (DDRIGs) and conferences in the following areas: judgment and decision making; decision analysis and decision aids; risk analysis, perception and communication; societal and public-policy decision making; management science and organizational design.

Deadline: August 18, 2023

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NSF: Infrastructure Innovation for Biological Research

The Infrastructure Innovation for Biological Research Program (Innovation) [<u>NSF 23-578</u>] supports research to design novel or greatly improved research tools and methods that advance contemporary biology in any research area supported by the Directorate for Biological Sciences at NSF. The Innovation Program focuses on research infrastructure that is broadly applicable to researchers in three programmatic areas: Bioinformatics, Instrumentation, and Research Methods.

Infrastructure supported by this program is expected to advance biological understanding by improving scientists' abilities to manipulate, control, analyze, or measure critical aspects of biological systems, which can be essential for addressing important fundamental research questions. Proposals submitted to these programmatic areas can do one of three things to advance or transform research in biology: develop novel infrastructure, significantly redesign existing infrastructure, or adapt existing infrastructure in novel ways. Projects are expected to have a significant application to one or more biological science questions and have the potential to be used by a community of researchers beyond a single research team.

Deadline: Proposals accepted ANYTIME

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NSF: Robert Noyce Teacher Scholarship Program

The National Science Foundation (NSF) Robert Noyce Teacher Scholarship Program (Noyce) [NSF 23-586] invites innovative proposals that address the critical need for recruiting, preparing, and retaining highly effective elementary and secondary mathematics and science teachers and teacher leaders who persist as classroom teachers

in high-need Local Education Agencies (LEA), (a.k.a. high-need school district). To achieve this goal, Noyce supports talented science, technology, engineering, and mathematics (STEM) undergraduate majors and professionals to become effective K-12 STEM teachers. It also supports experienced, exemplary K-12 STEM teachers to become teacher leaders who continue as classroom teachers in high-need school districts. NSF welcomes submission of proposals to this funding opportunity that include the participation of the full spectrum of diverse talent in STEM, e.g., as PI, co-PI, senior personnel, postdoctoral scholars, graduate or undergraduate students or trainees. In addition, the Noyce program supports research on the effectiveness and retention of K-12 STEM teachers in high-need school districts.

Noyce offers four program tracks:

Track 1: The Robert Noyce Teacher Scholarships and Stipends (S&S) Track,

Track 2: The NSF Teaching Fellowships (TF) Track,

Track 3: The NSF Master Teaching Fellowships (MTF) Track, and

Track 4: The Noyce Research Track. In addition, Capacity Building proposals are accepted from proposers intending to develop a proposal in any of the program's tracks. Noyce also supports conference proposals focused on improving STEM teacher preparation. Proposals that support authentic Research Experiences in STEM Settings (RESS) for Noyce and/or non-Noyce pre-service and in-service STEM teachers are also invited.

Deadline: August 29, 2023

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USDA: Agriculture and Food Research Initiative - Education and Workforce Development

The Agriculture and Food Research Initiative <u>- Education and Workforce Development</u> (EWD) focuses on developing the next generation of research, education, and extension professionals in the food and agricultural sciences. The National Institute of Food and Agriculture (NIFA) requests applications for the AFRI's Education and Workforce Development program areas to support:

- 1. professional development opportunities for K-14 educational professionals;
- 2. non-formal education that cultivates food and agricultural interest in youth;
- 3. workforce training at community, junior, and technical colleges;
- 4. training of undergraduate students in research and extension;
- 5. fellowships for predoctoral candidates and postdoctoral scholars.

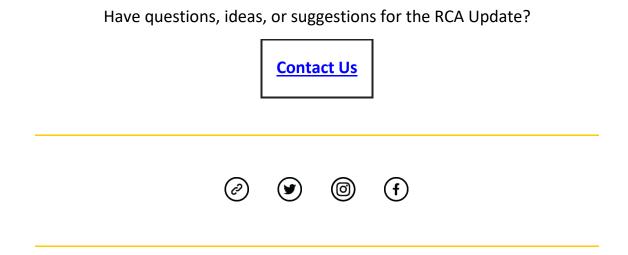
Deadlines vary by program area

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</u> page on the RCA website. If you have questions, please contact <u>ndsu.researchdev@ndsu.edu</u>.



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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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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.