

OSGC Undergraduate Team Experience Award Program 2016-17

Call for Proposals

Release Date: November 29, 2016 Proposals Due: January 13, 2017



Introduction

Student teams at Oregon Space Grant Consortium's (OSGC) affiliated institutions are invited to submit proposals to the OSGC Undergraduate Team Experience Award Program. The intent of the Undergraduate Team Experience Award Program is to fund student-led, research projects that develop diverse, capable, and prepared human capital in aerospace related science, technology, engineering, and mathematics (STEM) disciplines and provide a unique student team experience. Projects should be hands-on STEM based research projects that support NASA's vision to reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind, relevant to the NASA Mission Directorates. Preference will be given to projects that lead to participation in national and international student competitions. Potential projects include but are not limited to the NASA Micro-g NExT Opportunity, NASA University Student Launch Initiative, AIAA Experimental Sounding Rocket Association Intercollegiate Rocket Engineering Competition, NASA Robotics Mining Competition, Mars Society University Rover Challenge, and the RockOn!, RockSat-C, or RockSat-X NASA Wallops Programs. Participation of female and underrepresented minorities in the STEM fields is strongly encouraged. Teams are encouraged to conduct K-12 outreach activities in association with their research projects.

Amount and Duration of Awards

A total of \$55,000 will be competitively awarded to student teams for the 2016-17 funding cycle. If awarded, all work must be completed by June 30, 2017.

Proposal Guidelines

- Teams may submit requests for funding up to \$15,000 per team. A minimum 2-to-1 match obligation is required. Matching funds include donations, discounts, team travel contributions, and faculty advisor time from non-federal sources.
- Funding requests may include supplies, parts, registration fees and/or lodging accommodations related to the project competition. Airline tickets may not be included in the proposal; students are responsible for their own flights to travel to a related competition. No equipment purchases (over \$5,000) are allowed under this program.
- Expenditures for foreign travel are prohibited.

Note: Oregon Space Grant Consortium's obligation to make awards is contingent upon availability of funds from the NASA National Space Grant College and Fellowship Program.

Eligibility

- Recognized student teams from OSGC affiliate institutions are eligible to apply.
- All students participating in the project must be enrolled at an Oregon Space Grant affiliate institutions. The list of OSGC affiliate institutions is found on the OSGC website at http://spacegrant.oregonstate.edu/members-oregon-nasa-space-grant-consortium.
- Participation of female and underrepresented minorities in the STEM fields is strongly encouraged.
- All students participating in the project must be U.S. citizens.

Proposal Requirements

Proposals should be no less than single-spaced, using standard $8\frac{1}{2} \times 11$ paper, in font not smaller than 12-point with a minimum of 1" margins. All pages must be numbered sequentially.

- Cover Page (Page limit: As needed): Include Project Title/Team Name, Institution, Team Lead (name, address, phone, and email), Team Faculty Advisor/Mentor (name, address, phone, and email), and Date of Submission.
- Project Description (Page limit: 3 pages): Succinctly describe the research that the team is proposing including methodologies and approaches. Summarize the scholarly and creative aspects of the project and how this supports your educational objectives. What are the expected outcomes from your research (e. g. senior thesis, participation in industry competition, increased understanding of research, art exhibition, etc.), and how will you achieve these outcomes?
- Synergy (Page limit: 2 pages): Describe the aspects of the project that enhance the collaborative learning experience between your team and your project advisor. Describe any leveraging opportunities the project will provide for funding or further research. Will the project lead to additional opportunities for either the team or the advisor that would not have otherwise been developed, or is the activity being used as a mechanism to fund a project such as a senior thesis?
- Aerospace Relevancy (Page limit: 1 page): Briefly describe how your research supports the mission of NASA and how it is tied to one or more of NASA's Mission Directorates. See Appendix A. Strategic Framework for NASA or for a detailed description of NASA's mission, history, and future plans, visit the NASA Headquarters website at http://www.nasa.gov/about/highlights/what does nasa do.html.
- Budget (Page limit: As needed): The budget must reflect a clear alignment with the content and text of the proposal. Include matching support as a separate column.
- Team lead's current resume (Page limit: 2 pages).
- List of team members (Page limit: 2 pages): Include names of student team members and summary of demographics number or percentages of male/female students, underrepresented minority students in STEM, and students with military experience.
- Letter of support from the team's Faculty Project Advisor/Mentor (Page limit: 2 pages).

Deliverables if Awarded

- Team Letter of Acceptance: Team agrees to sign a letter of acceptance providing 1) the team lead name and contact info; 2) the point of contact with Space Grant if different than the team lead; 3) a complete list of all team members who are significantly involved with the project; 4) verification of team members' US citizenship; and 5) signature from the team's mentor agreeing to the accepted responsibilities and deliverables of the award.
- Student Profile Form: All team members who are significantly involved with the project must complete an online Student Profile Form. This information is used for longitudinal tracking purposes, to evaluate the effectiveness of NASA's higher education programs.
- Final Report: A final report describing the execution of the project, the outcome of the competition, evaluation and analysis of the results, budget expenditures including match funds, and list of publications arising from the work is due July 30th of the awarded year.
- OSGC must be cited as a source of funding in all publications resulting from the team's work using the phrase "...supported in part through NASA/Oregon Space Grant Consortium, grant NNX15AJ14H".
- The team agrees to notify OSGC of any changes in mailing address, email, and telephone number for contact purposes.
- The team grants permission to release and/or publish requested recipient information to NASA or other appropriate parties.
- Student Symposium: The team agrees to provide both a poster and presentation for participation in the annual OSGC Student Symposium, scheduled for November of the awarded year.

Submission Guidelines

Submit an electronic file of the complete package with signatures (Microsoft Word or PDF) via email to: Catherine Lanier, Associate Director, OSGC Catherine.Lanier@oregonstate.edu

Schedule of Awards

Award announcements will be made no later than January 27, 2017.

Appendix A. Strategic Framework for NASA

I. NASA's Vision

NASA's vision to reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind draws support from four principal organizations, called Mission Directorates, each with a specific responsibility.

II. NASA's Mission Directorates

- <u>Aeronautics Research</u>: works to solve the challenges that still exist in our nation's air transportation system: air traffic congestion, safety and environmental impacts. http://aerospace.nasa.gov/
- Human Exploration and Operations: focuses on International Space Station operations, development of commercial spaceflight opportunities and human exploration beyond low Earth orbit. http://www.nasa.gov/directorates/heo/home/
- <u>Space Technology</u>: rapidly develops, demonstrates, and infuses revolutionary, high-payoff technologies, expanding the boundaries of the aerospace enterprise. http://www.nasa.gov/directorates/spacetech/home/index.html.