



Established Program to  
Stimulate Competitive Research

## *News & Notes*

March 31, 2023

### **From the Interim Executive Director**

We are just coming off the 2023 annual ND EPSCoR State Conference in Fargo on March 29 and, on behalf of the entire team, I want to thank everyone who attended. It was great seeing all of the people involved with ND EPSCoR in person and to learn about the accomplishments of the past year. Nearly 240 researchers, educators, administrators, government officials, staff members, VIPs and students attended the event and we had a poster session featuring more than 80 unique research endeavors.



I'd like to send out a special thank you to my team who put in a lot of effort (and countless hours) to ensure the event was successful. Kimberly, Kathy, Lance, and Mark -- I appreciate all you do for ND EPSCoR!

While most of those names are probably familiar to you, one on that list is new and I'm happy to welcome Mark Puppe to ND EPSCoR as our Communication Specialist. Mark brings years of experience in communication and is a graduate of NDSU with a BA in Political Science and Master's in Communication. Even though he started a mere two weeks before the event, he definitely helped with it and I appreciate him. The Communication role is a critical one in ND EPSCoR and I know that many of you will be engaging with Mark in the near future. You'll learn more about Mark in the next News and Notes.

## Amplifying Research Efforts

“When I teach introduction to biology classes, we talk about what science is and what it isn’t. Science is a way of thinking and asking questions to advance knowledge,” said Lisa Montplaisir, professor of Biological Sciences at NDSU and co-lead of PROSPER (**PRO**moting **Sustainable Partnerships** in **E**ducation and **R**esearch). That same questioning approach is what Montplaisir and PROSPER co-lead, Hollie Mackey, Associate Professor in Education at NDSU, are using in their efforts to translate the ND-ACES research into practice across the state.



**Lisa Montplaisir**

“Part of our job is to break down what the ND-ACES science is and how it can be a useful for the individual’s or campus’ expressed needs,” noted Mackey. “When we broaden the participation of who’s involved, students and faculty across the state can see themselves in the work. Our goal is to build relationships that will translate the research more effectively and sustainably.”



**Hollie Mackey**

PROSPER is an ongoing element within the Track 1 NSF programs, and includes education and workforce development, communication, and broadening participation to include marginalized groups or individuals. Mackey and Montplaisir were appointed to the PROSPER leadership role in January with the goal of using PROSPER activities to foster relationships and build STEM capabilities with students and faculty. One example Montplaisir cited was their approach to mentoring students and early career faculty. “We want to take a holistic approach that not only includes the

science, but also considers other challenges such as people and time management. The value of mentoring is broadening the vision of what the individual can do.”

“Our role is to amplify the ND-ACES research,” Mackey said. “We are working to develop strategies that bring STEM learning into the tribal colleges and other underrepresented groups. It’s critical to strengthen our understanding of the tribal communities and what their expressed needs are. We want to respect everyone’s contributions, so the programs or activities are useful and anchored in the tribal values and customs.”

“I get excited about working with teachers to develop lessons that build on science topics,” Montplaisir said. “But there’s difference if you’re teaching in a rural area where one teacher *is* the science department or if the teacher is one of six biology teachers in a larger school. We are looking for ways to tailor activities to meet the individual growth needs of the teacher, but also to develop engaging topics for students that are based on the ND-ACES topics and fit into state standards for curriculum.” ND-ACES research has three focus areas: designing novel bone-mimetic materials that will support cancer cell growth; developing better understanding of cellular interactions with materials; and enhancing computer models that will predict more effective material-cellular interfaces. The broad scope of the project involves research in several disciplines, including biological sciences, computation and machine learning, material design, and biomedical engineering, so there are a host of opportunities for students and faculty to explore.

“PROSPER will always be a part of any Track 1 effort,” Montplaisir said, “so we want to continue to lay the foundation for future community building, to help students, teachers and faculty translate and apply the research. We want to create experiences that are engaging and exciting for all participants.”

[Learn more about PROSPER](#)

## Nursing Experience through Simulation

Dickinson State University has taken another leap forward in helping prepare their nursing students in an area of critical need: maternal/child health. Two recent awards from ND EPSCoR have been instrumental in acquiring important training tools for DSU's nursing program.

“The first award in 2021 helped the Department of Nursing to purchase ‘Victoria,’ an obstetrics simulator,” said Lucy Meyer, associate professor and chair of the Department of Nursing. Victoria simulates a full range of obstetrical events, from a normal vaginal delivery to a breech delivery, shoulder dystocia (where the baby's shoulders become lodged during a vaginal delivery), and other birthing conditions. Thanks to the HoloLens purchased with the simulator, students can visualize what is happening inside the body, as well as learn how to assess symptoms of Victoria and the baby, she explained.



**Lucy Meyer**

“The importance of simulation is practicing in a safe, controlled environment, where the students can experience a medical condition and learn how to react in those situations,” Meyer said. With Victoria, the students can practice providing care, before practicing with real patients.



**The "Victoria" obstetrics simulator by [Gaumard](#)**

The cost for Victoria was around \$120,000, said Holly Gruhlke, Dean of the College of Business, Education and Applied Sciences, but thanks to ND EPSCoR and another generous donor who contributed \$100,000 to the project, DSU was able to make the purchase, and create a simulation laboratory space. The newly created space will be dedicated later this year as the Glenice and Dale Hansen Nursing Education Center.

Although acquiring Victoria was a great step, the added communication and control elements needed for the simulator were also vital, Meyer said. The second EPSCoR award was used to purchase the technology in the space, including audio-visual equipment within the simulation lab which connects to a debriefing area, and a control room that provides a more isolated experience for small simulation groups and students who connect remotely. “The simulation capture allows instructors to visualize what students are doing in real time, and provide feedback,” explained Meyer.



**Holly Gruhlke**

“Instructors are not in the same room with the students, so students can assess, make decisions on how to respond, and then receive feedback on the care provided to the simulated patient.”

“These grants make a difference for the students, to become better equipped and more qualified nurses in the workforce,” said Gruhlke. “But it’s also made a difference to the faculty: they’re getting tools that help attract and retain students, as well as having laboratory space that’s more effective.”

DSU currently offers two programs in nursing: an Associate of Applied Science in Practical Nursing (AASPN), that when completed, allows students to take the National Council of State Boards of Nursing Licensure Exam to become a Licensed Practical Nurse (LPN); and a Bachelor of Science in Nursing (BSN), that upon completion, allows students to take the National Licensure Exam to become a Registered Nurse (RN). Students begin in the AASPN program and after meeting criteria, can transfer seamlessly into the BSN program. “Many of our students are working while they’re in school,” noted Meyer. “We have great community partners who are eager to have our students working in their agencies. It’s very common to have students offered a job as soon as they step on the clinical floor.”

“Any time you improve how you prepare your students for the workforce, it improves the community they serve as well as the whole state,” said Gruhlke. “With Victoria, we’ve given our students tools to be better, more qualified nurses. It’s a positive impact for our community and for North Dakota.”

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The banner features a dark teal background with three overlapping circles: a light green one on the left, a white one in the center, and a light green one on the right. The text is white and positioned on the left side of the banner.

## ND EPSCoR State Conference 2023

Wednesday, March 29, 2023, at the  
Fargodome in Fargo, North Dakota

### **ND EPSCoR State Conference 2023**

Nearly 240 academic and aspiring scientists from across the North Dakota University System assembled in Fargo for the 2023 ND EPSCoR Annual conference on March 29.

The conference revealed the great strides is making towards fulfilling its mission to broaden and diversify the state's STEM workforce pathways, support and grow statewide research efforts, and inform ND stakeholders.

To show respect and recognition to the Indigenous Peoples of North Dakota, enrolled member of the Northern Cheyenne Nation and NDSU associate professor Hollie Mackey addressed the crowd first with a reading of the NDSU Land Acknowledgement. After comments from top North Dakota cultural, political, and education leaders, NDSU President David Cook spoke and explained that his passion for progressive STEM programs like ND EPSCoR is rooted in his own graduate research at Iowa State University and the University of Kansas. He reiterated NDSU's commitment to being a collaborative resource and partner to all universities and tribal colleges on all levels.

National Science Foundation (NSF) Program Director John-David Swanson, Ph.D., travelled from Washington, D.C. to speak at the event. Sit-down discussions with NDSU Vice President of Research and Creative Activity Colleen Fitzgerald, Ph.D., ND EPSCoR Interim Executive Director Jolynne Tschetter, Ph.D. and faculty further

affirmed and separated ND EPSCoR as a mission-driven and forward-thinking partner to STEM education and solid NSF investment.

The event's keynote address was presented by Partnering Anthropology with Science and Technology (PAST) founder and president, Annalies Corbin, Ph.D. Corbin, who is based in Ohio and travels the nation advising organizations how to achieve NSF-oriented goals, said the ND EPSCoR Annual Conference was the first she had seen so many scientists “gelled together” in their projects and as one entity rather than agents of separate institutions. ND EPSCoR should be considered a model for collaborative research and resource optimization, she said.

The 2023 ND EPSCoR Annual convention facilitated essential discussions, was a call to action for STEM awareness, and launchpad for further work. The achievements shared and vision described during the conference displayed the collaboration that exists among scientists across the North Dakota University System.















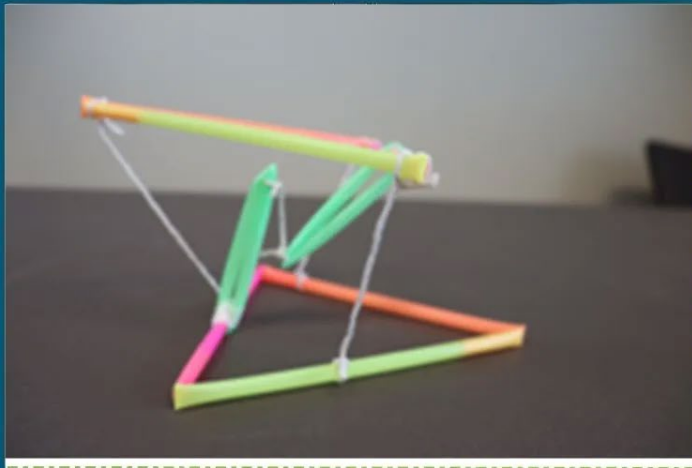
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## STEM at Home Activities with ND EPSCoR

Finding engaging STEM projects for elementary students that families can facilitate is not always easy but that is one of the goals of STEM at Home. These simple but fun projects are targeted at young students and will help teach important critical thinking skills and potentially spark a lifetime interest in STEM. Each video also includes a shopping list for materials.



Our latest video explains the concept of tensegrity:



## Tensegrity Devices

**ND EPSCoR** STEM at Home Activities Series

[Learn more >>](#)

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### Updates on open positions

- **ND EPSCoR Executive Director**  
Candidates being reviewed
- **Director - Tribal Partnerships**  
Candidates being reviewed
- **Communications Specialist**  
Mark Puppe started in this role on March 17



## Institute of Education Sciences Summer Training Opportunities

The Institute for Education Sciences (IES) is supporting training institutes during summer 2023 that have upcoming application deadlines:

### [Meta-Analysis Training Institute](#)

- Workshop dates: July 24 – 29, 2023
- Workshop location: Chicago, IL
- Application deadline: March 31, 2023

### [Summer Research Training Institute on Cluster-Randomized Trials](#)

- Workshop dates: July 17 - 27, 2023
- Workshop location: Northwestern University
- Application deadline: March 31, 2023

### [Evidence-Based Intervention Training for Education](#)

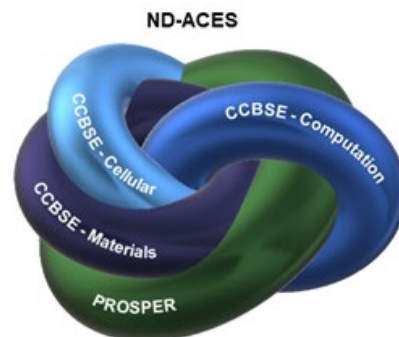
- Workshop dates: June 20-23, 2023
- Workshop location: Ohio State University
- Application deadline: March 31, 2023

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**Request for Proposals:  
New Discoveries in the Advanced Interface of Computation,  
Engineering, and Science (ND-ACES)**



Proposals are being requested in the areas that spin-off or are emerging research that can expand the reach and capacity of the NSF EPSCoR funded award entitled New Discoveries in the Advanced Interface of Computation, Engineering, and Science ([ND-ACES](#)).



***While proposals that fit well into one or more of the identified emerging areas below are encouraged, proposals for other areas that expand the capabilities of ND-ACES within the overall approved scope of the program will be considered.***

Research proposals that bridge ND-ACES foci are particularly welcome, as are proposals that connect CCBSE with [PROmoting Sustainable Partnerships in Education and Research \(PROSPER\)](#). Those receiving awards will be incorporated into CCBSE during the time of their award and be required to participate in the programmatic efforts of PROSPER

1. **Imaging Techniques for Cell Growth in Testbeds**
2. **Multimedia Art Modules for Explaining CCBSE Science**
3. **Inclusion of Additional Cell Types and Fluid Flow Conditions in Testbeds**
4. **Innovation Pilot Funding and Translational Seed Research that Fit the CCBSE Mission**
5. **Self-assembly technologies for tissue engineering**
6. **New Biomaterials in Tissue Engineering and Advanced Manufacturing of Biomaterials**
7. **Novel Biobased Specialty Crop Extracts for Anticancer Therapy Applications**

To learn more, read the [complete funding opportunity](#)

**ND EPSCoR: Emerging Seed Topics**

ND EPSCoR is soliciting Emerging Seed proposals in the areas that spin-off of or are emerging research area that can expand the reach and capacity of the NSF EPSCoR funded award entitled New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES). More information about eligibility and responding to this solicitation can be found in the [Funding Opportunities – Researchers](#) section of the ND EPSCoR website.

**Emerging Seed Topics:**

- Imaging Techniques for Cell Growth in Testbeds
- Multimedia Art Modules for Explaining CCBSE Science
- Inclusion of Additional Cell Types and Fluid Flow Conditions in Testbeds
- Innovation Pilot Funding and Translational Seed Research that Fit the CCBSE Mission
- Self-assembly Technologies for Tissue Engineering
- New Biomaterials in Tissue Engineering and Advanced Manufacturing of Biomaterials
- Novel Biobased Specialty Crop Extracts for Anticancer Therapy Applications

*Deadline: April 3, 2023*



The Advanced Research Projects Agency for Health (ARPA-H) released its first Open Broad Agency Announcement (Open BAA) and [announced](#) a wide range of agency actions, including the hiring of program managers (PMs) and mission office directors, selection of its first of three physical sites or Hubs, solicitation of the remaining two Hubs, and a new “ARPA-H Dash” competition soliciting ideas from the health, scientific, and technology communities. Modeled after the Defense Advanced Research Projects Agency (DARPA), ARPA-H was launched in March 2022

and is tasked with advancing high-risk, high-reward research with transformative potential to drive biomedical and health innovation.

- [Agency-wide Open BAA](#): Seeking funding proposals for research aiming to improve health outcomes across patient populations, communities, diseases, and health conditions, this BAA calls for proposals to outline breakthrough research and technological advancements.
- [ARPA-H Dash to Accelerate Health Outcomes](#): ARPA-H Dash is a collaborative online competition to solicit the best ideas in the country to enhance the ARPA-H mission. Submit your idea by April 7.

## DEPSCoR RESEARCH COLLABORATION (RC) OPPORTUNITY

The Department of Defense (DoD) announces the fiscal year 2023 (FY23) Defense Established Program to Stimulate Competitive Research (DEPSCoR) – Research Collaboration (RC) opportunity. 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 FY23 DEPSCoR appropriations through this announcement.



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**This funding opportunity aims to create basic research collaborations between a pair of researchers, namely**

1. **Applicant/Principal Investigator (PI), henceforth referred to as Applicant, a full-time faculty member who has never served as a PI on a prior DoD directly funded research Prime award and**
2. **Collaborator/co-Principal Investigator (co-PI), henceforth referred to as Collaborator, an investigator who will provide mentorship to the Applicant**

and has served as a PI on a DoD directly funded research Prime award actively between 1 October 2016 and 30 September 2023.

This structure is aimed at introducing potential applicants to the DoD's unique research challenges and its supportive research ecosystem.

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The Basic Research Office anticipates up to \$16 million in total funding will be made available for this program to fully fund and award up to twenty five (25) grants up to \$600,000 (total cost) each. Each grant award will be funded up to \$200,000 (total cost) per year for three (3) years.

The DoD intends to competitively make, and fund from fiscal year 2023 appropriations, multiyear awards for S&E research in areas relevant to the DoD's mission and important to national security.

Awards are subject to funding availability. There is no guarantee of an award.

**Deadline: November 20, 2023**

[Learn more >>](#)

## DEPSCoR CAPACITY BUILDING (CB) OPPORTUNITY

The Department of Defense (DoD) announces the fiscal year 2023 (FY23) Defense Established Program to Stimulate Competitive Research (DEPSCoR) – Research Collaboration (RC) opportunity. 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 FY23 DEPSCoR appropriations through this announcement.



**This funding opportunity aims to support the strategic objectives of IHEs (either individually or in partnership with others) in DEPSCoR States/Territories to achieve basic research excellence in areas of high relevance to the DoD.**

**IHEs in the following States/Territories are eligible to apply for this DEPSCoR opportunity under this announcement: Alabama, Alaska, Arizona, Arkansas, Connecticut, Delaware, District of Columbia, Guam, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Oregon, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, U.S. Virgin Islands, Vermont, West Virginia, Wisconsin, and Wyoming.**

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The Basic Research Office anticipates up to \$6 million in total funding will be made available for this program to fully fund and award between one to four grants up to \$1.5 million (total cost) each. Each grant award will be funded up to \$750,000 (total cost) per year for two (2) years.

The award is subject to funding availability. The Basic Research Office reserves the right to select and fund for award all, some, part, or none of the proposals received. There is no guarantee of an award.

**Deadline: November 20, 2023**

[Learn more >>](#)

## **DoD Breast Cancer Research Opportunities**

These funding opportunities are applicable to ND ACES as part of the sustainability component.

- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Breakthrough Award Levels 1 and 2](#)  
**Deadline: Apr 11, 2023**
- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Transformative Breast Cancer Consortium Development](#)

## Award

**Deadline: Apr 11, 2023**

- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Era of Hope Scholar Award](#)  
**Deadline: Apr 11, 2023**
- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Clinical Research Extension Award](#)  
**Deadline: Jun 22, 2023**
- Dept. of the Army — USAMRAAT  
[DoD Breast Cancer, Breakthrough Award Level 3](#)  
**Deadline: Jun 28, 2023**
- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Breakthrough Award Level 4](#)  
**Deadline: Jun 28, 2023**
- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Innovator Award](#)  
**Deadline: Jun 28, 2023**
- Dept. of the Army — USAMRAA  
[DoD Breast Cancer, Transformative Breast Cancer Consortium Award](#)  
**Deadline: Jun 28, 2023**

## **EPSCoR Research Infrastructure Improvement (RII)**

### **Track-4: EPSCoR Research Fellows**

EPSCoR RII Track-4: EPSCoR Research Fellows provides awards to build research capacity in institutions and transform the career trajectories of investigators and further develop their individual research potential through collaborations with

investigators from the nation's premier private, governmental, or academic research centers.

The fellowship provides opportunities to establish strong collaborations through extended or periodic collaborative visits to a selected host site. Through collaborative research activities with the host site, Fellows will be able to learn new techniques, develop new collaborations, advance existing partnerships, benefit from access to unique equipment and facilities, and/or shift their research toward potentially transformative new directions. The experiences gained through the fellowships are intended to have lasting impacts that will enhance the Fellows' research trajectories well beyond the award period. The benefits to the Fellows are also expected to improve the research capacity of their institutions and jurisdictions more broadly.

EPSCoR Research Infrastructure Improvement Track-4: EPSCoR Research Fellows offers the following two sub-tracks:

- RII Track-4:NSF
- RII Track-4:@NASA

While the two tracks are similar in achieving the same goals, RII Track-4:NSF is open to a broad community and RII Track-4:@NASA focuses on faculty from institutions with high enrollments of students from underrepresented populations in STEM to collaborate with researchers at the National Aeronautics and Space Administration (NASA) research centers. PIs who are eligible for both tracks may apply for only one track per competition cycle.

In both sub-tracks, the RII Track-4 provides opportunities for the participation of one trainee, who must be an undergraduate or graduate student enrolled full-time in an accredited degree program, or a postdoctoral researcher from an EPSCoR jurisdiction. Staff members, such as technicians or lab assistants could be considered as trainees when properly justified.

*Deadline: April 11, 2023*

[Learn More](#)

## **NSF DCL: Radio Spectrum Sharing - The Human Environment**

The purpose of this Dear Colleague Letter (DCL) [[NSF 23-065](#)] is to inform researchers in the social, behavioral and economic sciences (SBE) of a funding opportunity under the [Spectrum Innovation Initiative](#) (SII) of the National Science Foundation (NSF). The electromagnetic spectrum has disparate users including commercial companies (wireless communication, navigation, etc.), scientists (radio astronomy, geospace sciences, etc.), air traffic controllers and first responders.

A major objective of the SII, pursued through its [National Radio Dynamic Zones](#) (SII-NRDZ) program, is to advance dynamic and agile sharing of the electromagnetic spectrum. The term dynamic and agile sharing refers to methods enabling electromagnetic spectrum users to safely operate closer together in space or frequency or to safely alternate spectrum access more rapidly than is possible with the geographic exclusive licenses used in traditional spectrum management. Widespread use of dynamic and agile spectrum sharing is essential to mitigate spectrum congestion problems that constrain growth in many sectors of society and the economy.

Through this DCL, NSF invites both proposals and requests for supplements to active NSF awards. Both proposals and supplemental funding requests should focus on research that helps advance the use of dynamic spectrum sharing by studying its human environment, which includes studying the economic, social, and incentive issues associated with:

- adoption by private and public sector entities;
- understanding by and support from the general population; and
- paths to overcome barriers to deployment and use.

## **NSF: Fluid Dynamics**

The Fluid Dynamics program [[PD 23-1443](#)] supports fundamental research toward gaining an understanding of the physics of various fluid dynamics phenomena. Proposed research should contribute to basic scientific understanding using and/or creating innovative experimental, theoretical, and/or computational methods.



Major areas of interest and activity in the program include:

- Turbulence and Transition
- Bio-Fluid Physics
- Non-Newtonian Fluid Mechanics
- Microfluidics and Nanofluidics
- Wind and Ocean Energy Harvesting
- Fluid-Structure Interactions (FSI)
- Canonical Configurations
- Artificial Intelligence (AI)/Machine Learning
- Instrumentation and Flow Diagnostics

*Deadline: Proposals accepted ANYTIME*

## **Distributed Research Experience for Undergraduates (dREU)**

The Distributed Research Experience for Undergraduates (dREU) program is designed to strengthen North Dakota's STEM ecosystem by catalyzing bioscience research and career development opportunities for undergraduates. Selected students will conduct science, technology, engineering, and mathematics (STEM) research projects under the supervision and guidance of faculty researchers from the New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) Center for Cellular Biointerfaces in Science and Engineering (CCBSE). Like all ND-ACES programs, dREU is committed to building a diverse pool of engaged students and competitive researchers. Underrepresented people in STEM (e.g., women, first-generation college students, persons with disabilities, rural populations) are thus strongly encouraged to apply.

Selected students will conduct a research project for which they may receive up to \$15,000/year. Student salary is \$15/hour and includes time devoted to research, professional development, and associated tasks. Students conducting summer research may also receive up to \$2,500 for housing. All project activities must occur

at two (one for summer and one for the school year) of the nine institutions listed in the solicitation.

Start: May 16/June 1, 2023- End May 15, 2024

- Summer 2023 20-40 hours/week for 10 weeks
- Fall 2023 – 10-20 hours/week for 16 weeks
- Spring 2024 – 10-20 hours/week for 16 weeks

All dREU students are required to participate in virtual professional development seminars throughout the program. These experiences enhance students' research and career readiness (i.e., writing a resume, applying to graduate school, and preparing and delivering presentations). Students will also be required to produce a poster presentation and present their work at the ND EPSCoR Annual Conference in Spring.

Students already employed as research assistants with CCBSE researchers may still apply for the dREU program. Moreover, students conducting research in the summer will be eligible for the \$2,500 housing allowance.

[More information](#)

*Application Deadline: May 1, 2023*

## **NSF: Spectrum and Wireless Innovation enabled by Future Technologies**

The National Science Foundation's Directorates for Mathematical & Physical Sciences (MPS), Computer and Information Science and Engineering (CISE), Engineering (ENG), and Geosciences (GEO) are coordinating efforts to identify new concepts and ideas on Spectrum and Wireless Innovation enabled by Future Technologies (SWIFT) [[NSF 23-567](#)]. A key aspect of the SWIFT program, now in its

fourth year, is its focus on effective spectrum utilization and/or coexistence techniques, especially with passive uses, which have received less attention from researchers. Coexistence is when two or more applications use the same frequency band at the same time and/or at the same location, yet do not adversely affect one another. Coexistence is especially difficult when at least one of the spectrum users is passive, i.e., not transmitting any radio frequency (RF) energy. Within the general area of the SWIFT program, this SWIFT-SAT solicitation focuses on satellite-terrestrial coexistence and covers both radio-spectrum and optical-wavelength coexistence.

The goal of these research projects may be the creation of new technology or significant enhancements to existing wireless infrastructure, with an aim to benefit society by improving spectrum utilization and ancillary challenges, beyond mere spectrum efficiency. The SWIFT program encourages collaborative team research that transcends the traditional boundaries of individual disciplines.

*Deadline: June 5, 2023*

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Have questions, ideas, or suggestions for News and Notes?

[Contact Us](#)



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*Acknowledgement*

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