

RCA UPDATE

February 20, 2024

FARMS names Hollie Mackey Chief Strategy Officer

In the third week after securing a federal award of potentially up to \$160 million over 10 years, NDSU professor Hollie J. Mackey has been named Chief Strategy Officer to lead FARMS.

Hollie has been instrumental on FARMS and her responsibilities and contributions to the project included playing a vital role in developing the direction, content, and strategy for the virtual and in person NSF site visits in summer and fall 2023. She has demonstrated a deep understanding



of the project's potential for North Dakota and how that potential can be leveraged to improve the lives and successes of all people in the state.

Hollie has held faculty appointments at NDSU and prior to that, the University of Oklahoma. She served in several capacities in Montana with federal and state programs, including in the Montana Office of the Commissioner of Higher Education. As a Presidential Appointee in 2022, she served as the Executive Director for the White House Initiative on Advancing Educational Equity, Excellence and Economic Opportunity for Native Americans and Strengthening Tribal Colleges and Universities.

An enrolled member of the Northern Cheyenne Nation, Hollie has focused her academic career working within communities to advance research interests and has been a central contributor to the FARMS effort.

Read the announcement >>





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 <u>strategic priorities</u>, 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.

<u>Learn more and apply >></u>

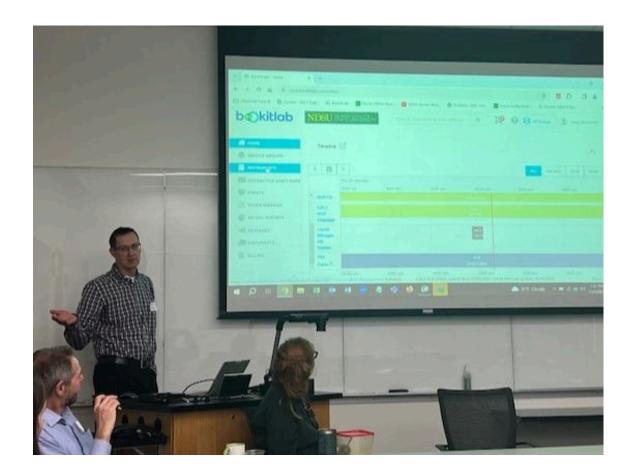
NDSU team attends Northern Nano Lab Alliance meeting

In January, members of the NDSU Office of Research and Creative Activity Research Operations team Fred Haring, Greg Strommen, Jim Bahr, and Interim Director Scott Payne visited the Twin Cities for the annual meeting of the Northern Nano Lab Alliance (NNLA).

The NNLA is a network of 10 regional university academic facilities for micro- and nanofabrication, nanomaterials, and advanced characterization. Its mission is to help each member improve their support of academic research in applied nanotechnology.



The group toured the Minnesota Nano Center cleanrooms and labs at the University of Minnesota College of Science and Engineering. In addition to sharing capabilities, problems, and solutions in a series of interest-driven technical sessions, Strommen presented an overview of BookitLab equipment management software.



What is an Adverse Event and how do I report one?

Adverse events (AE) are "outcomes that adversely affect the health or well-being of animals used in research, teaching, or testing; incidents related to experimental procedures that resulted in an increased level of pain or distress in an animal or death of an animal that was not anticipated and described in the approved protocol; OR any



occurrence of an unforeseen event that negatively impacted the welfare of animals; usually involving pain, distress, or death of an animal".

Unanticipated sickness or death in an animal study must be reported as an AE within 48 hours. Reports are filed using the adverse event tab of the related protocol in Novelution. The Attending Veterinarian and IACUC Administrator are notified once submitted and review the AE and comment or act as needed. The carcasses of animals that die unexpectedly should be immediately refrigerated (not frozen) and then submitted to the veterinary diagnostic laboratory within **24 hours** for a diagnosis. This allows the cause of the death to be investigated and helps to prevent future occurrence or a disease outbreak in the facility.

Unfortunately, many people are of the opinion that AEs are a bad thing and should never occur, but that is not realistic. Unexpected outcomes happen whenever we work with animals. The AE report is used as a tool to minimize and/or eliminate more problems from occurring in the future. It is an important quality control tool.

If you have questions about the AE reporting process, please contact <u>Neil Dyer</u>, attending veterinarian or <u>Tania Molden</u>, IACUC administrator.

North Dakota State University 2024 Summer Undergraduate Biomedical Research Program

NDSU is offering a summer undergraduate research program featuring the opportunity to study biomedical research within a variety of science and engineering fields. This program is intended to provide a coordinated, educational and dynamic research community to encourage research in undergraduate study.

There are 19 research projects to select from, including research areas in different STEM departments.

WHERE	The North Dakota State University campus in Fargo, ND.
WHEN	Projects will run for 10 weeks from May 28, 2024 to August 2, 2024.

WHO	Undergraduate students who are currently enrolled in a degree program at a North Dakota college or university and who will not graduate before December 2024.
PAY / MATERIALS	Wages of \$15 per hour. Students are expected to work 40 hours per week. Funds (up to \$500) to purchase consumable research materials by your advisor.
QUESTIONS	Contact Kirstin Saulsbury

Learn more and apply >>

Applications and two reference letters must be received by March 15, 2024

This program is supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number P20GM103442.



Call for Evaluators for Student Research Days

Evaluators are needed for both days for NDSU Student Research Days -- a two-day event dedicated to providing NDSU graduate and undergraduate students an opportunity to present their research and creative works. Scheduled for April 9-10, 2024, Student Research Days is a collaboration among NDSU EXPLORE, Gamma Sigma Delta, and the Graduate Student Council.

Student Research Day 2024 evaluator opportunities

1. Sign up to be an evaluator for NDSU EXPLORE

The NDSU Office of Research and Creative Activity hosts NDSU EXPLORE, an annual showcase in which undergraduate students in all disciplines present their research and creative projects.

2. Sign up to be an evaluator for Gamma Sigma Delta

Gamma Sigma Delta is an agricultural honor society that encourages and rewards excellence in agriculture, and the NDSU chapter hosts an annual symposium during which undergraduate and graduate students present their research.

3. Sign up to be an evaluator for Graduate Student Council

The NDSU Graduate Student Council hosts an annual research symposium in which graduate students in all disciplines present their research.

Thank you for supporting student research at NDSU.

- Dr. Ying Huang, Director of Undergraduate Research (ying.huang@ndsu.edu)
- Dr. Birgit Pruess, Gamma Sigma Delta Chapter President (birgit.pruess@ndsu.edu)
- Dr. Matthew Warner, Coordinator, The Graduate Professional Skills Academy (<u>matthew.b.warner@ndsu.edu</u>)





NDSU STEM Kids Camp Instructors and Assistants Needed

Do you have a passion for STEM and enjoy sharing it with K-8 students? NDSU's College of Engineering is looking for instructors and classroom assistants for STEM Kids Camp 2024.

The camp will be held two separate weeks at NDSU (July 15 - 18 and July 22 - 25).

- There are 2 sessions per day each week. Morning session is from 9am –
 12pm and afternoon session is from 1pm 4pm. Instructors will be with the same group of students for the entire session.
- Sessions are grouped by grades with maximum of 20 students:
- Instructors can teach up to four sessions and can teach the same topic each session.
- Curriculum is available but instructors are also welcomed to design their own. It needs to be designed to fill 12 contact hours with the students. Assistance planning sessions and all supplies will be provided.
- Instructors and assistants will receive:
 - Solo teaching sessions (Experience required) = \$750/session/week
 - Co-teaching sessions = \$500/session/person/week
 - Classroom Assistants = \$13/hour

If you are interested, contact Angela Gross by Tuesday, March 12.



Fast Track Leadership Training at NDSU

In today's higher education landscape, prioritizing diverse leadership cultivates creativity and problem-solving. Fast Track Leadership Training is a development and training opportunity for selected NDSU employees that is an opportunity to enhance leadership skills and prepare participants to take on various aspects of leadership when opportunities emerge.



Women and individuals from underrepresented groups are especially encouraged to apply for this program and to help in shaping the future of NDSU.

This training is sponsored by NDSU Agricultural Affairs, the Office of Research and Creative Activity, and Academic Affairs.

<u>Learn more and apply >></u>

Deadline: February 21, 2024

Funding agencies prohibit use of generative artificial intelligence technologies for peer review

On June 23, 2023, the National Institutes of Health (NIH) released an NIH Guide notice, *The Use of Generative Artificial Intelligence Technologies is Prohibited for the NIH Peer Review Process* (NOT-OD-23-149) The intent of this policy is to maintain security and confidentiality in the NIH peer review process.



On December 14, 2023 the National Science Foundation (NSF) announced a Notice to the Research Community: Use of generative artificial intelligence technology in the merit review process. NSF reviewers are prohibited from uploading any content from proposals, review information or related records to non-approved generative AI tools. Proposers are encouraged to indicate in the project description the extent to which, if any, generative AI technology was used and how it was used to develop their proposal. Learn more >>.

On August 10, 2023, the Department of Defense (DoD) announced the establishment of Generative AI Task Force. *Learn more* >>

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 >>





StartupBREW Fargo: Reach Right USA + Fargo Ergonomics

StartupBREW Fargo is a weekly event on Wednesday mornings with the mission to learn, support, and inspire.

On Wednesday, February 21, James Pladson, founder of Reach Right USA (and NDSU graduate) will discuss his innovative ergonomic tool attachment called Reach Right. The Reach Right handle attachment enables people to push, pull and lift from a more upright, ergonomic position, which reduces back pain and the risk of injuries. The handle can be attached to long-handle tools such as shovels, brooms, rakes and more.

Joining James will be Crystal Nelson, ergonomist, occupational therapist, and founder of Fargo Ergonomics and Alter Ergo. Crystal works to prevent work-related injuries for all settings, such as industrial, manufacturing, healthcare and office settings.

StartupBREW Fargo is held at Drekker Brewing Company, 1666 1st Ave N, Fargo, ND

8:00 AM - Coffee Club (time to drink coffee and connect)

8:30 AM - Program Begins

9:15 AM - Program Ends

Learn more >>

Exploring Paths to Research Leadership Seminar Series

As part of her RCA Broadening Participation Faculty Fellow role, <u>Febina Mathew</u>, NDSU associate professor of plant pathology, has created the Exploring Paths to Research Leadership pilot program.

These four sessions will enable participants to explore different paths to research leadership. One pathway is to grow a research program while a different set of skills and expectations are required for research leadership involving leading big initiatives (like centers) or serving in administrative roles in academia or industry.

Lunch will be provided at each session.

How Can I Effectively Lead my Research Program?

As a researcher, it is common to feel overwhelmed by data and underestimate your expertise in your field. However, effective communication and engagement with your work are crucial for establishing yourself as an expert. In this session, we will provide you with tips to help you gain recognition in your respective field.

- March 14, Badlands (MU), 11:30 AM to 1 PM
- Speakers: Febina Mathew and Julie Bowsher

Positioning Your Research Program in the Scientific Community

Facilitating networking opportunities with faculty members to effectively secure funding from the USDA, NSF, and/or other funding agencies.

- March 28, Nueta (MU), 11:30 AM to 1 PM
- Speakers: Phil McClean, Christy McGeorge, Sylvio May, Sathish Venkatachalem, Hollie Mackey, and Britt Heidinger

Developing Collaborations with Faculty Members within NDSU

Facilitating a Social Networking Session aimed at fostering interdisciplinary collaboration among faculty members, to collectively develop potential projects for submission to funding agencies. Additionally, the session will provide an opportunity for the teams to present their projects as "lightning talks" - concise 5-minute presentations - to gather feedback from peers and enhance their collaboration skills through peer-to-peer mentoring.

- April 5, Badlands (MU), 11:30 AM to 1 PM
- Speakers: Febina Mathew and Heidi Grunwald

How Do I Become a Research Leader?

Panelists will come from NDSU and the region, drawing from various sources such as associate deans for research, central research offices, industry, and more. They will provide valuable insights on career pathways based on their own experiences.

- April 12, Room of Nations (MU), 11:30 AM to 1 PM
- Speakers: Rajesh Kavasseri (SDSU), Wendy Reed (UMN), and Nancy Hodur

Sessions are free, but registration is required.

Learn more and register >>



2024 Nebraska Research & Innovation Conference

The Nebraska Research & Innovation Conference is scheduled for March 14. Nebraska's Track-1 "EQUATE" (quantum materials science) 2024 symposium's theme is "Diamond Quantum Sensing: Challenges and Opportunities."

The event is free and all interested colleagues from other EPSCoR jurisdictions are invited to register (pre-registration is required). It includes lunch and refreshments and features speakers from Princeton University, University of Chicago, Georgia Tech, UC-Berkeley, and more.

This event is supported by the National Science Foundation's award, OIA-2044049.

Learn more and register >>

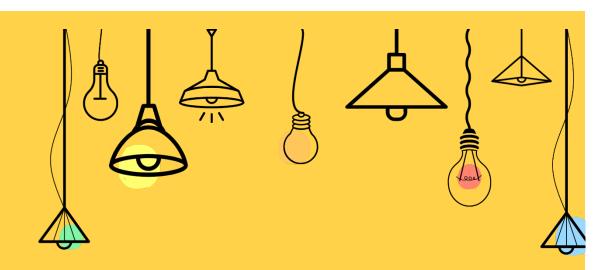


SciENcv individual or small group sessions available

NSF now requires the use of <u>SciENcv</u> 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

<u>ndsu.researchdev@ndsu.edu</u> 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

- StartupBREW Fargo: Fargo: Reach Right USA + Fargo Ergonomics
 February 21, 8-9:30am | <u>Learn more >></u>
- Save the Date: NIH National Institute of Nursing Research Director's Lecture
 Climate Change and Health

March 6 | 11-12p | *Register >>*

 Updates to the NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 24-1)

March 12, 1-2pm | Register >>

2024 Nebraska Research & Innovation Conference

March 14 | Register >>

- Exploring Paths to Research Leadership Seminar Series
 March 14, March 28, April 5, April 12 | Learn more and register >>
- Student Research Days
 April 9 and 10 | <u>Learn more >></u>

Funding Opportunity Announcements

AGRICULTURE AND ANIMAL SCIENCES

FFAR: Japanese Encephalitis Virus Research Program

Proactively protecting the health of the U.S. swine heard by enhancing the prevention, preparedness and response capabilities for Japanese encephalitis virus (JEV), a transboundary risk for U.S. introduction.

Learn more and apply >>

Deadline: April 15, 2024; 5pm

DOE: Regional Resource Hubs for Purpose-Grown Energy Crops

The 2024 Regional Resource Hubs for Purpose-Grown Energy Crops FOA [DE-FOA-0003209] supports the focus of the BETO Renewable Carbon Resources Program in

developing strategies and supporting technology development to reduce the cost, improve the quality, increase the quantity, and maximize the environmental benefits of using renewable carbon resources.

<u>Learn more and apply >></u>

Cost share: 20% required

Deadline: Concept Paper March 14, 2024; 4pm

USDA: Scientific Exchange Program – Women in Sustainable Food Systems

The 2024 Scientific Exchanges Program for "Women Leadership and Empowerment in Food Systems and Climate Change" will focus on advancing women's leadership in food systems transformation efforts.

<u>Learn more and apply >></u>

Deadline: March 25, 2024

• USDA: Urban Agriculture and Innovative Production Competitive Grants Program

The primary goal of the UAIP projects is to support the development of urban agriculture and innovative production. The UAIP grants being made available for application under this NFO support planning and implementation activities.

<u>Learn more and apply >></u>

Deadline: April 9, 2024

HEALTH AND HUMAN DEVELOPMENT

 NIH: Multi-Scale Models Bridging Levels of Analysis in Aging and Alzheimer's Disease and AD-Related Dementias (R01 Clinical Trial Not Allowed)

This broad scope [RFA-AG-25-016] encompasses a variety of computational approaches—such as mathematical and computational modeling, image analysis, artificial intelligence, and machine learning—to better understand aging processes and AD/ADRD across molecules, cells and networks, and cognition and behavior.

Learn more and apply >>

Deadline: Letter of Intent May 13, 2024

Melanoma Research Alliance: Next Steps Program

The intent of this research funding strategy is to help advance translation of discoveries into the clinic by supporting: 1) needed preclinical resources and tools for the research community to identify and begin to develop new therapies and 2) infrastructure to analyze and build large datasets to identify better diagnostic and

prognostic biomarkers leading to hypothesis-driven research proposals for submission to MRA and other funding agencies.

<u>Learn more and apply >></u> Deadline: March 28, 2024

ART, SCIENCES, AND ENGINEERING

NSF: Broadening Participation in Chemistry

The Broadening Participation Program in the Division of Chemistry (CHE) [PD 24-7487] supports individuals throughout their STEM career pathway by division-specific, MPS-wide, and partnership funding opportunities for high school students, undergraduate students, graduate students, post-doctoral researchers, early career faculty, and established faculty.

<u>Learn more and apply >></u>

Deadline: Anytime

NSF: Special Guidelines for Submitting Collaborative Proposals under U.S. National Science Foundation (NSF) and the Department of Biotechnology (DBT) of India Collaborative Research Opportunities

The U.S. National Science Foundation (NSF) and the Department of Biotechnology (DBT) of the Government of India have signed an Implementation Arrangement on research cooperation [NSF 24-054]. The Implementation Arrangement provides a framework to encourage collaboration between U.S. and Indian research communities and sets out the principles by which joint activities might be supported. Through this research agency partnership, U.S. researchers may receive funding from NSF and India researchers may receive funding from DBT respectively.

Learn more and apply >>

Deadline: There is only one round of proposal submissions related to this DCL. Proposals submitted to an NSF program that accepts proposals at any time must be submitted by April 11, 2024. Proposals submitted to any other participating NSF program must be submitted following the program due dates for calendar year 2024.

DOE: Carbon Negative Shot Pilots

This Funding Opportunity Announcement [DE-FOA-0003082] aims to expand the current Department of Energy portfolio of Carbon Dioxide Removal (CDR)

technologies to advance technologies that will ultimately achieve the Carbon Negative Shot target of under \$100/net tonne Carbon Dioxide equivalent (CO2e) removed (both capture and storage), by 2032.

<u>Learn more and apply >></u> Cost Share: 20% required

Deadline: April 16, 2024

DoD: DARPA – Adaptive Capabilities Office & Aerospace Projects Office Office-Wide Broad Agency Announcement

Proposed research should investigate approaches that enable revolutionary advances in science, devices, or systems in the following technical areas: architecture, sensing and tracking, lethality, survivability, communications, advanced battle management, complex all-domain experimentation, relevant non-kinetic effects, and faster than real time modeling and simulation.

<u>Learn more and apply >></u>

Deadline: Proposals accepted on a rolling basis until November 30, 2024; 12pm

Department of State: Fostering Democratic Discourse – Digital Creators Exchange Program

This project seeks to implement a 15-day exchange program to the United States for at least 10 participants representing digital content creators, targeting youth audiences from Punjab Province, Pakistan. The program will include recruitment and selection of participants, planning and execution of the exchange program in the United States, and implementation of a follow on program in Pakistan where participants can share their experiences and knowledge with other digital creators and youth.

<u>Learn more and apply >></u>

Deadline: April 10, 2024

Limited submission programs

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 date.

Review available <u>Limited Submission Programs</u>

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?

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.