

Engagement and capacity building

Over the past fiscal year, the ND EPSCoR State Office focused on engagement and capacity building. This attentive work resulted in the growth of a variety of programs serving children and families all the way through our institutions of higher education and beyond along the STEM pathway.

The State Office continues to bring fun STEM projects to families at home via our YouTube channel. Finding engaging STEM projects for elementary students that families can facilitate is not always easy. The STEM at Home Activities Series is a video-based series that makes it easy to find simple and fun projects for young children. These projects help to teach important critical thinking skills and potentially spark a lifetime interest in STEM. The entire playlist is available on the [ND EPSCoR YouTube Channel](#) or on the ND EPSCoR State Office [STEM at Home page](#), both of which are updated monthly with new activities. See what is new this month on [page five](#) of this issue.

The State Office coordinates and runs the annual ND EPSCoR State Conference. This annual showcase of research performed across the entire state draws students, faculty, and other stakeholders. New this year was the inclusion of a virtual pre-event session for secondary students at North Dakota middle and high schools. Researchers from the New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) cooperative agreement shared their insights on pathways to degrees and careers with students interested in a future in STEM.

The State Office also provides administrative support and trainings to all 11 ND EPSCoR participating campuses. In addition, the State Office visits each

campus annually and engages in outreach. The State Office has continued to develop additional state-wide programs and activities for statewide research, education, and outreach. Since 2017 (the start of the ND EPSCoR State Office), 618 projects (including 110 subawards to other institutions have been funded (144 projects funded from three federal awards and 474 projects funded from state dollars). These projects represent significant capacity-building efforts statewide.

The ND EPSCoR State Office STEM Education Portal supports K-12 teachers by providing free STEM lesson plans that are aligned

with the national Next Generation Science Standards utilized in ND. Beginning last year, the State Office contracted with K-12 educators to design innovative lesson plans that are based on ND EPSCoR's NATURE Sunday Academy STEM modules or the STEM at Home Video Series. The State Office also contracted with cultural experts to create Indigenous supplements for many STEM lesson plans. The team has now developed 33 K-12 STEM lesson plans, several of which are accompanied by both Lakota and Ojibway cultural supplements. The lesson plans are freely available via the State Office's [STEM Educational Portal](#).

As a new fiscal year begins, the ND EPSCoR State Office continues to grow these programs to support the STEM pathway in ND. I hope that you are, and will continue to be, well.

Regards,
Kelly A. Rusch, Ph.D., P.E., BCEE
Executive Director
ND EPSCoR State Office



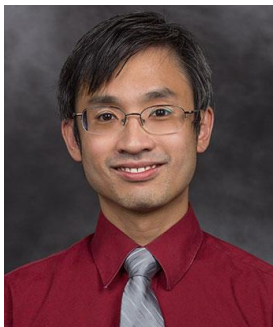
Introducing new ND-ACES senior personnel and new roles

ND-ACES: New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES), ND EPSCoR's current NSF RII cooperative agreement, recently welcomed new senior personnel to the team.

Three of the previous Emerging Areas Seed Awardees within the [Center for Cellular Biointerfaces in Science and Engineering \(CCBSE\)](#) are now senior

personnel: **Yen Lee Loh** (UND), **Ravi Kiran Yellavajjala** (NDSU), and **Michael Kjelland** (Mayville State University). Loh (pictured right) will now be senior personnel within the Computation, Machine Learning, and Predictive Modeling Pillar; he replaces Jerome Delhommelle (UND).

Loh is an Assistant Professor in the Department of Physics & Astrophysics at the University of North Dakota.



Yellavajjala (pictured left) will now be senior personnel within the Computation, Machine Learning, and Predictive Modeling Pillar. Yellavajjala is an Assistant Professor in the Department of Civil, Construction and Environmental Engineering at North Dakota State University.



Kjelland (pictured left) will now be senior personnel within the Materials Design at Biointerfaces Pillar. Kjelland is an Assistant Professor of Biology at Mayville State University.



Colin Combs (UND) is stepping down as one of the CCBSE Leads and will be remaining on the Cellular Systems at Materials Interface Pillar team as a researcher. Combs is replaced by **Mark Hoffmann** (UND, pictured right),



Chester Fritz Distinguished Professor of Chemistry and Associate Dean for Research at the University of North Dakota. **Deniz Cakir** (UND, pictured left) will take Hoffmann's place as the UND Lead of the Computation, Machine Learning, and Predictive Modeling Pillar, Cakir was

formerly a researcher within this pillar and is an Assistant Professor in the Department of Physics and Astrophysics at the University of North Dakota.

[PROmoting Sustainable Partnerships in Education and Research \(PROSPER\)](#) is also welcoming new senior personnel. **Justin Walden** (NDSU, pictured right) replaces Zoltan Majdik (NDSU) as the Lead of the Communication and Dissemination PROSPER element. Walden is an Associate Professor in the Department of Communication at North Dakota State University.



Danielle Condry (NDSU, pictured right) replaces Sarah Sletten (UND) as the Co-Lead of the Education and Workforce Development PROSPER element. Condry is an Assistant Professor of Practice and the Graduate Programs Coordinator in the Department of Microbiological Sciences at North Dakota State University.



Giancarlo López-Martínez (NDSU, pictured left) replaces Van Doze (UND) as the Lead of the Broadening Participation PROSPER element. López-Martínez is an Assistant Professor in the Department of Biological Sciences at North Dakota State University.



Please join us as we welcome these members to the ND-ACES team as senior personnel in their new roles.

ND-ACES participants create an animation to explain deep learning

What is deep learning? That's what some of the ND-ACES participants supporting cyberinfrastructure set out to answer via an edutainment animation. Satisfy your curiosity and find out more about deep learning, data sets, and neural networks by clicking on the brief animated video thumbnail below. Special thank you to **Aaron Bergstrom, David Apostal, Joe Robertson** (all UND) of the cyberinfrastructure team, and all of the CCBSE and PROSPER participants, who collaborated to make this piece of science communication possible.



Look for more animated edutainment as we continue to create more content that explains the scientific concepts behind the ND-ACES cooperative agreement.

2022 ND EPSCoR State Office STTAR internships begin


The ND EPSCoR State Office recently kicked off another season of internships through the STTAR program. We are featuring a Q&A series from our participating companies. In this second month, we're featuring **Nodak Electric Cooperative** and **MBN Engineering, Inc.** This year, 12 companies hired students from across North Dakota. Twenty-six students who represent six separate colleges are participating in the 2022 STTAR program as interns – the highest number since 2013.

The STTAR program provides juniors, seniors, and graduate students who are majoring in STEM disciplines a valuable opportunity to apply their academic training



and experience in order to address science and technology-based problems faced by ND companies. The internships, which take place over a minimum of eight weeks, are supported by a cost-sharing agreement between the ND EPSCoR State Office and our industry partners.



Your Touchstone Energy® Partner 

Q. Tell us about your company.

A. Nodak Electric Cooperative is a distribution electric provider whose mission is to safely provide reliable, competitively priced electric service for our member-owners. Our members' services range from a rural cattle waterer to some of the largest industries in the state of North Dakota.

Q. What are the benefits of having STTAR interns (to your company and the student)?

A. Electricity has changed very little in the last 100 years, but our processes change all the time. Our STTAR students have helped Nodak immensely over the years transitioning our GIS system from paper records to a much more useful digital system that allows us to locate, display, analyze, and model more efficiently. The students get great hands-on experience both in the field and in the office and develop professional skills that they can carry on to a wide range of careers.

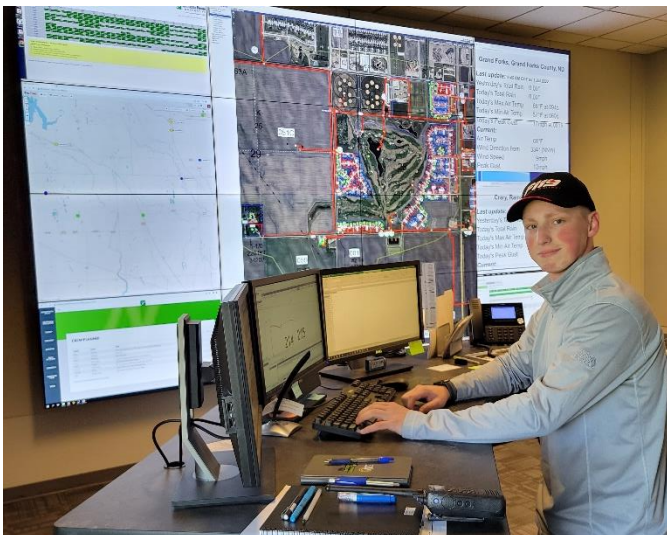
Q. During their internship what will the students be working on?

A. We have two students working with us this summer and both of them have worked with us in the past. **Tyler Workman** (UND) is with us for his fourth consecutive semester and has evolved into a more senior intern-type role. He has mastered the ins and outs of our work order process consisting of creating material lists and updating 811 databases and getting crews all the info they need to successfully complete their work. He is also the primary staking assistant out in the field, designing and measuring routes for new services. We collect our proposed and existing routes with a Trimble GPS that we pair with our ESRI-based GIS software in the office.



STTAR intern Tyler Workman is in his fourth semester working for Nodak Electric Cooperative.

Back with us again after a year is **Brycen Lunak** (UND). Brycen worked with us in the fall of 2020 up until he started training for the Air National Guard. After his initial training was complete he came back to Grand Forks to attend classes and is primarily located in our dispatch center. Here Brycen takes calls on the phone and radio from members and linemen on outages and work being done in the area. He is also helping us prepare for a new engineering analysis software implementation which is a painstaking task of fixing in-depth errors in our mapping databases. Both students have a very busy fall school schedule, so we might not see this very much, but we are very flexible with their hours because they have developed into such large assets for Nodak.



STTAR intern Brycen Lunak works in the dispatch center at Nodak Electric Cooperative.

Q. Have you partnered with the ND EPSCoR STTAR program before (if not, how did you hear about it)? What are the benefits of this partnership?

A. Yes, Nodak Electric Coop has partnered with the STTAR program on and off for many years. We have had dozens of students come through the program. In fact, we have four current engineers who were at one time STTAR student interns. Being able to house a student in the summer and keep them on for multiple semesters throughout the school year really gives us the opportunity to develop the student into a full-time-like role. If at the end of their tenure there is an opening at Nodak they are always first on the list for a new hire. When there is not an opening, we have had students go to places such as Polaris, Arctic Cat, 3M, and Texas Instruments. While these careers do not share a lot of similarities with a power coop, the professional competence that the students gain at any STTAR internship is appreciated everywhere.



Q. Tell us about your company.

A. MBN Engineering, Inc. began in 2007 with a vision for being a client-focused service-oriented engineering firm. We are a leader in the field of civil, electrical, mechanical, and transmission line engineering services offering LEED accreditation, energy conscience engineering as well as knowledge in zoning, covenants, building codes, ND Century Codes, and restrictions. Our knowledgeable staff has extensive expertise in transmission line design, building site design, municipal street and infrastructure, energy-efficient HVAC systems, HVAC systems commissioning, energy-efficient lighting systems and controls, power distribution systems, emergency power systems, renewable energy power systems, theatrical lighting systems and audio-visual systems, classroom technology systems, telecommunications systems

design, athletic field lighting, and athletic field audio systems.

MBN Engineering, Inc. has over 100 years of combined engineering service experience with expert knowledge in designing facilities such as sports complexes, recreational facilities, churches, hospital and medical facilities, educational facilities, multi-family residential facilities, mixed-use facilities, hotel facilities, and commercial establishments for both public and private clients. We offer our clients an efficient design solution, whether it is constructing a project from the ground up or renovating and upgrading existing facilities.

Q. What are the benefits of having STTAR interns (to your company and the student)?

A. There are several benefits to partnering with this program such as offering firsthand experience to an eager-to-learn intern, which will in turn help them better prepare for their future career path. They have the opportunity to work on real-time projects, and software that is current and industry-leading, as well as the opportunity to work side by side with experienced and knowledgeable engineers. The early spring is generally our busiest time, so the extra hands on deck are beneficial for the completion of projects. We have been privileged to experience growth in the number of projects in the works and pride ourselves on timely and accurate completion of these projects. This opportunity is definitely a win for both our firm and the intern and we hope to offer full-time positions to successful and enthusiastic interns.

Q. During their internship what will the students be working on?

A. Justin Sandberg (UND) is learning how to use lighting design software, auto cad drafting software, electrical design spreadsheets, and learning electrical design concepts. He will work closely with experienced electrical engineers and designers to assist in drafting and designing electrical systems for new buildings and buildings that are to be remodeled. Justin will have an opportunity to go onto the job site to see his work being incorporated into real projects and on occasion meet with sales representatives that are bringing new and innovative products to the market for use in specific projects. With the supply and demand issues of the current market, many projects are becoming redesigns and result in a flexible approach, while still meeting critical timelines for completion. This is truly a hands-on experience offering firsthand knowledge of what their full-time career would encompass.



STTAR intern Justin Sandberg works closely with engineers and designers at MBN Engineering, Inc.

Q. Have you partnered with the ND EPSCoR STTAR program before (if not, how did you hear about it)? What are the benefits of this partnership?

A. We have not partnered with the STTAR program in the past. We were introduced to the program by Cailin Shovkoplyas, who is the ND EPSCoR Communication Manager.

We wish the 2022 STTAR student interns well as they continue their internships! You can learn more about the STTAR program on our [program webpage](#) or contact the ND EPSCoR STEM Grant Writer & Program Manager, [Josh Wayt](#).

The STEM at Home video series continues

Our STEM at Home series is a video-based learning series that creates fun content centered on projects which incorporate STEM. These simple projects allow younger audiences to use critical thinking skills and potentially spark a lifetime interest in STEM.

Each video in this series is accompanied by a list of simple materials and goes through a step-by-step process for completing the project successfully. We hope to create a fun and easy way for families to engage in STEM projects through this video series. This month, our videos are Calm Down Jar, Balloon Lab, and Floating Paperclip.

2021-2022 ND-ACES cyberinfrastructure assistants reflect on experience

The ND EPSCoR ND-ACES Graduate Student Cyberinfrastructure (CI) Assistantship program is designed to increase student understanding of advanced research computing in hardware and software as it relates to their discipline and provide additional support to faculty in the CCBSE. Additionally, the CI Assistants provide students and faculty members CI training at all ND EPSCoR-participating institutions on potential CI uses and benefits.

For one academic year, the CI Assistants work in either the NDSU Center for Computationally Assisted Science and Technology (CCAST) under the direction of **Khang Hoang** or in the UND Computational Research Center (CRC) under the direction of **Aaron Bergstrom**.

This month, outgoing CI Assistants **Sarah Ghazanfari** (NDSU) and **Joe Robertson** (UND) reflect on their time in the program.

Sarah Ghazanfari (pictured right) is a Ph.D. Candidate in the Department of Civil Engineering at North Dakota State University. Ghazanfari's academic advisor is **Wenjie Xia**, assistant professor and ND-ACES Computational Approaches researcher.



During this assistantship, Ghazanfari learned the compilation process for most software packages related to her current research area, which focuses on multiscale modeling of nanoclays using molecular dynamics simulations, coarse-grained methods, and density function theory. For each software package, she documented procedural steps and shared this knowledge. Additionally, Ghazanfari was ultimately able to provide guidance and consultation to ND-ACES researchers and other faculty members who perform calculations using CCAST's high-performance computing (HPC) clusters.

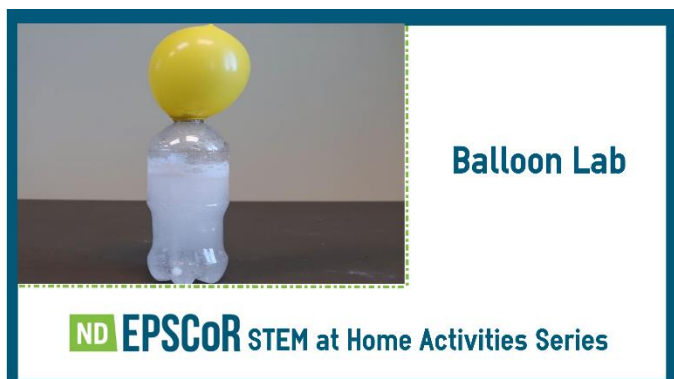
Ghazanfari also noted that the CI assistantship helped her expand her research and computational expertise. Specifically, the CI assistantship improved Ghazanfari's knowledge of how to utilize HPC computing resources more efficiently. Ghazanfari also



Calm Down Jar

ND EPSCoR STEM at Home Activities Series

Get the complete shopping list for the STEM at Home activity [here](#).



Balloon Lab

ND EPSCoR STEM at Home Activities Series

Get the complete shopping list for the STEM at Home activity [here](#).



Floating Paperclip

ND EPSCoR STEM at Home Activities Series

Get the complete shopping list for the STEM at Home activity [here](#).

[Subscribe to our YouTube channel](#) and visit our [STEM activities page](#) for shopping lists. You can also see our [STEM Education Portal](#) and [NATURE Sunday Academy](#) pages for more activities and lesson plans that strengthen the STEM pathway for students across ND.

concentrated on research and successfully published three papers in peer-reviewed journals. One of the papers was featured on the cover of *Langmuir* journal.



Joe Robertson (pictured left) is a Ph.D. student in the Department of Chemistry at the University of North Dakota. Robertson's academic advisor is **Qianli (Rick) Chu**, associate professor and INSPIRE-ND CSMS researcher.

One of the first projects Robertson started was using the perspective of software development to gain a

workable knowledge of parallel computing, a method of computation in which a processor runs several processes at the same time. This method can greatly increase the efficiency of software programmed to take advantage of it. Robertson began by focusing on a piece of software he had written, which used random generation of points to calculate the volume of irregular shapes. His first task was converting this software from its original language (C#) into a different, more portable language (python). The original code was written in serial and as he converted the code, he also implemented parallel computing techniques. Robertson was ultimately able to run the code portably across different operating systems and hardware.

Robertson also became proficient in the implementation and operation of the popular and powerful scientific visualization software, Paraview. He then assisted researchers in taking advantage of the parallel processing capabilities of Paraview. This included offering technical support to staff at CCAST and CRC in regard to Paraview and its various implementations across institutions.

Please join us in congratulating both of the outgoing CI Assistants on their many achievements over the past year.

CIRCLES Alliance survey and interview opportunities

In October 2020, the ND EPSCoR State Office joined five other EPSCoR states (Idaho, Montana, New Mexico, South Dakota, and Wyoming) in a National Science Foundation-funded collaborative research project that forms an Alliance to connect with tribal community members within those states to gain a better

understanding of each community's definition and perspective of STEM (science, technology, engineering, and mathematics). Initially, Alliance members planned to visit each tribal community, but with the COVID pandemic continuing, the Alliance has decided to continue to make virtual connections.

Using a common set of questions across the six-state CIRCLES (Cultivating Indigenous Research Communities for Leadership in Education and STEM) Alliance, participants' input is being gathered through virtual interviews over Zoom or through an online survey with tribal community stakeholders to gain their perspective on how Indigenous-based STEM education is currently being incorporated or might be incorporated in the future, to support student STEM learning. To participate in an interview or survey, you must be 18 years or older.

The ND EPSCoR State Office has created a [link to a 90-second video](#) that describes these efforts. The anonymous online survey is [available at this link](#). Additionally, ND EPSCoR is conducting individual virtual interviews. If you would prefer to participate in an individual interview, please contact ND EPSCoR at ndepscor.ndus.edu, or call 701-231-8400.

This effort aims to foster better connections with tribal communities and support STEM educational programming. Working toward that goal, the ND EPSCoR State Office humbly requests your assistance in completing this survey or contacting us to set up a virtual interview. The CIRCLES Alliance believes this is a particularly poignant time to reflect on observations regarding Indigenous-based STEM education as the COVID pandemic has brought some new challenges into focus. Learn more about the [North Dakota CIRCLES effort here](#).

News of Note

The Center for Diagnostic and Therapeutic Strategies in Pancreatic Cancer receives COBRE grant

Congratulations to **Sanku Mallik** (NDSU) on the renewal of the Centers of Biomedical Research Excellence (COBRE) grant award. Mallik is the P.I. on the grant award from the Department of Health and Human Services to the Center for Diagnostic and Therapeutic Strategies in Pancreatic Cancer. The award provides funding in the amount of \$2,088,884 per year for five years. The award will expand the Animal Studies Core Facility with an animal imager, cancer tissue biobank, and tissue histology capability. These expanded

resources would be available to ND EPSCoR researchers and other campus researchers. Congratulations!

Events and trainings

Responsible Conduct of Research (RCR)

RCR training is available upon request to augment initial campus or Collaborative Institutional Training Initiative (CITI) RCR trainings. Please [get in touch with ND EPSCoR](#) to schedule.

Funding opportunities

Funding Opportunities come from three sources:

1. The National Science Foundation (NSF)-funded New Discoveries at the Advanced Interface of Computation, Engineering, and Science (ND-ACES) RII Track-1 cooperative agreement, which consists of two broad components: 1) Center for Cellular Biointerfaces in Science and Engineering (CCBSE), which consists of three research pillars: materials design, cellular systems, and computational approaches and 2) PROMoting Sustainable Partnerships in Education and Research (PROSPER), which consists of four connected project elements: education and workforce development, broadening participation, partnerships and collaborations, and communication and dissemination.
2. ND EPSCoR State Office
3. [EPSCoR and EPSCoR-like federal funding agencies](#), which include: Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Institutes of Health (NIH), NSF, U.S. Department of Agriculture (USDA), and Department of Defense (DoD).

Graduate Student Cyberinfrastructure Assistantship Program (NDSU Announcement Only)

ND EPSCoR's New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) Graduate Student Cyberinfrastructure (CI) Assistantship program is designed to (1) increase student understanding of advanced research computing in hardware and software as it relates to their discipline; (2) provide additional support to faculty in the Center for Cellular Biointerfaces in Science and Engineering (CCBSE); and (3) provide student/faculty CI training at all ND EPSCoR-participating institutions on potential CI uses/benefits.

Support will be available for one academic year (August 16, 2022 – May 15, 2023) for one-half (10 hours per week) of a full-time graduate student assistantship in the NDSU Center for Computationally Assisted Science and Technology (CCAST). For the ND-ACES supported 10 hours per week, the student must work within the CCAST under the direction of the Center's staff. For more information, see the [Request for Applications](#).

Application Deadline: Due to ND EPSCoR at 5:00 pm CDT on July 15, 2022

Undergraduate Research Assistantship (URA) Program

This program gives current junior and senior undergraduate students pursuing a B.S. STEM degree at a four-year institution (or a two-year institution granting B.S. STEM degrees) in North Dakota an opportunity to perform research within the National Science Foundation (NSF)-funded New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) Center for Cellular Biointerfaces in Science and Engineering (CCBSE).

The URA is a six-month award that is renewable for up to one additional year. URA awardees will conduct up to 18 months of research under the direction of a ND-ACES CCBSE researcher. For more information, see the [Request for Applications](#).

Application Deadline: Open until funds are exhausted

Doctoral STEM Teaching Assistantship

The Doctoral STEM Teaching Assistantship is supported by the NSF-funded award New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES). This assistantship is designed to strengthen North Dakota's STEM ecosystem by building a diverse pool of effective educators, skilled researchers, and engaged students. More specifically, the assistantship will (a) strengthen doctoral students' experience in undergraduate STEM education, and (b) reduce the instructional workload of ND-ACES faculty at non-research universities, thereby allowing them to devote additional time to research.

The Doctoral STEM Teaching Assistantship is a semester-long teaching placement (during Fall 2022 or Spring 2023). Eligible candidates must be enrolled in a doctoral STEM program at a North Dakota research university (i.e., North Dakota State University or University of North Dakota).

For more information, see the [Request for Applications](#).

Spring 2023 Assistantship deadline: October 1st

ND-ACES: Emerging Areas/Seed Award Proposals Request for Applications

ND EPSCoR seeks to provide emerging areas seed awards of up to \$25,000 in direct costs to researchers from the National Science Foundation (NSF) Established Program to Stimulate Competitive Research (EPSCoR) RII Track-1 New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) participating institutions in areas of emerging high impact and transformative research related to the Center for Cellular Biointerfaces in Science and Engineering (CCBSE). More information can be found on the [CCBSE webpage](#) on the ND EPSCoR website.

Applications must be made by a researcher from Cankdeska Cikana Community College (CCCC), Dickinson State University (DSU), Mayville State University (MaSU), Minot State University (MiSU), Nuetta Hidatsa Sahnish College (NHSC), North Dakota State University (NDSU), Sitting Bull College (SBC), Turtle Mountain Community College (TMCC), University of North Dakota (UND), and Valley City State University (VCSU) who is not currently associated with the 2020-2025 ND-ACES cooperative agreement or who did not receive a 2021 or 2022 ND-ACES emerging seed award. Members of traditionally underrepresented populations in STEM disciplines are especially encouraged to apply. See the [Request For Applications](#) for details.

Deadline: Noon on September 1, 2022

Travel Awards for ND-ACES CCBSE Faculty Participants

ND EPSCoR's New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) RII Track-1 mission is to support scientific efforts that result in increased STEM faculty capacity and competitiveness.

To underscore the importance of collaborations in the sustainability of the ND-ACES effort, travel seed awards of up to \$3,000 are available to ND-ACES Center for Cellular Biointerfaces in Science and Engineering (CCBSE) senior personnel. A collaboration is the extension or development of a research-based engagement (directly aligned with the CCBSE applicant's ND-ACES activities) with a non-CCBSE researcher affiliated with an academic institution or national laboratory. Travel must be within the domestic U.S. (including within ND) and must be completed by 6/15/23. For details, see the [Request for Proposals](#).

Proposal Submission Deadline: when funds are exhausted

Defense Established Programs to Stimulate Competitive Research (DEPSCoR) FOAs

The Department of Defense (DoD) announces the fiscal year 2022 (FY22) Defense Established Program to Stimulate Competitive Research (DEPSCoR). The program is sponsored and managed by the Basic Research Office, Office of the Under Secretary of Defense for Research and Engineering (OUSD [R&E]), awarded by the Air Force Office of Scientific Research (AFOSR), and administered through the Office of Naval Research (ONR). The DoD plans to award FY22 DEPSCoR appropriations through this announcement.

The Research Collaboration ([FOA-AFRL-AFOSR-2022-0006](#)) funding opportunity seeks proposals that advance knowledge in basic science involving bold and ambitious research that may lead to extraordinary outcomes such as disrupting accepted theories and perspectives. Proposals must be submitted by a pair of researchers in DEPSCoR States/Territories (Applicant and Collaborator) aimed at introducing potential applicants to the DoD's unique research challenges and its supportive research ecosystem.

The Capacity Building funding opportunity ([FOA-AFRL-AFOSR-2022-0007](#)) aims to support the strategic objectives of institutions of higher education (IHE) (either individually or in partnership with others) in DEPSCoR States/Territories to achieve basic research excellence in areas of high relevance to the DoD.

Current Closing Date for Applications: Feb 21, 2023

ND NASA EPSCoR Research Seed and Travel Grant Funding

[North Dakota NASA EPSCoR \(Established Program to Stimulate Competitive Research\)](#) is soliciting research proposals from faculty at [affiliate institutions](#) for Research Seed Grant funding and Travel Grant Funding. Funding must contribute to the completion of NASA relevant research designed to promote and expand particular NASA research sub disciplines in North Dakota.

Seed research proposals are due at noon on July 13, 2022.

The full RFP, online submission form and budget sheet can be found in the: <http://blogs.und.edu/jdosas/2022/05/nd-nasa-epscor-research-and-travel-rfp-summer-2022/>.

FY 2023 RII Track-1 solicitation (NSF 22-599)

The FY 2023 RII Track-1 solicitation (NSF 22-599) has been released.

<https://beta.nsf.gov/funding/opportunities/epscor-research-infrastructure-improvement-program-track-1-rii-track-1>

Letter of Intent Due Date(s) (required) (due by 5 p.m. submitter's local time):

July 19, 2022

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

August 22, 2022

NOTE: With a current RII Track-1 in progress, North Dakota is not eligible for this solicitation until 2024. However, it remains listed here as a reference.

Department of Defense: DEPSCoR Regional DoD Day

The Department of Defense (DoD) has asked the University of South Dakota to host a regional DEPSCoR DoD Day, where DoD program managers will provide information about the DEPSCoR program and general information about working with the DoD. The regional DEPSCoR Day will be held in Vermillion, SD on July 19, 2022. For more information, please see: [DEPSCoR Regional DoD Day](#)

NSF: EPSCoR Workshop Opportunities

EPSCoR is designed to fulfill NSF's mandate to promote scientific progress nationwide, and NSF EPSCoR continually welcomes proposals for workshops in Solicitation NSF 19-588. These workshops focus on multi-jurisdictional efforts of regional to national importance related to EPSCoR's goals and NSF's mission. For more information, please see the RFP: [EPSCoR Workshop Opportunities](#)

Acronyms

Participating Institutions:

- Master's College/University (MCU)
 - Minot State – Minot State University
- Primarily Undergraduate Institutions (PUIs)
 - DSU – Dickinson State University
 - Mayville State – Mayville State University
 - VCSU – Valley City State University
- Research Universities (RUs)
 - NDSU – North Dakota State University
 - UND – University of North Dakota
- Tribal Colleges/Universities (TCUs)

- CCCC – Cankdeska Cikana Community College
- NHSC – Nueta Hidatsa Sahnish College
- SBC – Sitting Bull College
- TMCC – Turtle Mountain Community College
- UTTC – United Tribes Technical College

Funding:

- National Science Foundation (NSF) EPSCoR Research Infrastructure Improvement (RII) Track-1 Cooperative Agreements
 - ND-ACES – New Discoveries in the Advanced Interface of Computation, Engineering, and Science (NSF OIA #1946202)
- NSF Collaborative Research
 - CIRCLES Alliance – Cultivating Indigenous Research Communities for Leadership in Education and STEM Alliance (NSF OIA #2038196)
- ND EPSCoR State Office
 - STEM programming identified within the newsletter and state match funding for ND-ACES

Acknowledgement

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Stay in touch

Our mailing address is:

ND EPSCoR
1805 NDSU Research Park Drive N
Fargo, ND 58102
701-231-8400

www.ndepscor.ndus.edu

email: ndepscor@ndus.edu

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