



# North Dakota Space Grant Consortium

NASA initiated the National Space Grant College and Fellowship Program, a national network of over 950 public and private colleges and universities, space-related industry, nonprofit organizations, and state and local agencies, in 1989. Space Grant Consortia have been established in every State, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. Each consortium receives funds to be used in implementing a balanced program of research, education, and outreach. The North Dakota Space Grant Consortium (NDSGC) has its headquarters at the Department of Space Studies at the John D. Odegard School of Aerospace Sciences at the University of North Dakota.

## **Program Priorities:**

Promote NASA-relevant research and education through the following priorities:

- ❖ Encourage cooperative programs among universities, aerospace industry, and federal, state, and local governments.
- ❖ Encourage interdisciplinary training, research, and public service programs related to aerospace.
- ❖ Promote a strong science, technology, engineering, and mathematics (STEM) education base from elementary through post-secondary levels.
- ❖ Provide funding for scholarships and fellowships to undergraduate and graduate students from across North Dakota.
- ❖ Provide funding for NASA-related research proposals from non-research affiliate institutions.
- ❖ Present pre-service workshops on space science in collaboration with North Dakota's teaching training departments.
- ❖ Achieve gender/minority participation in NDSGC activities consistent with the state's demographics.
- ❖ Provide partial or full funding for North Dakota students to attend NASA Centers for summer internships
- ❖ Support North Dakota faculty in collaboration with EPSCoR and other NASA-related activities.
- ❖ Promote lifelong learning of space science through public presentations and projects coordinated by the ND regional educator resource center.
- ❖ Provide presentations on NASA related activities and their benefits to the public in communities around the state.

## [Faculty Funding Opportunities](#)

### **Summer Faculty Fellowship Program**

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.

Applications can be submitted on the NDSGC website. Preference will be given to North Dakota faculty in four year and two year colleges, and faculty members who did not receive funding the previous summer.

Feel free to contact Caitlin Nolby at [cnolby@space.edu](mailto:cnolby@space.edu) if you have any questions.

**Awards available: varies**

**Award Amount: \$4500**

**Next Due Date: May 11, 2018**

### **NASA-relevant Research Focus Areas**

The North Dakota Space Grant Consortium encourages submission of research proposals from STEM faculty at all affiliate institutions with an interest in beginning or continuing NASA-related research in North Dakota. Priority is given to faculty from two year and four year colleges. Research Focus Area (RFA) funding is designed to promote, develop, and expand NASA research in North Dakota in the following areas:

- ❖ Astronomical/planetary science
- ❖ Small satellite development
- ❖ Earth Sciences
- ❖ Materials science
- ❖ Planetary space suit research

The total amount of funding available for this program varies each year. Proposals can include funding for:

1. One month of faculty salary
2. Student stipends
3. Relevant research supplies
4. Travel to a NASA field center

We cannot fund equipment through ND Space Grant. Proposals must include plans to collaborate directly with at least one NASA research scientist at a NASA field center. Involvements of more than one faculty member at the lead institution and collaboration with researchers at other ND institutions are both encouraged. Proposal descriptions should be of adequate detail in both research effort and budget. Proposals will be evaluated on their intrinsic scientific merit, cost reasonableness, and relevance to NASA and one or more RFA. Non-RFA proposals may also be submitted.

**Next Due Date: May 11, 2018**

## **[Student Funding Opportunities](#)**

### **NASA Internship Program**

North Dakota Space Grant is able to fully fund up to 4 or 5 students each summer to complete an internship at a NASA Center. (Sometimes partial funding is also available to support additional students.) Those eligible include any United States citizen who is also an on-campus undergraduate or graduate student attending a two year college, four year college, or research university in the state of North Dakota.

Summer stipends are \$6,000 for undergraduates and \$7,500 for graduate students. (An additional \$500 is also available to each student to cover travel costs.) NASA accepts applications through OSSI (One Stop Shopping Initiative), a NASA-wide system for the recruitment, application, selection, and career development of undergraduate and graduate students primarily in science, technology, engineering, and mathematics (STEM) disciplines.

<https://intern.nasa.gov/ossi/web/public/main/>

Summer internship applications are typically due March 1<sup>st</sup> of the same year. Although NASA Centers sometimes have the ability to offer paid internships, the North Dakota Space Grant Consortium is responsible for funding these internships as well, so it is in the best interest of the student to keep the NDSGC informed of applications. Please have students contact Caitlin Nolby ([cnolby@space.edu](mailto:cnolby@space.edu)) regarding their applications to NASA centers so that the NDSGC can be involved with the internship matching process.

### **Student Fellowship Program**

The NDSGC provides funding for North Dakota students to complete research fellowships at both the undergraduate and graduate levels. Applicants must be citizens of the United States who are, or will be, enrolled at a tribal college or public two-year or four-year institution of higher education in North Dakota. Students' degree programs should be in

the areas of science, technology, engineering, or mathematics (STEM). The number of fellowships available each semester will vary depending on the current budget situation.

Fellowships at the undergraduate level are given at the amount of **\$3,600** (fall/spring semesters) and **\$2,250** (summer semester). Fellowships at the graduate level are given at the amount of **\$4,500** (fall/spring semester) and **\$2,850** (summer semester). Students may receive fellowships for no more than two semesters. Primary selection criteria are:

- ❖ Academic excellence (a minimum grade point of 3.00 is required)
- ❖ Relevance of the student's discipline and interests to STEM fields
- ❖ Preference will be given to those students not receiving graduate research assistantship (GRA) or graduate teaching assistantship (GTA) funding. Partial fellowships may be rewarded to those students receiving a 1/4<sup>th</sup> time GRA or GTA appointment.

All awardees will be required to submit a 1-2 page summary of their research to the NDSGC at the end of the semester during which they conducted their research. All awardees are also required to complete 10 hours of STEM- or NASA-relevant outreach for each semester of funding received. Fellowship recipients may also be asked to present their research at Space Grant regional, national, or NDSGC annual meetings.

Deadlines to apply for these fellowships will be approximately one month prior to the start of classes for the applicable semester. Applications can be submitted through the NDSGC website: <http://ndspacegrant.und.edu/applications/student-application-form.aspx>

#### **Upcoming deadlines:**

Summer 2018 fellowships: **May 11, 2018**

Fall 2018 fellowships: **August 15, 2018**

Spring 2019 fellowships: **December 1, 2018**

#### **Bridge Fellowship Program**

This program will provide the opportunity for students transferring from affiliate two-year colleges to a 4-year institution to complete a NASA-relevant summer research project under the advisement of a faculty mentor prior to enrollment. Collaborations will take place between the student's two-year college faculty and the 4-year institution's faculty in project development. Student may also apply if they are advancing from one degree program into another at the same institution (ex. BS to MS, MS to PhD, AS to MS, etc.)

This program's objective is to increase the retention of transfer students in STEM, a student population at significant risk for attrition in a STEM field, especially first-generation students. This will also give students hands-on experience in research relevant to their area of study and better help them transition from the more close-knit college environment to that of a research university. The application and selection process for these awards will be the same as the NDSGC fellowship program, yet faculty at Tribal College and Community College affiliate institutions will be consulted for potential student participant.

**Next Due Date: May 11, 2018**

## **Student Scholarship Program**

### **Lillian Goettler Scholarship**

The NDSGC has established the prestigious Lillian Goettler Space Grant Award for a female student in science at North Dakota State University. The award, for \$2500 per year, is given to honor the ideals of scholarship as exemplified by Lillian Goettler. Goettler was a distinguished NDSU professor. Awarded a doctorate in Mechanical Engineering from the University of Massachusetts Amherst, she came to NDSU with her husband in 1978. NDSU students should contact the NDSU Financial Aid office for application information.

Recipients must be an American citizen, have at least a 3.5 grade point average and ideally be involved in a research project that would be of interest to NASA.

**Next Due Date: February 23, 2019**

### **Pearl I. Young Scholarship**

The NDSGC has established the prestigious Pearl I. Young Scholarship for a female student in science at the University of North Dakota. The award, for \$2500 per year, is given to honor the ideals of scholarship as exemplified by Pearl I. Young. Young grew up in North Dakota, where she attended school. At age 11, she left home to work as a domestic in order to attend high school. After attending Jamestown College for two years, she transferred to the University of North Dakota. She graduated from UND in 1919 as a Phi Beta Kappa with a triple major in physics, mathematics, and chemistry.

Despite her heavy course load, financial necessity dictated that Young work while pursuing her studies. She served as a laboratory assistant in the Physics Department and also worked for the U.S. Weather Bureau. 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 the first woman hired as a technical employee - a physicist of the National Advisory Committee for Aeronautics (NACA). That agency later became NASA. She was the second woman hired as a physicist by 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.

Recipients must be an American citizen, have at least a 3.5 grade point average and ideally be involved in a research project that would be of interest to NASA.

**Next Due Date: March 1, 2019**

### **American Indian Scholarship**

The recently established prestigious American Indian Scholarships are designed to encourage and support Native American students interesting in pursuing STEM degrees and continuing their education beyond their current enrollment in community college. To assist

students in their goals, the North Dakota Space Grant Consortium offers five scholarships, each worth **\$2500**, to Native American students at five tribal colleges in North Dakota: United Tribes Technical College, Sitting Bull Community College, Fort Berthold Community College, Turtle Mountain Community College, and Cankdeska Cikana Community College.

Eligible students must commit to:

- 1) Attend a research or four-year institution after their graduation, and
- 2) Pursue a STEM degree at a research or four-year institution.

To apply, students should contact the Financial Aid office at their respective institutions.

### **Undergraduate Scholarship**

North Dakota Space Grant will continue to provide scholarship funding for outstanding students at North Dakota's two year and four year colleges and universities.

Each NDSGC affiliate should identify its qualified applicants and submit awardees' information to Marissa Saad ([msaad@space.edu](mailto:msaad@space.edu)) by **February 15<sup>th</sup>** each school year.

Scholarships, which are designed for students pursuing STEM degrees that support NASA research and technology needs, are awarded for both the fall and spring semesters.

NDSU/UND undergraduate students are not eligible for undergraduate scholarships.

To apply, students should contact the Financial Aid office at their respective institutions.

## **STEM Ambassador Program**

The program provides funding for undergraduate and graduate students in a STEM field (or education with a STEM emphasis) who will devote time each semester to participate in NDSGC public service or pre-college events like high-altitude balloon launches, space camps, classroom visits, and community outreach. The student work will be minimal in comparison to Graduate Research Assistants or fellowship recipients, but the impact to the surrounding community and to the participating college students will be great. Students will be able to improve communication skills (a valued talent especially in STEM fields) and inspire the next generation of scientists and engineers. This program also has the potential to serve as an indicator of student success as a future GRA or fellowship recipient.

This is a paid position open to college students from all affiliate institutions, where recipients are paid \$12/hr. Appointments will be made each semester if necessary, or for the entire academic year. Students may choose their length of appointment (some students have limited time due to student teaching requirements). The application can be found at the Space Grant website:

<http://ndspacegrant.und.edu/applications/stem-ambassadors-form.aspx>

### **Upcoming deadlines:**

Fall 2018 appointments: **May 31, 2018**