

NDSU OFFICE OF RESEARCH AND CREATIVE ACTIVITY
RCA UPDATE

February 5, 2024



FARMS collaborative project receives NSF award

It was only one week ago today when the news was released that NDSU and its core partners were one of 10 NSF Regional Engines awards selected nationally from the U.S. National Science Foundation.

FARMS stands for *Food systems Adapted for Resiliency and Maximized Security*. The project aims to create resilient and secure food systems in North Dakota by

combining advanced genomics, climate modeling, nanoscale sensors and computer networks to monitor and improve the growth of crops via strong networks of stakeholders across the state — including bringing tribal, rural and farming communities intentionally and meaningfully into the process of co-creating a blueprint for the future of agriculture and workforce development.

Each NSF Engine project will receive up to \$15 million for two years and could potentially receive up to \$160 million over 10 years. NSF believes the projects could also draw additional investments into each awarded region.

Spanning 18 states, these 10 NSF Engines represent a potential investment of nearly \$1.6 billion over the next decade by the NSF. According to the agency, this is one of the single largest broad investments in place-based research and development in the nation's history.

Catch up on the project:

- Read the FARMS press release: [North Dakota wins up to \\$160 million in federal funding to support innovation, jobs, and economic growth in agriculture technology](#)
- Read the NSF press release: [NSF establishes 10 inaugural Regional Innovation Engines across the country](#)
- Watch a replay of the January 29 [FARMS press conference](#)
- Learn about how FARMS was recognized by Emerging Prairie as the Innovation Project of the Year at their [1 Million Thanks event](#) on February 1, 2024
- Read Science's article about the NSF Engines initiative: [In a big bet on science, the U.S. just created 10 new innovation engines](#)
- Read how FARMS was featured by FORUM Communications Company in an editorial called [This unique collaboration will show us what the future of agriculture looks like](#)
- As part of a visit from USDA that included Under Secretary of Agriculture for Research, Education and Economics Chavonda Jacobs-Young, USDA Agricultural Research Service Administrator Simon Liu and additional leadership from ARS, the FARMS team provided details about the project and

participated in various discussions. The vibrant activity included a meeting with regional and agency leaders where Dr. Hollie Mackey provided FARMS updates and Adam Gilbertson (RDO Equipment Co.) shared updates from the Montana Headwaters Regional Technology & Innovation Hub.

- Learn more about all 10 projects on the [NSF Regional Engines site](#)

www.FARMSfeedstheworld.com

Follow FARMS on [LinkedIn](#) | [X](#) | [Facebook](#).



New Novelution Project Certification Module to Replace Current Effort Reporting System

NDSU will be transitioning from the current effort reporting system to an award-based payroll certification. We collaborated with Novelution to create a payroll certification module that will be launched February 5, 2024 within our current Novelution system.

To access the new module, sign in to Novelution, and click on the "Project Certification" tab which will be located next to the Sponsored Projects and Compliance modules tabs. The Project Certification module will process payroll certifications each semester by award rather than by person. The process will start with a pre-review by department administration and then be routed electronically to PIs for final review and certification.

Questions can be sent to ndsu.gca@ndsu.edu

Tips and Tricks for Academia-Industry Collaborations

Are you interested in NIH Grantsmanship?
Industry Collaborations? SBIR/STTR supported Translational Research?

Please join us on **Thursday, February 8 12p – 1p** in **Memorial Union, Nueta** for an inspiring lunch and learn with Ram Kadirvel, Ph.D. about *Tips and Tricks for Academia-Industry Collaborations*. Dr. Kadirvel is a Professor of Neurosurgery and Radiology at the Mayo Clinic in Rochester Minnesota with a background in chemistry/biochemistry. He will draw on his experiences collaborating with industry on successful SBIR/STTR awards and share some best practices for working with industry and forming collaborations that result in bringing bench science to the bedside.



Dr. Kadirvel's research focuses primarily on improving the understanding of the healing mechanisms of intracranial saccular aneurysms following endovascular therapies and developing novel therapeutic targets, including regenerative approaches, for accelerating aneurysm closure. He has been continuously funded as a PI for the last 18 years by NIH, NSF, AHA and various industries. Further, he directed preclinical safety and efficacy studies that have led to FDA approval of many groundbreaking neurovascular devices that are currently in clinical practice.

This event is supported by the CDTSPC-NDSU COBRE, Department of Pharmaceutical Sciences and the Office of Research and Creative Activity.

Nueta, Memorial Union, NDSU
February 8, 12-1pm
Lunch and drinks served

[Register >>](#)



Sparking **Big Ideas** **INTERDISCIPLINARY** RESEARCH PLANNING GRANTS

Sparking Big Ideas: Interdisciplinary Research Planning Grants

This planning grant program seeks to initiate early-stage project development to help catalyze collaborative, interdisciplinary teams among diverse disciplines in order to pursue innovative, ambitious solutions to impactful research questions that fit within NDSU's [strategic priorities](#), or align with prior and/or existing research investments at NDSU. Priority will go to teams without a prior track record of collaboration, or to teams that are expanding to include new disciplinary expertise.

Team composition should be reflective of the nature of the proposed research and the team's approach should rely on the perspective and expertise of multiple disciplines. This program is intended to help teams develop collaborations and prepare to pursue external sponsored research support for the proposed project. North Dakota has made it a priority to invest in the diversification of the state economy through research, and NDSU faculty are uniquely poised to bring their expertise together in teams to address challenges that cannot be solved by a single discipline.

Review of submitted proposals will begin February 21, 2024.

Proposals will be accepted on an ongoing basis until all funds are obligated. Pending continued availability of funds, the competition will continue into FY2025 with a final proposal deadline of October 1, 2024.

[Learn more and apply >>](#)

Apply for Research Support Grants

Due to faculty input, we have increased the amount available for our Research Support Grants to \$2,500. These funds are targeted at helping defray the costs of research, creative, or scholarly activities that lead to success of future grant proposals or research and creative outputs.

[Learn more and apply >>](#)

Call for proposals:

EDRF University Research Collaboration Program

North Dakota State University (NDSU) and University of North Dakota (UND) announce a joint call for the **University Research Collaboration Program**, funded by the Economic Diversification Research Funds (EDRF) appropriated in the 2023 Legislative session. The University Research Collaboration Program requires a project where faculty from UND collaborate with faculty at NDSU and include faculty or students from a third North Dakota institution (i.e., a predominantly undergraduate institution, polytechnic institution and/or a Tribal college or university). A call next fiscal year is also anticipated for the year two funds.

The newly launched University Research Collaboration Program seeks pilot collaboration projects that foster research collaboration across institutions. The funds should support activities (data collection, materials, experimental or instrumentation needs, etc.) for a pilot project to be submitted to an external funder. All proposals must include NDSU, UND and a third higher education institution (NDUS or NDTCS) to be considered for funding.

Deadline extended for this opportunity: COB, February 19, 2024

[Learn more and apply >>](#)

**Call for internal proposals:
Pilot Grants: NASA EPSCoR**

RCA is seeking internal proposals for NASA pilot projects of up to \$50,000.



Deadline to apply is COB, April 1, 2024

[Learn more and apply >>](#)

2024 NAM CATALYST AWARDS

SUBMIT YOUR IDEA BY March 11, 2024

<https://nam.edu/Catalyst-Award-Guidelines>



The National Academy of Medicine's (NAM) 2024 US Catalyst Award Competition

The Catalyst awards, part of a broader Healthy Longevity Global Competition, reward bold, new, potentially transformational ideas to improve physical, mental or social well-being and health of people as they age, in a measurable, equitable way.

With support from Johnson & Johnson Innovation, the Bia-Echo Foundation, and the Yun Family Foundation, the NAM will issue up to 18 Catalyst Awards to U.S.-based innovators. Each Catalyst Award includes up to \$50,000 cash prize as well as exclusive access to additional funding opportunities.

[Learn more >>](#)



NSF Issues Proposal & Award Policies & Procedures Guide, Webinar Offered

The National Science Foundation (NSF) has announced that a revised version of the **NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 24-1)** has been issued. The new PAPPG will be effective for proposals submitted or due on or after May 20, 2024. While this version of the PAPPG becomes effective on May 20, 2024, in the interim, the guidelines contained in the current **PAPPG (NSF 23-1)** continue to apply.

NSF will present information about these changes in a webinar — **Updates to the NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 24-1)** on Tuesday, March 12, from 2:00 – 3:00 PM EST. There is no cost to participate. The webinar will cover changes and clarifications to the PAPPG which will be effective for proposals submitted or due on or after May 20, 2024.

A by-chapter [Summary of Changes](#) provides a quick overview of the changes to this PAPPG (NSF 24-1). Questions prior to the webinar should be sent to grants_conference@nsf.gov.

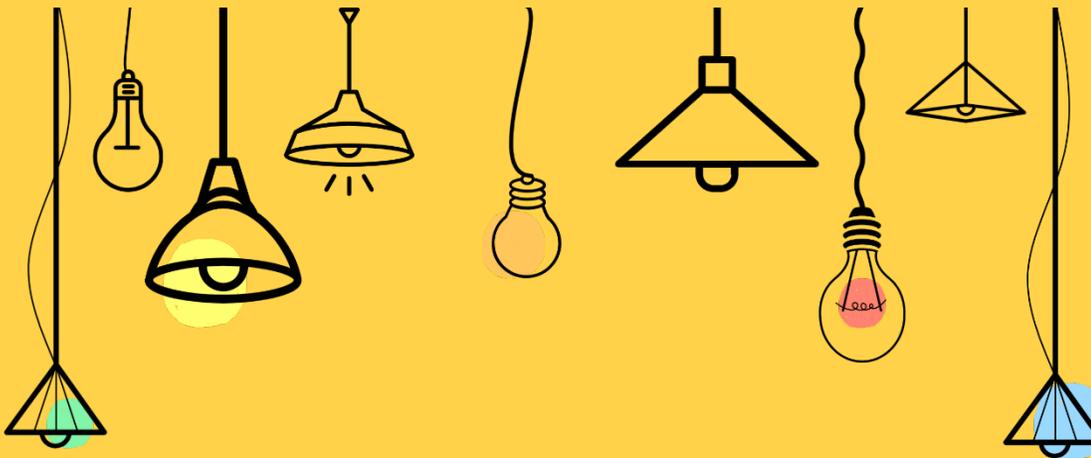
[*Learn more and register >>*](#)



SciENcv individual or small group sessions available

NSF now requires the use of [SciENcv](#) to generate your **BioSketch** and **Current and Pending Support** documents for *ALL* grant applications.

If you haven't already managed to login and create a needed biosketch and current and pending support, and you would like some assistance, please reach out to ndsu.researchdev@ndsu.edu to set up a session! We will accommodate in-person and zoom.



Have a big, bright idea about research at NDSU?

It's important that we continually challenge each other to come up with ambitious, big ideas in our research endeavors at NDSU. So we'd like to hear your ideas, and the bigger they are, the better.

While we can't promise all of them will succeed, we welcome you to share them - from an early concept or thought all the way to developed ideas that may just need some collaboration - send us an email (bigideas@ndsu.edu) and get the process started.

Upcoming Events at a Glance

- **Tips and Tricks for Academia-Industry Collaborations**
February 8, 12-1pm | [Register >>](#)
- **Technology, Innovation and Partnerships (TIP) Programs**
February 12, 1-2pm | [Register >>](#)
- **Updates to the NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 24-1)**
March 12, 1-2pm | [Register >>](#)

External Funding Opportunity Announcements

[The Campus Cyberinfrastructure \(CC\)](#) program invests in coordinated campus-level cyberinfrastructure improvements, innovation, integration, and engineering for science applications and distributed research projects. Projects that help overcome disparities in cyber-connectivity associated with geographic location, and thereby advance the geography of innovation and enable populations based in these locales to become more nationally competitive in science, technology, engineering, and mathematics (STEM) research and education are particularly encouraged.

ENERGY

- Learn about [Office of Energy Efficiency & Renewable Energy Funding Opportunities](#)
- ARPA-E is seeking concept papers for Catalyzing Innovative Research for Circular Use of Long-Lived Advanced Rechargeables ([CIRCULAR](#)) - Due 3/12/24

BIOLOGICAL SCIENCES

- NSF's Directorate for Biological Sciences (BIO) is encouraging proposals in response to the Dear Colleague Letter entitled [Leveraging Innovations From Evolution \(LIFE\)](#)

EDUCATION

- NSF's [Innovation in Graduate Education](#) (IGE) Program is designed to encourage development and implementation of bold, new, and potentially transformative approaches to STEM graduate education training.

CROSS-CUTTING PROGRAMS

- NSF [Sustainable Regional Systems Research Networks \(SRS RNs\)](#)
The United States is made up of regional systems comprising interdependent urban and rural systems and every community category between urban and rural. Urban systems and rural systems are interdependent for the provisioning of food, energy sources, water, other materials and natural resources, markets, manufactured goods, and medical resources. These systems are also connected by ecological processes that both influence and are influenced by human behavior. The vital interconnection of urban-rural systems underscores the critical need for the advancement of sustainable regional systems (SRS). The goal of this solicitation is to fund convergent research and education that will advance sustainable regional systems science, engineering, and education to facilitate the transformation of current regional systems to enhance sustainability.

USDA: Equipment Grant Program - LIMITED

[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.

The [Equipment Grant Program](#) (EGP) serves to increase access to shared-use special purpose equipment/instruments for fundamental and applied research for use in the food and agricultural sciences programs at institutions of higher education, including State Cooperative Extension Systems. The program seeks to strengthen the quality and expand the scope of fundamental and applied research at eligible institutions, by providing them with opportunities to acquire one major piece of equipment/instruments that support their research, training, and extension goals and may be too costly and/or not appropriate for support through other NIFA grant programs.

LIMITED to two applications per institution.

Key Dates:

- **NDSU Notification Deadline** – February 16, 2024; 5pm
- **NDSU Internal Pre-application Deadline** – March 1, 2024; 5pm
- **Decision Made** – Week of March 18, 2024; 5pm
- **USDA Equipment Grant Deadline** – May 3, 2024

PLEASE EMAIL YOUR NOTIFICATION TO: ndsuhesearchdev@ndsuhedu

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

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

[Contact Us](#)



The Office of Research and Creative Activity (RCA) sends bi-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.