

# New Hampshire Space Grant 2023

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, creating 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 was established in 1991 as a collaboration between the University of New Hampshire (UNH) and Dartmouth College. The Consortium has since expanded to include seven institutions at 20 locations throughout 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)
- 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:
  - ★ Fellowship support for graduate student research at UNH in soil ecology, methane production in thawing permafrost, and the Earth's magnetosphere, and at PSU, applied meteorology;
  - ★ Graduate assistantships in physics, earth science, computer science, and engineering at Dartmouth College, as well as symposia and hands-on experience for undergraduate women in STEM;
  - \* Mentorship and teaching experience for undergraduates through UNH Tech Camps and MSDC STEM Camp;
  - ★ Scholarships for dozens of diverse STEM-career students through CCSNH; and
  - ★ Travel to the American Geophysical Union and American Meteorological Society annual meetings, and Lunar & Planetary Science conferences, among others.
- NHSGC is committed to diversifying the STEM workforce and has consistently met Consortium-wide funding goals for STEM-underrepresented groups.
- Public outreach events include students and citizens across the state. AerospaceFest (PSU's demonstration booth seen in the photo at top) and summer STEM camps as well as innovative new collaborations between area tech high schools, dozens of distance learning programs, 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 and outreach resources are also available through our newly-reorganized website.

## EXECUTIVE COMMITTEE MEMBERS:

Dr. Antoinette Galvin, Director University of New Hampshire

- David Heirtzler, Assistant Director University of New Hampshire
- Dr. James LaBelle

Dartmouth College

Dr. Eric Hoffman Plymouth State University

Lisa Clark

Community College System of NH

Jeanne Gerulskis

McAuliffe-Shepard Discovery Center

#### **Brian Fitzgerald**

Mount Washington Observatory

#### Peter Bird

BAE Systems North America

NASA INTERNSHIPS, FELLOWSHIPS, SCHOLARSHIPS, AND RESEARCH AWARDS 1114 UNH: 13 PSU: 15 DARTMOUTH: 24 COMMUNITY COLLEGES: 60 MSDC: 2	DIVERSITY IN DIRECT-FUNDED AWARDS 51% FEMALE 17% UNDER-REPRESENTED	<ul> <li>NEW HAMPSHIRE SPACE GRANT CONSORTIUM AFFILIATE LOCCATIONS</li> <li>University of New Hampshire, Durham (I)</li> <li>Dartmouth College, Hanover (2)</li> <li>Plymouth State University, Plymouth (2)</li> <li>Mt. Washington Observatory, Mt. Washington (I)</li> <li>McAuliffe-Shepard Discovery Center, Concord (2)</li> <li>White Mountains Community College, Berlin (2)</li> <li>White Mountains Community College, Littleton (2)</li> <li>White Mountains Community College, Littleton (2)</li> <li>White Mountains Community College, Loconia (I)</li> <li>River Valley Community College, Lebanon (2)</li> <li>River Valley Community College, Claremont (2)</li> <li>Manchester Community College, Keene (2)</li> <li>Manchester Community College, Manchester (I)</li> <li>NH Technical Institute, Concord (2)</li> </ul>
INFORMAL EDUCATION & PRE-COLLEGE		1) Nashua Community College, Nashua (2)       Berlin 6a         12a Great Bay Community College, Portsmouth (1)       Berlin 6a         12b Great Bay Community College, Stratham (1)       6b         13a BAE Systems of N.A., Manchester (1)       6b
22,000+ Participants Statewide, including 11,000+ K-12 Students		<ul> <li>BAE Systems of N.A., Nashua (2)</li> <li>BAE Systems of N.A., Hudson (2)</li> <li>BAE Systems of N.A., Hudson (2)</li> <li>Ist Congressional District (1)</li> <li>2nd Congressional District (2)</li> <li>Direct-funded students in CD 1: 43</li> <li>Direct-funded</li> <li>Ebanon</li> </ul>
<ul> <li>engaged via:</li> <li>McAuliffe-Shepard Discovery Ctr.</li> <li>Aerospace Festival, STEM camps and clubs</li> <li>Mount Washington Observatory</li> <li>Science of Weather and Climate</li> <li>Programs</li> <li>University of New Hampshire</li> </ul>		students in CD 2: 70 8 Claremont Concord 5 10 Durham 1 Portsmouth (22) 8 Keene 10 10 10 10 10 10 10 10 10 10

### NEW HAMPSHIRE SPACE GRANT ALUMNI HIGHLIGHTS

# 88.5% of tracked student participants have gone into STEM disciplines as their next step!

"I experienced, first-hand, that research can push time and personal boundaries, which helped me learn about how I handle tough situations. Motivation, discipline, time management, a passion for my work, and customer service are critical to my success as an earth and environmental scientist. I discovered that being a full-time researcher is not a career path of interest for me, but that is ok because the work funded by this grant will help guide me to a different path that will also make a difference."

Tech Camps

Megan Wimsatt, University of New Hampshire 2023 Space Grant Graduate Fellowship "The NH Space Grant has given me an opportunity to focus on my research interests while working towards a doctorate degree in space physics. This grant also motivates me to set and achieve higher goals. It reminds me that my work could be important on a much larger scale than the department that I work in from day to day, and illuminates the amazing results that can come from the cooperation of STEM fields."

> Tedi Godfrey, Dartmouth College 2022 Space Grant Fellowship, 2023 New Hampshire Space Grant Fellowship

Nashu

Hudson