NDSU RESEARCH AND CREATIVE ACTIVITY

RCA UPDATE

August 08, 2022

NOVELUTION IBC MODULE NOW LIVE

All new Institutional Biosafety Committee (IBC) protocols will need to be submitted in the Novelution IBC module as of September 1, 2022. As the module is available now, you are highly encouraged to begin using it for your protocol submissions.

See the Novelution webpage or contact Amanda Wilkinson (701-231-8908) for more information.

RCA Opportunities

- Apply or nominate a colleague for the RCA leadership professional development program. Up to 12 mid-career faculty members will be selected for an 8-session research leadership course led by AtKisson Training Group (ATG). Deadline is 8/26/22.
- Planning a proposal to USDA-AFRI? Learn more about the USDA-AFRI Preproposal Review Pilot Program.
- Recently served on a USDA Review Panel? Volunteer to be part of the USDA Expert Bank at NDSU.
- Share what you're doing in your research space by hosting a lab tour for your NDSU colleagues and Vice President Fitzgerald.

Upcoming Events

- **Webinar: Understanding the New NIH Data Management and Sharing Policy**
  August 11, 2022; 12:30-2:30pm / *Learn more >>*
- **NIH Grant Writing Webinar Series for Institutions Building Research and Research Training Capacity**
  August 16, September 26, and November 1; 1-2:15pm / *Learn more >>*
- **REGISTRATION OPEN: DARPA Forward Regional Events on National Security Innovation**
  August-December, 2022 / *Learn more >>*
- **Webinar: Diving Deeper into the New NIH Data Management and Sharing Policy**
  September 22, 2022; 12:30-2:30pm / *Learn more >>*

FUNDING OPPORTUNITIES

1. CDMRP: Peer Reviewed Cancer Research Program
2. DARPA: Biological Technologies
3. DOC: Climate Program
4. DOE: Carbon Ore Processing
5. DOE: Solar and Wind Grid Services and Reliability Demonstration
6. EREF: Sustainable Waste Management
7. NIH: Next Generation Multipurpose Prevention Technologies
8. NPS: African American Civil Rights – History and Preservation
9. NSF / NIH: Smart Health and Biomedical Research in the Era of AI and Advanced Data Science
10. NSF DCL: Critical Aspects of Sustainability
11. NSF: INCLUDES - **LIMITED**
12. NSF: Major Research Instrumentation – **LIMITED**
13. RSF: Social Science Research
14. RWJF: Culture of Health

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 ndsu.researchdev@ndsu.edu by close of business on the notification deadline.

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

- NSF: INCLUDES
  Notification Deadline: 08/16/2022
- NSF: Major Research Instrumentation
  Notification Deadline: 09/01/2022
- NIH: Collaborative Program Grant for Multidisciplinary Teams
  Notification Deadline: 09/15/2022
- NSF: Scholarships in STEM (S-STEM) Program
  Notification Deadline: 09/15/2022

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.

- DOE: RENEW - High Energy Physics
  Deadline: 08/15/2022
- Templeton Foundation: Spiritual Yearning Research Initiative
  Letter of Inquiry Deadline: 08/19/2022
- NIH: Director's Early Independence Award
  Deadline: 09/02/2022
- HRSA: Strengthen Evidence for Maternal and Child Health Programs
  Notification Deadline: 09/08/2022
- NIH: Bridges to the Baccalaureate
  Deadline: 09/26/2022
- NIH: Bridges to the Doctorate
  Deadline: 09/27/2022

- NEH: Infrastructure and Capacity Building Challenge Grants
  Deadline: 09/27/2022
- Johnson & Johnson: Women in STEM2D
  Deadline: 09/30/2022
- LOC: Connecting Communities Digital Initiative
  Deadline: 09/30/2022
- NSF: Louis Stokes Alliances for Minority Participation - STEM Pathways Implementation-Only
  Deadline: 11/18/2022

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.

CDMRP: Peer Reviewed Cancer Research Program

The FY22 Defense Appropriations Act provides funding for the Peer Reviewed Cancer Research Program (PRCRP) to support innovative, high-impact cancer research. **This pre-announcement is intended to allow investigators time to plan and develop ideas for submission to the anticipated FY22 funding opportunities.** The FY22 PRCRP funding opportunity announcements for the following award mechanisms will be posted on the Grants.gov website. Pre-application and application deadlines will be available when the announcements are released.

The PRCRP **Overarching Challenges** are critical gaps in cancer research, care, and / or

patient outcomes that, if addressed, will advance the mission readiness of U.S. military members affected by cancer and will improve quality of life by decreasing the burden of cancer on Service Members, their families, Veterans, and the American public.

Congressionally Directed Topic Areas: The FY22 PRCRP appropriation will provide funds for research into cancers not addressed in the other CDMRP cancer programs (https://cdmrp.army.mil/researchprograms). *Research applications in the areas of breast, kidney, lung, prostate, pancreatic, ovarian, and rare cancer or melanoma will not be accepted by the PRCRP*.

The FY22 PRCRP Topic Areas are:

- Bladder cancer
- Blood cancers
- Brain cancer
- Colorectal cancer
- Endometrial cancer
- Esophageal cancer
- Germ cell cancers
- Liver cancer
- Lymphoma
- Mesothelioma
- Metastatic cancer
- Myeloma
- Neuroblastoma
- Pediatric, adolescent, and young adult cancers (PAYAC)
- Pediatric brain tumors
- Sarcoma
- Stomach cancer
- Thyroid cancer
- Von Hippel-Lindau syndrome malignancies (excluding cancers of the kidney and pancreas)

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DARPA: Biological Technologies

This announcement [HR001122S0034] seeks revolutionary research ideas for topics not being addressed by ongoing Biological Technologies Office (BTO) programs or other published solicitations.

This announcement will remain open through April 20, 2023

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DOC: Climate Program

Climate variability and change present society with significant economic, health, safety, and security challenges. As part of the National Oceanic and Atmospheric Administration (NOAA) climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) addresses these climate challenges by managing competitive research programs through which high-priority climate science, assessments, decision-support research, outreach, education, and capacity-building activities are funded to advance our understanding of the Earth's climate system, and to foster the application and use of this knowledge to improve the resilience of our Nation and its partners. Through this announcement [NOAA-OAR-CPO-2023-2007440], CPO is seeking applications for eight individual competitions in FY23. Several of these competitions are relevant to four high-priority climate risk areas CPO is focusing on to improve science understanding and/or capabilities that result in user-driven outcomes: Coastal Inundation, Marine Ecosystems, Water Resources, and Extreme Heat.

Letter of Intent deadline: September 1, 2022; 4pm

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DOE: Carbon Ore Processing

The U.S. Department of Energy's Office of Fossil Energy and Carbon Management's (U.S. DOE FECM) Office of Resource Sustainability's Carbon Ore Processing Program [DE-FOA-0002620] is focused on the conversion of coal and coal wastes into value-added products that are outside of traditional thermal and metallurgical markets. For this FOA, coal wastes are defined as the carbonaceous solid portion of waste resulting from the cleaning of coal.

Deadline: October 6, 2022

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DOE: Solar and Wind Grid Services and Reliability Demonstration

The Systems Integration Solar and Wind Grid Services and Reliability Demonstration funding opportunity announcement [DE-FOA-0002745] will provide funding to demonstrate the capability of large-scale solar and wind plants to provide grid services to

the bulk power grid as well as improving grid reliability.

Topic 1: Wind and Solar Grid Services Design, Implementation, and Demonstration
This topic area supports full-scale demonstration projects that seamlessly integrate renewable generation with other large-scale or aggregated distributed energy resource (DER) technologies to provide ancillary (grid) services and improve reliability.

Topic 2: Protection of Bulk Power Systems with High Contribution from Inverter-Based Resources
The goal of this topic area is to develop a better understanding of how protection systems will operate under very-high IBR scenarios through advancements in modeling and simulation capabilities and to develop and validate strategies and new technologies that can maintain system protection at any level of IBR penetration and improve reliability.

An informational webinar will be held on August 17 at 12 pm.

Concept paper deadline: September 1, 2022; 4pm

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Environmental Research and Education Fund: Sustainable Waste Management

The Environmental Research and Education Fund (EREF) is accepting pre-proposals related to sustainable solid waste management practices and pertaining to the following topic areas:

1. Waste minimization;
2. Recycling;
3. Waste conversion to energy, biofuels, chemicals or other useful products. This includes, but is not limited to, the following technologies:
    - Waste-to-energy;
    - Anaerobic digestion;
    - Composting;
    - Other thermal or biological conversion technologies;
4. Strategies to promote diversion to higher and better uses (e.g. organics diversion, market analysis, optimized material management, logistics, etc.); and
5. Landfilling.

Desirable aspects of the above topics, in addition to or as part of hypothesis driven applied research, also include: economic or cost / benefit analyses, feasibility studies for

untested technologies or management strategies, life cycle analysis or inventory, and analyses of policies that relate to the above.

Note that EREF defines solid waste to include:

- municipal solid waste (e.g. residential, commercial, institutional);
- construction and demolition debris;
- certain industrial wastes (e.g. exploration & production waste, coal ash); and
- other wastes typically managed by the solid waste industry or generated by the public not included in the above items (e.g. electronic waste, disaster debris, etc).

Agricultural wastes (that aren't handled by the waste industry), nuclear waste, and land applied wastewater treatment sludge are generally not included in this definition.

Pre-proposal deadlines: December 1, 2022 and May 1, 2023

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NIH: Next Generation Multipurpose Prevention Technologies (NGM) (R01 Clinical Trial Optional)

The objective of this Funding Opportunity Announcement (FOA) [PAR-22-222] is to support the continued development of new and innovative on-demand, event-driven, and long-acting (systemic and non-systemic) multipurpose prevention technologies (MPTs). It supports development of MPTs that prevent HIV infection and pregnancy (hormonal and non-hormonal methods); sexually transmitted infections (STI) and pregnancy; or multiple non-HIV STI or HIV/STI MPTs in cis and trans males and females of all ages. Applications for MPT development may involve pharmacokinetic (PK), pharmacodynamic (PD), safety and, drug-drug interactions (DDI) studies using drug development, and formulation science supported by animal model testing. Also supported are biobehavioral and behavioral/social studies to identify MPT user-desired rheological and biophysical factors (look, feel, effectiveness, safety, and duration of action) and other behavioral/social factors that could promote increased MPT adoption and use.

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NPS: African American Civil Rights – History and Preservation

The National Parks Service (NPS) African American Civil Rights (AACR) program documents, interprets, and preserves sites and stories related to the African American struggle to gain equal rights as citizens. The 2008 NPS report *Civil Rights in America, A Framework for Identifying Significant Sites* serves as the foundation reference document for the grant program and for grant applicants to use in determining the appropriateness

of proposed projects and properties. The grants are funded by the Historic Preservation Fund (HPF) and administered by the NPS. This competitive grant program provides grants to states, tribes, local governments (including Certified Local Governments), and nonprofits. Non-federal matching share is not required, but preference will be given to applications that show community commitment through non-federal match and partnership collaboration. Grants will fund a broad range of planning, development, and research projects for historic sites including: survey, inventory, documentation, interpretation, education, architectural services, historic structure reports, preservation plans, and "bricks and mortar" repair.

Projects are split into two categories: physical "preservation projects" and "history projects." "**Preservation**" grants are for the repair of historic properties. "**History**" grants are for more interpretive work, like exhibit design or even historical research.

Deadline: November 8, 2022

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

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

Deadline: November 10, 2022

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NSF DCL: Critical Aspects of Sustainability (CAS): Innovative Solutions to Sustainable Chemistry (CAS-SC)

With this Dear Colleague Letter (DCL) [NSF 22-111], the National Science Foundation (NSF) announces the establishment of the Critical Aspects of Sustainability (CAS): Innovative Solutions to Sustainable Chemistry Program (CAS-SC), under the CAS metaprogram umbrella. The CAS-SC Program recognizes the importance of sustainable chemistry in addressing many societal challenges and aims to encourage the expansion of the Nation's research capacity in this topic area through submissions of research proposals. Proposals that emphasize a detailed and quantitative understanding of sustainable chemistry and include industrial partnerships are of particular interest.

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NSF: Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) – 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 INCLUDES : Notify RCA **by 08/16/2022, 4pm, if you are interested in submitting to this program. Notifications of interest should include the project type (see list below).**

NSF INCLUDES is a comprehensive, national initiative to enhance U.S. leadership in science, technology, engineering, and mathematics (STEM) discovery and innovation, focused on NSF's commitment to ensuring accessibility and inclusivity in STEM fields, as communicated in the NSF Strategic Plan for Fiscal Years (FY) 2022 - 2026. The vision of NSF INCLUDES is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the diversity of the Nation's population. More specifically, NSF INCLUDES seeks to motivate and accelerate collaborative infrastructure building to advance equity and sustain systemic change to broaden participation in STEM fields at scale. Significant advancement in the inclusion of groups that have historically been excluded from or underserved in STEM will result in a new generation of STEM talent and leadership to secure the Nation's future and long-term economic

competitiveness.

With this solicitation [NSF 22-622], NSF offers support for five types of projects that connect and contribute to the National Network:

1. Design and Development Launch Pilots,
2. Collaborative Change Consortia,
3. Alliances,
4. Network Connectors, and
5. Conferences.

The NSF INCLUDES National Network is a multifaceted collaboration of agencies, organizations, and individuals working collectively to broaden participation in STEM. The NSF INCLUDES National Network serves as a testbed for designing, implementing, studying, refining, and scaling collaborative change models and is composed of:

- NSF INCLUDES funded projects
- Other NSF funded projects
- Subcommittee on Federal Coordination in STEM Education (FC-STEM) agencies
- Scholars engaged in broadening participation research and evaluation, and
- Organizations that support the development of talent from all sectors of society to build an inclusive STEM workforce.

All NSF INCLUDES funded projects must operationalize five design elements of collaborative infrastructure - (1) shared vision, (2) partnerships, (3) goals and metrics, (4) leadership and communication, and (5) expansion, sustainability, and scale - to create systemic change that will lead to the substantially broadened participation of individuals from historically excluded and underserved groups in STEM.

LIMITED SUBMISSION: An organization may serve as a lead organization on only one proposal per project type, not including conferences.

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NSF: Major Research Instrumentation – 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 09/01/2022, 5pm, if you are interested in submitting to this program. Notifications of interest should include the intended 'track' (see definitions below).**

The National Science Foundation **Major Research Instrumentation (MRI) Program** 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.

Note: There is a possibility that a new solicitation will be published for this program. If this happens, interested individuals will be notified of any significant changes to the program.

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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RSF: Social Science Research

The Russell Sage Foundation (RSF) is accepting letters of inquiry (LOIs) under all of its core programs and special initiatives:

- Behavioral Science and Decision Making in Context;
- Future of Work;
- Immigration and Immigrant Integration;
- Race, Ethnicity and Immigration; and
- Social, Political, and Economic Inequality.

In addition, RSF will also accept LOIs relevant to any of its core programs that address the effects of social movements, such as drives for unionization and mass social protests, and the effects of racial / ethnic / gender bias and discrimination on a range of outcomes related to social and living conditions in the United States.

Deadline: November 9, 2022

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RWJF: Culture of Health

The Robert Wood Johnson Foundation (RWJF)has several open opportunities on the theme of Building a Culture of Health, with a focus on equity.

- Systems and Services Research to Build a Culture of Health
  Deadline: October 5, 2022
- Exploring the Future to Build a Culture of Health
  Deadline is rolling

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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.

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.