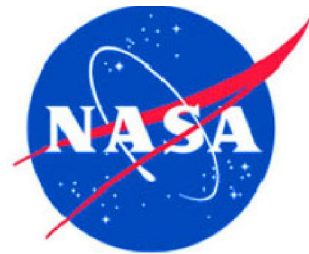


NSGA



National Space Grant Alliance

Request for FY 2016 Appropriations

- \$40 million, current funding level.
- Support for the entire appropriated amount to be allocated to the states so that consortia may competitively distribute the funds within the state to meet local, regional, and national needs.

INSPIRING AND PREPARING THE NEXT GENERATION OF EXPLORERS AND INNOVATORS

SPACE GRANT OVERVIEW

Established by Congress in 1988 to "Inspire the next generation of explorers," NASA's National Space Grant College and Fellowship Program is a powerful national grassroots network that significantly contributes to America's critical science, technology, engineering and mathematics (STEM) workforce. Space Grant is a vital part of NASA's Education portfolio and capitalizes on the excitement of space to enhance STEM education and retain students in STEM fields.

Space Grant is a competitive grant program, enabling the active involvement of the entire country in NASA activities through its national network of 52 consortia in 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. Space Grant supports and enhances science and engineering education and research efforts for educators and learners by leveraging the resources, capabilities, and technologies of NASA and over 1,000 affiliates from universities, colleges, industry, museums, science centers, and state and local agencies.

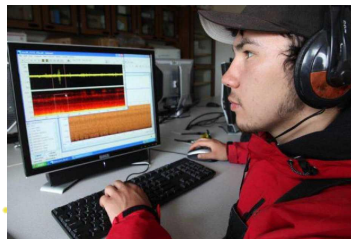
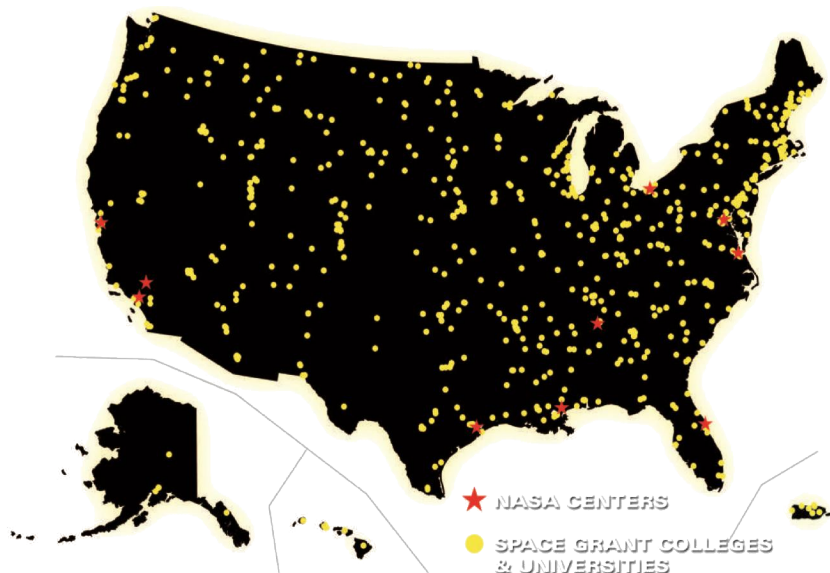
STUDENT AND EDUCATOR ENGAGEMENT AND SUPPORT

Longitudinal tracking shows that 89% of students who were significantly supported by Space Grant and graduated in 2010 are now active in STEM jobs with NASA, industry and academia, or are pursuing advanced STEM degrees.

Space Grant proactively assists high-potential young faculty in advancement toward becoming NASA Principal Investigators and effective partners with NASA centers and contractors.

Space Grant is a vital component to the National effort to ensure a STEM enabled workforce. In FY 2013, Space Grant provided direct support for 11,722 undergraduate and graduate students in scholarships, fellowships, internships and authentic hands-on research and engineering challenges. Diversity is a key component within the Space Grant program, achieving 26% participation of underrepresented students, and 40% participation of female students in Space Grant activities.

- Educators are an important target audience of Space Grant with 32,883 educator's participating in Space Grant education activities in 2013.
- Through NASA relevant informal education activities, web-based activities, and other instructional and enrichment activities, over 321,000 precollege students were reached.



Alaska Space Grant student Carlton Hautala scans underwater recordings from the central Aleutian Islands. As part of an introductory bioacoustics class at UAF, Hautala learned to use search algorithms to detect and classify acoustic signals of whales.

Over 1,000 Affiliates of the 52 Space Grant Consortia work to ensure that our nation is actively committed to promoting a strong vision for the future workforce of space exploration.

Learn more at:

www.spacegrantalliance.org



SUSTAINING NATIONAL COMPETITIVENESS:

As Space Grant implements its mission-critical activities – Education, Research, Public Outreach, Current and Future Workforce Engagement – it is establishing and maintaining a pipeline of future innovators, explorers, technical professionals and a supportive public community that allows the U.S. to sustain and grow its competitive lead in aeronautics and space.

MEETING STATE, REGIONAL AND NATIONAL GOALS

Space Grant's state-based programs and activities are aligned with National priorities. All activities conducted by the 52 consortia are in alignment with NASA goals, the Office of Education lines of business, as well as the National Science Technology Council (NSTC) CoSTEM priority areas. Space Grant awards have components in Scholarships/Fellowship/Internships, Higher Education, Research Infrastructure, Precollege, and Informal Education. This includes activities centered on undergraduate STEM retention rates, and increasing the number of qualified K-12 STEM educators, aligned with the President's Council of Advisors on Science and Technology (PCAST) goals to strive for one million STEM graduates and 100,000 new STEM middle and high school teachers over the course of the next ten years. Space Grant consortia also supported flight project activities led by student teams, including: CubeSat Launch Initiative, Rock-on Workshop, Rock-Sat-C, Rock-Sat-X, DemoSat, and High Altitude Student Platform (HASP).

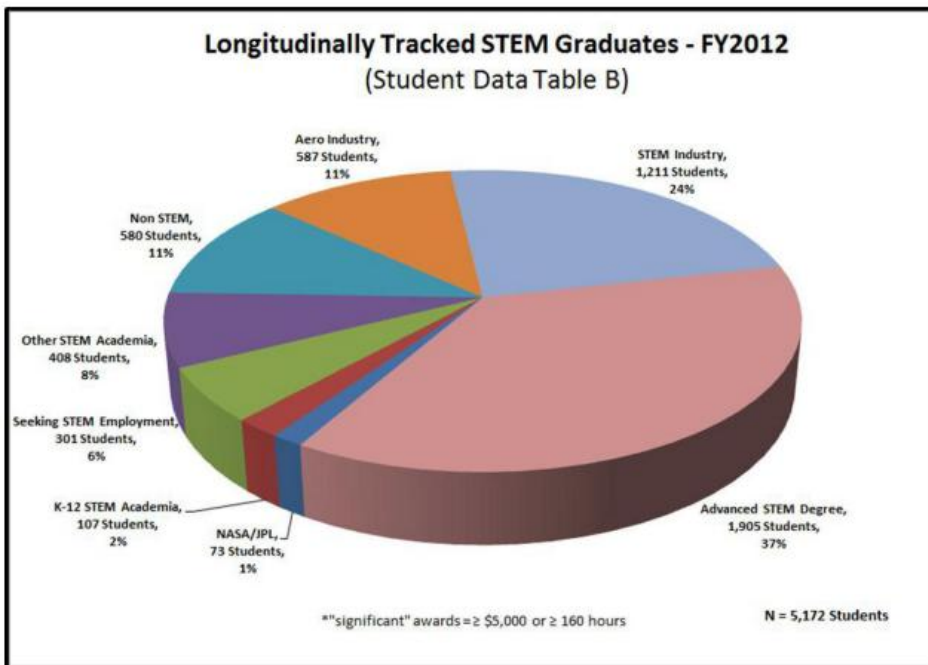
FY 2016 INITIATIVES

A key element of Space Grant's success is its national collaborative network of NASA center scientists and recognized STEM researchers and educators who dedicate their time and effort to mentor students and strengthen their STEM experience at multiple levels toward a career in STEM.

In FY 2016, NASA's 52 state-based Space Grant Consortia will:

- Provide hands-on experiences for U.S. graduate and undergraduate students to prepare them for the future workforce and/or academic careers;
- Conduct programs and projects that align with the NASA Education priorities, CoSTEM, missions and state-specific needs to build upon the education pipeline in higher education, research infrastructure, precollege and informal education;
- Promote a strong STEM education base from elementary through secondary levels by preparing teachers in these grade levels to become more effective at improving student academic outcomes;
- Continue to build upon and maintain the existing national network of universities with interests and capabilities in aeronautics, space and related fields; and
- Leverage the opportunities emerging from the NASA Education strategy to develop high-impact, nationwide partnerships.

NASA's SPACE GRANT PROGRAM IS A KEY PLAYER IN AMERICA'S STEM PORTFOLIO



The figure above shows the status of 5,172 students who were longitudinally tracked in 2012 after taking their next step from Space Grant. Of the 5,172 STEM graduates, 1,905 or 37 percent of the graduates are currently pursuing advanced STEM degrees. Data Source: NASA FY 2016 Budget Request

SPACE GRANT IS A COMPETITIVE FEDERAL STATE-BASED PARTNERSHIP

NASA solicits Space Grants through full and open competition for proposals accepted from Space Grant consortia in each state, Washington D.C., and the Commonwealth of Puerto Rico. Each consortium program must demonstrate state needs and alignment with education objectives that align with NASA strategic goals. Awards are based on peer reviews by external panels that evaluate performance, and internal/external panels that assess performance, merit, and alignment to Agency education, research, and technology goals. Awards are typically for five years.

Consortia submit annual performance data, student profile and award information (for students who meet the longitudinal tracking threshold), project information, and other performance data. Space Grants also undergo comprehensive program reviews very five years.