



# NH SPACE GRANT CONSORTIUM

Established by Congress (Public Law 100-147) in 1988 and implemented through the NASA Office of STEM Engagement, the National Space Grant College and Fellowship Program (known as 'Space Grant') contributes to the nation's space enterprise by funding related research, education, and public service projects through a national network of 52 university-based Space Grant consortia: one in each state, the District of Columbia, and Puerto Rico. Each consortium consists of multiple independent affiliate institutions, such that there is currently a network of over 850 Space Grant institutions nationwide. These affiliates represent more than 600 colleges and universities as well as industry, local government agencies, federal agencies, and nonprofit organizations. A key aspect of the Space Grant Program is that it is a Cost Share program, with federal dollars matched by state and affiliate funding contributions.

#### NH SPACE GRANT HIGHLIGHTS:

- New Hampshire Space Grant Consortium (NHSGC) was established in 1991 as a collaboration between the University of New Hampshire (UNH) and Dartmouth College. In the fall of 1999, through a NASA competitive process, NHSGC became a Designated consortium, the top rating given to consortia. NHSGC now includes seven NH institutions at 20 locations in the state: University of New Hampshire, Dartmouth College, Plymouth State University, the Community College System of NH, the McAuliffe-Shepard Discovery Center, Mount Washington Observatory, and BAE Systems. (See map on following page for full list of locations.)
- Undergraduate and graduate student STEM workforce development opportunities sponsored through the consortium include scholarships, fellowships, NASA Center hands-on experiences, conference travel allowances, student symposia support, and individual student and team research experiences. This past year, these student opportunities included a summer internship in aeromechanics (NASA Ames Research Center), RockSatXN sounding rocket payload and launch activities (NASA Wallops Flight Facility), the Robotic Mining Competition (NASA Kennedy Space Center), and Extra-Terrestrial Navigation with Particle Swarm Optimization (NASA Goddard Space Flight Center).

## EXECUTIVE COMMITTEE MEMBERS:

**Dr. Antoinette Galvin**, Director University of New Hampshire toni.galvin@unh.edu

David Heirtzler, Assistant Director University of New Hampshire david.heirtzler@unh.edu

Dr. James LaBelle

Dartmouth College

Dr. Eric Hoffman

Plymouth State University

Christine Barton

Community College System of NH

Jeanne Gerulskis

McAuliffe-Shepard Discovery Center

Brian Fitzgerald

Mount Washington Observatory

Katherine Reagan & Peter Bird

BAE Systems North America

- NHSGC is committed to diversifying the STEM workforce. Among directly funded student awardees this past year, 10% are underrepresented participants and more than 50% are women.
- Public outreach events include students and citizens across the state. AerospaceFest and Superstellar Fridays at MSDC, the MWO distance learning program, the WMCC STEM-Health Careers camp, Tech Camp and Project SMART at UNH, all allow K-12 students to gain hands-on research experience and get a taste of STEM careers and research. A wide range of NASA K-12 resources are also available through our website. For example, with the 50th anniversary of the Apollo missions in full swing this year, schools and libraries across the state can take advantage of the lesson plans and activities that NASA has to offer (http://www.nhsgc.sr.unh.edu/educ/apollo50.shtml).

### **BY THE NUMBERS: FY 2018**

NASA INTERNSHIPS FELLOWSHIPS & SCHOLARSHIPS

90

**UNH: 13** 

**PSU: 7** 

**DARTMOUTH: 23** 

**COMMUNITY COLLEGES: 47** 

DIVERSITY IN NIFS AWARDS

**UNDER-REPRESENTED MINORITY OR ETHNIC GROUPS** 

INFORMAL EDUCATION & PRE-COLLEGE

>24,000

**PARTICIPANTS STATEWIDE** 

### >8,500 K-12 STUDENTS >280 K-12 TEACHERS

engaged via:

McAuliffe-Shepard Discovery Center Aerospace Festival, STEM camps and clubs

**Mount Washington Observatory** 

Science of Weather and Climate Programs

**University of New Hampshire** 

Project SMART and Tech Camps (with BAE);

**BAE Systems of NA** 

Focus and WIT Programs and FIRST Robotics Sponsorships

Community College System of NH

Tech career days and STEM camps.

NH STEM STUDENT INTERNSHIPS AND CAREER PLACEMENTS



LONZ



















#### **New Hampshire Space Grant Affiliates**

- 1 University of New Hampshire, Durham
- 2 Dartmouth College, Hanover
- 3 Plymouth State University, Plymouth
- 4a Mt. Washington Observatory, Mt. Washington
- 4b Mt. Washington Weather Discovery Center, North Conway
- 5 McAuliffe-Shepard Discovery Center, Concord
- 6a White Mountains Community College, Berlin
- 6b White Mountains Community College, Littleton 6c White Mountains Community College, North Conway
- Lakes Region Community College, Laconia
- 8a River Valley Community College, Lebanon
- 8b River Valley Community College, Claremont
- 8c River Valley Community College, Keene
- Manchester Community College, Manchester
- 10 NH Technical Institute, Concord
- 11 Nashua Community College, Nashua
- 12 Great Bay Community College, Portsmouth
- BAE Systems of N.A., Nashua
- 13c BAE Systems of N.A., Hudson



6b Littleton

Berlin 6a

#### TESTIMONIALS FROM GRANT RECIPIENTS

This program absolutely helped to change the trajectory of my life. Not only have I been allowed the honor and privilege to attend college with the help of this grant, but I have also been able to spread awareness and advocate for science, technology, engineering and math within my community, my county, and my state. The Space Grant has also increased my confidence to work with all ages K through 12. More recently, I am working in microbiology and biological sciences and advocating for STEM in early education, and also in high school education."

> Colleen Ross, 2015-2017 Scholarship recipient, River Valley Community College

\* | believe that science belongs to everyone. When we share strong science, we open discussions of climate change, conservation, and environmental policy to a wider audience, encouraging more people to take interest and participate, inspiring a greater movement for change."

Tamara Marcus, 2017 Graduate Fellowship recipient, University of New Hampshire