

NDSU OFFICE OF
RESEARCH AND CREATIVE ACTIVITY

RCA UPDATE

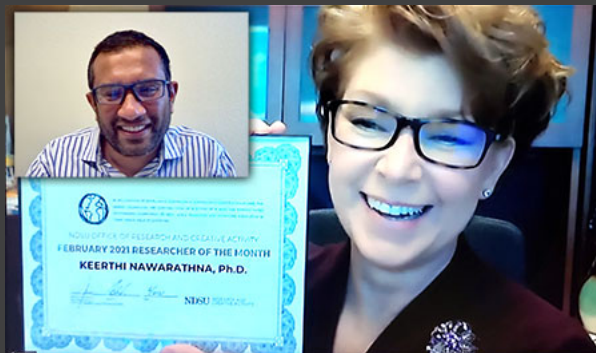
March 1, 2021

Dharmakeerthi Nawarathna

February 2021 RCA Researcher of the Month

When he was young, Dharmakeerthi (Keerthi) Nawarathna developed a fascination about how circuits and electromagnets worked. His interest in these fundamental engineering concepts led him to an appreciation of engineers and all of the ideas they have contributed to society. The NDSU associate professor of electrical and computer engineering still finds himself on that same path of discovery today.

"As a child, I was passionate about everything engineering has to offer and how engineers have truly changed the world," Keerthi recalls. "Not everyone in Sri Lanka has the chance to go to college. That is why my parents always encouraged me to work hard at school -- so I could grab one of the few opportunities to attend university education to become an engineer. Once there I set myself to learning all the fundamentals of the discipline in order to succeed."



Keerthi was successful in earning a spot at the University of Peradeniya, where he studied mechanical engineering. The educational foundation he had created served

him well at this time as he took advantage of all opportunities to continue learning. "I spent a lot of time in the library during my undergraduate years -- I read all the books. The more I read, the more I got excited about how I could contribute to the world." This mindset has stayed with Keerthi. He finds himself immersed in some sort of educational pursuit most of his time now, whether it's teaching or researching. "I like to think about new ideas all the time."

After graduation, Keerthi decided that merely getting a job wasn't going to give him the fulfillment he desired. While he wanted to create new ideas and take his turn at moving engineering forward in diagnostics and applicable applications, he also reflected on how he enjoyed helping others during his undergraduate studies. "I always respected my professors and it occurred to me that perhaps I could join them and become an effective educator." So he decided to continue his education and earned his doctorate in engineering physics / applied physics at the University of Houston.

Keerthi notes that the freedom his advisor gave him in the lab at the University of Houston was key to his development as a researcher. He was allowed to try, test, and validate new ideas. He also wrote often at this stage as a graduate student and was able to publish a large amount of research papers.

After spending a year as a postdoc at the University of California Irvine, Keerthi joined NDSU in 2014. Finding himself on a tenure track at a new job in a new city was stressful, but Keerthi enjoyed it. "As soon as I was hired, I began planning my lab. I determined what I would need for space, basic equipment, and software so I was ready."

Keerthi also needed to attract students to his program because he believed they would be a key piece to his work. He firmly believes that a lab and programs cannot succeed without good students. "At first I was lucky to attract two really good students. That was the start."

[Read more about Dr. Nawarathna >>](#)

RCA Research Support Services Award Increase

Research Support Services Awards have been increased to a maximum of \$2,500 per request. These funds are to help defray the costs of support services required for research, creative, or scholarly activity. For example, funds may be used in one of the NDSU Core Facilities, another recharge / service center, or for transcription services. More information and application instructions are posted on the [RCA website](#). Please contact ndsuh.researchdev@ndsuh.edu with questions.

Recent NDSU Graduate Wins AOCS Excellence Award



Zoriana Demchuk, a recent graduate from the NDSU Coatings & Polymeric Materials program, has received the 2021 Industrial Oil Products Division Student Excellence Award from the American Oil Chemists' Society (AOCS). Demchuk will present at the 2021 AOCS Annual Meeting & Expo.

Demchuk's paper, entitled "The Sustainable Synthesis of Monomers and Latex Polymers Derived from Renewable Plant Oils," details how renewable resources can be used to create new latex compounds. Conducted in collaboration with researchers at NDSU and Ukraine's Lviv Polytechnic National University, the work discusses the viability of synthesizing polymeric materials from vegetable oils which Demchuk notes are better than traditional petroleum-based options given their lower costs and more positive environmental impact. Biobased latexes offer controlled mechanical properties and better moisture resistance which could make them ideal candidates for various coatings applications.

Andriy Voronov, NDSU professor of coatings and polymeric materials, was Demchuk's advisor at NDSU and researcher collaborator. He commented, "I congratulate Zoriana on this well-deserved award. Several times during her PhD study she faced entirely new research tasks and she always succeeded given her strong scientific curiosity, persistency and patience."

Demchuk earned her PhD in polymer science in 2020 and currently works as a postdoctoral research associate in the Chemical Sciences Division at Oak Ridge National Lab.

The AOCS Annual Meeting will be held on May 3-14, 2021. It's a premier international science and business forum on fats, oils, surfactants, proteins and related materials with an extensive technical program dedicated to 10 unique interest areas.

Opportunity to Discuss new DARPA DSO Research Initiatives with Program Officers

The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) announces the opportunity for potential performers to meet with a DSO program manager (PM) to discuss mutual research interests. These meetings will be held virtually in conjunction with the anticipated Discover DSO Day webinar in early summer 2021. Nearer to the event, DARPA will publish a separate announcement on <https://beta.sam.gov/> to announce registration and provide additional details for this webinar.

All meetings with DSO PMs will be held via telecom and only a limited number of meeting times are available. **To take advantage of this opportunity, interested parties must submit an executive summary as described herein.** DSO is interested in executive summaries describing innovative approaches and technologies that enable revolutionary advances in areas that fit within DSO's mission, although exceptional executive summaries in other topics may also be considered. Information regarding DSO's mission and current focus areas may be found at <https://www.darpa.mil/about-us/offices/dso>. DSO will review the executive summaries and – based on their context and the interest they generate within DSO – will choose respondents for participation in virtual meetings with DSO PM(s) to discuss the executive summary's contents in more detail. Those chosen to participate will be able to register for Discover DSO Day in advance of the general public.

Additional information regarding this SN can be found at the following link:

<https://beta.sam.gov/opp/a3a942b9082846cdbb8313541716c044/view>

Please send any questions to: DiscoverDSODay2021@darpa.mil.

Virtual Conference: Artificial Intelligence and the Humanities

In April, the National Humanities Center is hosting a series of free, virtual events - presentations, conversations, webinars, film screenings, and an art exhibition - highlighting perspectives from leading humanists, scientists, engineers, artists, writers, and software company executives collectively advancing inquiry into key emerging questions related to AI's influence on daily life.

[Learn more and register >>](#)



February Issue: Research Development & Grant Writing News

The February issue of [Research Development and Grant Writing News](#) is now available to view. Use your NDSU login information to access this resource. Various topics are covered, including:

- Humanities and Arts Funding Opportunities
- The Future of Arts and Humanities Funding under the Biden Administration
- The Impact of Science Policy Changes on Funding Opportunities
- How Alondra Nelson's Appointment to Office Science & Technology Policy Will Impact Funding
- What Amazon Can Teach You About Proposal Writing
- Research Priorities Revealed in Preliminary and / or Final Federal Agency Budgets
- Communications on Interdisciplinary Team Grants



Registration is open for undergraduate students interested in presenting their research and creative activity projects at the annual NDSU EXPLORE event. This year's showcase will be virtual and held during Undergraduate Research Week, April 19-23. The deadline for registration is March 31, 2021.

Details can be found on the [NDSU EXPLORE](#) website. If you have any questions about this event, please send an email to ndsu.researchdev@ndsu.edu.



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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.

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

- [Arts Midwest: Grow, Invest, Gather](#)
Notification Deadline: 03/04/2021
- [NEA: Challenge America](#)
Notification Deadline: 03/04/2021
- [NEH: Challenge Grants](#)
Notification Deadline: 03/04/2021

- [NIH: Collaborative Program for Multidisciplinary Teams](#)
Notification Deadline: 03/04/2021
- [NIH Research Education: Genomic Research for Data Scientists](#)
Notification Deadline: 03/09/2021
- [NIH Research Education: Enhancing STEM Educational Diversity](#)
Notification Deadline: 03/09/2021
- [NSF Advanced Cyberinfrastructure Coordination Ecosystem: Services & Support](#)
Notification Deadline: 03/11/2021
- [NSF Advanced Cyberinfrastructure Coordination Ecosystem: Services & Support - Coordination Office](#)
Notification Deadline: 03/11/2021
- [NSF LSAMP Regional Foundational and Forward-Thinking Educational Research Conferences](#)
Notification Deadline: 03/18/2021

There are a number of limited submission grant programs with upcoming agency deadlines for which we did not receive any notifications of interest. For those interested in applying to the programs listed below, 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.

- [NIJ: Office of Violence Against Women](#)
Multiple programs; Agency deadlines vary
- [DOE: Chemical Upcycling of Polymers](#)
Agency deadline: 03/10/2021
- [EPA: Water Infrastructure Workforce Development](#)
Agency Deadline: 03/26/2021
- [NSF: Scholarships in STEM](#)
Agency deadline: 04/07/2021
- [NSF: Enabling Quantum Leap](#)
Agency deadline: 04/12/2021
- [NIH Research Education: Biomedical Engineering](#)
Agency Deadline: 04/26/2021

Looking for more funding opportunities?



On January 1, NDSU transitioned to a new funding opportunity database subscription: SPIN by InfoEd Global. SPIN is free for current NDSU faculty, staff, and students.

For more information, visit the [SPIN page](#) on the RCA website. If you have questions, please contact ndsu.researchdev@ndsu.edu.

DoD: Peer Reviewed Cancer Research Program

The Department of Defense (DoD) Peer Reviewed Cancer Research Program (PRCRP) supports innovative, high-impact cancer research in areas not addressed in the breast, pancreatic, prostate, ovarian, kidney, lung, melanoma, and rare cancer research programs.

The PRCRP has released a pre-announcement to allow investigators to plan and develop ideas for submission to the anticipated FY21 funding opportunities. Anticipated topics are:

- Bladder cancer
- Blood cancers
- Brain cancer
- Cancers associated with the use of beryllium\
- Colorectal cancer
- Endometrial cancer
- Esophageal cancer
- Germ cell cancers
- Head and neck cancers
- Liver cancer
- Lymphoma
- Mesothelioma
- Metastatic cancer
- Neuroblastoma
- Pediatric, adolescent, and young adult cancers (PAYAC)
- Pediatric brain tumors
- Sarcoma
- Stomach cancer

- Thyroid cancer
- The link between scleroderma and cancer

[Learn more >>](#)

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Facebook: Sample-Efficient Sequential Bayesian Decision Making

Bayesian optimization is a methodology for sample-efficient learning and optimization. By leveraging a probabilistic model, it allows practitioners and researchers to explore large design spaces using only a small number of experimental trials. Facebook utilizes Bayesian optimization to improve product experiences, infrastructure, and aid in cutting edge research.

To enable and support this work, Facebook developed and open-sourced [BoTorch](#), a modular framework for Bayesian optimization research, and [Ax](#), a turn-key framework for those who want to apply Bayesian optimization to their own problems. The goal with BoTorch is to accelerate the pace of research in the area of Bayesian optimization and unlock new potential applications.

With this request for proposals (RFP), Facebook hopes to deepen ties to the academic research community by seeking out innovative ideas and applications of Bayesian optimization that further advance the field. Facebook is committed to open source and will help awardees make the products of this RFP available to the public as part of BoTorch.

Facebook invites faculty to respond to this call for research proposals. In order to support academic work that addresses challenges and opportunities while producing generalizable knowledge, Facebook is pleased to offer two research awards of \$50,000 and \$25,000, respectively. Awards will be made as unrestricted gifts to the principal investigator's host university. Awardees will be invited to present and engage in discussion with researchers at Facebook. For full details and to apply, please visit the [Sample-Efficient Sequential Bayesian Decision Making RFP](#) page.

Deadline: April 21, 2021

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NARA: Publishing Historical Records in Documentary Editions

The National Archives and Records Administration (NARA) National Historical Publications and Records Commission (NHPRC) [seeks proposals](#) to publish documentary editions of historical records. NHPRC especially welcomes projects that focus on broad historical movements in U.S. history, such as law (including the social and cultural history of the law), politics, social reform, business, military, the arts, and other aspects of the national experience, including any aspect of African American, Asian American, Hispanic American, and Native American history. Projects may also center on the papers of major figures from American history.

The Commission is especially interested in projects to commemorate the 250th anniversary of the Declaration of Independence. NHPRC encourages applications that use collections to examine the ideals behind the founding of the United States and the continual interpretation and debate over those ideals over the past 250 years. The Commission welcomes projects that engage the public, expand civic education, and promote understanding of the nation's history, democracy, and culture from the founding era to the present day.

Grants are awarded to collaborative teams (including at least two scholar-editors, in addition to one or more archivists, digital scholars, data curators, and / or other support and technical staff, as necessary) for collecting, describing, preserving, compiling, transcribing, annotating, editing, encoding, and publishing documentary source materials online and in print. Eligible documentary edition projects typically focus on original manuscript or typewritten documents, but may also include other formats, such as analog audio and / or born-digital records. Because of the focus on historical documentary sources, grants do not support preparation of critical editions of published works unless such works are just a small portion of the larger project.

This program requires cost-share.

Deadline: June 9, 2021; October 7, 2021

(Optional drafts are due by April 1 and August 1, respectively)



NDSU Foundation Grants

The NDSU Foundation is now accepting applications for their grant programs:

- **The Centennial Endowment** can provide maximum awards of \$5,000, with a total of \$22,000 available. This grant fund supports professorships, scholarships, biotechnology, faculty development, libraries, and cultural arts.
- **The Board of Trustees Endowment** can provide maximum awards of \$1,000, with a total of \$5,000 available. This grant fund supports general programs across campus.
- **The Library Endowment** has \$3,700 available to award. This grant fund supports requests from any academic unit on campus for materials that will enhance the collections and/or operations of university libraries.
- **The Gordon A. Larson Foundation Fund** has \$16,000 available to award. This grant fund supports competitive grants for agricultural research efforts conducted at North Dakota State University.
- **The Carl A. and Jean Y. White Memorial Endowment for Agriculture Research** has \$4,400 available to award. This grant fund supports faculty and research staff to encourage agricultural research initiatives.
- **The Engebretson Family Research Fund** has \$12,700 available to award. This grant fund is available every other year (odd years) and was established to support the advancement of pharmaceutical research by encouraging the discovery and development of new drug therapies and delivery systems.

[Learn more and apply >>](#)

Deadline: March 29, 2021

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NIH: Cancer Prevention, Detection, Diagnosis, and Treatment Technologies for Global Health (U01 – Clinical Trial Optional)

This Funding Opportunity Announcement (FOA) [[RFA-CA-21-030](#)] supports the development of cancer-relevant technologies suitable for use in low- and middle-income countries (LMICs). Specifically, the FOA solicits applications for projects to adapt, apply, and validate existing or emerging technologies into a new generation of user-friendly, low-cost technologies for preventing, detecting, diagnosing, and / or treating cancers in people living in LMICs.

Applicants should have a working assay or device prototype (not necessarily already

capable of cancer applications). The U01 project includes studies to both adapt this technology as well as demonstrate technical functionality and clinical performance for use of the device or assay in specific LMIC settings by meeting objective performance milestones followed by improvements and validations of the technologies in the LMIC settings. Projects proposed in response to this FOA will require multidisciplinary efforts to succeed; therefore, all applicant teams must include expertise in engineering / assay / treatment development, oncology, global healthcare delivery, and business development. Investigators responding to this FOA must consider affordability and cost-effectiveness as well as usability at the point-of-need as part of their design criteria.

This funding opportunity is part of a broader NCI-sponsored Affordable Cancer Technologies (ACTs) Program.

Deadline: June 2, 2021

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NIH: Promoting Research on Music and Health: Phased Innovation Award for Music Interventions (R61/R33 – Clinical Trial Optional)

The purpose of this Funding Opportunity Announcement (FOA) [[PAR-20-266](#)] is to promote innovative research on music and health with an emphasis on developing music interventions aimed at understanding their mechanisms of action and clinical applications for the treatment of many diseases, disorders, and conditions. Given the emphasis on innovation, little or no preliminary data are needed to apply under this FOA. Because of the need for a multidisciplinary approach, collaborations among basic researchers, translational science researchers, music intervention experts, other clinical researchers, music health professionals, and technology development researchers are encouraged. The FOA utilizes a phased R61 / R33 funding mechanism to support mechanistic research and to evaluate the clinical relevance of music interventions. The R61 phase will provide funding to either investigate the biological mechanisms or behavioral processes underlying music interventions in relevant animal models, healthy human subjects, and / or clinical populations, or can be used to develop innovative technology or approaches to enhance music intervention research. The second R33 phase will provide support for further mechanistic investigations in human subjects or animal models, intervention development, or pilot clinical studies. The pilot clinical studies may focus on intervention

optimization / refinement, feasibility, adherence, and / or identification of appropriate outcome measures to inform future clinical research. Transition from the R61 to the R33 phase of the award will depend on successful completion of pre-specified milestones established in the R61.

Deadline: June 2, 2021; October 4, 2021

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NSF: Cyber-Physical Systems

Cyber-physical systems (CPS) are engineered systems that are built from, and depend upon, the seamless integration of computation and physical components. Advances in CPS will enable capability, adaptability, scalability, resiliency, safety, security, and usability that will expand the horizons of these critical systems.

The CPS program [[NSF 21-551](#)] aims to develop the core research needed to engineer these complex CPS, some of which may also require dependable, high-confidence, or provable behaviors. Core research areas of the program include control, data analytics, and machine learning including real-time learning for control, autonomy, design, Internet of Things (IoT), mixed initiatives including human-in- or human-on-the-loop, networking, privacy, real-time systems, safety, security, and verification. By abstracting from the particulars of specific systems and application domains, the CPS program seeks to reveal cross-cutting, fundamental scientific and engineering principles that underpin the integration of cyber and physical elements across all application domains. The program additionally supports the development of methods, tools, and hardware and software components based upon these cross-cutting principles, along with validation of the principles via prototypes and testbeds. This program also fosters a research community that is committed to advancing education and outreach in CPS and accelerating the transition of CPS research into the real world.

NSF is working closely with multiple agencies across the federal government, including DHS; DOT; NIH; and USDA-NIFA.

Proposals for three classes of research and education projects—differing in scope and goals—are supported through the CPS program:

- **Small** projects may request a total budget of up to \$500,000 for a period of up to 3 years. They are well suited to emerging new and innovative ideas that may have

high impact on the field of CPS.

There is no deadline for Small projects.

- **Medium** projects may request a total budget ranging from \$500,001 to \$1,200,000 for a period of up to 3 years. They are well suited to multi-disciplinary projects that accomplish clear goals requiring integrated perspectives spanning the disciplines.

There is no deadline for Medium Projects.

- **Frontier** projects must address clearly identified critical CPS challenges that cannot be achieved by a set of smaller projects. Furthermore, Frontier projects should also look to push the boundaries of CPS well beyond today's systems and capabilities. Funding may be requested for a total of \$1,200,001 to \$7,000,000 for a period of 4 to 5 years.

Deadline: December 15, 2021



NSF: Science of Learning and Augmented Intelligence

Science of Learning and Augmented Intelligence (SL) [[NSF PD 19-127Y](#)] supports potentially transformative research that develops basic theoretical insights and fundamental knowledge about principles, processes and mechanisms of learning, and about augmented intelligence - how human cognitive function can be augmented through interactions with others, contextual variations, and technological advances.

The program supports research addressing learning in individuals and in groups, across a wide range of domains at one or more levels of analysis including: molecular / cellular mechanisms; brain systems; cognitive, affective, and behavioral processes; and social / cultural influences.

The program also supports research on augmented intelligence that clearly articulates principled ways in which human approaches to learning and related processes, such as in design, complex decision-making and problem-solving, can be improved through interactions with others, and/or the use of artificial intelligence in technology. These could include ways of using knowledge about human functioning to improve the design of collaborative technologies that have capabilities to learn to adapt to humans.

Deadline: July 14, 2021



NSF Boosting Research Ideas for Transformative and Equitable Advances in Engineering (BRITE)

The National Science Foundation (NSF) strategic goals are to expand knowledge and build capacity for a diverse science and engineering workforce. The goal of this solicitation [[NSF 21-568](#)] is to enable and create opportunities to advance scientific discoveries and new research using a variety of approaches that harness the national talent ecosystem of experienced faculty. Recognizing that a successful faculty research career is neither linear nor continuous, this BRITE solicitation seeks proposals that enable experienced researchers and scholars (tenured or equivalent) to forge new directions or to enter new fields by capitalizing or branching out of their established knowledge domains. All BRITE proposals are expected to address fundamental research that creates new knowledge in one or more CMMI program areas. BRITE proposals must identify key research outcomes and describe the research plans for the period of funding sought. Although collaborative proposals are not permitted and will be returned without review, the PI can include a collaborator in a limited role as senior personnel. The solicitation includes four funding tracks: Synergy, Pivot, Relaunch, and Fellow in support of experienced scientists and engineers (tenured or equivalent).

- The BRITE **Synergy Track** is intended to support synthesis proposals borne out of a disaggregated and accumulated body of prior research outcomes that remain unstudied and unprobed to forge or conceptualize a novel direction, methodology, paradigm, or outcome that is more than the sum of the parts.
- The BRITE **Pivot Track** is intended to enable researchers to quickly adapt to the fast-moving pace of research and create new knowledge and research products in their field by infusing new concepts from a different discipline or sub-field.
- The BRITE **Relaunch Track** is intended to support tenured or equivalent faculty, who have had a pause in research activity, to relaunch back into active research, and to diversify the experiences of the nation's STEM researchers.
- The BRITE **Fellow Track** is intended to support established tenured or equivalent researchers who have demonstrated impact beyond scientific output to request extended time and freedom to use their intellectual creativity to explore divergent, bold, and ambitious research ideas where the expected scientific outcomes are highly uncertain and, therefore, high-risk.

Deadline: May 25, 2021

USDA: Agriculture and Food Research Initiative Foundation and Applied Science

The Agriculture and Food Research Initiative (AFRI) Foundational and Applied Science Program supports grants in six AFRI priority areas to advance knowledge in both fundamental and applied sciences important to agriculture. The six priority areas are:

1. Plant Health and Production and Plant Products;
2. Animal Health and Production and Animal Products;
3. Food Safety, Nutrition, and Health;
4. Bioenergy, Natural Resources, and Environment;
5. Agriculture Systems and Technology; and
6. Agriculture Economics and Rural Communities.

Research-only, extension-only, and integrated research, education and / or extension projects are solicited in this [Request for Applications \(RFA\)](#).

Deadlines vary by program area

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Webinars: Funding Opportunities for New Investigators - USDA Agriculture and Food Research Initiative (AFRI)

This webinar series (March 1-4, 2021) will provide an overview of opportunities for AFRI New Investigators and discuss program areas covered under [Agriculture and Food Research Initiative](#). Attendees will have an opportunity to ask questions. Registration is required for each webinar.

Prior to the webinar series, we suggest that you look at the [AFRI Food and Agricultural Science Enhancement \(FASE\) Grants for New Investigators FAQs](#) for some basic information about these opportunities.

- **Overview of AFRI Agriculture Economics and Rural Communities Program Area**
Tuesday, March 2, 1-2:30 CST
[Registration link for Overview of AFRI AERC](#)
- **Overview of AFRI Animal Health and Production and Animal Products Program Area**

Tuesday, March 2, 3-4:30 CST

[Registration link for Overview of AFRI AHPAP](#)

- **Overview of AFRI Education and Workforce Development Program Area**
Wednesday, March 3, 1-2:30 CST
[Registration link for Overview of AFRI EWD](#)
- **Overview of AFRI Agriculture Systems and Technology Program Area**
Wednesday, March 3, 3-4:30 CST
[Registration link for Overview of AFRI AST](#)
- **Overview of AFRI Plant Health and Production and Plant Products Program Area**
Thursday, March 4, 1-2:30 CST
[Registration link for Overview of AFRI PHPPP](#)
- **Overview of AFRI Bioenergy, Natural Resources, and Environment Program Area**
Thursday, March 4, 3-4:30 CST
[Registration link for Overview of AFRI BNRE](#)

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Proposal Development Virtual Program: Meeting Expectations of Funding Agencies - USDA

The Proposal Development Program provides professional development opportunities for faculty, staff, and graduate students who are new to proposal writing or are seeking a refresher about proposal writing skills and funding agency opportunities. This semester, these sessions will be held virtually on Zoom.

Meeting Expectations of Funding Agencies: USDA

Wednesday, March 24, 2020 | 12-1pm

Presenter: Christine Strohm, Ph.D., Grant Writing Consultant

[Register for this session >>](#)

Zoom access information will be shared with registrants.

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NSF CAREER Proposal Development Program

The National Science Foundation (NSF) Faculty Early Career Development ([CAREER](#)) Program is a prestigious grant award program that supports early career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research.

The NDSU Office of Research and Creative Activity is offering some NSF CAREER-focused, virtual sessions over the next couple of months to assist potential applicants with preparing competitive proposals.

- **Introduction to the NSF CAREER Program [March 30, 2021 - 12pm (noon)]**
This session will include an overview of the NSF CAREER program, proposal requirements, planning for an application, and opportunities for Q&A.
Presenter: Christine Strohm, Ph.D. - grant writing consultant
- **Broader Impacts and Intellectual Merit [April 14, 2021 - 12pm (noon)]**
This session will focus on NSF's [merit review criteria](#), and how to effectively address them in your CAREER proposal.
Presenter: Christine Strohm, Ph.D. - grant writing consultant
- **NSF CAREER Awardee Panel [April 28, 2021 - 12pm (noon)]**
For this session, four recent NSF CAREER awardees at NDSU will share their experiences and offer their tips for writing a successful proposal and answer your questions about the process.
Presenters:
Britt Heidinger, Ph.D. - Biological Sciences
Ying Huang, Ph.D. - Civil and Environmental Engineering
Dmitri Kilin, Ph.D. - Chemistry and Biochemistry
Keerthi Nawarathna, Ph.D. - Electrical and Computer Engineering

[Register to attend these sessions >>](#)

NSF Workshops on Pandemic Prediction and Prevention

The Directorates for Biological Sciences (BIO); Computer Information Science and Engineering (CISE); Engineering (ENG); Social, Behavioral and Economic Sciences (SBE); and the Office of International Science and Engineering (OISE) at the National Science Foundation (NSF) are jointly supporting a series of interdisciplinary workshops to engage research communities around the topic of **Predictive Intelligence for Pandemic Prevention**. These workshops bring together interdisciplinary experts in the **biological, engineering, computer, and social and behavioral sciences** to start conversations and catalyze ideas on how to advance scientific understanding beyond state-of-the-art in pre-emergence and emergence forecasting, real-time monitoring, and detection of inflection point events in order to prevent and mitigate the occurrence of future pandemics.

Each workshop is expected to have up to 50 invited active participants. The community can participate in a listen-only mode and interact through chat and Q&A functions.

March 22-23, 2021: Examining how human attitudes, social behavior, and the drivers underlying both contribute to disease transmission through their determination of policy and behavioral obstacles and supports.

[Learn more and register to attend >>](#)

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SBIR / STTR Webinars from SHARPhub

[SHARPhub](#), an NIH-funded program to assist in translating bioscience discoveries into startup companies, is offering multiple free webinars on SBIR / STTR programs.

Cuss and Discuss

Friday, March 12 from 9 –10:30 am CST

Meet others planning to submit SBIR / STTR proposals to NIH, sharing challenges and learning from others.

REGISTER: <https://bit.ly/371phUf>

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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.

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