

## NORTH CAROLINA SPACE GRANT

Developing the  
next generation  
of explorers

[NCSpaceGrant.org](https://www.ncspacegrant.org)



NC Space Grant focuses on students.

### WHAT IS NC SPACE GRANT?

North Carolina Space Grant leads the way in developing and promoting aeronautics and space-related science, technology, engineering and math (STEM) education. Since 1991, education and outreach efforts have equipped the current and future aerospace workforce. Our partnerships span academic institutions across North Carolina and include collaborations with NASA, industry, nonprofits and state government agencies.

### OUR PARTNERS

From our NC State University headquarters in Raleigh, NC Space Grant collaborates with colleges and universities statewide, plus the community college system and many other partners, including NASA centers, industry, planetariums and museums.

### HOW WE WORK

Since its inception, NC Space Grant has facilitated funding for millions of dollars of STEM research and public outreach efforts. We equip the future workforce with a diverse talent base prepared to address challenges through hands-on experiential learning, team-based activities and research.

Through a combination of federal, state and industry funding, we successfully create and support unique and competitive opportunities for students. We also engage with students, faculty, educators, and often the public, to participate in space-related research, education and outreach programs across the state.

Inspired by NASA's revolutionary research and a pioneering state aerospace sector, we help train our country's future STEM leaders. We fund about 300 students each year and reach many K-12 and informal educators. NC Space Grant also is committed to advancing aerospace, aviation and astronomy engagement through outreach programs.

#### BY THE NUMBERS

6,000

Number of public participants in outreach activities in FY20

86%

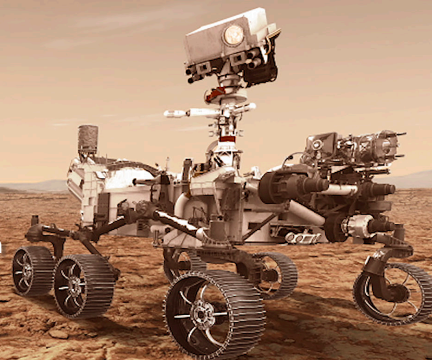
Of NC Space Grant students remain in STEM fields after graduation

38

Number of educators who received professional development training in NASA-related content in FY20

268

Number of higher education students engaged in NC Space Grant activities in FY20



On Mars, NASA's rover will store rock/soil samples in sealed tubes for future missions to retrieve. NC Space Grant and partners provide Mars-related lessons and outreach links online.

ILLUSTRATION FROM NASA/JPL-CALTECH

Contact NC Space Grant:  
[ncspacegrant@ncsu.edu](mailto:ncspacegrant@ncsu.edu)  
[ncspacegrant.org](https://www.ncspacegrant.org)

     
[@ncspacegrant](https://www.ncspacegrant.org)  
[#NCSpaceGrant](https://www.ncspacegrant.org)



## SPACE EDUCATION AMBASSADORS LIFT-OFF

We invest in educators, who then guide future generations of STEM leaders and professionals. In 2020, NC Space Grant proudly launched the [North Carolina Space Education Ambassadors \(NCSEA\)](#) program in collaboration with NASA Langley Research Center. We are building a statewide network to deliver NASA educational content to students, schools and communities. Representing each education district in the state, the group meets virtually, with sessions featuring NASA science and education experts. The intensive professional development focuses on current NASA Next Gen STEM education

themes. Art is added to the science, as students are participating in a competition to design an official NCSEA patch that will be manufactured by A-B Emblem, a new NC Space Grant partner in Weaverville. A-B Emblem has made NASA mission patches for decades. The teachers are testing lessons in their classrooms, and provided demonstrations as part of the virtual 2021 Astronomy Days at the NC Museum of Natural Sciences.

  
NC Space Education Ambassador  
Neil Pifer provided online video  
demonstrations of lessons.



## FROM CLASSES TO CAREERS

Dreams of rocket science and space exploration have come true for many former NC Space Grant scholars. For example, two alums now at United Launch Alliance had different career paths. Jennifer Adams had an NC Space Grant-supported internship at NASA Marshall Space Flight Center, and was part of UNCC 49er Rocketry Club. She is now a propulsion system test engineer. Stephanie Smith is now a contamination control engineer. She had an NC Space Grant research scholarship while at NC State.

Our website, [NCSpaceGrant.org](https://NCSpaceGrant.org) features stories on engineers and scientists drawing upon STEM knowledge from classes and skills honed in internships and student competitions.



## DIVERSE STUDENTS & OPPORTUNITIES

NC Space Grant has a strong commitment to diversity in seeking applicants for its student programs, as well as for students in faculty-led research. For example, the new **Minority-Serving Institution (MSI) STEM Bridge** scholarship supports research interests, and offers opportunities to learn about NASA Mission Directorates and pathways for

internships. Recipients are undergraduates from historically underserved and underrepresented communities, and who demonstrate the potential to contribute to the future STEM workforce. Recipients have come from the University of North Carolina at Pembroke, Fayetteville State University, and NC A&T State University.

Our overall portfolio also includes scholarships for students planning careers in education. They will be school, district and community leaders, and will inspire countless students.

Careers in NASA and industry require teamwork. NC Space Grant supports student teams across the state to participate in competitions that complement STEM academic studies. Teams provide hands-on learning opportunities related to one or more of NASA's missions. In 2019-20, NC Space Grant funded 18 teams.



 Winston-Salem State University Astrobiology Lab presents in Washington, D.C.  
Above: NASA interns Danielle Chasten and Simone Blaylock met R. Joshua Dobbs of the Jacksonville Jaguars and a NASA Adult Space Camp alum.