

Successful hybrid conference

The hybrid 2022 ND EPSCoR State Conference on Wednesday, April 6, was a great event and, after two years, allowed us to gather once again. This year, we returned to an in-person format while also retaining the elements of last year's virtual conference that allowed for broader engagement from throughout the state. The research at this year's hybrid conference was offered virtually on our Symposium™ platform and in person at the Alerus Center in Grand Forks, ND. In addition, the conference featured the impact of the research of ND EPSCoR's current NSF cooperative agreement, New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES), and the corresponding extensive broader impact, education, and outreach efforts.

The ND EPSCoR annual conference allowed for many EPSCoR-funded participants to talk about their research and work accomplished over the past year. Like last year's virtual conference, students from across ND, outside of the EPSCoR Track-1 projects, had the opportunity to submit virtual posters on their research efforts and engage with attendees about their work using a comments feature on each poster's webpage.

Each faculty member and student participating in ND-ACES Center for Cellular Biointerfaces in Science and Engineering (CCBSE) and the related broader impacts component of PROSPER (PROmoting Sustainable Partnerships in Education and Research) helped contribute toward the goals and objectives set over the past year. For example, when looking at the second year of the ND-ACES Track-1 cooperative agreement, there are 170 active participants at ten institutions, including 42 senior personnel, 11 seed awardees, 53 graduate students, and 29 undergraduate students.

The day was a celebration of research and outreach. The hybrid event brought together faculty, students, and the community to celebrate the STEM endeavors taking place within our participating institutions. The agenda featured eight live sessions on a range of STEM topics. This year's meeting highlighted both student and

faculty speakers from ND EPSCoR-participating institutions across the state.

Seventy-nine total posters were submitted from institutions around the state, 47 of them stemming from ND-ACES research. The virtual posters received 2,057 views, and participants spent over 100 hours engaging with the content. In addition, the conference featured a contest for ND-ACES poster submissions for the first time. In addition to the virtual judging, ND-ACES poster authors were invited to present their work in person at the Alerus Center (pictured below). Please join us in congratulating the poster contest winners on [page 3](#) of this issue.



Thank you to everyone who joined us at the Alerus Center or connected virtually and celebrated all of the past year's successes at our conference event. Next year's conference will be on Wednesday, March 29, 2023, in Fargo, 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



2022 ND EPSCoR State Conference highlights

This year, the 2022 ND EPSCoR State Conference was a hybrid event that featured both live speakers and asynchronous presentations regarding the ND EPSCoR-sponsored research and outreach for the past year throughout North Dakota. Although much of the conference's emphasis was devoted to the ND-ACES Track-1 award, STEM students who were not funded by the Track-1 cooperative agreement were also invited to submit virtual posters.



The behind-the-scenes look at how a hybrid conference was made possible at the Alerus Center.

This year's conference represented the work of the second year of the ND-ACES Track-1 award. Faculty and students who had been funded through those projects presented their work, giving a glimpse into the breadth of research and STEM education and outreach inquiry.

External Advisory Board (EAB)

One of the behind-the-scenes resources involved in the Track-1 cooperative agreement is the input of the EAB, a group of experienced professionals in key fields who understand and support the research being conducted. The EAB consists of individuals who provide helpful direction and keen insights into research and outreach efforts. The ND-ACES EAB gathered in a hybrid format on April 5 to hear presentations on all aspects of the project.

The ND-ACES EAB members are:

- **Candan Tamerler**, Ph.D., EAB Chair, Associate Dean of Research, School of Engineering, Wesley G. Cramer Professor, Department of Mechanical Engineering, University of Kansas, Lawrence, KS
- **Sinan Keten**, Ph.D., EAB Vice Chair, Associate Professor of Civil & Environmental Engineering, Associate Professor of Mechanical Engineering, Director of Graduate Studies in Mechanical Engineering, Northwestern University, Evanston, IL
- **Marc D. Basson**, M.D., Ph.D., M.B.A., F.A.C.S., Senior Associate Dean for Medicine and Research, Professor of Surgery, Pathology, and Biomedical Sciences, UND School of Medicine & Health Sciences, Grand Forks, ND
- **James Brown**, Ph.D., CEO and President, Agathos Biologics, West Fargo, ND
- **Annalies Corbin**, Ph.D., President & CEO, The Past Foundation, Columbus, OH
- **David Pearce**, Ph.D., President of Innovation and Research, Sanford Research, Sioux Falls, SD
- **Daniel M. Tuvin**, M.D., F.A.C.S., Surgical Oncologist, Sanford Health, Fargo, ND

Conference presentations

The ND EPSCoR annual conference was Wednesday, April 6, 2022. Kelly A. Rusch gave a warm welcome to attendees. Attendees were also greeted by the North Dakota University System (NDUS) Vice Chancellor of Strategy and Strategic Engagement, **Jerry Rostad**, and staff representatives from ND's three U.S. Congressional members, **Senator John Hoeven**, **Senator Kevin Cramer**, and **Representative Kelly Armstrong**.

NSF EPSCoR Section Head **Sandra Richardson**, Ph.D., provided an overview of NSF EPSCoR. Next, **Jose Colom-Ustariz**, Ph.D., the RII Track-1 Program Director for North Dakota, outlined the current emphasis areas within NSF and provided an overview of some of the EPSCoR-specific programs. Also, he encouraged attendees to pursue other funding avenues available through NSF as they build collaborations across institutions and jurisdictions.

The remaining agenda for the day was a mix of presentations from ND-ACES faculty, student researchers, and the ND-ACES PROSPER broadening participation outreach arm and additional panels and keynote addresses on a variety of STEM topics. The schedule also provided time for a hybrid poster question and answer session with the authors.

Keynote presentation and panels

Candan Tamerler, the ND-ACES EAB Chair, delivered a recorded afternoon keynote address on her current research efforts.

A panel immediately followed the afternoon keynote address on STEM-based Indigenous Knowledge and Research, featuring **Shelly Valdez**, Ph.D., President of Native Pathways, and **Jill Stein**, Principal Consultant at JKS Consulting. The session provided a unique perspective on STEM-based Indigenous knowledge and evaluation methods.

The conference also offered a Panel on Industry Partnerships moderated by ND-ACES Co-PI and the Partnerships and Collaborations Co-Lead **John Mihelich** (UND) and featuring **Sinan Ketten, James Brown, and David Pearce** (all ND-ACES EAB members).

ND-ACES presentations: CCBSE and PROSPER

The CCBSE presentations featured a variety of student and faculty speakers. The presentations reflected the three scientific pillars of ND-ACES: 1) materials design at biointerfaces; 2) cellular systems at materials interface; and 3) computation, machine learning, and predictive modeling. Additionally, the ND-ACES sessions featured speakers from PROSPER, the other project elements arm of the project.

Archana Dhasarathy, Cellular Systems at Materials Interface Pillar UND Lead, and **Sanku Mallik**, Materials Design at Biointerfaces Pillar NDSU Lead, virtually moderated the first session of ND-ACES research presentations which led off with an overview from CCBSE NDSU Lead **Kalpana S. Katti**. Next, Education and Workforce Development (EWD) Lead **Sarah Sletten** (UND) spoke about the EWD digital badging efforts. **Hilde van Gijssel** (VCSU), a Cellular Systems at Materials Interface Pillar researcher, provided an in-depth look at how research is coordinated with students at a Primarily Undergraduate University, while **Binglin Sui** (UND) presented his research within the Materials Design at Biointerfaces Pillar. The session also included undergraduate speaker and Materials Design at Biointerfaces Pillar student researcher **Nicholas Bittner** (CCCC), advised by **Brent Voels** and **Michael Parker** (both CCCC), who shared his research using 3D printing.

Dinesh R. Katti, the Computation, Machine Learning, and Predictive Modeling Pillar NDSU Lead, and **Julia Zhao**, the Materials Design at Biointerfaces Pillar UND Lead, moderated the afternoon ND-ACES research session. The session began with **Mark Hoffmann**, the Computation, Machine Learning, and Predictive Modeling Pillar UND Lead, who honored the life and work of **Tao Yu**, the previous Computation, Machine

Learning, and Predictive modeling Pillar UND Lead, who passed away unexpectedly in June of 2021.

The session also featured a recorded presentation from Materials Design at Biointerfaces Pillar student researchers **Brooke Roeges** and **Hayle Boechler** (both Mayville State University), advised by **Khwaja G. Hossain** and **Michael E. Kjelland**. In addition, graduate student **Lahcen Akerkouch** (NDSU), advised by **Trung Bao Le** (NDSU), presented his research within the Computation, Machine Learning, and Predictive Modeling Pillar. Finally, CCBSE UND Lead **Colin K. Combs** gave a wrap-up overview of the day's ND-ACES presentations.

ND-ACES poster competition

Please join us in congratulating the 2022 poster competition winners:

Winners in the Computation, Machine Learning, and Predictive Modeling Pillar (tie)

Amirhadi Alesadi, Wenjie Xia, and Dimitri Kilin, NDSU. "Photo-induced charge transfer of fullerene and non-fullerene conjugated polymer blends via ab initio excited-state dynamics."

Dharanidharan Arumugam and Ravi Kiran Yellavajjala, NDSU. "Interpreting denoising autoencoders."

Winner in the Education and Workforce Development Element

Andrea Doyon, Georgia Paul, Adel Said, Niyeli Herrera, Rachel Navarro and Sarah Sletten, UND. "Baseline data report: promoting retention and STEM success through research training groups."

Winners in the Materials Design at Biointerfaces Pillar (tie)

Julia Kohls, Trevor Gravseth, Brooke Roeges, Hayle Boechler, Madisen Knudsvig, Khwaja Hossain, and Michael Kjelland, Mayville State University. "3D bioprinting using human cancer and STEM cells with novel arabinoxylan bioink for 3D cell culture."

Yingfen Wu, Xu Wu, Diane Darland, and **Julia Xiaojun Zhao**, UND. "Multifunctional nanoparticles for synergistic photodynamic/photothermal therapy."

Winner in the Cellular Systems at Materials Interface Pillar

Sujata Birua, Sierra Giebel, Annie Schiro, and John Wilkinson, NDSU. "3D Culture model to mimic the heterogeneity of breast cancer."

Celebrating five years of NATURE Sunday Academy co-coordination

Since 2017, friends and colleagues **Julia Bowsher** and **Britt Heidinger** (both associate professors in Biological Sciences at NDSU) have coordinated the NATURE (Nurturing American Tribal Undergraduate Research and Education) Sunday Academy together. Their involvement with Sunday Academy started with creating a jointly-designed lesson in 2015, which quickly became an outreach project they both felt dedicated to.



Julia Bowsher (left) and Britt Heidinger (right) have co-coordinated Sunday Academy since 2017.

"We started doing lessons and then for two years together and we just really enjoyed it, we thought it was such a worthwhile thing. I mean when I think about the impact of different outreach activities, I think that NATURE has the biggest impact and potential to help people and to change their educational trajectory, so we really were invested in this," recalled Bowsher. "We definitely wanted to do it because of our love of the program and that it would be so much fun to do it together."

Bowsher and Heidinger also organize an annual summer workshop to facilitate lesson plan development among participating faculty. According to Heidinger, Sunday Academy lessons succeed because the faculty authors design them to be very engaging. "The lesson plans are really active and engaging, and students are doing experiential learning."

All Sunday Academy lessons incorporate relevant cultural teachings. "What I love so much about NATURE is the cultural connections to these lessons that are developed. So the Tribal Elders get access to the lessons and then develop these cultural connections for the students that are so powerful," noted Heidinger.

Bowsher, who will be finishing her time co-coordinating Sunday Academy in June, remarked that it had been a great opportunity. "You go places that you wouldn't normally go, and you get to meet people that you wouldn't normally meet. I learned a lot by just being in the Tribal Colleges and Universities in North Dakota, talking with the faculty, getting to meet the high school students, and meeting the teachers of the high school students."

While co-coordinators, Sunday Academy has served 1,947 students during the past five years. Please join us in thanking both Julia Bowsher and Britt Heidinger for their work co-coordinating NATURE Sunday Academy. We also extend congratulations to Julia Bowsher on her upcoming appointment to Chair of Biological Sciences at NDSU. Britt Heidinger will continue as sole Sunday Academy Coordinator, saying, "I feel really grateful to be part of this program. I do really feel like it is special to be part of it."

Sunday Academy is part of the NATURE program, an educational outreach project. NATURE aims to improve science, technology, engineering, and mathematics (STEM) education among middle school, high school, and tribal college students and build a pathway for American Indians living in North Dakota interested in pursuing careers in STEM disciplines. NATURE builds on activities of a long-term collaboration between tribal colleges in North Dakota, NDSU, and UND. NATURE programs are currently funded by the State of North Dakota and the National Science Foundation EPSCoR Track-1 Cooperative Agreement OIA #1946202.

You can also visit our [NATURE page](#) for additional information. For more information about our NATURE program, contact Raymond Burns, the ND EPSCoR State Office Tribal Partnerships Manager, by [email](#) or calling 701-231-8606.

Partnership with ND's Gateway to Science enhances STEM activities for school outreach

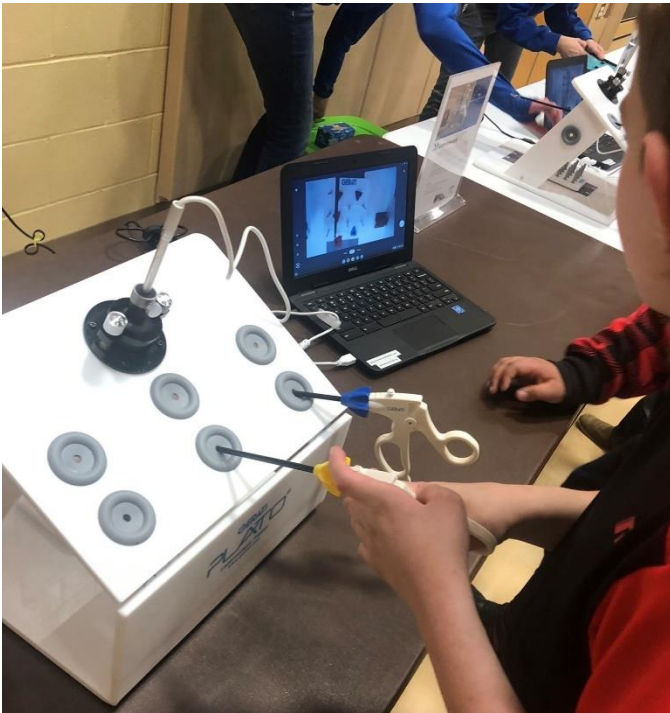
ND EPSCoR State Office partner North Dakota's Gateway to Science (NDGTS) delivers hands-on STEM programming throughout North Dakota with classroom workshops and school-wide STEMzone programs. STEMzone is a carnival-style event with STEM stations that allow students to engage in hands-on learning experiences in science, technology, engineering, and math.

The ND EPSCoR State Office recently supported the enhancement of STEM activities for NDGTS's outreach to rural schools and communities. The new activities will enhance STEMzone by introducing STEM topics not currently covered.

"We visit many of the same schools each year, specifically rural schools," said Janet Rosario, NDGTS Programs Director. "The addition of new activities will keep the students engaged while they explore novel hands-on experiences, skills, and careers not previously seen."

New hands-on STEM activities for delivery to rural schools and communities added are:

- **Laparoscopy** (pictured below): laparoscopic surgery is the new standard in modern surgical practice. Students will practice basic laparoscopic skills, hands-on skills, and hand-eye coordination.



- **Structural Engineering:** This activity demonstrates a basic principle of mechanical physics or structural engineering in a hands-on way. Students learn about basic structural elements and explore the forces acting on structural components.

- **Simple Machines:** Students explore mechanical physics by learning all about simple machines and how they are used to make complex tasks easier. The Simple Machines activity provides 26 model-building exercises to investigate all six classic simple machines — wheels and axles, levers, pulleys, inclined planes, screws, wedges, and gears.

- **Marble Run** (pictured below): Students build track systems and discover how the laws of physics affect the journey the marble takes. The activity challenges students to be creative and use their imagination to design and build their marble runs while building critical thinking and problem-solving skills.



The mission of North Dakota's Gateway to Science is to inspire the discovery of science through hands-on experiences. Gateway to Science fulfills its mission by operating an interactive exhibit gallery in Bismarck and by developing and delivering mobile educational outreach programs across the state through the Gateway to Science on the Go van (pictured next page, top).

A construction project on the Bismarck State College campus will greatly expand this valued resource to better serve the students and families in our state. Scheduled for completion in late 2022, the new NDGTS building will feature interactive experiences that highlight STEM industries, careers, and skills in a gallery 5½ times the size of its current space.

The facility will also feature an education wing, including a laboratory classroom, two additional classrooms, and outdoor learning areas. The expanded space means expanded programs offered by NDGTS - including camps, afterschool clubs, workshops, and public events – will reach more children and families. The new center will also serve as the Gateway to Science on the Go headquarters.



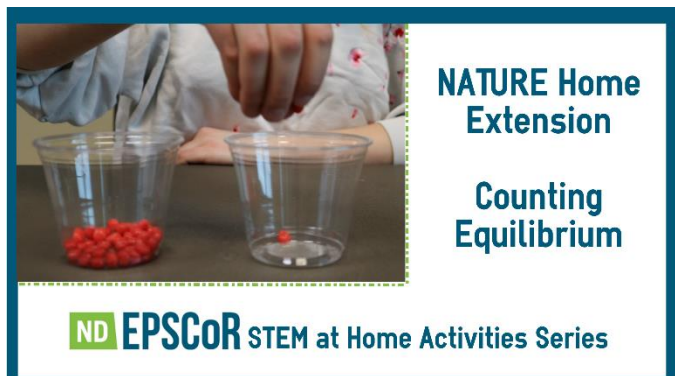
Learn more by visiting our [Partnership with North Dakota's Gateway to Science](#) page.

The STEM at Home video series continues with NATURE extensions

In the [March 2022 edition of News & Notes](#), the ND EPSCoR State Office introduced new videos on our YouTube channel to the STEM at Home series. This series incorporates NATURE Sunday Academy modules into the STEM at home videos. 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 Sunday Academy STEM projects through this video series.

This month, our video is based on the Sunday Academy lesson featured in the [November 2021 edition of News & Notes](#), "Counting Equilibrium," authored by **Alexander Parent** (NDSU).



Get the complete shopping list for the NATURE Home Extension Counting Equilibrium 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.

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

ND-ACES student participant, Sarah Reagen, receives the Excellence in Teaching Award from UND

ND-ACES Materials Design at Biointerfaces Pillar student researcher **Sarah Reagen** (UND; pictured right) is the recipient of UND's Excellence in Teaching Award for 2022. Reagen is a graduate student in the Chemistry Department, advised by **Julia Xiaojun Zhao** (UND). Congratulations!



UND student team selected by NASA to launch scientific payloads

The UND student team will be one of nine chosen to launch scientific payloads on a NASA heavy-lift balloon. The launch is part of the 16th High-Altitude Student Platform (HASP) mission in Fort Sumner, New Mexico.

The UND student team will fly their payload for the ninth time with HASP. The team will continue to improve upon their design for measuring the ozone within Earth's different atmospheric layers. Congratulations!

ND-ACES student participant, Di Sun, receives graduate student oral presentation award



Di Sun (UND, pictured left), received a Graduate Student Oral Presentation award on April 22, 2022 at the North Dakota Academy of Science Annual Conference in Fargo, ND. Two additional ND-ACES student participants, **Sarah Reagen** and **Yingfen Wu** (both UND), presented their work at the conference as well. Sun, Reagen,

and Wu are all graduate students in the Chemistry Department, advised by **Julia Xiaojun Zhao** (UND). Congratulations!

Events and trainings

NATURE University Summer Camp

Save the Date for NATURE University Summer camp!

NATURE University Summer Camp Opening Ceremony: Monday, June 6 at 11:00 am CDT at the Diederich Atrium in the Alumni Center at NDSU.

Nature University Summer Camp Closing Ceremony: Friday, June 17 at 12:30 pm at the Gransberg Community Room in the Gorecki Alumni Center at UND.

For questions about NATURE University Summer Camp events, [contact Raymond Burns](#), ND EPSCoR State Office Tribal Partnerships Manager.

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).

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) 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 an ND-ACES CCBSE researcher. For more information, see the [Request for Applications](#).

Application Deadline: Open until funds are exhausted

Distributed Research Experience for Undergraduates (dREU)

Under this program, undergraduate students – from the nine ND EPSCoR ND-ACES RII Track-1 participating campuses - three Primarily Undergraduate Institutions (PUIs), one Master's College/University (MCU), three Tribal Colleges/Universities (TCUs) located in ND, or the two Research Universities (RUs) – are required to work in the ND-ACES Center for Cellular Biointerfaces in Science and Engineering (CCBSE) alongside NSF Track-1 faculty researchers on their CCBSE cutting-edge research projects in materials design, cellular systems, or computational approaches. Women, minorities underrepresented in STEM, persons with disabilities, first-generation college students, economically disadvantaged, or rural populations are strongly encouraged to apply. 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](#).

Fall 2022 Assistantship deadline: May 1st

Spring 2023 Assistantship deadline: October 1st

NSF EPSCoR Research Fellows FY 2022 RII Track-4

The FY 2022 RII Track-4 solicitation has been released. The NSF EPSCoR Research Fellows funding opportunity, under solicitation [NSF 22-573](#), has a deadline of May 12, 2022. This initiative provides early-career investigators the opportunity to travel to a host site to establish or strengthen research collaborations, learn new techniques and / or access state of the art facilities.

RII Track-4:FAST Matching: The solicitation also highlights the RII Track-4:FAST track where nontenured PIs from selected institutions can conduct research activities a participating NASA Research center. These institutions include Minority Serving Institutions, Primarily Undergraduate Institutions, Two-Year Colleges, Women's Colleges and Institutions Primarily Serving Students with Disabilities.

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 6/15/22. For details, see the [Request for Proposals](#).

Proposal Submission Deadline: Noon CDT, May 31, 2022

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 Spring of 2022 in Vermillion, SD. 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 Collaborative 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

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- Submit stories to: <https://bit.ly/epscorsubmitnews>
- To be added to the newsletter mailing list, please email ndepscor@ndus.edu, subject line: newsletter.

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