



Established Program to  
Stimulate Competitive Research

## News & Notes

*Providing leadership and coordination to broaden and diversify North Dakota's science, technology, engineering, and mathematics (STEM) workforce pathway and growing statewide STEM research and competitiveness at participating institutions of higher education.*

June 2024

### From the Executive Director



Hello,

As we move into summer, we want to congratulate all the students who graduated this spring.

The “Students in Technology Transfer and Research” interns have started their experiences working at companies across North Dakota. A summary of the companies and interns participating in this year's program are listed below. We will be highlighting their internship experiences as the summer progresses.

As we continue into the summer, there are still great opportunities to spread the word about STEM with our colleges, communities, and state. Please share any related events and successes with us to include in our future ND STEM Highlights sections [here](#).

Jolynne



# Students in Technology Transfer and Research (STTAR) Summer Internship Updates

The STTAR Program was established in 1994 by the ND EPSCoR Office in order to meet increased needs for technology transfer from universities to industry. Each summer North Dakota University System students, North Dakota residents enrolled in other colleges, and students enrolled at tribal colleges in North Dakota are partnered up with North Dakota businesses for 8 or more weeks of internship experience.

This summer, the following companies have been paired together with interns through the STTAR Program:

## **Aethero, Inc. (prev. Tau Drones LLC)**

Research Intern:

- Ajan Meenakshisundaram (UND)

## **Apex Engineering Group**

Civil Engineering Interns:

- Ariel Jacobson (Univ. of Mary)
- Marcus Longsdorf (Univ. of Mary)
- Trayton Hinderer (NDSU)
- Nick Troske (NDSU)

## **Bushel Inc.**

Software Engineering Interns:

- Quinn Johnson (NDSU)
- Jaleta Tesgura (Concordia)

## **ComDel Innovation**

Engineering Interns:

- Jacob (Jake) Hanson (NDSU)
- Grady Larsen (NDSU)
- Samuel Moe (NDSU)

## **CorVent Medical**

Embedded Software Engineering Intern:

- Ayden Schmidt (NDSU)

Operations & Manufacturing Engineering Intern:

## **Creedence Energy Services**

Field Engineering Intern:

- Dylan McDonald (SDSMT)

## **Dakota Growers Pasta Company**

Engineering Intern:

- Kaden Hoffman (NDSU)

## **Elinor Coatings**

Research Assistants:

- Austin Hamilton (UND)
- Finley Hearon (MSU-Moorhead)
- Sean Vreeland (UND)

## **Marvin**

Design Engineering Interns:

- Cody Cardwell (NDSU)
- Victor Cyr (NDSU)
- Zach Van Batavia (NDSU)

## **MBN Engineering Inc.**

Civil Engineering Intern:

- Ryan Jones (NDSU)

## **Moore Engineering Inc.**

Engineering Technician I Interns:

- Joshua Crowder (UND)

- Max Bowman (NDSU)

Supply Chain Intern:

- Eke Denessen (NDSU)

- Alayna Holder (NDSU)
- Kolby Rasmusson (NDSU)

## Swanson Health Products

Science & Innovation Intern:

- Ashley Chepkorir (Concordia)

Congratulations to all our 2024 STTAR summer interns!  
For more information on the STTAR Program, you can visit our [website](#).



## ND STEM Highlights

[Mayville State University Students Receive Research Awards](#): Mayville State University students George Davisson and Chloe Jacobson have received ND EPSCoR ND-ACES Distributed Research Experience for Undergraduates (dREU) Program awards for the summer of 2024.

[Dickinson State University Hosts Southwest Regional Science Olympiad Competition](#): Dickinson State University hosted the Southwest Regional Science Olympiad Competition on March 14, 2024, welcoming over two hundred area middle and high school students to campus.

[Minot State announces approval of data science for AU-ABC](#): Minot State University announced its new data science program has been approved by the Air University Associate-to-Baccalaureate Cooperative (AU-ABC).

[‘The sky is literally the limit’](#): University of North Dakota’s Aerospace Community Day draws thousands of attendees from across North Dakota and Minnesota.

[NDSU Design, Build, Fly team soars to new heights](#): A group of North Dakota State University College of Engineering students finished among the best in the nation at the American Institute of Aeronautics and Astronautics Design, Build, Fly Competition.

[Environmental Science undergraduate student, Precious Yellow Fat has recently been accepted to the 2024 Montana Tech Research Experience for Undergraduates \(REU\) program](#): The

program is a 10-week immersive research experience opportunity for students with a desire for a career in a STEM field related to characterizing or solving environmental issues.

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## Meet the Researcher



**Ali Alshami, Ph.D.**  
**Associate Professor of Chemical Engineering**  
**University of North Dakota**

**Member of the NSF EPSCoR Track-1: New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES)**

**What are your primary research and scholarly interests?**

Primary research interests focus on tissue engineering, polymeric and hydrogel biomaterials. Current research activities include developing novel three-dimensional biomaterials as cell scaffolds and drug screening platforms, and investigation of cell and material interactions in bioreactors.

**How does this tie into the work you are doing with ND-ACES?**

This work ties into the ND-ACES project by developing and producing both hard and soft scaffolds for cellular applications.

**Where are you from and where did you pursue your education?**

I am from North Dakota, and pursued both undergraduate and graduate education at Washington State University, in Pullman, Washington.

**What excites you about ND EPSCoR?**

The collaborative nature and sharing ideas between team members that inform the development of technologies and therapies that better address the treatment of metastasized cancer.

**What motivates you?**

I am motivated knowing that my work contributes to the research and treatment of various types of cancer.

**If you could time travel, where would you go?**

I would love to have been on Noah's Ark. To me it is the ideal time to start fresh...!

**If you could have coffee / tea with anyone, who would it be?**

Archie Bunker of All in the Family. I can listen to him all day long.

**What was your first job?**

A salesman in retail business.

**What does your very best day include?**

A cup of coffee with a pastry.

**What's your favorite quote?**

"Everyone I like stays the hell away from me."

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## STEM Workshops, Webinars, and Events

### NSF EPSCoR: E-RISE General Information Session

- Tuesday, June 25, 2024, 12:00 - 1:15 PM CDT
- [More information and registration](#)

### 28th NSF EPSCoR National Conference

- October 13 - 16, 2024
- [Learn more](#)

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**2024 SBIR/STTR Road Tour: [Great Lakes](#)**

**July 15 | East Lansing, Michigan**

Hosted by BBC Entrepreneurial Training & Consulting's Michigan Catalyst Advantage Network

**July 16 | Indianapolis, Indiana**

Hosted by Indiana Economic Development Corporation

**July 17 | Champaign-Urbana, Illinois**

Hosted by Research Park at the University of Illinois

**July 18 | Madison, Wisconsin**

Hosted by the Center for Technology Commercialization

**July 19 | Minneapolis, Minnesota**

Hosted by MNSBIR, Inc.

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## Funding Opportunities\*

**Department of Defense**

- [DoD Prostate Cancer, Implementation Science Award](#)
- [DoD VRP, Investigator-Initiated Research Award](#)

**Department of Energy**

- [Quantum Information Science Enabled Discovery \(QuantISED 2.0\)](#)

**National Science Foundation**

- [Enabling Partnerships to Increase Innovation Capacity](#)
- [NSF 24-539: Division of Molecular and Cellular Biosciences Core Programs](#)
- [NSF 24-540: Established Program to Stimulate Competitive Research \(EPSCoR\): Workshop Opportunities](#)
- [NSF 24-577: National STEM Teacher Corps Pilot Program](#)
- [NSF 24-094: Dear Colleague Letter: NSF Scholarships in Science, Technology, Engineering, and Mathematics Program \(S-STEM\) Scholarship Supplements for Advanced Technological Education \(ATE\) Recipients](#)
- [NSF 24-576: Gen-4 Engineering Research Centers](#)
- [NSF 24-091: Dear Colleague Letter: Announcement of Topic for the Fiscal Year 2025 and 2026 EPSCoR Research Improvement Infrastructure-Focused EPSCoR Collaborations \(RII-FEC\) Program](#)
- [NSF 24-575: EPSCoR Centers of Research Excellence in Science and Technology \(EPSCoR CREST Centers\)](#)

**United States Department of Agriculture**

- [Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers \(2501 Program\)](#)

*\*These funding opportunities may contain Limited Submission solicitations. Please follow your institution's guidelines and processes for Limited Submission solicitations.*

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## ND EPSCoR wants to hear your news

Given the opportunity to communicate with both the public and internally within our own program, the ND EPSCoR team invites you to provide content that can be used in stories, social media, press releases, and ND EPSCoR News and Notes.

Send us your news, events, accomplishments and most importantly, your BRIGHT SPOTS!

[Submit a Story Idea](#)

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



[Contact Us](#)



### Acknowledgement

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