NDSU strengthens Central Core Research Facilities through new leadership and reorganization

In line with peer Carnegie R1 institutions, NDSU’s Office of Research and Creative Activity has reorganized the unit’s two core facilities, now unified under the executive leadership provided by Scott Payne, PhD. These efforts are squarely in line with President Cook’s priority to maintain R1 status and align with NDSU’s strategic plan, which prioritizes as a goal the integration and strengthening of centralized administrative and academic support for research and creative activity.

With this reorganization, the RCA Core Research Facilities represent two distinct sets of facilities and capabilities, the EMC and the Materials, Fabrication Analysis and Fabrication Core, the latter formerly known as Research Operations. The EMC houses and provides services for the university’s electron microscopy, micro computed X-ray tomography, and imaging equipment used for teaching, research, and industry activities.

The Materials Characterization, Analysis and Fabrication Core (MCAF) services
consist of more than 130 materials synthesis and characterization, microfabrication, device packaging, and testing equipment sets used by NDSU faculty, staff, students, and external academic and industry users (instrumentation description below). The MCAF Core is staffed by three highly skilled technicians and engineers (James Bahr, Fred Haring, and Greg Strommen), with instrumentation located in buildings Research 1 Addition (R1A) and Research 2 (R2) in the NDSU Research & Technology Park.

The two Cores serve more than 120 NDSU researchers and students from 20 departments across five NDSU colleges and 20 external companies. On average, this work is a component in 125-175 publications and 30-40 dissertations/theses annually. The new Executive Director role will manage all responsibilities and employees from both teams.

Payne has been promoted to Executive Director of Core Research Facilities at NDSU to provide leadership to the Cores. Previously, he served as Director of the Electron Microscopy Core (EMC). Payne received his doctorate in materials from NDSU and began working at the EMC in 1995. After developing expertise in micro-computed X-ray tomography and scanning and transmission electron microscopy, he accepted the lead for the facility upon retirement of the previous Director in 2008. In early 2023, Payne assumed overload duties as the Interim Director of Research Operations for the Office of Research and Creative Activity when the previous director, Aaron Reinholz, moved into a new role in Agriculture Affairs.

During the past 16 years, Payne's efforts have made the facility a world-class scientific core facility supporting the university’s R1 research mission. He has secured three National Science Foundation Major Research Instrumentation (MRI) awards and a National Institutes of Health S10 award totaling over $2.3 million combined. These funds have enabled the purchase of sophisticated new instrumentation which in turn strengthened the EMC’s ability to support the work of researchers in diverse disciplines and departments at NDSU.

Payne initiated an organizational restructuring of the EMC that moved the core into the NDS Vice President for Research and Creative Activity's team, better reflecting
the nature and broad use of the services provided.

NDSU VPR Colleen Fitzgerald saw an opportunity to leverage Payne’s strengths in strategically developing sustainable core approaches to the EMC, noting that “Scott’s new role is reflective of the need for having strategies for sustainable core facilities and instrumentation plans that leverage users and reflect alignment to key strengths, all of which are commensurate with efforts at R1 institutions.”

Fitzgerald noted how important it's been to her to have a leader like Payne on her team. "As a member of the RCA leadership team, Scott has provided knowledgeable input and he reliably advises me on needs for growth and maintenance of our research infrastructure and instrumentation, especially when it comes to supporting NDSU’s R1 mission. The instrumentation and technical expertise of the MCAF team supports NDSU’s specialized expertise in materials science and engineering, which supports industry partnerships and numerous critical missions for the Department of Defense. I appreciate Scott’s willingness to accept new responsibilities and I am grateful for his leadership.”

The 75,000 square foot R2 facility was opened in 2004 and includes cleanroom, laboratory, and office space. The R2 ISO5 and ISO7 Clean Rooms include Class 100 and Class 10,000 bays encompassing a total area under filtration of 12,000 square feet. The R2 building houses instrumentation supporting microfabrication, device packaging, device testing, and reliability/failure analysis. R1a is a 35,000 square foot facility connected to the research administration building at NDSU (R1 and houses a comprehensive set of tools for materials synthesis, processing and characterization. The tool set includes the ability to conduct combinatorial materials research using robotic machines and software. A complementary capability was established to support rapid biological test and screening for anti-fouling, anti-microbial, and other coatings. Overall, the equipment set investment in both buildings exceeds $30M.
NDSU Assistant Professor of English Amy Gore has been awarded the Reese Fellowship by the American Antiquarian Society (AAS). This Fellowship is designed to facilitate research in American bibliography and projects related to the history of the book in America. This funds short-term visiting research fellowship spanning one month and allows the recipient to take up residence at AAS in Worcester, Massachusetts. Fellows are selected based on the applicant's scholarly qualifications, the project's scholarly significance or importance, and the appropriateness of the proposed study to the Society's collections.

Gore will be conducting archival research on her project, “Bodies of Believers: Typography and Christian Embodiment in Samson Occom’s A Sermon and William Apess’s A Son of the Forest,” which takes up typography to examine the ways in which race and religious affiliation became embodied materially within Indigenous book history. During the late 1700s and early 1800s as ideas about race were forming, books like *Occom’s Sermon* (1772) and Apess’s *Son of the Forest* (1829) showed how Native Christians grappled with racial and religious conflicts. Despite facing racism and doubts about their authenticity, these authors stood up for Native Christianity. Their books not only told stories but also reflected changing ideas about race and religion through their design and text. Gore will argue that by looking at how these books were made and what they say, we can understand how perceptions of race and Christianity were shifting in early America.

Gore commented about the impact of the award. “I’m thrilled to be the recipient of the Reese Fellowship and looking forward to working with the extensive archive at the American Antiquarian Society,” she said.

A national research library and learned society founded in 1812 by Revolutionary War patriot and printer Isaiah Thomas, AAS is located in Worcester, Massachusetts.
The AAS library today houses the largest and most accessible collection of books, pamphlets, broadsides, newspapers, periodicals, children's literature, music, and graphic arts material printed before the twentieth century in what is now the United States, as well as manuscripts and a substantial collection of secondary texts, bibliographies, and digital resources and reference works. AAS was presented with the 2013 National Humanities Medal by President Obama in a ceremony at the White House.

“This prestigious recognition of Dr. Gore’s scholarship provides national validation on how NDSU humanities researchers look to history, literature and beyond to address important and fundamental questions on the nature of who we are as humans” said Colleen Fitzgerald, NDSU vice president of research and creative activity.

INTERNAL FUNDING OPPORTUNITIES from RCA

RCA Sparking Big Ideas Research Seed Projects

The Office of the Vice President for Research and Creative Activity (RCA) Research Seed projects are intended to support ideas that 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.

The purpose is to support teams to advance ideas for the development of competitive proposals in pursuit of significant external funding.

The seed projects can request up to $100,000 for a project period of approximately one year, with the goal of a submission of a large-scale proposal to an external funder within six months of the seed project end date.
The deadline for proposals is May 15, 2024.
Learn more and apply >>

**Bison Arts and Humanities Fund**

The Vice President for Research and Creative Activity has created a program to stimulate new research and creative endeavors in the humanities and the arts: the Bison Arts and Humanities Fund.

The arts and humanities are vital to the human condition, with importance for civic engagement, cross-cultural understanding, and the development of critical and creative thinking skills.

Faculty are encouraged to submit a proposal for up to $5,000 that can be used for early-to late-stage humanities or arts projects. Emphasis for funding will be on projects that directly support career progression and projects with strong potential to bring positive national attention to NDSU faculty and/or which can be leveraged for future funding.

Learn more and apply >>

**University Research Collaboration Program (URCP) - ROUND 2**

North Dakota State University and the University of North Dakota have issued a joint call for the University Research Collaboration Program which is funded by the Economic Diversification Research Funds (EDRF) appropriated in the 2023 Legislative session. The University Research Collaboration Program has selected a first round of awards of up to $50,000. The EDRF funds are targeted at stimulating economic activity across the state through innovation of new technology, concepts, and products and promoting job creation and career and wage growth while providing experiential learning opportunities for students. The URCP requires projects to include faculty from UND and NDSU along with faculty or students from a third North Dakota institution. A call next fiscal year is also anticipated for the year two funds.
Deadline: June 5, 2024
Learn more and apply >>

EDRF Technology Acceleration Program

The Technology Acceleration Program will accelerate the development of prototypes (e.g. software, IoT, algorithms, sensors, biologics, materials, medical devices) that have potential to leverage public-private partnerships and fit within NDSU’s strategic priorities or align with prior and/or existing research investments at NDSU. Proposals should demonstrate commercial applicability and articulate how the funding would result in significant progress for the prototype along the bench to the market pipeline. Proposals should include a concise statement of how the activity being funded can serve an unmet industry or market need. The Technology Acceleration Program is not intended to support projects at a conceptual stage.

Deadline: June 1, 2024
Learn more and apply >>

SBIR/STTR Phase 0 Funding Program

Research and Creative Activity has designed a program to provide financial support for those pursuing federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. Funding for this program will come from Economic Diversification Research Funds (EDRF). Established by the ND Legislature for NDUS institutions, the program’s purpose is to:

- 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.
Applications will be accepted on a rolling basis beginning April 23, 2024. Review of submitted proposals will begin May 15, 2024. The request for applications will be open until funds are fully obligated. Learn more and apply >>

Join us as we celebrate Dr. Neil Dyer and his 28 years of service to NDSU!

Thursday, May 9 from 2:00pm-3:30pm
Room 148/154
Research 1
WE'RE HIRING:
Director of Animal Resources/Institutional Attending Veterinarian
Tips for Proposal Submissions

1. NIH submissions due on or after January 24, 2025 will have a new forms package. ASSIST, the electronic submission system for NIH, includes the ability to copy and reuse a past application. Keep in mind that the new Forms I application package must be used for submissions on or after January 24, 2025, so the copy functionality may not work for these submissions.

2. Most sponsors have strict deadline dates and times that must be met. Please allow time for SPA staff to process and submit the proposal. If a deadline is 5:00pm local time, sponsors will not accept submissions at any time after
that, even if it is only late by one minute.

3. Each funding opportunity has its own unique set of forms. Always double check to ensure that you are using the correct application forms for the funding opportunity you have selected.

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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 2024 edition:

- **Dangers and Opportunities of Technology: Funding Sources** – We discuss this NEH program, which includes funding opportunities focused on methods of parceling and analyzing massive data that complement the core values of strengthening democracy, advancing equity, and addressing our cultural inheritance threatened by a changing climate.

- **NSF Innovative Use of Scientific Collections** – We discuss a recent NSF Dear Colleague Letter encouraging projects to increase and diversify the ways in which the research community can access and use scientific collections and collections-associated digital data and metadata.

- **FY2025 NSF Budget: Exploring New Funding Directions** – We discuss NSF’s FY 2025 Budget Request and what it tells us about NSF’s priorities.
• **Figuring Out What You Want to Do for Your NSF CAREER Education Component** – Many PIs struggle to figure out what to propose for their CAREER education component. We discuss ways to find inspiration.

• **Summary of Changes: NIFA FY 2025 Budget Request** – We discuss how USDA’s National Institute of Food and Agriculture’s FY 2025 budget request has changed from last year’s budget.

• **What Is the Intellectual Significance of Your Proposed Humanities Project?** – We discuss how reviewers in the humanities assess the intellectual significance of proposed projects.

• **Tracking Allocations in Research Agency Budgets** – We discuss how to analyze agency budgets to understand shifting agency priorities.

*Access these and many more articles (requires NDSU log-in) >>*

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**NIH increases pay levels for some predoctoral and postdoc scholars**

The National Institutes of Health recently announced an increase in annual pay levels for predoctoral and postdoctoral scholars at NIH-funded external institutions who are recipients of the Ruth L. Kirschstein National Research Service Awards (NRSA). Predoctoral scholars will receive an approximate 4% increase in their pay level bringing it to $28,224, and postdoctoral scholars will receive an approximate increase of 8%, with pay levels beginning at $61,008 and upwardly adjusted based on years of experience.

NIH aims to increase these pay levels over the next three to five years. Eligible recipients also will receive a $500 increase in subsidies for childcare and an
additional $200 for training-related expenses. This pay-level increase was informed by recommendations of NIH’s *Advisory Committee to the Director* (ACD). Those recommendations were based on significant feedback from the research community and a report from *a special working group* the ACD convened.

*More information is available: press release, Guide Notice, and Open Mike blog.*

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**Get ready for the new NSF PAPPG Requirements**

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.

**Changes to NSF Proposal Guide: Tribal Nation Approval for Proposals that Impact Tribal Resources or Interests**  
*Effective May 20, 2024*

The new Proposal and Award Policies and Procedures Guide (*PAPPG 24-1*) from the National Science Foundation (NSF) will take effect on May 20, 2024. Among the changes introduced in the new PAPPG, **NSF will now require written approval from the official(s) designated by the relevant Tribal Nation(s).** For projects that may impact Tribal resources or interests, applicants must include with their application one of the following:
1. a copy of the written request to the relevant Tribe(s) to carry out any proposed activity/activities that may require prior approval from the Tribal Nation(s);
2. written confirmation from the Tribal Nation(s) that review and approval is not required; or
3. a copy of a document from the relevant Tribal Nation(s) that provides the requisite approval.

Note that if only (1) is provided, the proposer will still be required to submit either (2) or (3) as a just-in-time document before NSF will make an award decision.

Learn more about this new approval requirement >>
Read a summary of all changes introduced in PAPPG 24-1 >>

Webinar replay
The recording for the Updates to the NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 24-1) webinar held on March 12, 2024, is now available on-demand in the Resource Center and on YouTube.

NSF Common Forms now available in SciENcv
NSF announces that the NSTC-approved Common Forms for the Biographical Sketch and Current and Pending (Other) Support which are compliant with the new NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 24-1), are now available in SciENcv.

These revised formats will be required for proposals submitted or due on or after May 20, 2024. While these revised formats cannot be uploaded in Research.gov or Grants.gov until May 20, 2024, NSF encourages proposers to become familiar with them in preparation for proposal submission in May.

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.

The videos below provide step-by-step instructions:
- Current and Pending (Other) Support
- Biographical Sketch

If you would like additional assistance, contact ndsu.researchdev@ndsu.edu to set up a session. We will accommodate in-person and zoom.

SciENcv for NSF Users: Current and Pending (Other) Support
This video provides step-by-step instructions to help you create and maintain NSF-approved Current and Pending (Other) Support format for proposal submission.
SciENcv for NSF Users: Biographical Sketch
This video focuses on features in SciENcv that help you create, share, and maintain NSF approved biographical sketches that are used for proposal submission.

SciENcv for NSF Users: Biographical Sketch

Great Plains I-Corps Hub seminar and summer cohort
You’re invited to join the Great Plains I-Corps Hub’s upcoming seminar, From Lab to Market: Applying I-Corps to Your Research on Friday, May 03 from 1:00pm - 1:30pm (CDT)

This event will be a 30-minute seminar hosted via Zoom, where we will talk about how the National Science Foundation’s I-Corps training teaches researchers, innovators, and entrepreneurs to use customer discovery to gain a stronger understanding of the ecosystem, decision makers, and stakeholders surrounding their technology.

Register for the seminar >>

The Great Plains I-Corps Hub is now accepting applications for summer cohorts. The regional I-Corps training is a free, five-week program aimed at teaching graduate students, post-docs, researchers, and faculty the best practices of customer discovery and how to apply what they learn to their research/innovations. In the Regional I-Corps program, teams can qualify for up to $1,000 to be used towards customer discovery.

Learn more and apply for upcoming cohorts >>
NSF Convergence Accelerator expansion engages the Midwest as the first region

May events in Minneapolis, Omaha and Chicago to stimulate innovation, workforce development and research acceleration

The U.S. National Science Foundation’s Convergence Accelerator is kicking off its national program expansion with the Midwest Region.

Launched in 2019, the NSF Convergence Accelerator—a TIP program—builds upon NSF’s investment in basic research and discovery to accelerate solutions toward societal and economic impact. The program’s multidisciplinary teams use convergence research fundamentals and innovation processes to stimulate innovative idea sharing and development of sustainable solutions.

- In May, NSF will host a series of regional expansion events in the Midwest Region. Interested stakeholders and organizations from Illinois, Iowa, Minnesota, Nebraska, North Dakota, South Dakota and Wisconsin are encouraged to register and attend one of three half-day, in-person events to be held in Minneapolis (May 16).

Learn more about the Midwest Region NSF Convergence Accelerator expansion >>
Register for Minneapolis event >>

NIH Entrepreneurship Boot Camp

The NIH Entrepreneurship Boot Camp provides teams of academic and small
business investigators with specialized innovation and entrepreneurship training. Instructors with decades of life-science innovation and entrepreneurial experience will teach participating teams to use a life science focused customer discovery process to assess customer and stakeholder needs, develop stronger business models and market strategies, and validate their commercialization plans in advance of their initial Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) application.

This program targets teams that have not yet been awarded an SBIR or STTR for their technology development project, and that may not yet have formed a company. No prior product development or commercialization experience is required and innovators who are new to the NIH ecosystem are highly encouraged to apply.

Participating teams will learn critical skills including

1. when, why, and how to talk to diverse stakeholders without offering remuneration
2. when to talk to regulators and third-party payers; and
3. how to approach potential partners, funders, or acquirers.

Consequently, this course will improve participants’ understanding of the commercialization requirements of biotechnology development and will inform their decisions to pursue SBIR/STTR funding or any other source of support. The Boot Camp also places teams on a path to take advantage of other NIH innovator support programs, particularly those associated with the NIH Small Business Program (SBIR/STTR).

Eligibility
Teams must register with a technical lead with expertise in the proposed project and an individual who will act as the business lead and who is interested in learning how to assess whether the innovation presents a compelling commercialization opportunity. There is no cost for teams to participate in this program.
The program is structured such that full participation is required across the sessions, which build upon each other. Thus, only teams who can commit the time and effort to participate in the coursework, webinars, and one-on-one coaching sessions actively and consistently should apply.

Innovators who have an active SBIR/STTR award (including no cost extensions) during the course are not eligible for this program. (Active SBIR/STTR Phase I awardees are eligible for other programs – see https://seed.nih.gov/support-for-small-businesses/commercialization-enhancement-programs.)

The inaugural Entrepreneurship Bootcamp began accepting requests in April 2024. Further information about the program may be found on the NIH SEED website: NIH Entrepreneurship Bootcamp.

Department of Energy Office Hours

The U.S. Department of Energy (DOE) Office of Science (SC) is the nation’s largest supporter of basic research in the physical sciences, the steward of 10 national laboratories, and the lead federal agency supporting fundamental research for energy production and security.

The DOE's monthly virtual office hours are opportunities to share information and ask questions about the six research programs and two research and development and production offices. Researchers at all institutions are welcome to attend and learn more about the programs; no existing relationship with DOE or the DOE national laboratories is required to attend. Research administrators are also
encouraged to attend.

Office hours will take place on the schedule below for each program office. Topics will vary each month. The office hour will be in the form of a zoom meeting, starting with a brief presentation on the monthly topic, followed by questions. Program managers will be available to answer questions from the community. **Click on the topic below to register for one of the office hours.**

**Advanced Scientific Computing Research (ASCR)**
ASCR will hold virtual office hours on the second Tuesday of the month, 1-2 pm. Upcoming topics include:
- May 14, 2024, at 1 pm – [Introduction to ASCR’s Applied Mathematics research program](https://science.osti.gov/ascr/officehours)
- For more information on ASCR office hours, visit [https://science.osti.gov/ascr/officehours](https://science.osti.gov/ascr/officehours)

**Basic Energy Sciences (BES)**
BES will hold virtual office hours on the third Thursday of the month, 1-2 pm. Upcoming topics include:
- Thursday, May 16, 2024, at 1 pm – [Introduction to BES Chemical Sciences, Geosciences, and Biosciences Division - Organization, priorities, and funding opportunities](https://science.osti.gov/bes/officehours)
- For more information on BES office hours, visit [https://science.osti.gov/bes/officehours](https://science.osti.gov/bes/officehours)

**Biological and Environmental Research (BER)**
BER will hold virtual office hours on the fourth Tuesday of the month, 1-2 pm. Upcoming topics include:
- Tuesday, May 28, 2024, at 1 pm – [Introduction to the BER Earth and Environmental Systems Science portfolio](https://science.osti.gov/ber/officehours)
- For more information on BER office hours, visit [https://science.osti.gov/ber/officehours](https://science.osti.gov/ber/officehours)
Fusion Energy Sciences (FES)
FES will hold virtual office hours on the first Wednesday of the month, 1-2 pm. Upcoming topics include:
- Wednesday, May 1, 2024, at 1 pm – How to Become an Effective Reviewer
- For more information on FES office hours, visit https://science.osti.gov/fes/officehours

High Energy Physics (HEP)
HEP will hold virtual office hours on the third Tuesday of the month, 1-2 pm. Upcoming topics include:
- Tuesday, May 21, 2024, at 1 pm – Technology Initiatives and HEP Core Research
- For more information on HEP office hours, visit https://science.osti.gov/hep/officehours

Nuclear Physics (NP)
NP will hold virtual office hours on the first Monday of the month, 2-3 pm. In cases where the first Monday falls on a federal holiday, the office hour will slide to the second Monday of the month. Upcoming topics include:
- Monday, May 6, 2024, at 2 pm – Post-Award Actions: Annual Reports
- For more information on NP office hours, visit https://science.osti.gov/np/officehours

Accelerator R&D and Production (ARDAP)
ARDAP will hold virtual office hours on the second Wednesday of the month, 2-3 pm. Upcoming topics include:
- Wednesday, May 8, 2024, at 2 pm– Writing a strong proposal and managing an award
- For more information on ARDAP office hours visit https://science.osti.gov/ardap/officehours

Isotope R&D and Production (DOE IP)
DOE IP will hold virtual office hours on the second Monday of the month, 1-2 pm. In cases where the second Monday falls on a federal holiday, the office hour will slide to the third Monday of the month. Upcoming topics include:
Energy Sovereignty for Indigenous People (ESIP) Global Initiative Workshops

The Energy Sovereignty for Indigenous People (ESIP) Global Initiative, a collaboration of the University of North Dakota, Kansas State University, and North Dakota State University, is sponsoring workshops via Zoom that are open to all faculty and graduate students at North Dakota's NSF EPSCoR affiliated colleges and universities.

SERIES 4: NETWORKING AND COLLABORATIONS

- Session 1: Networking and Collaborations - May 8 from 11-noon via Zoom

Learn more and register >>
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.

Funding Opportunities

NIH Grant Funding  NSF Grant Funding  DoD Grant Funding
Highlighted Funding Opportunities

NSPIRES  *Early Stage Innovations (ESI)*

The Appendix seeks proposals from accredited U.S. universities for innovative, early-stage space technology research. The grants will sponsor research in specific high-priority areas of interest to America's space program. ESI is intended to accelerate the development of groundbreaking, high-risk/high-payoff space technologies to support the future space exploration and science needs of NASA, other government agencies, and the commercial space sector. The total ESI award value is up to $750,000. Research and development efforts will take place over three years.

- **Computational Materials Engineering for Lunar Metals Welding**
  - The goal of this topic is to advance the state of the art for in-space assembly and manufacturing (ISAM) metals welding processes for use on the lunar surface through computational physics-based materials engineering.

- **Passive Lunar Dust Control through Advanced Materials and Surface Engineering**
  - The goal of this topic is to advance the development of technologies to control lunar dust surface adhesion passively through advanced materials and surface engineering technologies.

NOIs Due: May 09, 2024
Proposals Due: Jun 06, 2024

*Learn more and apply >>*

**DARPA SURGE**

The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals to rethink and accelerate distributed additive manufacturing of critical structural parts. Structures Uniquely Resolved to Guarantee Endurance (SURGE) will develop methods to predict part life directly from data collected during additive manufacturing (AM) in a way that is transferable across disparate machines, materials, locations, and geometries.

Abstracts due May 9

*Learn more and apply >>*
DCL: Joint NSF and USDA National Institute of Food and Agriculture Funding Opportunity: Supporting Foundational Research in Robotics (FRR)
The National Science Foundation (NSF), in collaboration with United States Department of Agriculture National Institute of Food and Agriculture (USDA/NIFA), seeks proposals to advance foundational research in agricultural robotics. These proposals should be of mutual interest to the NSF Foundational Research in Robotics (FRR) program and to USDA/NIFA.

Read full DCL >>

NIH R01: Interventions to Reduce Sleep Health Disparities
Standard deadlines apply, First deadline in October

Learn more and apply >>

NIH R01: Understanding the Intersection of Social Inequities to Optimize Health and Reduce Health Disparities: The Axes Initiative
Deadline July 5

Learn more and apply >>

Spencer Foundation – Large Grants for Education Research
Intent to Apply Deadline – May 22, 12pm (Noon)

Learn more and apply >>

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.

Notice of Intent to Compete in Limited Submission Programs:
The following Limited Submission programs are open for “Intent to Compete” notifications. If you are interested in submitting to any of these programs, please send an email to ndsu.researchdev@ndsu.edu by the dates indicated below. If more than two applicants respond we will run an internal pre-proposal phase.

**Enhancing Science, Technology, EnginEering, and Math Educational Diversity (ESTEEMED) Research Education Experiences (R25 Clinical Trial Not Allowed)**

- April 16, 2024 - Notice of Extension of the Expiration Date of PAR-23-114, "Enhancing Science, Technology, EnginEering, and Math Educational Diversity (ESTEEMED) Research Education Experiences (R25 Clinical Trial Not Allowed)". See Notice [NOT-EB-24-007](#)


Review all available [Limited Submission Programs](#)

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.
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.