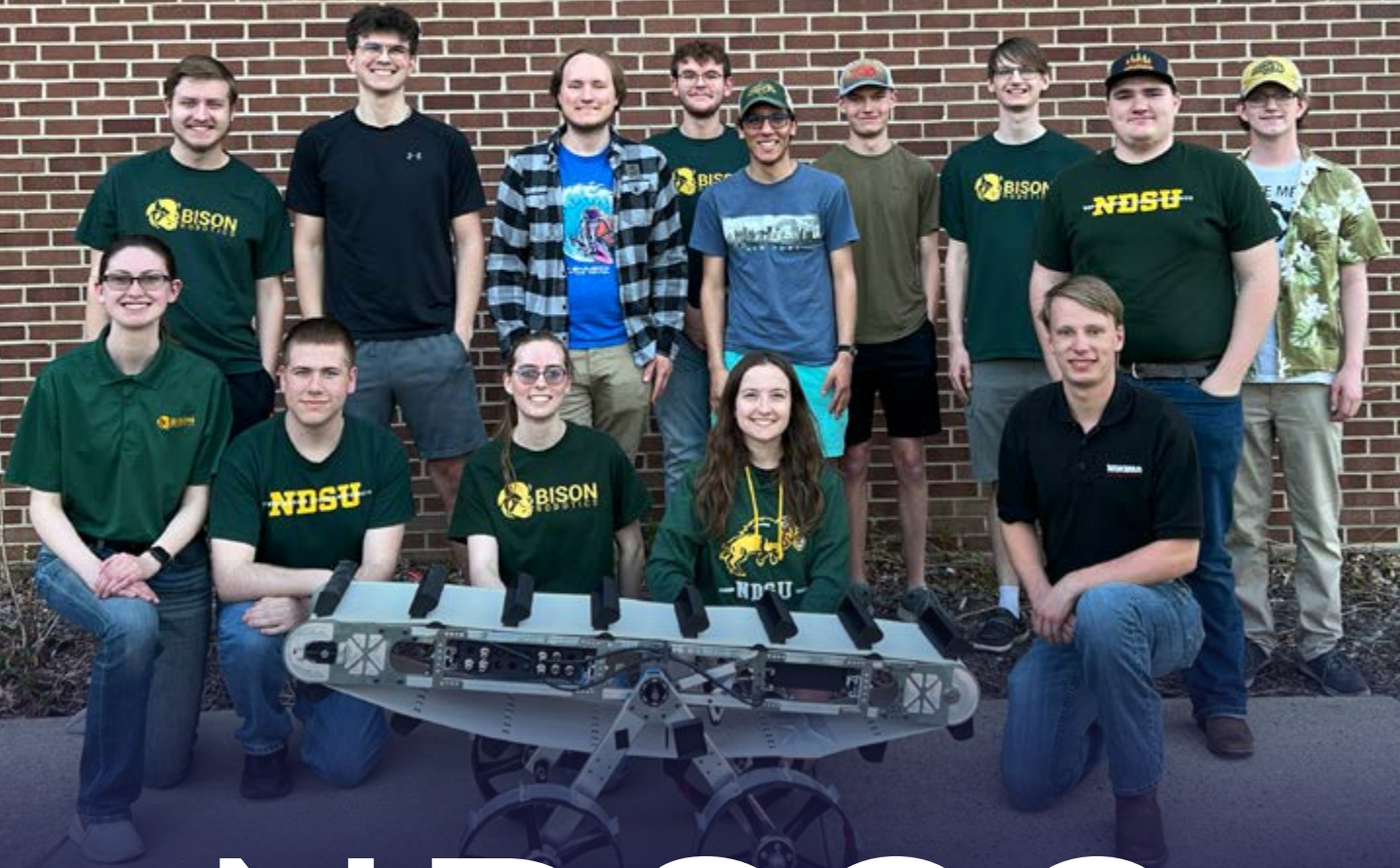


VIEW ARCHIVED ISSUES OF  
AURORA ONLINE!

[ndspacegrant.und.edu/aurora](http://ndspacegrant.und.edu/aurora)



# NDSGC AURORA

NORTH DAKOTA SPACE GRANT CONSORTIUM | 2026 EDITION



# NOTES FROM THE Director

2026 was another exceptional year for the NDSGC, due to the incredible work and unwavering passion of the core team, STEM Ambassadors, ND affiliate representatives, national Space Grant and NASA network, industry and education partners, and awardees across the state.

While we are sad to see her go, we wish the best of luck to previous Associate Director, Tori McIntosh. Thank you for your many years of service to the NDSGC and ND NASA EPSCoR Team, through your many roles! Tori is now the Research Security Manager in the Division of Research & Economic Development at the University of North Dakota. Laurie Salander has been promoted to the Associate Director position - congratulations, Laurie! We would also like to welcome Dr. Dawn Cleveland to the team as the new Assistant Director. Dr. Cleveland has a background in Biomedical Sciences, though like many of us, she has always had a keen interest in space and the cosmos. She is at her happiest when discussing science, walking her dog, or meeting the delightful people at NASA and across the state.

Flipping through this year's edition of the Aurora, you will find evidence of talented NASA interns studying: **Aeronautics**, **Lunar Plumes**, and **Machine Learning**, to name a few (p. 10 - 12); student fellows conducting cutting edge research in areas such as: **Hypersonic Re-entry Vehicles**, **Rocket Engines**, and **Exoplanets** (p. 14 - 17), college teams completing National Challenges in **Uncrewed Aircraft** and **Electric Vehicles**, (p. 18 - 21), and middle and high school teams competing in **Robotics** and **Space Agriculture** (p. 48 - 53). You'll see faculty members revising college courses to best prepare students for the **STEM Workforce** (p. 22 - 23), scholarship recipients from across the state (p. 24 - 36), graduate students starting **Community Gardens** (p. 38 - 39) and affiliates completing **Plant Research** (p. 42 - 43), teachers securing robust STEM resources for their local schools (p. 40 - 41), and educators exploring the **University of Alaska Fairbanks** engineering and composite materials, while collaborating on K-12 lesson plan design (p. 60 - 61). You'll discover the innovative work of **Cankdeska Cikana Community College** (p. 67 - 69), current STEM Ambassadors who serve as the backbone of the NDSGC program (p. 44 - 47) by engaging in community events across ND (p. 54 - 56), and even hear from alumni who served in the **very first cohort of NDSGC STEM Ambassadors**, 10 years ago (p. 62 - 66). If you're looking for those quick numbers, check out this year's **Infographic** (p. 8 - 9) to grasp the quantitative impact of the NDSGC in just one year.

Each of these students', educators', and faculty members' efforts directly contribute to the NDSGC's goal of engaging all in NASA and STEM. To me, the only thing more impressive than the research and projects themselves, is the ability of these awardees to share their findings with others. At the 2025 Affiliates Meeting hosted by ND's Gateway to Science in Bismarck, the NDSGC held its first-ever student research poster session. We invite you to join us for the 2026 meeting in April, where we'll hear from these students directly (and we'll take the poster session up a notch, competition-style!).

As we move forward in 2026, I am reminded of the amazing work that our team continuously accomplishes through perseverance, collaboration, and lifting others up. We are beyond grateful for the strong support of our ND affiliate network, our NASA Space Grant colleagues, and our all-star STEM Ambassadors. Thank you for your collaborations, enthusiasm, patience, and creative ideas throughout the year. We could not have done it without you. Together, we are #NASAINND.

*Caitlin Milera*

Caitlin Milera  
Director, NDSGC

## WHAT IS SPACE GRANT?

NASA initiated the National Space Grant College and Fellowship Program, also known as Space Grant, in 1989. Space Grant is a national network of colleges and universities. These institutions are working to expand opportunities for Americans to understand and participate in NASA's aeronautics and space projects by supporting and enhancing science and engineering education, research and public engagement efforts. The Space Grant national network includes over 950 affiliates from universities, colleges, industry, museums, science centers, and state and local agencies. These affiliates belong to one of 52 consortia in all 50 States, the District of Columbia, and the Commonwealth of Puerto Rico. The 52 consortia fund fellowships and scholarships for students pursuing careers in science, technology, engineering, and mathematics, or STEM, as well as curriculum enhancement and faculty development. Member colleges and universities also administer pre-college and public service education projects in their states.



## In this Issue

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## CONTACT US

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# Space Grant Meetings



**WESTERN REGIONAL MEETING**

*Above: The Washington Space Grant Consortium hosted the Western Regional Space Grant Meeting in October 2024. The NDSGC team and two affiliate members (Dr. Julie Robinson, Center for Engineering Education Research Director & Assistant Research Professor at the University of North Dakota, and Hope Burdolski, STEM Education Specialist at Gateway to Science) attended the conference. The meeting also included a visit to Blue Origin. The NDSGC was also invited to present a hands-on session titled, "IDEAS Teacher Workshop: Collaborations & Engagements."*



**CAPITOL HILL VISIT**

In early spring 2025, the NDSGC team attended the National Council of Space Grant Directors' Meeting in Washington, D.C. They also participated in Hill visits to discuss NASA programming with North Dakota legislators.

The NDSGC also supported students to attend and share their experiences with the Senators and Representative. Laina Behrenbrinker (NASA Intern, Research Fellow, STEM Ambassador, and Lunabotics Team Leader) from the University of North Dakota, and Turner Person (NASA Intern, Research Fellow, and High-Power



**DC NATIONAL MEETING**

Rocketry Competition Team Leader) from North Dakota State University were the students in attendance.

The upper right photos shows the NDSGC with Distinguished Service Award Recipient: Apollo 9 Astronaut, Rusty Schweickart.



FROM THE BLOG:

# 2025 NDSGC Affiliates Meeting Recap: Innovation, Inspiration, & Impact

April 21, 2025

**THE NORTH DAKOTA SPACE GRANT CONSORTIUM WAS PROUD TO HOST OUR ANNUAL AFFILIATES MEETING THIS MARCH IN BISMARCK, NORTH DAKOTA, CELEBRATING A YEAR OF REMARKABLE ACHIEVEMENTS AND COLLABORATION ACROSS THE STATE.**

### Welcoming the Day in Bismarck

This year's meeting was held at North Dakota's Gateway to Science, a fitting venue for a day packed with engaging events and meaningful conversations. The morning began with a welcome breakfast and opening remarks from our Director, Dr. Caitlin Milera, who shared exciting updates on the Space Grant program and NASA initiatives.

### Student Spotlights: NASA Interns & Fellowship Recipients

We kicked off the event with a Q&A panel featuring several of our recent NASA interns, who shared their experiences and advice for future applicants. This was followed by presentations from our student and faculty fellowship recipients, highlighting the incredible research and projects supported by NDSGC this year.

### Show & Tell: Research Poster Session

One highlight of the day was our interactive poster session, where awardees had the opportunity to display and discuss their research in a collaborative, show-and-tell format. It was an excellent moment for students to be recognized for their hard work while educating and inspiring fellow attendees.

### A Special Message from Senator Hoeven

A memorable part of the day was a guest appearance from Senator John Hoeven, who spoke about the importance of STEM education and workforce development in North Dakota. His words of encouragement were a powerful reminder of the impact our work has on both a state and national level.

### Career Readiness with Job Service North Dakota

After a networking lunch, John from Job Service North Dakota led a dynamic session on resume building and interview preparation. His insights and practical advice were a hit with attendees, offering valuable tools to enhance professionalism and career readiness.

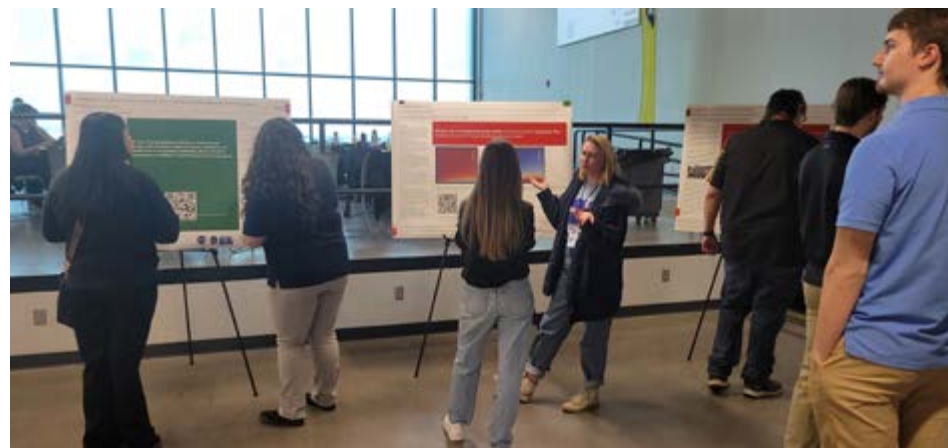
### STEM in Action: Panels and Presentations

The afternoon concluded with engaging panels featuring recipients of our Mini-Grants and current STEM Ambassadors. These sessions spotlighted the incredible outreach and education efforts happening across the state, and the dedication of those working to make STEM accessible and inspiring for all.

### Looking Ahead

It was truly an inspiring day of connection, celebration, and growth. We are incredibly proud of all our awardees and partners, and we look forward to continuing to support and expand opportunities for students, educators, and professionals in the year ahead.

***We hope to see both familiar and new faces at next year's meeting!***



**READ THE FULL BLOG POST!**

<https://blogs.und.edu/jdosas/2025/04/2025-ndsgc-affiliates-meeting-recap-innovation-inspiration-impact/>

*Top left: Affiliate Meeting 2025 Program and Agenda to kick off the Meeting.*

*Top right: 2025 NDSGC Affiliate Meeting group photo on the staircase in the ND Gateway to Science Center.*

*Center left: NDSGC Scholarship awardees sharing the impact of receiving the funding for their education.*


*Center right: Attendees broke out into groups for small sessions. This session was a STEM Challenge that included collaboration and innovation.*

*Bottom left: Awardee Poster Session sharing their research the NDSGC funding helped with in the NASA Internship or Student Research Fellowship awards.*

*Bottom right: Senator John Hoeven speaking with the NDSGC Awardees.*

# NORTH DAKOTA

**11** **NASA INTERNSHIPS**  
 HQ | GLENN | JOHNSON  
 AMES | ARMSTRONG  
 LANGLEY | GODDARD



**14** **RESEARCH FELLOWSHIPS**  
 EARTH SYSTEM SCIENCE & POLICY  
 AEROSPACE ENGINEERING | BIOLOGY  
 PHYSICS | SPACE STUDIES | MATHEMATICS  
 EDUCATIONAL FOUNDATIONS & RESEARCH  
 MECHANICAL ENGINEERING



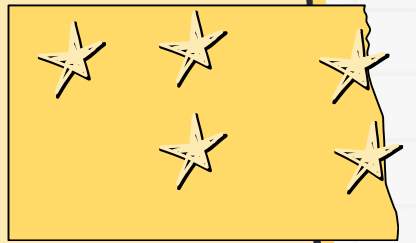
**19** **STEM AMBASSADORS**  
 COMMERCIAL AVIATION | PSYCHOLOGY  
 MIDDLE LEVEL EDUCATION | MATHEMATICS  
 MECHANICAL ENGINEERING | PHYSICS  
 ATMOSPHERIC SCIENCES | CHEMISTRY  
 BIOCHEMISTRY | COMMUNICATIONS



# SPACE GRANT CONSORTIUM

**10,719** **EVENT PARTICIPANTS**

5,421 ELEMENTARY | 751 M.S. | 1,411 H.S. STUDENTS  
 651 UNDERGRADS | 176 GRADUATE STUDENTS  
 281 EDUCATORS | 116 FACULTY | 1,912 PUBLIC



**10** **MINI GRANTS**  
 1 COLLEGE STUDENT  
 7 EDUCATORS  
 2 AFFILIATES

**148** **SCHOLARSHIPS**  
 UNDERGRADUATE &  
 GRADUATE STUDENTS  
 NDUS & TRIBAL COLLEGES

**32** **COMPETITION TEAMS**  
 ROCKETRY | SNOWMOBILE | DRONES  
 ROBOTICS | AERONAUTICS | RACECAR  
 PLANT THE MOON / MARS CHALLENGE



**4** **FACULTY FELLOWSHIPS**  
 VALLEY CITY STATE U.  
 MINOT STATE U. | NDSU

**1** **INDUSTRY INTERNSHIP**  
 GRANDSKY &  
 UNIVERSITY OF ND

FALL 2024 | SPRING 2025 | SUMMER 2025

[NDSPACEGRANT.UND.EDU](http://NDSPACEGRANT.UND.EDU)

# NASA Internships

The NDSGC is committed to supporting North Dakota students in NASA internships.

Students who are US citizens and enrolled at NDSGC-affiliated institutions will be able to engage in authentic, hands-on learning experiences that involve real-life problem-solving.



**ETHAN JORDAN\***



**MIGUEL HUTCHINSON**



**TALIA FRAHM\***



**TERRENCE ANDRE SAN GABRIEL**



**TURNER PERSON**



**DANI LOHNES**



**MADELEINE PHILLIPS**



**ZOE GRAHAM**



**EMILY MIKHAIL**

## FALL 2024

### ETHAN JORDAN\*

Space Studies | University of North Dakota

Project: Drones as First Responders (DFR) Modeling UAS Mitigations and Hazards

NASA Ames Research Center

"I had a chance to work on this project last session as well as in the spring here, so it was great to see it to completion. I am thankful for the opportunity to experience working on a meaningful project and participating in a publication. I was able to contribute greatly to the project due to my background knowledge on UAS, but I have learned a lot more on the topic during this session as well as developing my skills on presentation, writing, and data analysis. I had new experiences such as learning MBSE and how to conduct an interview. I am grateful to have learned all this and am hopeful it will contribute to professional development as I move forward in the future."

#### Spring 2025 update:

"I am thankful for the opportunity to have continued working with the team at NASA and to have seen the project to completion. Through this project I have learned a great deal about research, communication, presentation, and data analysis. It was exciting to devise a methodology for analyzing drone safety data and to be able to contribute to the UAS First Responders community, bettering society as a whole."

### MIGUEL HUTCHINSON

Space Studies | University of North Dakota

Project: IMPACT - Preliminary Performance Comparison of LifePak, TempusPro, and LifeBot (Human Research Program)

NASA Glenn Research Center

"I am grateful for the opportunity of obtaining a NASA internship from Glenn Research Center through NDSGC. It was an incredible experience working with the IMPACT team applying what I learned in

Space Studies classes and my background knowledge working as a Medical Laboratory Scientist. This experience has opened many doors for future opportunities."

### DANI LOHNES

Pre-Engineering | Cankdeska Cikana Community College

Project: Flight Software Development

NASA Johnson Space Center

"The internship that the North Dakota Space Grant allowed me to continue my summer internship into fall semester. I am very grateful for that opportunity as it has brought connections and helped me explore different engineering projects. The internship taught me how to code and implement it into applications, which brought my interest to my Bachelors Degree in Software Engineering."

### TALIA FRAHM\*

Industrial Engineering and Management | North Dakota State University

Project: Space Operations Data Analytics and Knowledge Management Project

NASA Headquarters

"I am incredibly thankful to the North Dakota Space Grant Consortium (NDSGC) for the invaluable opportunity to intern at NASA. This experience has been life-changing, enabling me to collaborate with industry leaders, travel, and enhance both my technical and communication skills. I am excited to continue my journey with NASA in Fall 2025 under the NDSGC, and I look forward to learning, growing, and making a meaningful impact as I progress."

### ZOE GRAHAM

Commercial Aviation | University of North Dakota

Project: Aeronautics STEM Engagement

NASA Headquarters

"This internship was an incredible experience that further illuminated my passion to inspire youth interested in aviation. It gave me opportunities to apply my strengths,

\* Denotes a student that received funding to continue the same project a second semester.

and grow areas that I am weaker in. These projects helped me feel more equipped for the workforce, and I am immensely grateful for the NDSGC's support of my internship!

I am so grateful for the opportunities provided by the NDSGC! My experience in the NASA Internship Program set me up to be well equipped for a Marketing role a few months after I finished up the program. It was a unique experience collaborating with agencies, educators, and communicators to make aviation education accessible!"

### SPRING 2025

#### MADELEINE PHILLIPS

Aviation Safety and Operations | University of North Dakota  
Project: Computer Perception for Autonomous Aviation  
NASA Armstrong Flight Research Center

### SUMMER 2025

#### EMILY MIKHAIL

Mechanical Engineering and Physics | North Dakota State University  
Project: Stereo Cameras for Lunar Plume Surface Studies (SCALPSS)  
NASA Langley Research Center

"I am incredibly grateful to the North Dakota Space Grant Consortium and their supporting my internship at NASA Langley! Working with the SCALPSS (Stereo Cameras for Lunar Plume Surface Studies) team allowed me to learn from the ongoing advancements in lunar surface imaging and gain firsthand experience with cutting-edge optical diagnostics, and it was so exciting to be part of a project that can potentially help us return to the moon! This opportunity was truly transformative for my personal and professional growth, and I know it will be a huge stepping stone as I work toward a career in the aerospace industry."

#### TERRENCE ANDRE SAN GABRIEL

Mechanical Engineering | North Dakota State University  
Project: Finite Element Analysis (FEA) Global Parameter Optimization Studies with Machine Learning  
NASA Langley Research Center

"I am grateful for the ND Space Grant Program's support of my internship at NASA Langley. It has been a life changing experience to apply my skills at such an elevated level and be able to engage with the inner workings of the industry I aspire to be in."

#### TURNER PERSON

Mechanical Engineering and Physics | North Dakota State University  
Project: Cryogenics and Fluids - Lunar Applications  
NASA Goddard Space Flight Center

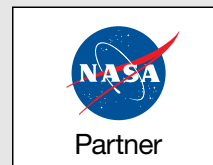
"My 2025 summer internship at NASA Goddard had a huge impact on my academic and career goals. Working hands-on with cryogenic systems and thermal vacuum testing gave me experience I could never get in a classroom and pushed me further toward a career in spacecraft propulsion and thermal systems. I'm extremely grateful for the support from NDSGC, which made this opportunity possible and helped me grow both as an engineer and a researcher."

Working at NASA showed me how deeply people here care about the mission and each other. The supportive and passionate environment made it an incredible place to grow as an engineer."



## Want to become a NASA intern?

To learn more, visit the ND Space Grant website:  
<https://ndspacegrant.UND.edu>



# Industry Internship

NDSGC-sponsored industry internships support college students working with local mentors at a STEM-relevant company or laboratory to complete research projects, and to help develop STEM skill sets.

Specific qualities that make a good industry partnership include, but are not limited to, real-world STEM experiences and hands-on and experiential learning. These internships do not involve NASA centers and focus on local industries.



TUCKER SHELLEY

Commercial Aviation | University of North Dakota  
Project: Meteomatics Meteodrone and Project Ultra  
Industry Partner: GrandSKY

"This internship was a dream come true. I learned so much about UAS operations and applications."

# Student Research Fellowships

The NDSGC Student Research Fellowships are available to students completing NASA-relevant research in a STEM field under the guidance of a faculty mentor.

Awards are offered throughout the fall, spring, and summer semesters to undergraduate and graduate students at NDSGC affiliate colleges. All NDSGC Student Research Fellowships are awarded on a competitive basis.



MANNA KAHN



WESTON NAPIER



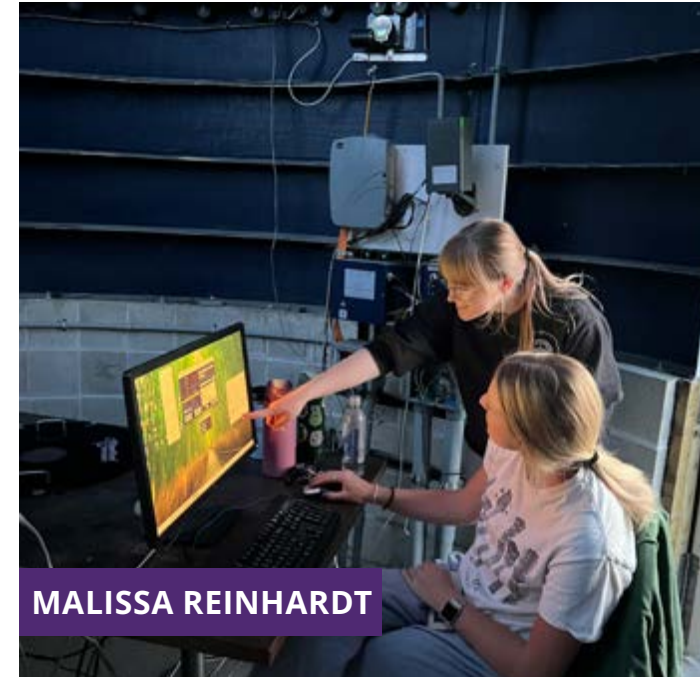
CALEB STROM



KRISTIAN HAUGEN



LAINA BEHRENBRINKER



MALISSA REINHARDT



MARY MORONEY-FERNANDEZ



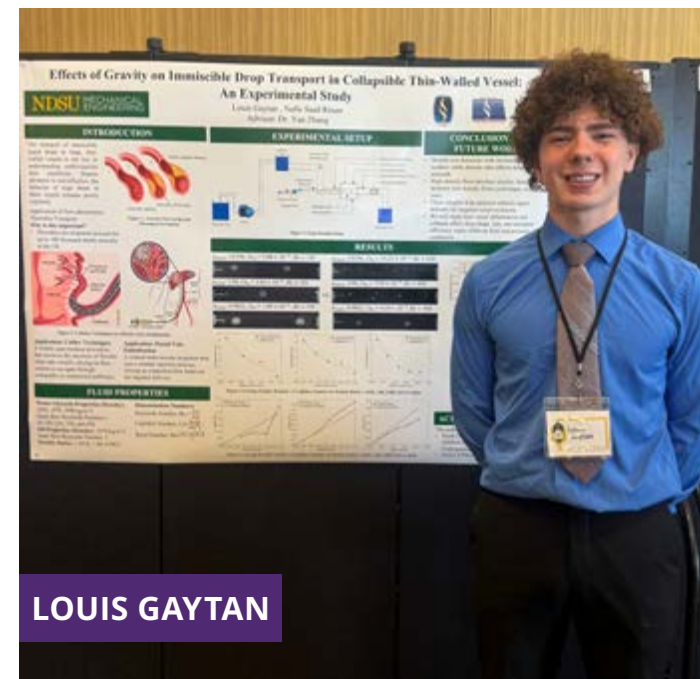
TURNER PERSON



SADIE (BONE) KOBOS



ANTON GOLOVKO



LOUIS GAYTAN



WILLIE RODEN

## FALL 2024

### CALEB STROM

Space Studies | University of North Dakota

Project: Evaluation of the Causes of the Morphological Distinctiveness of Ahuna Mons and Implications for the Diversity of Cryovolcanic Styles on Ceres, Miranda, and Ariel

“The North Dakota Space Grant Consortium gave me the resources I needed to complete my dissertation project and get published as a planetary scientist.”

### JALEN HOWARD

Mechanical Engineering | University of North Dakota

Project: Centrifugal Nuclear Fuel Thermal Rocket

“The NASA research fellowship proved to be a very rigorous and credible experience. I was able to learn skills and study state of the art technology in nuclear technology. Long-term, this has accelerated my desire to start my own company to pursue SBIR grants.”

### LAINA BEHRENBRINKER

Mechanical Engineering | University of North Dakota

Project: Modeling and Analysis of High Radiation Gas-Surface Interactions on Hypersonic Re-entry Vehicles for Thermal Protection System Optimization

“I am forever grateful to the NDSGC for providing me access to incredible learning experiences. This research gave me the opportunity to push my own boundaries and gain in-depth knowledge of hypersonics.

I’m incredibly grateful for the support from the North Dakota Space Grant Consortium, both financially and professionally. The program has boosted my confidence, expanded my network, and motivated me to continue pursuing opportunities in the engineering research.”

### KRISTIAN HAUGEN

Aerospace Engineering and Mechanical Engineering | University of North Dakota

Project: An Investigation of Collegiate Contribution to the Development of Rotating Detonation Rocket Engines

“The support awarded to me from the North Dakota Space Grant Consortium allowed me the opportunity to conduct targeted and guided research on a deep passion of mine.

I was able to expand my knowledge vastly due to this opportunity.”

### TURNER PERSON

Mechanical Engineering and Physics | North Dakota State University

Project: NDSU Hybrid Rocket Research

“My Fall 2024 NDSGC Research Fellowship had a big impact on my academic and career goals. It gave me the chance to dive deeper into our hybrid rocket project, improve our testing setup, and build the skills I need as I work toward a career in propulsion. This support helped me grow a lot as a researcher and set me up well for the work my team and I are continuing to do.”

### SADIE (BONE) KOBOS

Physics | University of North Dakota

Project: A Comparison of Zeroth-Order Rankine-Hugoniot Jump Conditions with WIND Downstream Shock Observations

“I am deeply grateful for the opportunity that has been provided by the NDSGC research fellowship. Not only has this allowed me to pursue research in a different field, but it has allowed me to further refine my researching capabilities which will be crucial as I pursue a PhD in Astrophysics. I worked with my mentor to lay the foundation of a numerical modeling protocol to study the differences that arise in theoretical and observational plasma parameters. The results of this work will contribute to a better understanding of the environment around interplanetary shocks that are driven by coronal mass ejections.”

### ANTON GOLOVKO

Biology | University of North Dakota

Project: Ocular Degradation in Space: Investigating Vision Impairment in Astronauts

“My participation in the North Dakota Space Grant Consortium program has strengthened my research skills and deepened my understanding of the topics I investigated. Through writing proposals, reports, and presenting my work, I have significantly improved my technical communication—an ability that will support my future goals in both medicine and research. It has been fulfilling to contribute

in a meaningful way to astronaut safety and human spaceflight, I am truly grateful for the support this program has provided me.”

### MANNA KAHN

Earth System Science and Policy | University of North Dakota

Project: A Comparison of Zeroth-Order Rankine-Hugoniot Jump Conditions with WIND Downstream Shock Observations

“Completing this award was an incredibly fulfilling experience, as it allowed me to apply my skills and knowledge to address real-world challenges, connect with diverse perspectives, and contribute to meaningful solutions for community resilience and environmental sustainability.”

## SPRING 2025

### MALISSA REINHARDT

Physics and Mathematics | University of North Dakota

Project: A Parameter Study of Transiting Exoplanet Light Curves from Martens Observatory and TESS ExoFOP

“I am truly grateful for this opportunity afforded to me by the North Dakota Space Grant Consortium. This experience has not only helped me become a better leader and science communicator but has also allowed me to share my passion for space beyond the classroom and shed light on my future academic and career goals.”

### WESTON NAPIER

Mechanical Engineering | University of North Dakota

Project: Pressure Sensitive Paint Calibration System for Wind Tunnel Applications

### LOUIS GAYTAN

Mechanical Engineering | North Dakota State University

Project: Effects of Gravity on Immiscible Drop Transport in Collapsible Thin-Walled Vessel: An Experimental Study

“As a freshman, one of my biggest goals was to try as many things as possible so I could discover where my true interests lie. Through my fellowship, I developed a genuine love for research, and it’s led me to seriously consider pursuing a doctoral degree in biomedical or Aerospace.”

## SUMMER 2025

### MARY MORONEY-FERNANDEZ

Educational Foundations and Research | University of North Dakota

Project: Growing Scientists: Nature-Based STEM Learning for Children

“The North Dakota Space Grant Consortium provided critical support that enabled me to initiate a community garden project while also advancing my dissertation research. This funding allowed me to employ the outdoor natural space as a context for implementing STEM-based learning activities with elementary-aged students during the summer months. Through these experiences, children engaged with nature and scientific concepts in novel and meaningful ways, deepening their understanding beyond what traditional classroom settings typically afford.”

### KRISTIAN HAUGEN

Aerospace Engineering and Mechanical Engineering | University of North Dakota

Project: Design of Small Scale Rotating Detonation Rocket Engines for Rapid Experimentation

“The North Dakota Space Grant Consortium allowed for the continuation of my research on rotating detonation rocket engines (RDREs) in the small scale. This has been an amazing opportunity that has led to my latest project investigating the use of Tesla Valves in RDREs.”

### WILLIE RODEN

Mechanical Engineering | North Dakota State University

Project: Development of a Numerical Algorithm to Predict Heat and Mass Transfer Phenomena in a Solid Cylindrical Combusting Chamber

“The NDSGC Summer Research Fellowship allowed me to independently investigate a topic of great interest to me. This will prepare me well for future research projects in graduate school and beyond.”



# Did you know the NDSGC has a Student Research Fellowship Bridge Program?

The Student Bridge Fellowship is a flexible entry-level research program, designed to introduce transfer students to the research being conducted in their new program. Students who have earned a 2- or 4-year undergraduate degree and are starting an advanced program at an NDSGC-affiliate college or university are encouraged to apply for funding to complete entry-level research projects in STEM fields. The NDSGC also helps students to match with mentors for the bridge program.

To learn more, visit: <https://ndspacegrant.und.edu/college-students/internships-and-fellowships/bridge-program.html>.

# National Student Competitions

## 1. NDSU FORMULA SAE TEAM: FSAE ELECTRIC RACECAR CHALLENGE

"This was a fantastic season for NDSU's Bison Motorsports club. We saw significant progress for the development of our electric vehicle and we took our combustion vehicle to the Formula SAE IC Competition (competing in all three main events). The club and its EV and CV teams also saw growth in the number of students involved. Our organization has been able to expand its presence on campus and establish long term teams in order to continue bringing our vehicles to competition going forward."

## 2. NDSU ROCKETRY CLUB: SPACE GRANT MIDWEST HIGH-POWER ROCKETRY COMP.

"We are very thankful for the opportunity the ND Space Grant Program has provided. Through this competition, we've learned so much about rocket design, manufacturing, and teamwork. This experience has given us valuable hands-on skills that we will carry into our future engineering careers."

This season, the NDSU Rocketry Team successfully designed, built, and launched a high-power rocket for the NASA Midwest Rocketry Competition, focusing on a 1000-ft target altitude and maximum-altitude flights. After a five-year hiatus, we rebuilt the team from the ground up, completing key design reports, manufacturing and testing the rocket, and earning 3rd place in the report category at the competition. We also presented to several NDSU clubs to raise awareness of our team and build a foundation for future students. We are excited for the future as this club continues to expand and grow."

## 3. NDSU BISON MOTORSPORTS CLUB: SAE CLEAN SNOWMOBILE CHALLENGE

"This year the NDSU Clean Snow team took on a new challenge for competition by competing with a two-stroke snowmobile for the first time. This team is not one to back down from a challenge though. The team's commitment to innovating has been unwavering, and it shows in the results over the past couple years with two second place finishes back-to-back. This year our main focus was the exhaust system on the snowmobile, and we were able to create a muffler with an integrated catalytic converter to improve emissions. Along with the catalytic converter an electronically controlled temperature regulation system was implemented to preserve the life of the catalytic converter."

## 4. NDSU DESIGN BUILD FLY: AIAA DESIGN BUILD FLY

"The NDSU AIAA Design Build Fly (DBF) team had a successful 2024-25 season, designing, building, and testing a remote-controlled aircraft to meet a complete mission profile. With support from the North Dakota Space Grant Consortium, the team traveled to the international DBF competition in Tucson, AZ, where they placed 70th out of 112 teams. Despite challenges during the technical inspection, they completed Mission 1 and demonstrated Missions 2 and 3 during testing. The experience provided valuable hands-on learning, strengthened engineering and teamwork skills, and provides valuable information to next year's NDSU DBF team."

## 5. NDSU BISON ROBOTICS: NASA LUNABOTICS

"The NDSU robotics team, Bison Robotics, competes in the NASA Lunabotics challenge every year designing, manufacturing, wiring and programming new robots that help us complete the challenge set out by NASA. This challenge is set on a simulated moon environment to collect and deposit regolith into berms while navigating the lunar surface. This is meant to be an addition to NASA's Artemis space missions. Some of the most innovative features on the robots included a dovetail system for the buckets to be interchangeable and a drawer system for the electronics to increase ease of testing."

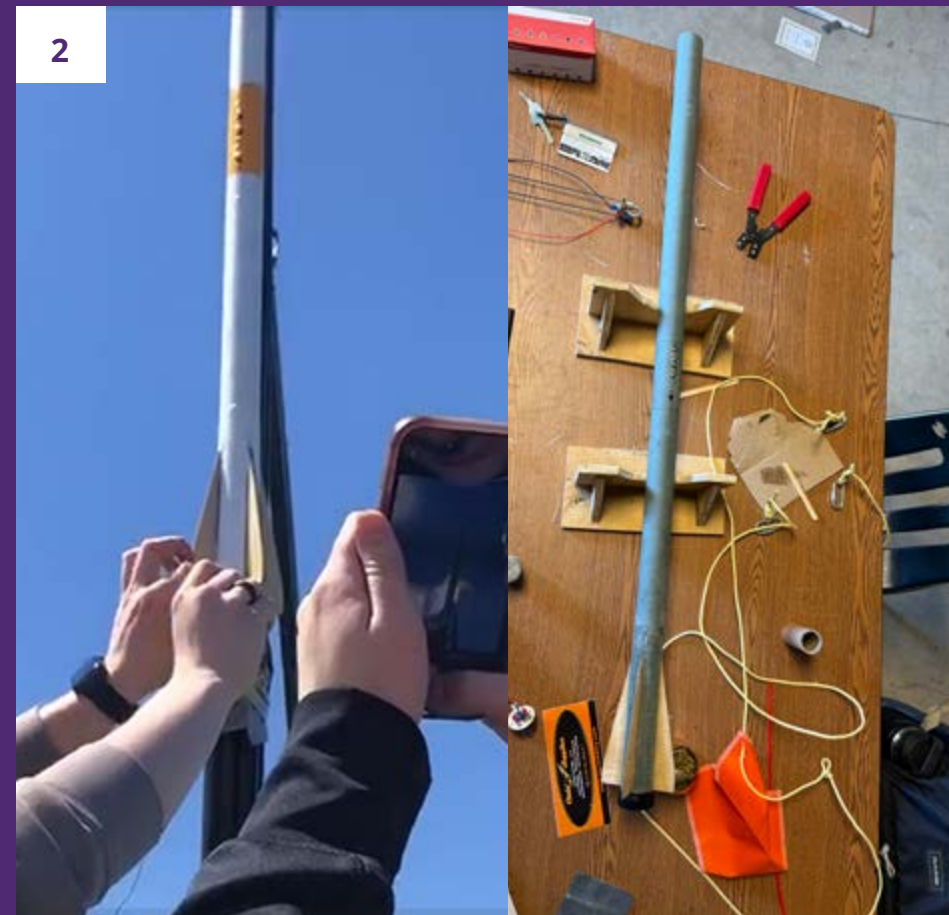
## 6. GRAND FORKS RED RIVER HIGH SCHOOL: FENWORKS FPV DRONE RACING COMPETITION

"Working with the North Dakota Space Grant allowed our competition Drone Racing team to be a reality this year. The ten students involved got to experience FPV racing and compete during the season and at the state tournament. These students received experiences they couldn't have received without the help of the NDSGC."

We are a FPV Drone Racing team at Red River High School who races through Fenworks. The bulk of our racing is based around simulator racing on computers where the foundational skills of FPV Drone Racing are learned. Throughout the season students also practice flying physical drones through FPV Goggles. All season long they build up points that are used to qualify them to the state tournament. This year we placed in all 4 events at state taking 1st place in team and individual FPV and 1st place in individual simulator racing and 2nd place in team simulator racing."

The North Dakota Space Grant Consortium proudly provides funding to students participating in national competitions such as NASA's Robotics Mining Competition and the Formula SAE Race Car Competition.

It is imperative that students be given the chance to partake in these events as they challenge a student's collaboration and problem-solving skills while promoting innovation.



5



7



6



8



### 7. UND VERTICAL FLIGHT SOCIETY: DESIGN-BUILD-FLIGHT COMPETITION

“Our team and season are ready to carry on our projects next season, focused on using the platform we already have to design, test, and fly new systems preparing competition.”

### 8. UND ROBOTICS TEAM: NASA LUNABOTICS

“UND’s Lunabotics team is grateful for the opportunities the North Dakota Space Grant Consortium has provided. Through the funding provided, the team was able to purchase essential electrical components and materials to build their robot for the Lunabotics competition. Without the support of the Consortium, the team would have had to divert design and fabrication time to gather more sponsorships. Not only has NDSGC helped this year’s Lunabotics team, but also helped us build the foundation to start more projects under the robotics club!

The UND Lunabotics team tackled NASA’s Challenge to design and build an autonomous robot capable of collecting lunar soil and constructing berms for future moon infrastructure. Despite facing timeline challenges and a mechanical failure during competition, the team secured 5th place out of 12 at ISU’s COSMIC competition. Beyond the robot, the team also gave back through outreach—judging local robotics tournaments, mentoring middle school FRC teams, and hosting an educational outreach event for young students. Thanks to NDSGC support, the UND Lunabotics team not only built a competitive robot, but also built momentum for more robotics projects at UND.”

**NOT PICTURED:  
UND FORMUAL SAE TEAM: FSAE ELECTRIC RACECAR CHALLENGE**

**UND ADVANCED ROCKETRY CLUB:  
INTERCOLLEGIATE ROCKET ENGINEERING COMPETITION**

# Summer Faculty Fellowships

Summer Faculty Fellowships are designed to assist faculty in creating or revising a college-level course that is in a Science, Technology, Education, or Mathematics (STEM) field and is NASA-relevant.

This program directly supports one of the goals of NASA Education, and the overall goal of this program is to increase the exposure of college students to NASA and NASA research.

## LINDSEY KIECKER

Science | Valley City State University

Course: BIOL/CHEM 490: Secondary Science Methods and Techniques

"The redevelopment of the Secondary Science Methods course at VCSU was made possible through the NDSGC Summer Faculty Fellowship. This award allowed me to focus my attention to what our science education students need to be prepared for when taking over their own classroom. One of the most unique aspects of a science class are the laboratory activities and demonstrations, and now VCSU students that complete this course will be fully prepared to incorporate these in their own classroom. Thank You, NDSGC!"

## TRISTA MONTGOMERY

Science | Valley City State University

Course: BIOL 280 Park Management and Communications

"The NDSGC Summer Faculty Fellowship awarded me the time to develop a new course from scratch for our Fisheries and Wildlife Science students. Many of them go on to work as park managers, park rangers, and park interpreters, though we had no content in this area in our program. The main goal of this course is to provide students with the skills necessary to manage a park for the purpose of balancing conservation and resource management with public recreation and education. In developing this course, I found I am particularly proud of the field trips and the hands-on activities that were thoughtfully incorporated. Students will collaborate, discuss and debate difficult topics, build communication skills, and gain confidence in addressing an audience to better advocate their personal views on nature ethics."

## RACHEL SCHOMAKER

Biology | Minot State University

Course: BIOL 361 - Environmental Health and Microbiology

"I thoroughly enjoyed putting this course together and am very grateful for this award in allowing me to do so! Not only did I personally learn a lot more about the concepts I will be teaching through CDC training to enhance the course material, but I was able to put the time and energy into really curating this course into something that will be useful for students, allowing them to directly apply the skills they will be taught in this course to jobs related to environmental health and microbiology. I am excited to offer this course in the spring semester!"

## Y. BORA SUZEN

Mechanical Engineering | North Dakota State University

Course: ME 484/684 Aerospace Propulsion

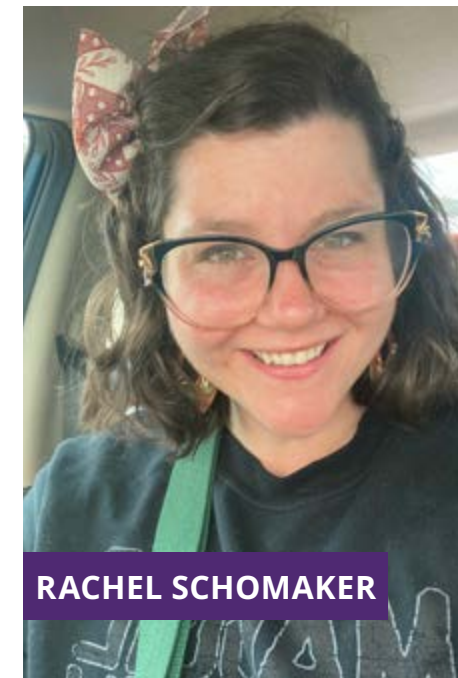
"The Summer Faculty Fellowship allowed me to develop a new course on Aerospace Propulsion covering air-breathing and rocket engines used in flight systems. We have high student interest in aerospace related research topics and careers. Aerospace propulsion has been a main area of interest. This course will provide our students with a foundation in aerospace propulsion and prepare them for future careers in aerospace field."



LINDSEY KIECKER



TRISTA MONTGOMERY



RACHEL SCHOMAKER



Y. BORA SUZEN



# Pearl I. Young Scholarship

**THE NDSGC ESTABLISHED THE PRESTIGIOUS PEARL I. YOUNG SPACE GRANT AWARD FOR A STUDENT AT THE UNIVERSITY OF NORTH DAKOTA.**

This \$2500 award honors the ideals of scholarship as exemplified by Pearl I. Young. Young graduated from UND in 1919 as a Phi Beta Kappa with a triple major in physics, mathematics, and chemistry. After graduation, she taught physics for two years at UND. She then accepted an appointment at the Langley Memorial Aeronautical Laboratory in Hampton, Virginia.

She was hired as a technical employee, a physicist of the National Advisory Committee for Aeronautics (NACA); that agency later became NASA. She was also a physicist for the federal government. When Young died in 1968 her obituary noted that she had been a scientist, university professor, journalist, lecturer, author, and world traveler.



## GABRIELLE WAHL

"I am grateful for the North Dakota Space Grant Consortium and all of the support offered to students. Being a STEM Ambassador was an amazing opportunity, where I got to grow as both a student and instructor, during amazing professional development opportunities at the University of North Dakota, and beyond, like at SEEC. Winning the Pearl Young Scholarship is very impactful for my schooling, as it allows for more time focusing on studies and less time working to fund my schooling. The NDSGC does such amazing work, and I'm thankful to have been part of an organization that makes such a meaningful impact."



### LEARN MORE!

<https://ndspacegrant.und.edu/college-students/scholarships/pearl-i-young.html>

# Additional Scholarship Opportunities



## THE LILLIAN GOETTLER SCHOLARSHIP

The NDSGC established the prestigious Lillian Goettler Space Grant Award for a student at North Dakota State University. This \$2500 award honors the ideals of scholarship as exemplified by Dr. Lillian Goettler. Dr. Goettler, a former faculty member in Mechanical Engineering at NDSU pursued her goals by earning a Ph.D. in 1974 and working overseas before joining the faculty at NDSU in 1978. Another important piece of Dr. Goettler's legacy was her role as a founding member of Expanding Your Horizons.



## THE NORTH DAKOTA VISION SERVICES/SCHOOL FOR THE BLIND SCHOLARSHIP

The NDSGC, through a partnership with North Dakota Vision Services/School for the Blind (NDVS/SB), is now awarding an annual NDVS/SB & NDSGC Scholarship. Students studying STEM at any the NDSGC's 16 affiliate schools and who qualify for services from the NDVS/SB are highly encouraged to apply. The scholarship was awarded for the first time during the 2020-2021 academic year.

## THE TRANSFER SCHOLARSHIP

The North Dakota Space Grant Consortium provides scholarship funding for outstanding students at North Dakota's public two- and four-year colleges and universities. The NDSGC Transfer Scholarship aims to support a student's continuing education efforts. Students must have completed a 2- or 4-year degree, a certificate program, or 24 credits at a post-secondary school before transferring to a NDSGC-affiliated four-year school. All funds are distributed on a competitive basis.

# The American Indian Scholarship

The American Indian Scholarship is designed to encourage and support tribal college students interested in pursuing STEM degrees and continuing their education.

To assist students in their goals, the North Dakota Space Grant Consortium offers five scholarships, each worth \$2500, to students at the five tribal colleges in North Dakota: United Tribes Technical College, Sitting Bull Community College, Nueta Hidatsa Sahnish College, Turtle Mountain Community College, and Cankdeska Cikana Community College.



RYAN ALLARD

## RYAN ALLARD

Turtle Mountain College

"I've been blessed to continue my education after spending several years in the IT industry. I've returned to school --to better understand my career path forward and compliment my IT background. The NDSGC has allowed me to continue on this journey while opening my eyes to other industries that require cybersecurity."

## AMBER KIRK

Nueta Hidatsa Sahnish College

## HELENA MACK

Cankdeska Cikana Community College

## ARIEL RODRIGUEZ

United Tribes Technical College

## Meet an Affiliate: Cankdeska Cikana Community College (CCCC)

This year's NDSGC "Meet an Affiliate" Highlight is Cankdeska Cikana Community College (CCCC). *Learn more on page 68!*

# The Affiliate Undergraduate Scholarship



**SONYA WILLIAMS**



**NATALIE LILE**



**MADDIX FALK**



**SOFIA MORALES**



**LUIS GARCIA**



**SHERIDAN BROWN**



**PARKER HUMMEL**



**JESSE HALVERSON**



**GABRIELLE CORMIER**

Every academic year, the NDSGC provides each of the two-year, four-year, affiliate schools with scholarship funding.

Students are selected by faculty at their home institution. Students must have an excellent academic record and be majoring in a STEM field.

## BISMARCK STATE COLLEGE

### JUSTIN BURUD

Computer Engineering

### JOSIAH HAVERLUK

Biology/Pre-Med

"The North Dakota Space Grant Consortium has allowed me to allocate my time cultivating new skills, experiences, and information to propel me into my future endeavors. NDSGC has provided me with the tools to pursue my dream career, and I am grateful for the opportunity that this program offers to help individuals become the best versions of themselves."

## CANKDESKA CIKANA COMMUNITY COLLEGE

### DERIK BULL

Pre-Engineering

### LARAH DAUPHINAIS

Construction; Carpentry; ND STEM needs

### TORI EVENSON

Pre-Engineering

### WILLIAM GEORGESON

Construction; Carpentry; ND STEM needs

### HELENA MACK

Natural Resource Management

### SONYA WILLIAMS

Natural Resource Management

"I would like to thank the ND Space Grant Consortium for the NASA Scholarship from CCCC. With this scholarship, I was able to attend the affiliate meeting in Bismarck, ND and talk about how the scholarship has helped me with the financial burden of college expenses. This event encouraged me to do research and present a poster myself. Thanks again for your support in my educational journey.

I was able to attend the Affiliates Meeting in Bismarck, ND. The meeting was a great experience. I was able to meet students, hear about their research and view their posters. It was an experience that I will always remember."

## DAKOTA COLLEGE AT BOTTINEAU

### LARIYA HANKEL

Env-Tech-Natural Resource M.

### MONICA YODER

Wildlife Management

### EMMA RYBCHINSKI

Health Professions (to MD, OT, Pharmacy, etc.); STEM Courses

"I am very thankful and appreciative for the scholarship I received from North Dakota Space Grant Consortium. With this scholarship money, I was able to put more time into my studies and less stress on paying for my schooling. This scholarship helped me to continue on to a 4-year school and give me enough funds to pursue my degree further."

### NEALA KLOKSTAD

Diag-Med-Sonography (Med Tech; STEM Courses)

### EMANUELLE WEBER

Horticulture

### KITA MELIA MONTEJO

Env-Tech-Natural Resource M.

"I am so grateful for the support of the NDSGC scholarship. The support through this scholarship has allowed me to continue to my education in S.T.E.M. at DCB, I have even decided to continue my education and reach for my Bachelors Degree in Environmental Science and go on to my Masters!"

### SARA SMITH

Wildlife & Fisheries Tech.

### DAVID PALMER

Urban Forestry Man.

## DICKINSON STATE UNIVERSITY

### NATALIE LILE

Biology

"Being selected for an NDSGC Scholarship allowed me to further my education as a Pre-Medical Biology student. I was able to utilize more time focusing on my senior capstone project with the help of this scholarship, and was able to make big leaps in research!"



**JOSIAH HAVERLUK**



**BREANNA OLSON**



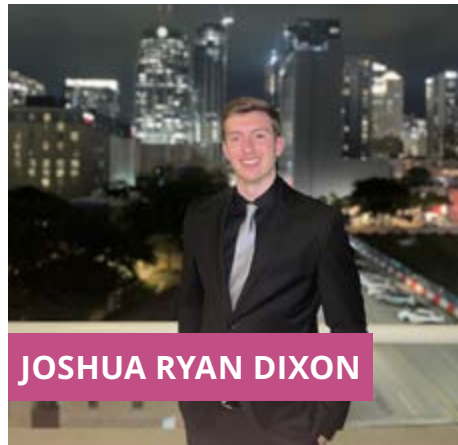
**SAMANTHA PASSA**



**KATHLEEN VETTER**



**HUNTER LOGAN**



**JOSHUA RYAN DIXON**



**ZARIAH JUNE**



**EMMA MILTENBERGER**

**JAVIN FRIESZ**

Engineering

**KORI NAGEL**

Biology

**WHITNEY EDWARDS**

Exercise Science (Kinesiology)

**MADISON BECKLER**

Biology, Chemistry

"I am very grateful for the funds I received through the North Dakota Space Grant Consortium. This has allowed me to prioritize my academics and research as I prepare for grad school."

**TIA MADRIGGA**

Biology

**JACE FRIESZ**

Mathematics Education

**ANNA M. BEER**

Mathematics Education

**BENJAMIN THOMPSON**

Mathematics, Computer Science

**GRACIE ROLLER**

Exercise Science (Kinesiology)

**LAKE REGION STATE COLLEGE**

**LANE KINSELLA**

Wind Energy Technician

**DYLAN MATTHEWS**

Wind Energy Technician

**JADE WILLSON**

Wind Energy Technician

**MCKENNA SAMUELSON**

Agriculture

**MATTHEW NEUMANN**

Wind Energy Technician

**KOLE TOSO**

Associate in Science - Biology

**MORGAN LEAS**

Associate in Science - Biology

**MAGDALYNN BENDER**

Associate in Science - Forensic Science

**GABRIELLE CORMIER**

Associate in Science - Biomedical Engineering

"I cannot express how grateful I am towards the NDSGC. Not only have they allowed me to further my education for my goals but they've also pushed me to complete my end goal. Helping people and serving the community around me."

**JACOB WARNKE**

Agriculture

**HANNAH BEARDEN**

Simulator Technology

**NOAH JAGER**

Associate in Science - Natural Resources

**CONNOR CRAWFORD**

Information Technology

**BRAYDEN EHNERT**

Agriculture

**MADISON KNOKE**

Agriculture

**BROOKLYN FORTIER**

Associate of Science - Chemistry

**MAYVILLE STATE UNIVERSITY**

**ALEXIS NESHEIM**

Composite Science Education and Chemistry

**CASSIDY MUELLER**

Mathematics Education

**CHLOE JACOBSON**

Biology

**EMMA STEWART**

Mathematics Education

**GEORGE DAVISSON**

Biology

**HANNAH STARK**

Biology

**JESSE HALVERSON**

Program

"The ND Space Grant Consortium Scholarship has helped support my dreams of pursuing my wildlife biology degree! I have been able to study the subjects I love and go into a career that I have worked hard to achieve."

**JOCELYN AASEN**

Elementary Education- Math minor

**JOSHUA RYAN DIXON**

Biology

"I am very appreciative of the support that the North Dakota Space Grant Consortium provided for me through scholarships. Because of this support, I was able to graduate with a biology degree from Mayville State University. In my time there, I developed quality research and writing skills that I can apply to my future career. I am currently attending the Biomedical Engineering Master's program at North Dakota State University, and the support from this program helped me get to this stage in my education."

**KAITLIN ENSIGN**

Comsite Science Education

**KAYDEE KOISTINENE**

Composite Science Education

**LINDSEY NYHAGEN**

Biology

**MACKENZIE FUXA**

Mathematics & Accounting

"I am very thankful for the support from the North Dakota Space Grant Consortium Scholarship through Mayville State University. With this scholarship I was able to continue my education studying Mathematics and Accounting along with being a collegiate softball player without having to focus on where I would get the money to pay for it. It has helped me develop immense knowledge so when I get

into the workforce, I will be able to use my strengths."

**MICAELA KOCHER**

Chemistry

"The ND Space Grant Consortium NASA scholarship has helped me pay for school while pursuing my dream of becoming a chemist. It has given me the opportunity to focus on my studies and research, and to grow as both a scientist and a leader—especially through my role as president of the Science and Math Club at Mayville State University!"

**MICAH MUSSER**

Mathe Education

**MOLLIE ROBBINS**

Biology Major

"The support of the North Dakota Space Grant allows me to continue my education. I appreciate the financial assistance in pursuing a degree in STEM, it has allowed me to continue on to graduate school after the completion of my undergraduate degree."

**SAMANTHA PASSA**

Mathematics

"I am incredibly grateful to have received the NASA Scholarship during my time at Mayville State, as it was a tremendous honor and privilege, and the support eased my financial stress and allowed me to focus more fully on my education and goals. I deeply appreciate NASA's commitment to supporting women in STEM fields and empowering students like me to succeed. I was able to fully be differentiated in the workforce by being a confident woman with a Mathematics degree, and that is possible because of this scholarship."

**MINOT STATE UNIVERSITY**

**CONNER MELDRIM**

Exercise Science & Rehabilitation

**FAITH HAUCK**

Biology



**MICAELA KOCHER**



**MOLLIE ROBBINS**



**EMMA RYBCHINSKI**



**THOMAS COX**



**BRENDAN BERK**



**MADISON BECKLER**



**TUCKER JOHNSON**



**MACKENZIE FUXA**

**MARKELLE ALEXANDER**

Biology

"I am beyond thankful for the opportunity provided to me through the North Dakota Space Grant Consortium to pursue the research I participate in, growing my knowledge. I have learned how to use problem-solving skills and find solutions when problems are presented to me in the lab. I have gained a great amount of knowledge through the opportunities the North Dakota Space Grant Consortium, which is a transformative experience that will help me pursue a future career in science."

**JAYLEN ANDERSON**

Radio Technology

**KATHRYN KEPHART**

Chemistry

**ETHAN MILLER**

Biology

**KEVIN GOODWIN**

Computer Science

**CAYDEN WHITE**

Computer Science & Mathematics

**WHITNI PECK**

Mathematics Education

"The North Dakota Space Grant Consortium Scholarship allowed me to study and work at MSU in comfort, knowing that I was being supported by others in my field. I am deeply grateful for all that this program has allowed me to participate in and am proud to say that my professional goals (mathematics teacher) have become a reality with the support of NDSGC."

**BREANNA OLSON**

Computer Science

"The support from the North Dakota Space Grant Consortium allowed me to work fewer hours and focus more fully on my computer science coursework. This made a significant difference in my academic performance and gave me the time to pursue hands-on projects that strengthened my programming and technical skills. I am extremely grateful for this opportunity, as it has helped me feel more confident and prepared for my future career in software development."

**EMMA MILTENBERGER**

Data Science

"I am very grateful for the support I received from the NDSGC, as it enabled me to continue my studies and make progress toward completing my degree. Without this support, I would have never been able to have such in-depth knowledge in my degree field. I plan on continuing my learning and hope to join competitions with this newfound knowledge soon."

**PARKER HUMMEL**

Computer Science

"I am thankful for the North Dakota Space Grant Consortium Scholarship for helping fund my education in computer science. I cannot wait to graduate and begin working an industry where things are always evolving."

**NORTH DAKOTA STATE COLLEGE OF SCIENCE**

**LILY MATHERN**

Liberal Arts Transfer - Physical Therapy; STEM courses

**CARL EKRE**

Precision Machining; STEM, ND Needs

**SHERIDAN BROWN**

Liberal Arts Transfer - Engineering; STEM Courses

"Participating in this NDSGC-sponsored program provided valuable academic support by connecting me with mentors and resources that strengthened my coursework and research skills. It also offered professional guidance that helped me better understand possible career pathways and how to prepare for them. The program's encouragement and structured support system boosted my confidence and kept me motivated throughout my studies."

**HOGAN MORTENSON**

Welding; STEM, ND Needs

**WADE GORDER**

Welding; STEM, ND Needs

**MATTHIAS SIMON**

Welding; STEM, ND Needs

**EVAN REPSCHER**

Liberal Arts Transfer - Dental; STEM Courses

**JACK GREELIS**

Precision Machining; STEM, ND Needs

**ZACH BENSON**

Precision Machining; STEM, ND Needs

**NUETA HIDATSA SAHNISH COLLEGE**

**SARAYA HOULE**

Science/STEM Transfer

**LAURICE MORNINGSTAR**

Environmental Science

"The ND Space Grant Scholarship supported my environmental research using ArcGIS and helped me build stronger GIS and land analysis skills. This experience increased my confidence as an emerging conservation scientist and guided me toward a career focused on protecting North Dakota's lands."

**PIERRE PRETTY WEASEL**

Environmental Science

**KEVIN RELAFORD**

Environmental Science

**CHRISTOPHER ANDERSON**

Environmental Science

**REILEE LEE**

Science/STEM Transfer

**SITTING BULL COLLEGE**

**ZACHARY RIDLEY**

Environmental Sciences

**TURTLE MOUNTAIN COMMUNITY COLLEGE**

**KUTTER BELGARDE**

Network Administrator; IT

**MADELYN BRAUNBERGER**

Science

**QUENTIN BRIEN**

Cyber Defense

**HAVLIN DELONG**

Engineering

**CHRISTINA JAMES**

Cyber Defense

**CODY LAFLOE**

Cyber Defense

**DEREK LAVALLIE**

Cyber Defense



MEGAN LAHTONEN

**MITCHELL NADEAU**

Welding; STEM/ND State Needs

**JENNA PARIEN**

Biology

**JUSTIN THOMAS**

Cyber Defense

**SHYANNA LAROCQUE**

Science; transfer

**UNITED TRIBES TECHNICAL COLLEGE**

**KADIN EAGLE**

Pre-Engineering

**AMARA MARTINSON**

Environmental Science

**JENNIFER FRAGUA**

Pre-Engineering

**SARA FRUETAL**

Environmental Science

**AUDREY HALL**

Environmental Science/Fisheries and Wildlife

**JAXSYN DELORME**

Environmental Science

**TRISTEN ALBERTS**

Environmental Science

**DAWSON RICHARDS**

Environmental Science

**KALLEN OMEN**

Pre-Engineering

**DANI LOHNES**

Pre-Engineering

**JETTA TOBACCO**

Environmental Engineering

**ZARIAH JUNE**

Pre-Engineering

"The NDSGC program awarded me a scholarship that provided both financial

support and personal motivation throughout the semester. Knowing that I was selected for this opportunity encouraged me to stay focused on my academics and maintain a high level of commitment to my coursework. With the program's support, I was able to have a successful and productive semester, which ultimately helped me secure my return to my prestigious internship at Los Alamos National Laboratory. I am grateful for the opportunities and encouragement the NDSGC program has offered me."

**VALLEY CITY STATE UNIVERSITY**

**ZEKE LUCHI**

Fisheries and Wildlife Science

**ZACH EDWARDS**

Fisheries and Wildlife Science

**COOPER KLAHSEN**

Health Science

**NICK DESCHAMP**

Environmental Science/Fisheries and Wildlife

**THOMAS COX**

Chemistry

"I am very grateful for the scholarship and opportunity provided to me through the North Dakota Space Grant Consortium. With the scholarship, it helps me financially to get through school and pursue a career in research science and feel motivated to pursue a Master of Science in Chemistry! I am again grateful for this opportunity and to the North Dakota Space Grant Consortium scholarship!"

**MEGAN LAHTONEN**

Composite Biology Education

"I am very thankful for receiving the North Dakota Space Grant Scholarship. I used the money from the grant to put towards my education here at Valley City State University. I am studying biology education and plan on teaching seventh-grade life science or tenth-grade biology. I am very grateful for the support that I had along my journey."

**ELIZABETH AUKA**

Fisheries and Wildlife Science

"I am very thankful for the opportunity the North Dakota Space Grant Consortium gave to me. By receiving this, I was able to continue my studies in being a scientist for wildlife management. I was able to further my skills in conducting research, writing grants and scientific papers. There are very valuable skills that will follow me in to my professional career. The experience I gained from North Dakota Space Grant Consortium Research Fellowship led me to my job after college, and for that I am extremely grateful for their support."

**NOAH CHAMBERS**

Fisheries and Wildlife Science

**TUCKER JOHNSON**

Fisheries and Wildlife Science

"I am very thankful for the North Dakota Space Grant Consortium for providing a scholarship to help with my schooling. It helps me focus on my studies rather than paying for school. Over the last couple of years, I've been able to get knowledge that will help me in my career. Thanks to NDSGC I have had no stress in the focus of learning."

**ALEX STOTERAU**

Fisheries and Wildlife Science

**MCCOY MOHL**

Fisheries and Wildlife Science

**HANNAH MILLER**

Health Science

"The scholarship I received from the North Dakota Space Grant Consortium made a meaningful difference in my semester by reducing financial strain and allowing me to concentrate more fully on academics. The support has encouraged me to continue pursuing my long-term educational goals. I am incredibly grateful for the opportunity."

**COLLIN PECK**

Medical Lab Science

**ETHAN FETTIG**

Chemistry Education

**LORENZO LUCHI**

Fisheries and Wildlife Science

**KATHLEEN VETTER**

Math Education

"The support from the North Dakota Space Grant Consortium allowed me to pursue a degree in Mathematics Education for the state of North Dakota. This is an area that is hurting for workers, and this grant opportunity was able to help me in being a help to my community. It took away the financial stress that getting a degree can create because of this generous gift."

**JACOB HENDRICKSON**

Mathematics

**TAYLOR JONES**

Math Education

**HUNTER LOGAN**

Mathematics

"I am very thankful for the opportunity provided to me through the North Dakota Space Grant Consortium. With the scholarship I received, I was able to put more focus into my school work and continue to try and make an improvement in the world."

**ARIE J BRATRUD**

Mathematics

**BRENDAN BERK**

Math Education

"The scholarship has help me tremendously in getting through school while motivating me to continue to learn and grow. With the scholarship I plan on continuing my education and passion for teaching mathematics one day."

**COURTNEY FIEBIGER**

Math Education

**ANNA ERICKSON**

Math Education

"The NASA scholarship was a tremendous help in covering my tuition during the Spring 2025 semester, and I am extremely grateful to receive it again this semester. As a Mathematics Education major with a Computer Science minor, I work hard to balance challenging coursework with financial responsibilities. This support provides me with invaluable peace of mind and allows me to focus more fully on my studies rather than financial stress."

**CLAIRE BAUER**

Math Education

**CALEB ZEJDLIK**

Math Education

**GIDEON LINT**

Mathematics

**ISABELLE SUNDBY**

Math Education



HANNAH MILLER



LAURICE MORNINGSTAR



WHITNI PECK



**ELIZABETH AUKA**

**WILLISTON STATE COLLEGE**

**MADDIX FALK**

Biomedical Engineering

“The scholarship funds from the North Dakota Space Grant Consortium has given me great footing while on my educational journey to becoming a biomedical engineer. I’ve been able to spend even more time focusing on my schooling and future career, and for that I couldn’t be more grateful!”

**SOFIA MORALES**

Astrophysics

**JAYDEN SHUPE**

Aerospace Engineering

**ETHAN MITCHELL**

Computer Science

**DYLAN HLAD**

AAS - Electronic/Industrial Controls

**LUIS GARCIA**

AAS - Electronic/Industrial Controls

“I am extremely grateful for the opportunity that NDSGC gave me by awarding me a scholarship that helped me continue my studies and pursue my dreams. Thanks to this support, my goals remain within reach and allow me to stay more focused than ever on achieving them.”



**ANNA ERICKSON**



**KITA MELIA MONTEJO**



**MARKELLE ALEXANDER**

# “ – NDSGC Impacts

**The NDSGC stays in contact with awardees after they have graduated. The following quotes describe some of the ways the NDSGC has impacted their academic careers and their lives.**

**BELLA HETTICH**

2023 NDSGC Fellowship | University of North Dakota

“The award supported the conceptualization of my dissertation. This year, I volunteered at the Space Symposium in Colorado, where the work I have done while on the grant facilitated networking within the space-related industry, allowing me to validate and refine my dissertation ideas. Additionally, my efforts enabled me to present my research at the National Conference on Race and Ethnicity in Honolulu, HI, this past May, providing valuable feedback and expanding my professional connections within the field.”

**LEA KOBROSSY**

2023 NDSGC Scholarship | North Dakota State University

“Growing up in Lebanon, I experienced first-hand the severe impact of socio-economic disadvantage. Several compounding and devastating factors over the years led my family to decide that remaining in Lebanon was no longer viable, and through significant hardship, we moved to Fargo, ND.

The financial support of the NDSGC was essential in supporting my college education as we painstakingly rebuilt our lives. The destruction of the hospital and near loss of my parents’ lives made me aware of the fragility of life and the critical need for ethical healthcare practices. These experiences have forged in me a resolve to ensure that no community has to endure such negligence. I was able to focus on my main goal of serving others and I was able to study and volunteer without the worries of paying large amounts of money towards my college tuition.

The NDSGC greatly impacted me and helped me take another step towards reaching my ultimate goal of service and I am forever thankful for that. Now that I have the privilege of living in North Dakota and being able to focus on my studies I have also seen people suffer similarly especially in more rural and underserved places in North Dakota where medical resources are less prevalent. I promise to do what I can to serve such communities just as the North Dakota Space Grant has done for me. I am very thankful for this opportunity which helped me and my family rebuild our lives, and now it is my turn to do the same to others.”

**SONYA WILLIAMS**

2023 NDSGC Scholarship | Cankdeska Cikana Community College

“Participating in the North Dakota Space Grant Program is helping advance my education for a brighter future. Being enrolled in a STEM program at a tribal college is giving me the opportunity and eligibility requirements needed for financial support through NASA and UND to help fund my education. This support has helped me focus on my studies without the weight of financial burdens and hardships.

Participating in the NASA program has also helped me explore, shape, and direct my educational and career goals. I look forward to participating in NDSGC programs next semester and continue exploring our mass universe implementing technology and science in my education and career with the help of NASA’s support. Thank you, for helping impact my life.”



# Mini-Grants

## STUDENT MINI-GRANTS

Student Mini-Grants are available for undergraduate and graduate students who are completing STEM- or NASA-relevant research that directly affects their thesis or dissertation. Student Mini-Grants are awarded each semester and may include materials funding.

## EDUCATOR MINI-GRANTS

Educator Mini-Grants are open to North Dakota formal and informal educators who are teaching, hosting, or participating in research or education initiatives related to STEM and/or NASA. Educator Mini-Grants may be applied to, but are not limited to: STEM-relevant field trips, materials and resources that enhance the STEM classroom, and participation in NASA-relevant or STEM challenges at local, regional, and national levels.

## AFFILIATE MINI-GRANTS

Affiliate Mini-Grants are available to NDSGC affiliate representatives who are hosting or participating in research or education events related to STEM and/or NASA. Affiliate Mini-Grants may be applied towards college-level initiatives, such as materials funding for STEM courses and research, or travel funding for college students to participate in field research related to their STEM courses. Faculty must be directly involved in the programming to be eligible for a Mini-Grant.

# Student Mini-Grants

SUMMER 2025



“

### MARY MORONEY FERNANDEZ

University of North Dakota

“Through the NDSGC Fellowship, I had the opportunity to design and lead hands-on STEM activities in the community garden that we set up. Children were able to explore science in nature through planting, observing, and experimenting. Watching their curiosity bloom alongside the plants reinforced my belief in the power of outdoor learning to inspire the next generation of scientists and problem-solvers.”

”

# Educator Mini-Grants

## FALL 2024

### STEVEN QUINLIVAN

Center Stanton High School

Science Fun Night Ignites Curiosity and Exploration- Presented by The Center-Stanton Crocobots and the North Dakota Space Grant Consortium

“On a crisp evening in December, families and science enthusiasts gathered for the highly anticipated Science Fun Night, an event sponsored by the North Dakota Space Grant Consortium (NDSGC) and organized in collaboration with the Center-Stanton Crocobots. Held at The Center-Stanton Public School, the event offered an array of interactive exhibits, hands-on activities, and educational demonstrations that captivated the imaginations of all ages.

The NDSGC, known for advancing science education, and the Center-Stanton Crocobots, a local robotics team, joined forces to create an unforgettable evening filled with creativity, exploration, and discovery. Among the highlights was the “UV Astronauts” activity, where students created small astronaut figures and tested the UV-blocking abilities of common materials like tinfoil, napkins, plastic wrap, and various types of sunscreen. This interactive project emphasized the importance of UV protection and allowed students to observe the science of shielding against harmful rays. For budding artists, the Cloud Art Station provided an opportunity to explore meteorology and creativity. Participants learned about different cloud types while crafting their own cloud-inspired artworks using cotton balls and paper.

Another engaging feature was the Tactile Constellation Project, designed to bring the stars closer to all attendees, including those with visual impairments. Students created touch-sensitive constellation boards using LED lights and conductive materials, learning about the shapes and stories

behind the stars while building a unique, interactive project. Of course, the classic crowd favorites also shone. The “Build-a-Volcano” activity delighted young scientists with fizzy, colorful baking soda and vinegar eruptions. The “Fizzy Lemonade Lab” taught participants about chemistry in a tasty way as they created their bubbly refreshments. At the Homemade Ice Cream Experiment, families learned the science behind freezing point depression while making and enjoying delicious ice cream. The robotics activity, hosted by the Center-Stanton Crocobots, was a major draw. Attendees explored and programmed cutting-edge robots, including the Sphero RVR+ and Sphero BOLT.

These hands-on activities allowed students to navigate obstacle courses and experiment with coding in a fun, interactive environment. The Crocobots also showcased their own innovative creations, inspiring attendees with their passion for engineering and technology. ‘Tonight’s goal was to make science accessible and fun for everyone and gain students’ interest in robotics,’ said Mr. Quinlivan Crocobots Co-Coach. ‘Activities like the UV Astronauts and tactile constellations, along with our partnership with the North Dakota Space Grant Consortium, The Crocobots, and their robotics expertise, show how science can inspire creativity and curiosity in people of all ages.’

The evening was a resounding success, with attendees of all ages leaving with newfound knowledge and excitement for science and technology. The night wrapped up with various door prizes ranging from volcanoes to a Lego spaceship and solar robots to continue to ignite the students’ curiosity.”

### BETH DUCHSHERER

Des Lac Burlington Elementary

“NDSGC provided me the opportunity to reach multiple students with science & engineering concepts that are not taught about in rural elementary schools. I am

very appreciative for the generosity of NDSGC and hope to share with fellow colleagues these grants and experiences that can help increase the knowledge and expertise of educators. With the grant that I received, I was able to be awarded funds for electronic microscopes and two hydroponic gardens. Currently the students that I teach are learning and seeing first hand how hydroponics works. I have one of the systems set up and they are able to see the growth that is taking place. One class was able to taste some of the produce from the clippings.”

### KAYLA ANDERSEN

Des Lac Burlington Elementary

“Des Lacs Burlington Elementary was able to participate in some fun STEM learning thanks to the grant from NDSGC, this opportunity wouldn’t have been provided if not for the grant! The grant bought different STEM supplies that allow access to all grade levels at our school any time throughout the year. Different classrooms have the opportunity to use the supplies whenever they would like, but also our school is able to offer STEM learning days where students rotate through the activities with students of their ages or different ages.

Des Lacs Burlington Elementary students were able to discover the engineering process by creating and testing different things. Some things they were able to create were a race track, a mini golf hole, and shapes with pentominoes. Students were also able to discover how wind can move objects and use coding to move a robot.”

### JOANN SCHAPP

Nedrose High School

“Mrs. Schapp’s STEM students were able to explore using Drones in their Flight Unit. Afterwards, the STEM students invited the upper elementary students to their

classroom and helped them fly the drones and complete missions using the drones.”

### COURTNEY HERNANDEZ

Grafton Century Elementary

“Our students are only in the beginning stages of utilizing all of the items we were able to receive with this grant. We have been able to take what we have learned about coding in technology and incorporating that into real life applications. We will utilize our microscopes this spring for our field trip to explore organisms in our environment. Our students have been fortunate to have this opportunity.”

### JESSICA ENSTAD

Washington Elementary School

“With the help of the North Dakota Space Grant, I have encouraged and brought to light an interest in space exploration. There is no way I would ever be able to bring an experience such as the ZipGarden to my students without the help of this grant.”

## SUMMER 2025

### JESSICA ENSTAD

Washington Elementary School

“I have received a few grants over the years from NDSGC, and they have helped me provide my students with opportunities they would not get anywhere else. My class has transformed from being just another class to an experience the kids can’t wait to get to.”



STEVEN QUINLIVAN



JESSICA ENSTAD



KAYLA ANDERSEN



COURTNEY HERNANDEZ



JOANN SCHAPP



BETH DUCHSHERER

# Affiliate Mini-Grants

FALL 2024

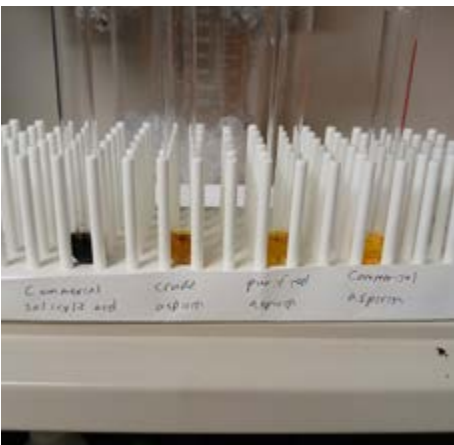


**RACHEL SCHOMAKER**

Department of Biology - Minot State University

“The Affiliate Mini-Grant allowed me to collaborate with my colleagues and provide students with a unique and fun space-related project that would have otherwise been entirely out of the usual realm of my typical research.”

SUMMER 2025



**MARK WILLIAMSON**

Department of Population Health - University of North Dakota

“I was able to synthesize aspirin from wintergreen plants grown in simulated lunar regolith, showing how space, agriculture, biology, chemistry, and medicine can be combined for a small, innovative project into new frontiers.”

# STEM Ambassador Program

To promote Science, Technology, Engineering, and Math (STEM) across North Dakota, the NDSGC established the STEM Ambassador program. Available for undergraduate and graduate students at all NDSGC affiliate schools.

STEM Ambassadors conduct hands-on activities to North Dakota students, families, and communities. This can include K-12 classroom visits and informal education events such as library engagement events, family nights, and science festivals.



**LAINA BEHRENBRINKER**



**JOSH LAKODUK-ERNST**



**CHEYENNE HARRISON**



**JACOB STANLEY**



**KATE KESLER**



**MADDALENE GUTHRIE**



**THOMAS IKEN**



**CASSANDRA TAGGART**



**AMANDA CURATTI**



**AUTUMN LANDWEHR**



**CASIA STEINHAUS**



**EDEN PARKINSON**

## LAINA BEHRENBRINKER

School: UND  
Major: Mechanical Engineering

"Working at the NDSGC as a STEM Ambassador has been an incredibly rewarding experience, full of opportunities to learn, lead and grow!"

## JOSH LAKODUK-ERNST

School: NDSU  
Major: Mechanical Engineering

## CHEYENNE HARRISON

School: UND  
Major: Mechanical Engineering with Aerospace Focus

"I am so grateful to the North Dakota Space Grant Consortium for hiring me as a STEM Ambassador for a second year. This position gave me the opportunity to develop my teaching and lesson planning skills through professional development at work, at SEEC in Johnson Space Center, and the annual NDSGC meeting. This experience has been so fun and I am excited to use my skills in my engineering career moving forward."

## JACOB STANLEY

School: UND  
Major: Mathematics (B.S.)

"I am grateful for the opportunity provided to me by the NDSGC STEM Ambassador program. Through this program, I was able to attend many interesting events and meet many great people. I really enjoyed this opportunity to spread STEM awareness and excitement."

## KATE KESLER

School: UND  
Major: Chemistry (Pre-Medicine)

## MADDALENE GUTHRIE

School: UND  
Major: Commercial Aviation

"My favorite memory as a STEM Ambassador was having the opportunity to travel to Houston, TX for SEEC. It was an unforgettable experience that allowed me to learn, explore, and connect with others who share a passion for STEM education.

This program has not only introduced me to my closest friends, but it has also given me the chance to engage with the community

and make a meaningful impact on students in the area. Being a STEM ambassador has taught me patience, helped me learn how to adapt to new challenges, and strengthened my communication and leadership skills."

## THOMAS IKEN

School: UND Major: Physics and Mathematics

"Some of my favorite moments as a STEM Ambassador were getting to visit schools across the state and do hands-on STEM activities with students of all ages. It was so rewarding to connect with teachers and spark excitement about science in the next generation.

The STEM Ambassador program will be something I will always remember. It was a pivotal piece of my college experience allowing me to make an impact in my community as well as build connections and friendships with other STEM Ambassadors. I also learned how to explain tough scientific ideas in ways that make sense to everyone — a skill that's already been super helpful and will definitely stick with me as I move forward in my research career."



**LEARN MORE ABOUT THE STEM AMBASSADOR PROGRAM AND APPLY TODAY!**

<https://ndspacegrant.und.edu/college-students/stem-ambassadors.html>



**ELISABETH STAROSTA**



**GABRIELLE WAHL**



**GRACE LARSON**



**MIA NIXON**



**HAILEY OLSON**



**SARAH FRANKSON**



**HANNA KRAUSE**

**CASSANDRA TAGGART**

School: UND  
Major: Atmospheric Sciences + Middle-Level Education

“My favorite memory of being a part of the STEM Ambassador program was when we traveled to Minot State University to present a workshop with Pre-Service Educators and showcasing what is NDSGC and some of our STEM activities!

The STEM Ambassador program has impacted my college experience greatly. This program has opened so many doors and possibilities such as traveling to different workshops and conferences to experience a NASA internship which I didn't think was possible. In addition, the STEM Ambassador program has shaped me into the STEM educator and STEM education advocate that I am today.”

**AMANDA CURATTI**

School: UND  
Major: Commercial Aviation

“Being a STEM Ambassador has been one of the most rewarding and impactful parts of my college experience. The program strengthened my confidence as a leader and communicator while allowing me to share my passion for aviation and space with students across North Dakota. Seeing young learners become genuinely excited about STEM reminded me just how meaningful outreach can be. One of my favorite memories is engaging with students at career expos and watching their faces light up as they discovered opportunities they never knew existed. This experience has inspired me to pursue a career that blends technical innovation with community engagement, continuing to make STEM both accessible and inspiring for others.”

**AUTUMN LANDWEHR**

School: UND  
Major: Physics and Chemistry

**CASIA STEINHAUS**

School: UND  
Major: Physics and Mathematics

“Working as a North Dakota STEM Ambassador allowed me to make a difference in my community! I was able to bring STEM opportunities that I didn't have in middle or high school to ND students, which I am so grateful for.”

**EDEN PARKINSON**

School: UND  
Major: Commercial Aviation

“I participated in the NDSGC by conducting STEM and NASA-focused engagement activities at community events and in after-school programs. I helped prepare and develop lesson plans and hands-on activities, promoted the NDSGC at college visits, and attended outreach events such as Girls in Aviation to support STEM engagement. My experience as an NDSGC STEM Ambassador was impactful, strengthening both my path in commercial aviation and my service in the Air Force. Engaging students in hands-on STEM activities sharpened my ability to lead, communicate, and mentor others. I'm grateful for this opportunity and for the growth it brought to my academic, professional, and personal journey.”

**ELISABETH STAROSTA**

School: UND  
Major: Biochemistry

**GABRIELLE WAHL**

School: UND  
Major: Mathematics and Mechanical Engineering

“I am grateful for the North Dakota Space Grant Consortium and all of the support offered to students. Being a STEM Ambassador was an amazing opportunity, where I got to grow as both a student and instructor, during amazing professional development opportunities at the University of North Dakota, and beyond, like at SEEC. Winning the Pearl Young Scholarship is very impactful for my schooling, as it allows for more time focusing on studies and less time working to fund my schooling. The NDSGC does such amazing work, and I'm thankful to have been part of an organization that makes such a meaningful impact.”

**GRACE LARSON**

School: UND  
Major: Psychology

“My absolute favorite memory was teaching a lesson to a group of girl scouts about how their interests could be incorporated into future careers—I loved encouraging them to dream big and feel empowered to change the world!

Working for the Space Grant Consortium made me feel more connected to my Grand Forks Community and allowed me to be a part of a program that uplifts its students and teachers.”

**HANNA KRAUSE**

School: UND  
Major: Physics

“My favorite memory from being a STEM ambassador was going to SEEC! I loved

getting to explore Johnson Space Center and connect with other STEM educators. The STEM Ambassador Program had a huge impact on my college experience. It gave me opportunities to share my passion for space science with students across North Dakota and helped me gain confidence in public speaking. It also helped me realize that outreach and education will always be an important part of my career in astronomy.”

**MIA NIXON**

School: UND  
Major: Communications and Space Studies

“My favorite memory as a STEM Ambassador has been meeting and connecting with astronaut Greg Chamitoff at the SEEC 2025 Conference.

The NDSGC STEM Ambassador program has impacted my college experience and career path through more ways than one. As a STEM Ambassador I have learned more about working alongside a team and emphasizing the strengths and weaknesses of each member to strive for the best result in outreach. Because of this program I have had the opportunity to connect with mentors in the space exploration industry and attend events promoting networking and knowledge of the current space exploration landscape. This has given me the chance to meet some of my best friends while attending UND, and continues to make me feel supported and encouraged away from home.”

**HAILEY OLSON**

School: UND  
Major: Commercial Aviation

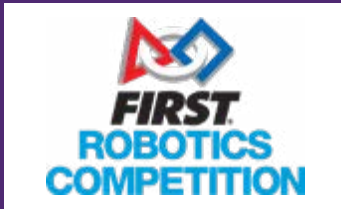
**SARAH FRANKSON**

School: UND  
Major: Commercial Aviation

“The STEM Ambassador program has been a wonderful outlet to engage with the youth and peers through my passion for aerospace and the STEM-related field. No other opportunity has given me the chance to grow so significantly as both a leader and a member of the community.”

**Where are they now?**

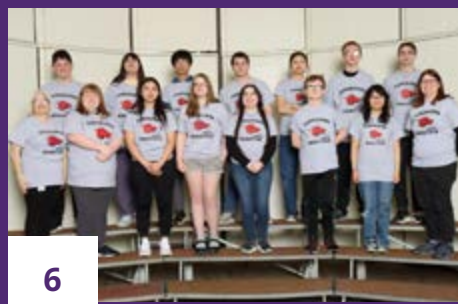
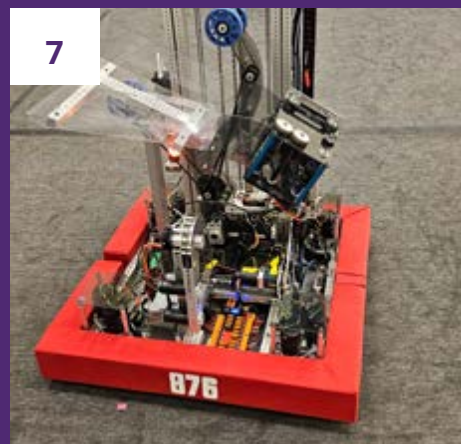
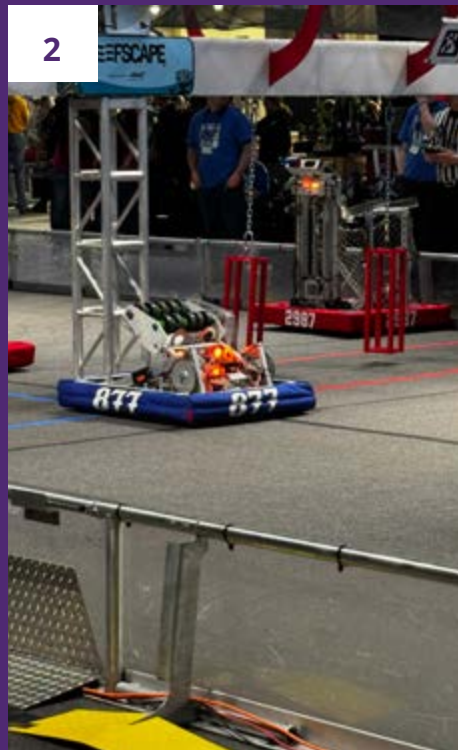
Check out page 62 for alumni memories of the first STEM Ambassador cohort as well as their current career and life accomplishments!



# FIRST Robotics

The FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition promotes inclusivity and hopes to inspire students to engage in STEM activities to become future STEM leaders.

All students, whether they possess technical or non-technical skills, are encouraged to be part of these competition teams. The FIRST Robotics Competitions combine STEM and sports. Past regional qualification rounds have put robots to the test of playing basketball! The North Dakota Space Grant Consortium is thrilled to fund FIRST Robotics Teams across the state of North Dakota. In the past, North Dakota teams have advanced to the FIRST Robotics World Championships.



## 1. JAMESTOWN HIGH SCHOOL/JV ROBOTICS: FIRST ROBOTICS

"The JVRA FIRST Robotics Team 7578 is grateful to the support provided to use through the North Dakota Space Grant Consortium. With the funding provided, we were able to provide the local high school students with the opportunity to participate in two FIRST robotics competitions for the seasons where they competed very well at the Granite City Regional, scoring in the top teams and taking home the Judges Award. This was possible because we were able to afford upgraded control system components that allowed us to maintain a competitive edge in the ever increasingly competitive competitions!"

## 2. CANDO NORTH STAR SCHOOL: FIRST ROBOTICS

"PiRho'botics at North Star is a FIRST Robotics Competition team based in Cando, North Dakota. We welcome area high school students and homeschoolers to learn programming, fabrication, electrical, engineering and other STEM skills as part of our team. We meet year-round, with a more intense schedule from January - March. This year, we really enjoyed the underwater theme. Our robot, Flounder, performed well at competition and was a strong climber. We had an opportunity to share our robot and design with Governor Armstrong and our state legislators at the state Capitol Building.

North Star School's FRC Team 877 is extremely grateful for the funding we have received from the North Dakota Space Grant Consortium. It has enabled our small school to provide an excellent robotics program for our students, many of whom have gone on to pursue technical careers in the military and industry. It is very encouraging to see stakeholders like NASA and Space Grant put a value on STEM-related extra-curricular activities. Thank you!"

## 3. POWERS LAKE PUBLIC SCHOOLS: FIRST TECH CHALLENGE, ROBOTICS

"This season, our inclusive robotics team built its best robot yet, gained valuable STEM and problem-solving skills, and competed proudly. Grant support helped remove financial barriers so all students could participate fully."

## 4. GRAND FORCE @ GRAND FORKS: FIRST ROBOTICS

"With support from the ND Space Grant, our FIRST FRC team not only grew by 60%—adding three new students—but also expanded our community outreach and engagement. The funding allowed us to build a competitive robot that stood shoulder to shoulder with teams operating on much larger budgets. This experience has empowered us as young engineers and deepened our commitment to STEM education in our region."

## 5. FARGO PUBLIC SCHOOLS/RED RIVER RAGE: FIRST ROBOTICS

"The Red River Rage received the Engineering Inspiration award at the Norther Lights Regional in Duluth, MN. This entitled the team to participate in the FIRST Championship in Houston, TX. Thanks to the ND Space Grant Program, eight students and six mentors were able to travel to Houston and compete against teams from across the world."

## 6. DEVILS LAKE HIGH SCHOOL: FIRST ROBOTICS

"Firebirds Robotics is very grateful for ND space grant program for their help in funding our FIRST robotics team for the 2024-2025 season. The info session in the fall made completing the award very understandable. FIRST Firebirds Robotics Team #8586 built the REV starter bot for the 2025 season. FIRST Firebirds Robotics students enhanced their communication skills. They developed their collaboration skills. They creatively came up with solutions to problems and used creativity in designing outreach projects. They also used critical thinking to solve problems when the robot did not do what it was designed to do. We competed at two regional competitions this season and had hoped to make it to Houston. Even though we didn't reach our goal of Houston, we have great plans moving forward next year. The team worked hard all year and keep improving on their skills every year."

## 7. NORTHWOOD PUBLIC SCHOOLS: FIRST ROBOTICS

"As a team composed of 23 young boys and girls, Thunder Robotics had a successful year. Thunder Robotics is very thankful to NDSGC for their grant. It helped enable them to achieve personal and team goals that they didn't believe were possible and gave the team an experience that they won't forget.

Thunder Robotics had a successful year. The students designed, built, tested and programmed a winning robot that they named 'Hammerhead'. The game was very challenging this season. Deadlines, testing prototypes and structural constraints are all real life challenges that the students had to deal with. Winning the Great Northern Regional and taking 3rd place at the Duluth Regional qualified team 876 for a trip to the World Championships in Houston, Texas where they did well."

NOT PICTURED:

## MINOT NORTH HIGH SCHOOL: FIRST ROBOTICS



# Vex Robotics

**The VEX Robotics Competition engages students in a fun, hands-on environment that builds both technical and soft skills.**

Through teamwork, problem-solving, communication, and leadership, students learn how to collaborate effectively while tackling real-world engineering challenges. The program prepares participants to think critically and creatively, helping shape them into future innovators. By increasing interest in STEM fields and providing practical experience, VEX inspires students to pursue STEM-related careers and equips them with skills that extend far beyond the classroom. The North Dakota Space Grant Consortium is happy to support the VEX Robotics Competition Teams in North Dakota.

## 1. GRAND FORKS DISCOVERY ELEMENTARY: VEX ROBOTICS

"This season we had 9 teams and 38 students in our program. Our season started in mid-September and ended at the state competition in March. We had one team win the Excellence Award at State and earn a place at Worlds, so they continued to practice and attended the World Competition in May. We had a successful season practicing, learning, and growing with one another!"

## 2. SJPF HOMESCHOOL IN THOMPSON: VEX ROBOTICS FOR MIDDLE SCHOOL

"We were grateful to receive the ND Space Grant. This grant allowed our team to plan for a successful season as well as support our team to compete and register for the World Championship! Without this grant, our team would not have had a successful season.

Thompson, ND Vex Robotics team 94605A Max IQ had a fantastic 2024-2025 season. Early in the season they won a Design award (most effective and efficient robot design process), and a Judges award (recognition from Judges for special accomplishments). After redesigning their robot, they won their next four tournaments, including the ND Middle School State Championship tournament in Grand Forks. This win qualified them for the Vex World Championships in Dallas, TX. They finished 31st out of 84 teams in their division, a great result for their first time at Worlds. Competing against the best teams in the world was the ultimate learning experience and great motivation to design an even better robot next season. Most of the students on the team are planning to study in STEM programs when they graduate high school."

## 3. SJPF HOMESCHOOL IN THOMPSON: VEX ROBOTICS FOR HIGH SCHOOL

"SJPF Code X Team # 30029B Code X is a homeschool team out of Thompson, ND. This team had a tremendous 2024-2025 season.

Code X competed in a handful of Vex Competitions in North Dakota and South Dakota. They participated in the first annual University of North Dakota signature event to start off the season. From there, Code X was the winner of five competitions and runner up in another. They also received the skills award as well as the build award at these competitions. Code X was the winner of the North Dakota State Championship which allowed them to be invited to Vex Worlds Competition in Dallas, TX. Code X finished 33rd out of 83 in their division. They just missed the opportunity to compete in the finals of their division. SJPF continues to look for more students interested in STEM and we look forward to see where these opportunities take our students in the future."

## 4. UND VEX-U ROBOTICS TEAM: VEX UNIVERSITY ROBOTICS

"This year, our UND Vex-U team had a dynamic and rewarding season. From early design discussions to our final robots, we pushed the limits of creativity, programming, and engineering. Our primary robot (24x24 inches) featured a high-torque drivetrain designed for pushing and scoring, while our secondary bot featured a custom CNC-machined aluminum chassis, built to be lightweight and easily movable on its omni-directional base.

While we weren't able to participate in as many events as we had hoped for this season, we are preparing to put our all into next season. Beyond competition, this season had plenty of learning and collaboration. Each member played a crucial role in designing, building, coding, and refining our robots. We faced challenges, mediated setbacks, and learned how to respond better in future situations. As this season concludes, we are proud of what we have accomplished and are excited to continue this in seasons ahead."



# Plant the Moon/Mars

North Dakota K-12 students to participate in the Institute of Competition Science's "Plant the Moon Challenge". This agricultural based challenge asks students and their mentors to grow plants in lunar and Mars regolith — soil from Mars and the Moon that has been re-created in a lab.

During Fall 2024, the program supported five teams using 13 kits. In Spring 2025, participation expanded to five teams with 21 kits. Students ranged from elementary through high school levels,

allowing more than 300 students to engage in hands-on learning. Through this experience, participants learned how to use Moon and Mars simulant materials to explore sustainable crop growth, strengthening their understanding of space science, agriculture, and STEM concepts.



1



2



5



3



4

TOTAL # OF SGC SUPPORTED TEAMS IN NORTH DAKOTA:

21

TOTAL # OF SGC SUPPORTED STUDENTS IN NORTH DAKOTA:

220

TOTAL # OF SGC SUPPORTED STUDENTS NATIONWIDE:

6,455

## FALL 2024

### 1. ANNA BLOCK

Hettinger High School

"This program allowed students to see real-life challenges that professionals and amateurs are currently working to solve."

### 2. RACHEL SCHOMAKER

Minot State University Biology Department

"This support from the ND Space Grant Consortium for our work on the Plant Mars project allowed for us to work collaboratively to provide a unique research opportunity for students we otherwise wouldn't have been able to conduct. The students learned how to design and control a complex experiment with multiple factors, and all of the faculty involved got to learn new skills and information they had not been involved with before. We are grateful for the opportunity to be involved in this project and for the continued support of the ND Space Grant Consortium!"

We worked on the Plant Mars project, investigating if soil bacteria added to earth and martian soil would affect the growth of different kinds of plants in these soil types. This was a collaborative project with three biology professors (Janelle Green, Dr. Joseph Pettit, and Dr. Rachel Schomaker) at Minot State University, which involved two undergraduate students, as well (Grayson Bonilla and Kaveen Magamage). This research took place in the Fall of 2024."

### 3. BECKY SERR

Wildlife Explorers 4-H Club

"Through funding from the North Dakota Plant the Moon Grant, the kids were able to participate in the Plant the Moon program. This support gave them the opportunity to experiment with lunar soil simulant, learn how plants grow in different environments, and better understand the challenges of growing food in space. We are grateful for their funding and support in making this project possible. This was for the Wildlife Explorers 4-H club in Steele County, ND. They call their group the Root Rebels.

The kids chose to plant spinach seeds because they believed they would grow the fastest and offer the most nutrition for astronauts. They mixed their soils and planted three seeds in each pot at a 1/2-inch depth. Spinach can grow in different mixtures of moon simulant, potting soil, and chicken manure, but the strongest plants are expected to grow in potting soil alone. They tested three planting

soils: moon simulant, potting soil, and chicken manure. Their dependent variable was plant growth."

NOT PICTURED:

### JERAD LEHMANN/RILEY WASS

Devils Lake High School

### CHRISTINE FLEISCHACKER

St. Rita's Home School

## SPRING 2025

### 4. DANIJELA LJEOJA

Ben Franklin Middle School

### 5. JESSICA ENSTAD

Washington Elementary

"Sixth-grade students at Washington Elementary in Valley City participated in the Plant the Moon Challenge. Students conducted experiments using a mixed ratio of moon regolith and Earth soil. Their goal was to test various ratios and see which ratio would produce the best tomato plant. Students created a hypothesis and documented plant growth, color, soil moisture, pH levels, and weekly photos."

NOT PICTURED:

### MARCUS STANLEY

Shiloh Christian School

### JOANN SCHAPP

Nedrose High School

"Mrs. Schapp's science classes participated in the Jr Plant the Moon Spring round. They tried various items such as coffee grounds, egg shells, sheep manure, and sheep wool to see which would help promote the best growth of their plants."

### KELLY HOCHHALTTER

Berthold Public School

# Community Engagement Events



## 1. POTATO BOWL PARADE

September 14, 2024

NDSGC team participated in the Potato Bowl Parade, handing out posters and hands-on activities to families along the parade route.

## 2. GIRLS IN AVIATION DAY

September 28, 2024

STEM Ambassadors designed a model of Fargo's Hector International Airport to engage young girls interested in aviation. Using coding and Ozobots, participants practiced taxiing on a simulated runway, exploring the connections between aviation and technology.

## 3. FULL STEAM AHEAD

October 8, 2024

STEM Ambassadors hosted a hands-on STEM activity for students during the FULL STEAM Ahead event. Participants designed and built their own rocket capsules, then tested their creations to see if their "astronaut" could safely land after a drop test.

## 4. DISCOVERY ELEMENTARY SCHOOL

STEM Ambassadors helped with sharing information about the Parker Solar Probe and UV Astronaut activities. Elementary

students learned about the journey the Parker Solar Probe is taking and then created their own Parker Solar Probe to take home, along with learning about the UV rays from the sun and how important it is to protect themselves.

## 5. T-4 CAREER FAIR

April 8-9, 2024

The T4 Workshop introduces students to essential workforce skills, industry needs, training opportunities, and networking with industry leaders and technicians. NDSGC engaged students in a hands-on STEM activity called Bristlebots, giving them the opportunity to explore engineering and design concepts while problem-solving and improving their creations.

## 6. AEROSPACE OPEN HOUSE

April 12, 2025

STEM Ambassadors hosting a table sharing information about funding and opportunities NDSGC offers.

**NOT PICTURED:**

## LOL CAMP

September 7, 2024

STEM Ambassadors helped with activities such as telescope gazing and the moon phases.

## UND STEM CAREER FAIR:

September 24, 2024

STEM Ambassadors shared information about funding available with the NDSGC for NASA Internships, Research Fellowships, and several other programs.

## BIG EVENT

October 12, 2024

Girl Scouts introduces girls of every age and their families to science, technology, engineering and math (STEM), and helps them take action to change the world - whether they're programming robots, building a bridge, learning code, caring for animals or piloting a flight simulator. NDSGC STEM Ambassadors provided a hands-on activity for approximately 150 girls and their family members in grades K-12.

## UND AEROSPACE DAY

October 26, 2024

This event is an opportunity for prospective UND students to learn about the programs available in the College of Aerospace Sciences. Students will attend an admissions presentation, tour campus with a current student, and visit with faculty. NDSGC hosted a table to provide information about the funding available for students.

## ENCORE VISITS

(All school year)

STEM Ambassadors visited the Encore after-school program in Grand Forks, bringing engaging STEM activities to students several times a week. Through these sessions, students were introduced to a variety of STEM topics and hands-on learning experiences.

## HTTC STEM CAREER FAIR

December 3, 2024

NDSGC hosted a booth at the HTTC STEM Expo in Fargo, along with engaging students in three sessions of hands-on STEM activities throughout the event.

## STANLEY SCHOOL VISIT

December 13, 2024

STEM Ambassadors engaged high school students with the Blue Marble Matches planet activity. Students learned how Earth's land features help scientists identify similar features on other planets, then applied their knowledge by creating their own planets with unique geological characteristics.

## FUTURE CITY COMPETITION

January 18, 2025

STEM Ambassadors helped with the event. The students were passionate about their projects sharing them with the judges.

## VALLEY MIDDLE SCHOOL

February 25, 2025

Valley Middle School in Grand Forks hosted a Family STEM night. The NDSGC provided a series of hands-on activities for families

to engage in STEM, along with handing out posters and activity books.

## BISMARCK CAREER FAIR

March 18, 2025

NDSGC hosted a booth at the Capital Career Fair sharing information about funding opportunities for college students and educators in North Dakota.

## EGF STEM DAY

March 25, 2025

East Grand Forks celebrated the "I Love to Read Month" with a special visit from NDSGC. STEM Ambassadors read a variety of books to students, followed by exciting space-themed activities that connected to each story.

## STEM CAREER GIRLS SCOUTS

April 26, 2025

NDSGC STEM Ambassadors assisted with the hands-on STEM Activities. Girls rotated through a series of stations exploring different types of STEM activities.

## PAGES AND PATHWAYS

June 17-18, 2025

NDSGC presented Bringing NASA into the Classroom! Sharing NASA STEM activities and literature that pairs with the activities.

Responses from those that attended:

"Very hands on!"

"Loved it!"

"Nice to know that NASA still has resources for teachers."

"Wonderful!"

"I loved all of the extra information."

"The interactivity was very engaging, and despite being very science class heavy, it got me thinking of how to modify a few of these lessons for my high school English classes."

"Amazing presentation with passionate and knowledgeable presenters! Hands-on activities and great resources."

"I was able to walk out with resources to utilize in my classroom as well as how to use them and implement them."

"So much great information! I appreciated all of the ideas to use in the classroom. Thanks!!"

## NDCTM

June 24 & 25, 2025

Hosted a booth at the conference and presented sharing NASA STEM Activities with educators in North Dakota.

## STEM CAMP GIRL SCOUTS

Girl Scouts STEM Days in Fargo, ND and in Grand Forks, ND.

## DAKOTA SCIENCE SUMMER CAMP

July 14th, 16th, 17th, 21st, & 23rd, 2025

Series of NASA STEM Camps held at the Grand Forks Public Library. STEM Ambassadors helped with several different NASA AstroCamps and NASA Day.

# ASCEND Grant

The Affiliate Synergistic and Collaborative Engagements across ND (ASCEND) program is designed to promote, develop, and expand NASA research and projects within North Dakota.

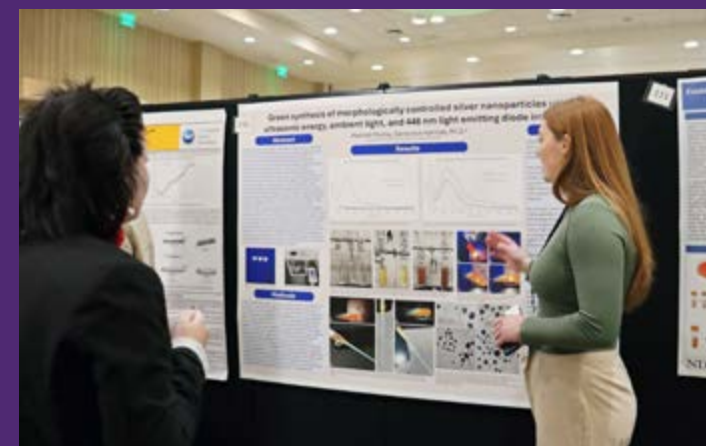
These grants, which may be research- or teaching-based, will be defined by the goals found within NASA's Mission Directorates (MDs) and the NDSGC's proposal.



Left: Two of the current student researchers supported by this project (Hannah Murray, left, and Krista Permentier, middle) and Principle Investigator Dr. Genevieve Kahrilas in the nanosynthesis lab. In the background are the sonochemical seeding chamber (right) and some of the LEDs used for the photochemical shape conversion of nanoparticle solutions (left).

Top right: One of the solutions of shaped silver nanoparticles with spectacular optical properties synthesized by students using our novel, green method. This specific synthesis results in nanoparticles that scatter the entire rainbow in a thickness and concentration-dependent manner, and appear to "magically" change color right in front your eyes.

Bottom right: One of the undergraduate student researchers supported by this project, Hannah Murray, presenting her results at the 2025 NSF EPSCOR conference at the North Dakota State University Ballroom in Fargo, ND.



## MINOT STATE UNIVERSITY

Developing a Novel, Green, Shape-Controlled Silver Nanoparticle Synthesis for Undergraduate Research

"The support provided by the North Dakota Space Grant Consortium ASCEND grant has been absolutely transformational to my research. Not only has this funding enabled me to achieve positive scientific results, but it has also enabled me to widely expand the scientific opportunities I am able to offer my students, and support many undergraduate research projects. With a totally non-toxic and eco-friendly nanosynthesis lab, I am now able to bring nanoscience to our primarily undergraduate university in a safe and visually fascinating way.

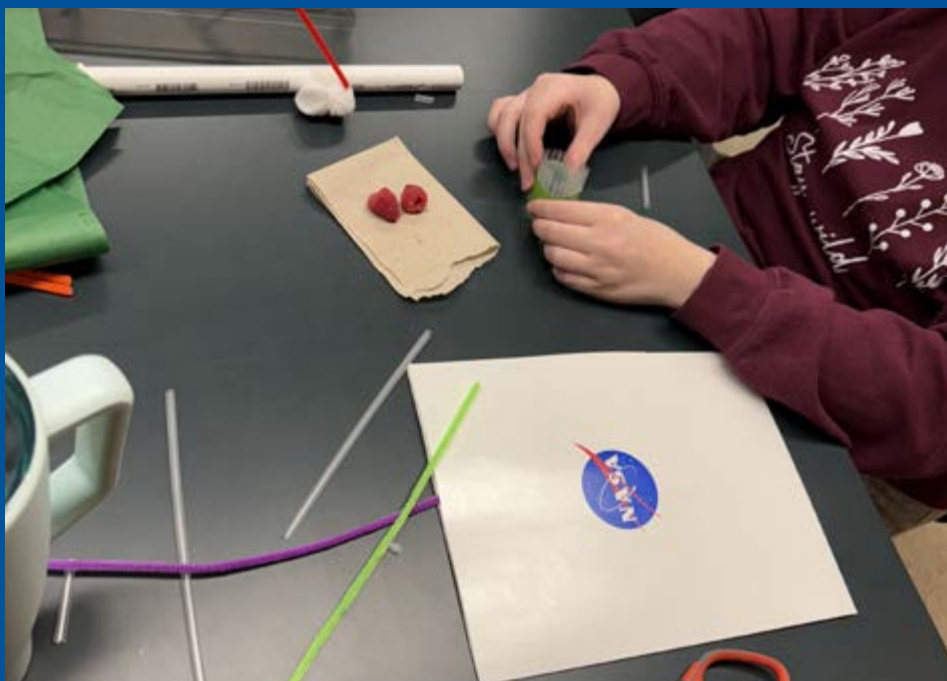
The support from the ASCEND grant was used to provide student salaries for five different undergraduate researchers, two of which are currently still in the group (the others having successfully graduated). It was also used to purchase reagents, supplies, minor equipment, and pay for nanoparticle characterization via my collaborator (co-PI Guodong Du). Results from this research have now been presented at two regional conferences and produced multiple publications and collaborations, with a journal publication in the works."

# Educator Professional Development



## MISU VISIT- EDUCATOR WORKSHOP

Twice a year, the NDSGC team visits the Science Methodology class at Minot State University to share engaging NASA STEM lessons that future educators can bring into their classrooms. Activities include Pocket Solar System, Rockets to the Rescue, End Effector, and more!



## SEEC 2025

Last year, NDSGC was able to send 9 educators from North Dakota and 19 STEM Ambassadors to attend the annual Space Exploration Educators Conference (SEEC) in Houston, TX. This annual event is designed to immerse participants into the work of space exploration through hands-on workshops, expert presentations, tours, and interactive breakout sessions. This conference provides an exceptional professional development opportunity to enhance the passion for space science in the classroom and community.

We look forward to continuing our support for these kinds of enriching opportunities, as we know they have the power to shape the next generation of scientists, engineers, and innovators.

## PARTICIPATING EDUCATORS:

### Emily Montgomery: North Dakota Gateway to Science

"I am grateful for my time at SEEC, as it helped broaden my horizons outside of the classroom! In doing informal education as a first year educator, this helped prepare me for hands-on, kinesthetic learning. I greatly appreciated the easy applicability as well for when I return back to work! I left feeling eager to teach with a new vision."

### Annie Beck: North Dakota Gateway to Science

"I am so thankful for the opportunity to attend SEEC last year! From memorable personal experiences like SCUBA diving and flying a plane for the first time, to gaining many ideas to bring back for workshops for Gateway to Science, it was a wonderful experience! I have already been able to implement many of the ideas with our camps and clubs! Thank you so much North Dakota Space Grant Consortium!"

### Betsey McIntyre: Winship Elementary School

"I am so thankful for the opportunity to attend the Space Exploration for Educators conference with the support of the North Dakota Space Grant Consortium. The information and lesson ideas I gained from this conference have been used many times already in the elementary school where I conduct STEM lessons with all grades."

## NOT PICTURED:

Justin Foss: Hatton-Northwood Public School

JoDe Knutson-Person: North Dakota Gateway to Science

Tracy Foss: Hatton Eielson School

Emily Tweten: Winship Elementary School

Stephanie Krueger: Winship Elementary School

Alex Hoffmann: Maple Valley School District

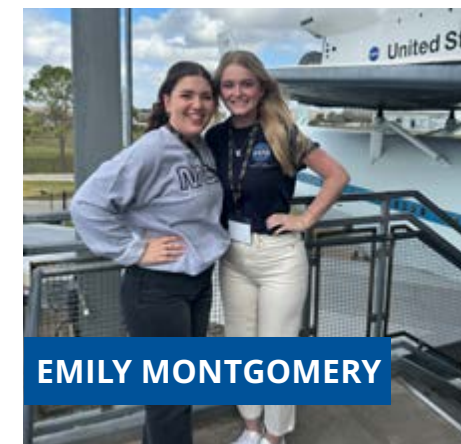


Above: STEM Ambassadors at SEEC 2025.

Bottom row left: Emily Montgomery with STEM Ambassador Kate Kesler.

Bottom row middle: Annie Beck SEEC 2025: Scuba diving like astronauts!

Bottom row right: A student of Betsey McIntyre engaging in a weaving activity. This activity was part of a breakout session titled "Culture Meets Stem, Breaking Barriers at NASA for Native American Students"



EMILY MONTGOMERY



ANNIE BECK



BETSEY MCINTYRE



Above: Madison Salander (left) and Quenna Eisenzimmer (right) are in simulation for the IDEAS workshop practicing their engineering skills by building a robotic hand out of paper to pick up items.

## FROM THE BLOG:

# NDSGC Joins Forces for 2025 IDEAS Educator Workshop in Alaska

July 21, 2025

This summer, a team of passionate educators, scientists, and space enthusiasts gathered under Alaska's midnight sun for a unique experience that blended cutting-edge STEM content with hands-on, classroom-ready activities. From July 7-10, 2025, the annual IDEAS Educator Professional Development Workshop brought together pre-service, in-service, and



### READ THE FULL BLOG POST!

<https://blogs.und.edu/jdosas/2025/07/ndsgc-joins-forces-for-2025-ideas-educator-workshop-in-alaska/>

informal educators from across the country to learn new ways to inspire the next generation of space explorers.

Hosted at the University of Alaska-Fairbanks, the 2025 IDEAS Workshop marked another successful year of collaboration between the North Dakota, South Carolina, and North Carolina Space Grant Consortia. Funded by NASA's National Space Grant College and Fellowship Program, IDEAS—short for Innovative Differentiated Exploration Activities in Space Science—is more than just an acronym; it's a mission to empower educators with dynamic teaching strategies grounded in real NASA science.

### Reimagining STEM Education, the NASA Way

The goal? Equip educators with the tools, confidence, and resources to bring space science into any classroom—whether it's a kindergarten class learning about the moon, or high schoolers prototyping a Mars habitat.

Participants explored a wide range of space science content areas, including human

spaceflight, heliophysics, astronomy, and planetary science. The sessions weren't just sit-and-listen lectures—they were built around problem-based learning, multi-modal teaching strategies, and experiential learning, all designed to spark creativity and promote critical thinking.

This year's workshop put a strong emphasis on Universal Design for Learning (UDL), helping educators adapt NASA content to support students, regardless of learning style. The workshop also provided time for meaningful collaboration—fostering a national network of STEM educators who share a passion for space and science education.

### Hands-On Activities that Spark Curiosity

Throughout the four-day event, educators had the opportunity to get their hands dirty (sometimes literally!) with activities they can replicate back home into their classrooms:

- Play-Doh Circuits led by Dr. Denise Thorsen introduced basic electronics through tactile learning—no batteries required.
- Aurora and Electromagnetic Waves, presented by Dogacan Su Ozturk, explored the colorful science behind the Northern Lights, linking space weather with real-world impact.
- Robotic Lunar Habitat Building, designed by Nima Farzadnia, challenged participants to construct ISRU (In-Situ Resource Utilization) bases on the Moon using limited materials and robotic tools.
- Plant Growth Chambers, facilitated by Betty Jo Moore, demonstrated how to grow sustainable food systems in space and on Earth.
- The ever-popular Dragonfly Mission activity, hosted by Troy Cline, gave educators a deep dive into NASA's future mission to Saturn's moon Titan—complete with drone simulations and planetary exploration planning.

Whether it was building circuits out of Play-Doh or simulating robotic assembly on the lunar surface, every activity was backed by authentic NASA content and aligned with national science standards.

### Building Community Through STEM

Behind the scenes, the workshop was powered by an all-star team of facilitators from each Space Grant Consortium: Dr. Cass Runyon (SCSGC), Jobi Cook (NCSGC), Dr. Caitlin Milera and Laurie Salander (NDSGC),

and Dr. Denise Thorsen (AKSGC), who also served as this year's host in Alaska. Their energy, expertise, and creativity helped shape each session into an unforgettable experience.

And of course, being in Alaska offered more than just incredible science—it provided an unforgettable setting for outdoor exploration, informal networking, and a chance to experience the natural wonders of the Far North.

### Looking Ahead

As we look to the future of education in space science, workshops like IDEAS ensure that educators remain on the frontlines of innovation. Participants left with more than just new lesson plans—they returned home with new collaborators, new inspiration, and a renewed commitment to STEM education.

Stay tuned for details about the next IDEAS Workshop and upcoming professional development opportunities! Whether you're an educator, student, or space enthusiast, opportunities to engage with NASA content and Space Grant activities are closer than you think.

*Want to learn more about North Dakota Space Grant's educator programs or future workshops like IDEAS? Visit [ndspacegrant.org](https://ndspacegrant.org) for upcoming events and resources!*



MADISON SALANDER



QUENNA EISENZIMMER

## PARTICIPATING EDUCATORS:

### Madison Salander: Fargo Public School

"The IDEAS workshop offered valuable project-based STEM Lessons, examples and resources we could use in our classrooms. I was also pleasantly surprised to receive so many strategies for accommodations to lessons that better supported all my students."

### Quenna Eisenzimmer: Munich Public Schools

"I participated in the IDEAS conference in Alaska this past summer, where I was able to learn from the presenters and other educators. Through simulation, I learned how some tasks may be difficult for students with impairments or challenges. I was really intrigued by the simulation activities, and I conducted similar activities with our staff at our school!"

Students and affiliates are encouraged to submit Student Success Stories to the NDSGC team.

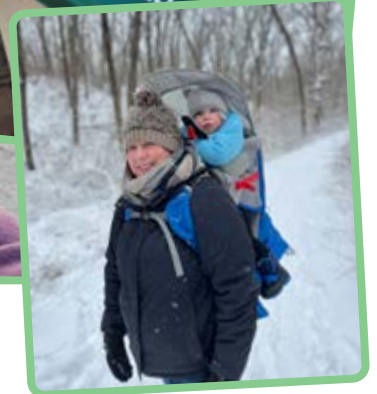
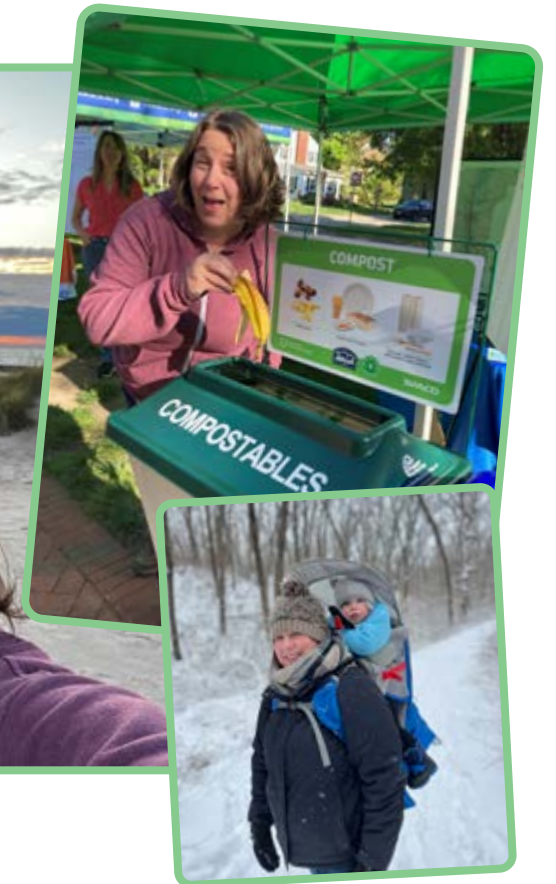
## Where Are They Now?

# CELEBRATING 10 YEARS OF THE STEM AMBASSADOR PROGRAM

The NDSGC established the STEM Ambassador program in 2015. The STEM Ambassador program expands the reach of the NDSGC, focusing on statewide impacts with college students, educators, K-12 students, and the general public. STEM Ambassadors visit classrooms, attend career fairs, and conduct hands-on STEM investigations, sharing their passions for STEM and NASA, inspiring the next generation of explorers.

The first cohort of STEM Ambassadors included five graduate and undergraduate students from across North Dakota. This section highlights, "Where are they now?" sharing alumni memories of the 2015 - 2016 program as well as their current career and life accomplishments.

### AMY DENSBORN



#### Current Position:

Programs Manager for the Solid Waste Authority of Central Ohio (SWACO).

We develop programs that reduce reliance on landfills in our region through the reuse, recycling, and composting of materials.

#### Education:

My undergraduate degree was in Wildlife Biology from Purdue University and Master's Degree in Environmental Science from UND.

#### Favorite Memories of the SA program:

I enjoyed taking the Stomp Rocket activity on the road to various age groups and helping them figure out the best way to set it up so it would go the farthest distance. Watching the students interact with one another and challenge their theories while looking for my guidance was always a joy.

#### Impact of the NDSGC on your Career Path:

I knew I wanted to have a career path that incorporated education and science, and being an SA only affirmed that for me. STEM is for everyone, and I am grateful for the SA program highlighting that there are all kinds of career paths in STEM.

#### Advice for Others:

Don't let anyone tell you that you aren't capable of doing something; explore your own limitations and then conquer them.

#### Anything Else You'd Like to Share:

Some of my favorite hobbies include birding, hiking, traveling, and a bit of gardening with my spunky 2-year-old. Some of my biggest accomplishments include becoming a mom in 2023 to the coolest little lady and designing the first state-of-the-art education center for all things waste diversion. It will open in 2027 and will be the first of its kind in Ohio. And finally, I also helped open a recycling convenience center for hard-to-recycle materials like styrofoam, electronics, and paint, diverting 600,000 lbs of materials from the landfill since inception.



## SHEYANNE BOSSERT

### Current Position:

I'm currently an Account Manager at South Park Insurance in Fairplay, Colorado, and I'm lucky enough to love what I do.

### Education:

I attended Lake Region State College for Precision Agriculture and General Studies.

### Favorite Memories of the SA program:

Some of my favorite memories from the SA program are working with my mentor and friend, Shaun Prince, and planning activities for kids.

### Advice for Others:

If I had any advice to share, it would be: explore, ask questions, be confident, and don't be afraid to step outside your comfort zone. That's where the best growth happens.

### Anything Else You'd Like to Share:

My biggest accomplishments are being a mom, building a career I enjoy, and making the move to the mountains.



## HOPE SWENSON

### Current Position:

Data/Curriculum Coordinator for the TGU School District in North Dakota

### Education:

University of North Dakota - Master of Education  
Mayville State University - Bachelor of Science in Elementary Education, Minor in Science for Elementary Teachers

### Favorite Memories of the SA program:

One of my favorite memories from being a STEM Ambassador was teaching the Pocket Solar System Lesson! It was always so fun to see students holding up their giant receipt paper - often taller than they were - to visualize the scale of distance between planets. Plus, I always loved road-tripping around the state with Caitlin and Marissa!

### Impact of the NDSGC on your Career Path:

This NDSGC funding positively impacted my career path as it gave me the unique experience to be in a variety of educational settings. In these settings, I led and planned lessons that helped me to develop strong classroom management and coordinated with teachers, which led me to develop strong communication skills. Overall, the program pushed me to get out of my comfort zone as a college student, which led to valuable lifelong skill development

### Advice for Others:

Take full advantage of every opportunity! Gaining hands-on experience in schools and with students — while being paid - is something many students don't get the chance to experience. Be willing to step out of your comfort zone and make the most of everything the program offers.

### Anything Else You'd Like to Share:

Thank you, NDSGC!



## JANELLE HAKALA

"I attached two photos. One work photo and one fun photo. The work one (TallTower) is at one of my field sites where the tower is utilized as a sampling platform for in-situ measurements of CO<sub>2</sub>, CH<sub>4</sub>, and CO. The fun photo (skiing) is in the mountains with my husband (Rob)."

### Current Position:

Associate Scientist II, Cooperative Institute for Research in Environmental Sciences (CIRES), CU Boulder. I work within NOAA's Global Monitoring Lab.

### Education:

Atmospheric Science, University of North Dakota

### Favorite Memories of the SA program:

My favorite memory is eating Oreo cookies with elementary students to teach them about moon phases. It was a fun and delicious little lesson where we would twist the Oreo in half and then start eating some of the frosting away to resemble different phases. Another fun memory I have from the SA program is when UND was the 1000th radio call to the ISS!

### Impact of the NDSGC on your Career Path:

The STEM Ambassador program was a great opportunity to become involved more broadly across the University and in the community. I gained professional experience across STEM fields in the program. It also reiterated the importance of outreach and sharing science with everyone, which I have continued to do throughout my career and it is by far the most rewarding part.

### Advice for Others:

For both current and future students, I would say to diversify your skills and experiences. You never know when an opportunity or contact you make could change your career course. All your connections matter. Try for every opportunity and become involved.

### Anything Else You'd Like to Share:

Since moving to Colorado in 2019, I have fallen in love with being in the mountains, especially backcountry skiing. I even skied in my wedding dress earlier this year. 😊



**JENNIFER  
LA ROSA**

**Current Position:**

I'm the Director of Manufacturing at Overview Energy, where I lead the development and scale-up of our next-generation power-beaming hardware.

**Education:**

Mechanical engineering at the University of North Dakota

**Favorite Memories of the SA program:**

Some of my favorite memories from the SA program were volunteering at community events around Grand Forks. It was incredibly meaningful to work with local students and see them get excited about engineering. Programs like that played a huge role in sparking my interest in STEM early on, so getting to give that same spark to the next generation felt full-circle.

**Impact of the NDSGC on your Career Path:**

NDSGC provided a scholarship that made a real difference for me during school, and the hands-on, community-focused experiences helped shape the kind of engineer and leader I wanted to become. It reinforced both the technical path I was on and the importance of bringing people into STEM who might not otherwise see themselves there.

**Advice for Others:**

Follow your curiosity and say yes to the projects that scare you a little. The work that stretches you is often what builds your confidence the

fastest. And don't underestimate how much relationships matter—your career will grow through the teams you build, the mentors you seek out, and the people you help along the way.

**Anything Else You'd Like to Share:**

Outside of work, I love long-distance running, hiking, and reading widely — especially history and literary fiction. This year my husband and I summited Mount Kilimanjaro.

Professionally, I've had the chance to work on some incredible hardware:

- I joined Tesla during the “production hell” era and later helped launch the Austin Gigafactory.
- At Overview Energy, I've led manufacturing, systems integration, and operations for a complex airborne power-beaming demonstration—coordinating hardware builds, optical alignment, flight testing, and cross-disciplinary engineering teams.

These experiences built a foundation in both hands-on engineering and leading teams through difficult, high-stakes technical challenges.

I'm grateful for the foundation UND and NDSGC gave me. The experiences I had there ultimately led me to work on cutting-edge renewable energy systems—from Tesla's production ramp to large-scale power-beaming hardware today—and I still draw on the skills and values shaped during that time.

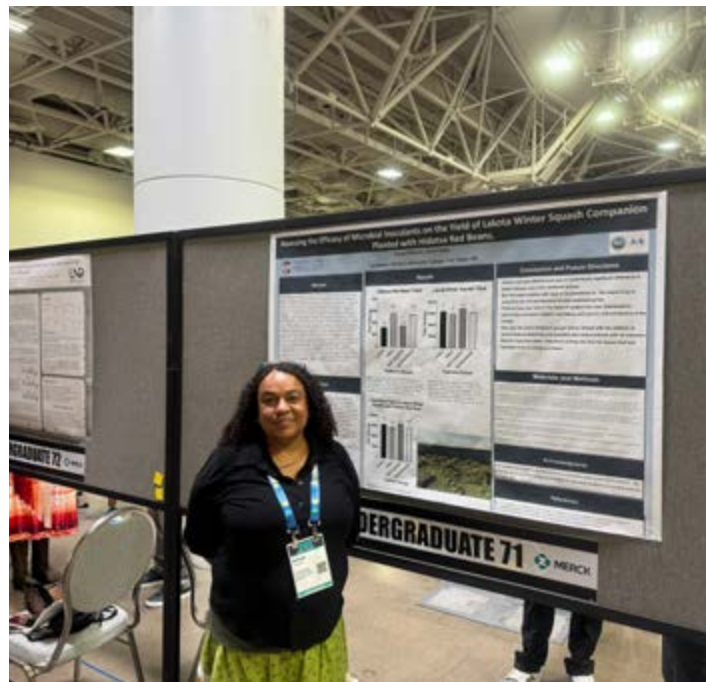


MEET AN AFFILIATE:  
**Cankdeska Cikana  
Community College**

This year's NDSGC “Meet an Affiliate” Highlight is Cankdeska Cikana Community College (CCCC). CCCC was chartered by the Spirit Lake Tribe in 1974 and accredited by the Higher Learning Commission.

It is a public, non-profit institution offering 8 associate degrees and 4 certificates with 110 employees (including 18 faculty, 36 staff, 54 Head Start staff). CCCC has also experienced record numbers of graduates over the 2021 - 2025 4-year period.





Top: A rainbow over the CCCC campus.

Bottom left: Squash growing in the Community Garden.

Bottom right: Sonya Williams, Undergraduate Student Researcher, presenting at the AISES Conference in Minneapolis in Fall 2025.

### OVERVIEW:

Critical student support services that are offered at CCCC are many and varied including: professional tutoring specific to the course offerings, hybrid classes offered in the evenings as a high percentage of students work full-time and have families, flexible class schedules, transfer and career services, internships, apprenticeships, and job shadowing, transportation assistance and laptops for all students. An Angel Fund and Emergency Fund are also available to assist with funding for larger emergencies such as: rent, internet and other utilities, appliance breakdown, or car repairs.

### CARPENTRY PROGRAM AND TINY HOMES PROJECT:

Cankdeska Cikana Community College's carpentry program prepares students for entry-level carpentry positions by providing experiential learning opportunities by building a home and selling it every year. In the Fall of 2022, the carpentry program and administration came up with a plan to build tiny homes and give them to students to help alleviate the home shortages on the reservation. The first tiny home was completed in December of 2024. The home is 900 square feet which includes two bedrooms, one full bath, and all appliances. With this project, the carpentry students raised funds to build these homes for the students while receiving real-world, hand-on education and giving back to the community. The second tiny home was completed in December of 2025.

### FOOD & NUTRITION INITIATIVES:

Food is more than nourishment – it is connection, culture, health, and community. At Cankdeska Cikana Community College's Land Grant Extension, every program is built around this understanding. The Extension has spent years developing a holistic ecosystem of food and nutrition initiatives that meet immediate community needs while strengthening long-term food sovereignty for the Spirit Lake Dakota Nation. Through gardening, education,

sustainable agriculture, youth development, and community partnerships, the Land Grant Extension supports families in reconnecting with the land and building healthier futures.

### SUMMER INTERNSHIP PROGRAM:

A cornerstone of these efforts is the summer internship program. Each year, high school and college-aged students join the Extension team and gain hands-on experience that blends traditional knowledge with modern sustainable practices. Interns learn how to operate tractors and tillers, start and maintain vegetable gardens, forage and harvest fruit for workshops, and process produce with food preservation equipment. They also help plan and run community events, building leadership skills and confidence. Their work allows the Extension to provide thousands of packets of seeds and starter plants to families across the reservation, making it easier and more affordable for community members to grow food at home.

### COMMUNITY GARDEN:

For families who do not have access to land for gardening, CCCC maintains a 1.75-acre community garden. This shared space invites people of all ages to learn, grow, and cultivate food together. At CCCC, the community garden is also a place of belonging – a living classroom where families gather, share knowledge, and access healthy foods regardless of their home circumstances. Part of this garden is dedicated to the Extension's pumpkin patch, tended each year with help from the interns. The harvest supports Pumpkin Fest, a fall carnival that has become a beloved community tradition.

### SPIRIT LAKE MOBILE FARMERS MARKET:

The Land Grant Extension also strengthens the local food economy through its seasonal Spirit Lake Mobile Farmers Market. More than a place to buy produce, the market creates opportunities for local growers and

makers to earn income while ensuring the community has access to fresh, Dakota-grown foods. Because the market accepts SNAP benefits, families of all income levels can participate.

### TEACHING KITCHEN:

Education is at the heart of every Land Grant program, and nowhere is that more visible than in the CCCC teaching kitchen. This fully equipped, student-centered learning space has become a hub for interactive cooking classes, nutrition education, and food preservation workshops. Community members learn how to prepare healthy meals, safely can and freeze produce. Because many preservation techniques require specialized equipment and space, the teaching kitchen plays a critical role in making these skills accessible to everyone. Supporting both gardeners and home cooks, the Extension offers workshops, demonstrations, and one-on-one guidance throughout the year. These educational programs encourage sustainable food practices, build practical skills, and strengthen community resilience. Whether residents are learning to plant their first garden or preserve a full harvest, they gain tools that empower them to feed their families and care for the land.

Through all its programs, the CCCC Land Grant Extension is not simply teaching people how to grow food – it is cultivating skills, confidence, relationships, and a stronger, more self-reliant community.



# We are #NASAinND

#NASAinND allows North Dakota students, faculty, and community members to share STEM and NASA involvement on social media. Take a look at all the activities and hard work from the past year!

Stay up to date with North Dakota Space Grant events and happenings by following the North Dakota Space Grant on social media!  
<https://ndspacegrant.und.edu/about/social-media.html>

@NORTHDAKOTASPACEGRANT

@NDSPACEGRANT

NORTH DAKOTA SPACE GRANT

NORTH DAKOTA SPACE GRANT CONSORTIUM

**North Dakota Space Grant Consortium**  
1,233 followers  
8mo •

The NDSGC had an incredible experience at SEEC!

Our team had the privilege of attending the Space Exploration Educators Conference at Space Center Houston, where our STEM Ambassadors and leadership team engaged in hands-on learning, explored innovative lesson plans, and connected with passionate educators from across the country.

We left with invaluable knowledge, new resources, and an even greater appreciation for the educators who inspire the next generation of explorers.

Check out our highlights below! [#SEEC](#) [#STEMEducation](#) [#NDSGC](#)

**North Dakota Space Grant Consortium**  
1,233 followers  
7mo •

As we continue to celebrate National Robotics Week...

The North Dakota Space Grant Consortium (NDSGC) is thrilled to celebrate the future of STEM by highlighting the amazing work of VEX IQ Robotics Team 18347 from Discovery Elementary School in Grand Forks!

Team 18347 is made up of bright and motivated 4th and 5th graders who are diving into the world of robotics through VEX IQ. These young innovators are learning to design, build, and program robots while developing critical thinking, teamwork, and problem-solving skills along the way.

What makes them awesome...

- They're mastering real-world STEM skills at an early age
- They're building teamwork and leadership through hands-on challenges
- They're gearing up for an exciting future in robotics and beyond

We're incredibly proud to support young minds like those on Team 18347 as they explore, create, and inspire during National Robotics Week and all year long!

Keep up the amazing work, Discovery Elementary — the future is in great hands!

**VEX IQ Robotics Team 18347**

Discovery Elementary School

**ndspacegrant**  
Fargo Air Museum

ndspacegrant What an incredible weekend! 🎉 The NDSGC had an amazing time hosting a booth for Girls in Aviation Day at Hector International Airport (HIA). Both kids and adults got the chance to put their coding skills to the test, guiding their aircraft from the hangar to the runway! Fantastic job, everyone!

[Aster #GirlsInAviation #FargoFledge](#)  
5m

View insights

Liked by spacegrantfoundation and 40 others  
September 10, 2024

Add a comment...

**ndspacegrant**

ndspacegrant Thanks to everyone who stopped by our #NASAinSpaceGrant booth today at the #BooForNorthDakota Career Fair! We'll be back again tomorrow!

[#STEM](#) [#Research](#) [#Fellowships](#) [#NASA](#) [#Internships](#)

[@spacegrantfoundation](#)  
6m

Liked by miss\_purplexx and 37 others  
September 23

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Post

**ndspacegrant**  
Grand Forks Head Start

ndspacegrant Last night we attended the Headstart Family Night event here in Grand Forks! We loved seeing all of the smiling faces and spreading the word about STEM through various resources.

7m

Liked by miss\_purplexx and 20 others  
September 17

Add a comment...

Post

**North Dakota Space Grant Consortium**  
1,233 followers  
2mo •

Welcome back, students! 🎉

The NDSGC is excited to kick off a new year with you. Stop by our office in Clifford Hall to grab free bookmarks, keychains, posters, and MORE (or just pop in to say hi 🤗).

While you're here, learn about the scholarships, funding opportunities, and programs we offer to support your journey in STEM!

Ryan Kram and 16 others

Like Comment Repost

**North Dakota Space Grant Consortium**  
Published by Later • October 16, 2024

Last week, the NDSGC team attended the #UND Multicultural Conference.

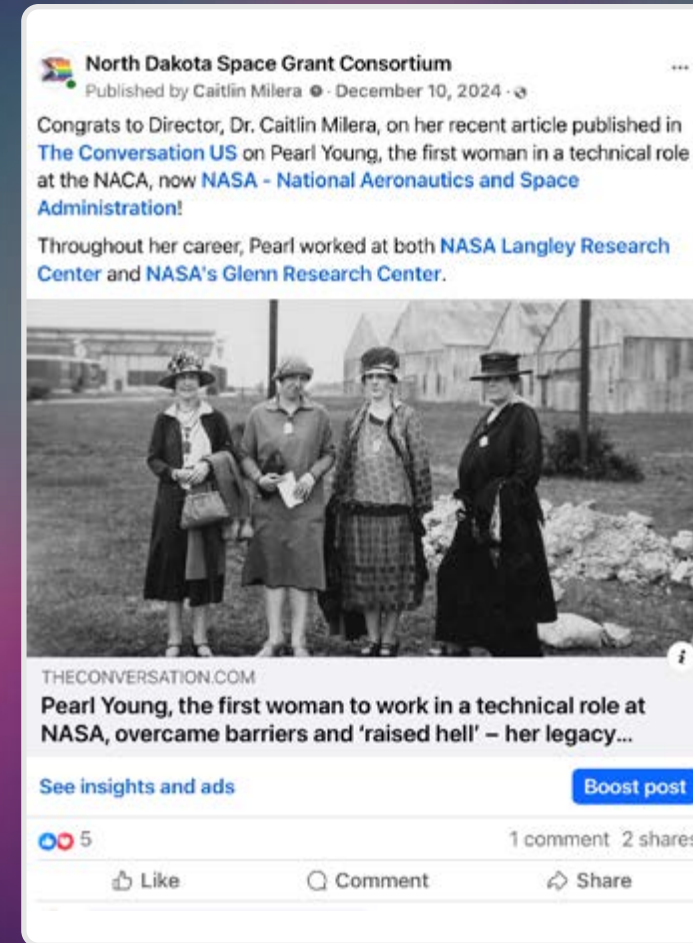
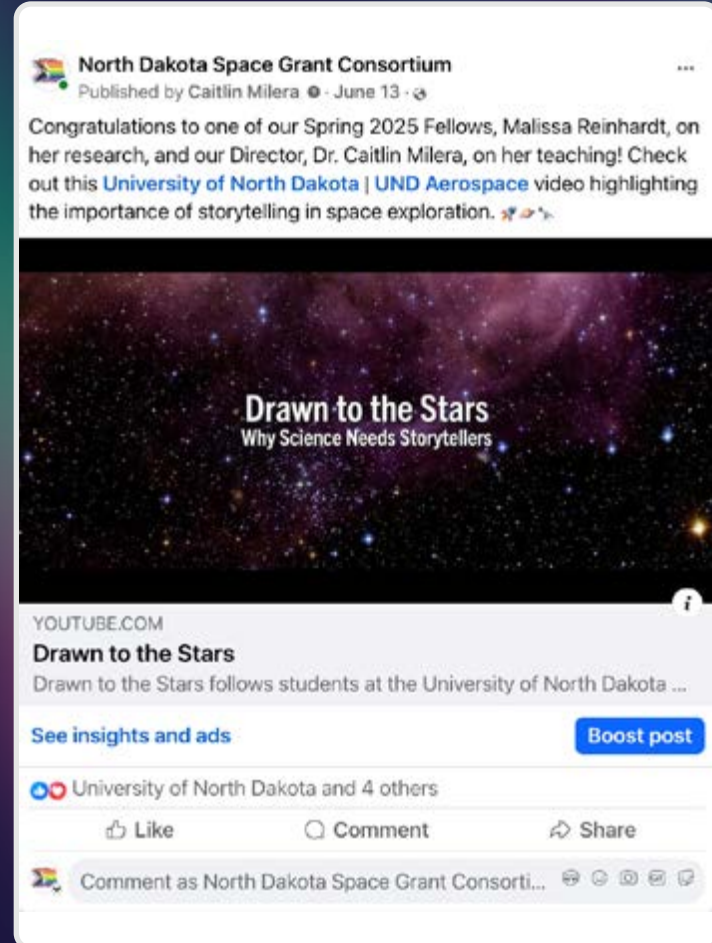
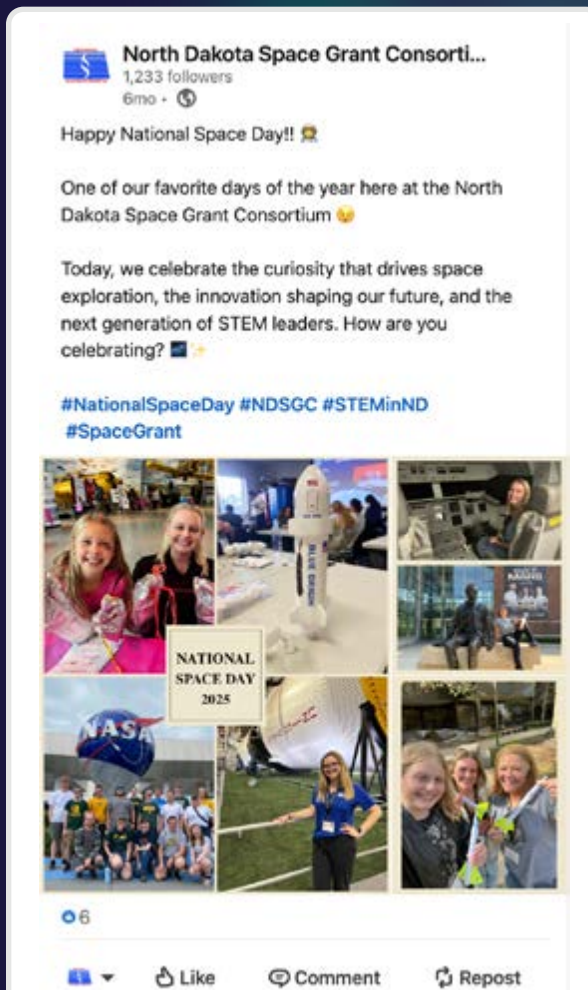
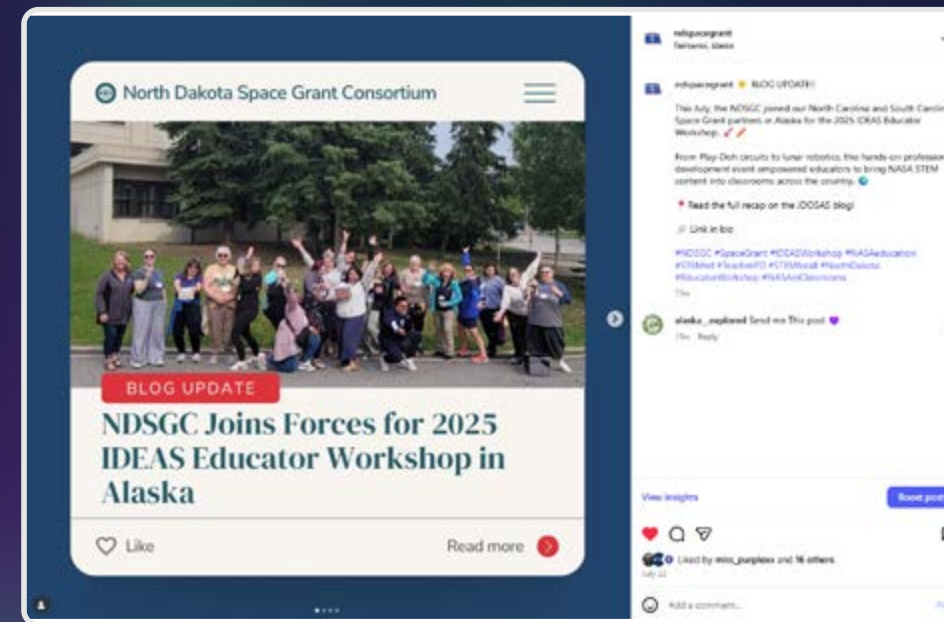
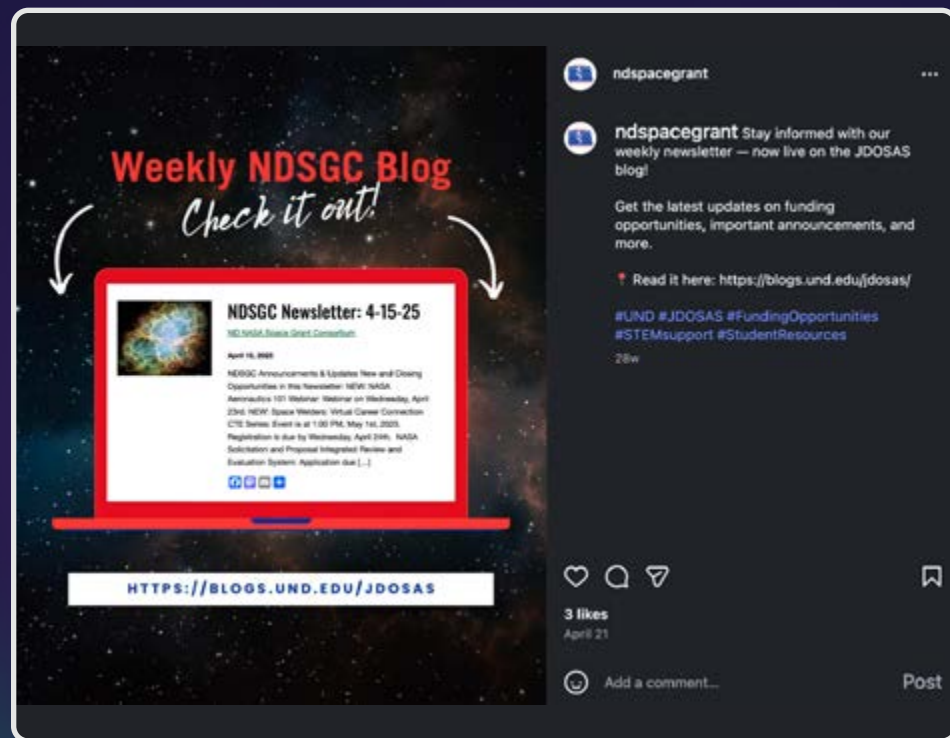
Thanks to all the conference organizers! [#NASAinND](#) [#NASASpaceGrant](#) <#>

See insights and ads

Boost post

15

Like Comment Share



# STAY ENGAGED WITH Space Grant



**READ OUR BLOG**

<https://blogs.und.edu/jdosas/category/all-news/nasa-space-grant/>



**JOIN OUR MAILING LIST**

[tinyurl.com/mpncthaf](https://tinyurl.com/mpncthaf)



# WE NEED YOU

## WE WANT YOU!

The NDSGC is always looking to expand its reach with students and educators across North Dakota.

If you are interested in any of the opportunities described in this newsletter, want to engage your students or colleagues, or want to contact us, please reach out to any member of the NDSGC team. Contact information is listed on the inside of the front cover. You can register for our electronic mailing list and explore our brochure with the QR codes found on this page.

## EDUCATOR WEBSITE

Educator activities can be found on our K-12 Engagement website.

Scan the QR code below to get involved with e-field trips to the Human Spaceflight Lab, to find STEM lesson plans, to request classroom guest speakers, and more!



**VISIT OUR  
EDUCATOR WEBSITE**

[spacegranteducation.wixsite.com/ndsgc](https://spacegranteducation.wixsite.com/ndsgc)

## WEBSITE AND SUBMITTABLE

To view all of the active NDSGC applications, please visit our Submittable application site. This list of programs changes throughout the year and reflects open application windows.

You can find information about NDSGC opportunities on their respective web pages, at <https://ndspacegrant.und.edu>.

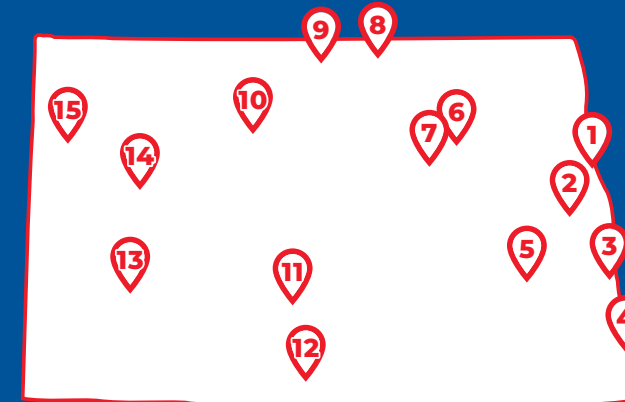


**VIEW ACTIVE  
NDSGC APPLICATIONS**

[ndspacegrant.submittable.com/submit](https://ndspacegrant.submittable.com/submit)

*We Need You: NASA commissioned poster for an exhibit at the Kennedy Space Center Visitor's Complex in 2009.*

## NORTH DAKOTA SPACE GRANT AFFILIATES



1

Dakota Science Center  
North Dakota Vision Services/  
School for the Blind  
University of North Dakota

2

Mayville State University

3

North Dakota State University

4

North Dakota State College of Science

5

Valley City State University

6

Lake Region State College

7

Cankdeska Cikana Community College

8

Turtle Mountain College

9

Dakota College at Bottineau

10

Minot State University

11

Bismarck State College

North Dakota's Gateway to Science  
State Historical Society of North Dakota  
United Tribes Technical College

12

Sitting Bull College

13

Dickinson State College

14

Nueta Hidatsa Sahnish College

15

Williston State College

## THANK YOU!

None of these events would be possible without the amazing work of representatives at the NDSGC affiliate institutions (listed on the back cover). Their efforts allow the NDSGC to expand its reach statewide and ensure that students across North Dakota are able to participate in a number of programs. The NDSGC would like to thank each of them for their dedication to NDSGC programming, promotion of opportunities, and continued involvement.

Thank you, also, to Heather Schuler (Visual Communications Specialist in the School of Aerospace at the University of North Dakota) for designing the Aurora Newsletter. The NDSGC is grateful for all the work Heather has done and her contributions to the NDSGC.

# Appendix

## WE ARE #NASAINND FULL DESCRIPTIVE TEXT

### 1. The NDSGC recaps their visit to SEEC with a collage.

Screenshot of North Dakota Space Grant Consortium social media post captioned, “Our team had the privilege of attending the Space Exploration Educators Conference at the Space Center Houston, where our STEM Ambassadors and leadership team engaged in hands-on learning, explored innovative lesson plans, and connected with passionate educators from across the country. We left with invaluable knowledge, new resources, and an even greater appreciation for the educators who inspire the next generation of explorers. Check out the highlights below! #SEEC #STEMEducation #NDSGC.” Under the caption was a collage of photos taken from the conference including group photos, attendees completing hands-on projects, and other conference pictures.

### 2. The NDSGC celebrates National Robotics Week with a collage.

Screenshot of North Dakota Space Grant Consortium social media post captioned, “As we continue to celebrate National Robotics Week... The North Dakota Space Grant Consortium (NDSGC) is thrilled to celebrate the future of STEM by highlighting the amazing work of VEX IQ Robotics Team 18347 from Discovery Elementary School in Grand Forks. Team 18347 is made up of bright and motivated 4th and 5th graders who are diving into the world of robots through VEX IQ. These young innovators are learning to design, build, and program robots while developing critical thinking, teamwork, and problem-solving skills along the way. What makes them awesome: they’re mastering real-world STEM skills at an early age, they’re building teamwork and leadership through hands-on challenges, and they’re gearing up for an exciting future in robotics and beyond. We’re incredibly proud to support young minds like those on Team 18347 as they explore, create, and inspire during National Robotics Week and all year long! Keep up the

amazing work, Discovery Elementary – the future in in great hands!” Under the caption are three images of elementary students in bright green shirts at a Robotics Competition.

### 3. The NDSGC hosted a booth for Girls in Aviation Day.

Screenshot of North Dakota Space Grant Consortium social media post with a location tag at the Fargo Air Museum captioned, “What an incredible weekend! The NDSGC had an amazing time hosting a booth for Girls in Aviation Day at Hector International Airport (KFAR) Both kids and adults got the chance to put their coding skills to the test, guiding their aircraft from the hangar to the runway! Fantastic job, everyone! #stem #girlsinaviation #fargo #ndsgc.” Beside the caption is a photo of five women in NDSGC shirts standing below a pink balloon arch.

### 4. The NDSGC at their booth at the University of North Dakota Career Fair.

Screenshot of North Dakota Space Grant Consortium social media post captioned, “Thanks to everyone who stopped by our #NASASpaceGrant booth today at the @uofnorthdakota Career Fair! We’ll be back again tomorrow! #STEM #Research #Fellowships #NASA #internships @spacegrantfoundation.” Beside the caption is a photo of four women in NDSGC shirts standing in front of a NDSGC banner and behind a table covered in a NASA tablecloth with various SWAG items.

### 5. The NDSGC at the Headstart Family Night in Grand Forks, North Dakota.

Screenshot of North Dakota Space Grant Consortium social media post with a location tag at the Grand Forks Head Start captioned, “Last night we attended the Headstart Family Night event here in Grand Forks! We loved seeing all of the smiling faces and spreading the word about STEM through various resources.” Beside the caption is a photo of a family at a NDSGC booth.

**6. The NDSGC welcomes students back for the semester.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Welcome back, students! The NDSGC is excited to kick off a new year with you. Stop by our office in Clifford Hall to grab free bookmarks, keychains, posters, and MORE (or just pop in to say hi). While you are here, learn about the scholarships, funding opportunities, and programs we offer to support your journey in STEM!" Under the caption is a picture of the NDSGC office, complete with sign and NASA meatball.

**7. Members of the NDSGC at the UND Multicultural Conference.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Last week, the #NDSGC team attended the #UND Multicultural Conference. Thanks to all the conference organizers! #NASAINND #NASASpaceGrant." Under the caption is a photo of three women in business casual clothes by a colorful balloon arch.

**8. NDSGC announcement for the weekly newsletter.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Stay informed with our weekly newsletter – now love on the JDOSAS blog! Get the latest updates on funding opportunities, important announcements, and more. Read it here: <https://blogs.und.edu/jdosas> #UND #JDOSAS #FundingOpportunities #STEMsupport #StudentResources." Beside the caption is a screenshot of the NDSGC Newsletter from August 15, 2025, with the words "Weekly NDSGC Blog, Check it Out!" on a black space background with the website listed again.

**9. NDSGC celebrated National Space Day with a collage.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Happy National Space Day!! One of our favorite days of the year is here at the North Dakota Space Grant Consortium. Today, we celebrate the curiosity that drives space exploration, the innovation shaping our future, and the next generation of STEM leaders. How are you celebrating? #NationalSpaceDay #NDSGC #STEMinND #SpaceGrant." Below the caption is a collage of photos of students and NDSGC team members at events, doing space-themed projects, and at historic NASA sites.

**10. NDSGC shares a video highlighting the importance of storytelling in space exploration.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Congratulations to one of our Spring 2025 Fellows, Malissa Reinhardt, on her research, and our Director, Dr. Caitlin Milera, on her teaching! Check out this University of North Dakota | UND Aerospace video highlighting the importance of storytelling in space exploration." Below the caption is a link to a YouTube video with the opening frame a dark starry background with the words, "Drawn to the Stars: Why Science Needs Storytellers."

**11. Blog update about the 2025 IDEAS Educator Workshop.**

Screenshot of North Dakota Space Grant Consortium social media post with location tag at Fairbanks, Alaska, captioned, "BLOG UPDATE!! This July, the NDSGC joined our North Carolina and South Carolina Space Grant partners in Alaska for the 2025 IDEAS Educator Workshop. From Play-Doh circuits to lunar robotics, this hands-on professional development event empowered educators to bring NASA STEM content into classrooms across the country. Read the full recap on the JDOSAS blog! Link in bio. #NDSGC #SpaceGrant #IDEASWorkshop #NASAeducation #STEMed #TeacherPD #STEMforall #NorthDakota #EducatorWorkshop #NASAINClassrooms." Besides the caption is a screenshot from the NDSGC blog of a group of people standing in front of a building cheering, titled "NDSGC Joins Forces for 2025 IDEAS Educator Workshop in Alaska."

**12. NDSGC shares an article published by Dr. Caitlin Milera about Pearl Young.**

Screenshot of North Dakota Space Grant Consortium social media post captioned, "Congrats to Director, Dr. Caitlin Milera, on her recent article published in The Conversation US on Pearl Young, the first woman in a technical role at the NACA, now NASA – National Aeronautics and Space Administration! Throughout her career, Pearl worked at both NASA Langley Research Center and NASA's Glenn Research Center." Below the caption the article linked there, titled "Pearl Young, the first woman to work in a technical role at NASA, overcame barriers and 'raised hell' her legacy..." with the title black and white photo of four women in fashion from the 1900s.



# THANK YOU TO OUR AFFILIATES!



BISMARCK STATE COLLEGE



CANKDESKA CIKANA COMMUNITY COLLEGE



DAKOTA COLLEGE AT BOTTINEAU



DAKOTA SCIENCE CENTER



DICKINSON STATE UNIVERSITY



ND'S GATEWAY TO SCIENCE



LAKE REGION STATE COLLEGE



MAYVILLE STATE UNIVERSITY



MINOT STATE UNIVERSITY



NORTH DAKOTA STATE COLLEGE OF SCIENCE



NORTH DAKOTA STATE UNIVERSITY



NDVS/SB



NUETA HIDATSA SAHNISH COLLEGE



SITTING BULL COLLEGE



STATE HISTORICAL SOCIETY OF NORTH DAKOTA



TURTLE MOUNTAIN COLLEGE



UNITED TRIBES TECHNICAL COLLEGE



UNIVERSITY OF NORTH DAKOTA



VALLEY CITY STATE UNIVERSITY



WILLISTON STATE COLLEGE