



Oregon NASA Space Grant Consortium

Affiliate Faculty Research Incubator Program (AFRIP)

Proposals Due: *11:59 PM last day of each month*



Oregon NASA Space Grant Consortium
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Phone: 541.737.2414 Fax: 541.737.9946
<http://www.spacegrant.oregonstate.edu>

Funding Opportunity Description

1. Introduction

The Oregon NASA Space Grant Consortium (OSGC) is accepting proposals for the Affiliate Faculty Research Incubator Program (AFRIP). OSGC is a participant of the *NASA National Space Grant College and Fellowship Program (Space Grant)* dedicated to building, sustaining, and deploying a skilled, high-performing, and diverse workforce meeting the current and emerging needs of NASA and the nation. A critical point in the student education pathway is access to faculty engaged with research and education efforts aligning with NASA's workforce needs. The traditional way faculty have engaged students with hands-on research experiences has been to serve as a Principle Investigator of a NASA research award and to provide limited-scope research projects to be conducted by undergraduate or graduate students. Over the past decade, fewer NASA awards have been granted to OSGC faculty and hence the pool of student research projects has dwindled. To compensate, OSGC has strategically expanded the number of OSGC students funded for summer NASA Center internships where they are mentored by a NASA researcher to work on a project relevant to that Center's mission. This OSGC NASA Internship effort has been an unqualified success. Attention is now needed to sustain and increase the involvement of OSGC affiliated faculty who recruit and educate STEM undergraduates. Such an effort will help build student academic work resumes and qualify the students for NASA internships. OSGC is experiencing the same "aging" workforce problem facing much of the aerospace industry. Many of the OSGC faculty who have been highly successful mentors are approaching the end of their working careers and new faculty need to be recruited to fill the void. The first step in this process is to provide a limited funding base to entice faculty to work on NASA research questions, thereby giving an opportunity for undergraduate STEM majors to experience research and gain specific skillsets needed for NASA internships. This funding opportunity is structured to be fluid, enabling faculty to take advantage of windows of opportunity and become engaged with a NASA research question at the earliest moment. The OSGC Affiliate Faculty Research Incubator Program goal is to act as a path to develop "internship ready" OSGC students for the NASA education pipeline and to prepare young faculty to leverage the experience into a potential full-scale NASA research award.

1.1 Goals and Objectives

The goal of the OSGC Affiliated Faculty Research Incubator Program is to recruit additional faculty to become involved with the Oregon Space Grant Consortium and to provide basic resources needed to develop authentic hands-on student experiences in science and engineering disciplines. Such experiences include the incorporation of active participation by students in hands-on learning or practice with experiences rooted in NASA-related, STEM-focused questions and issues, and the incorporation of real-life problem-solving. The OSGC priority for NASA-related activities means focus on projects supporting the efforts of NASA Mission Directorates in the following order: Science Mission Directorate, (SMD), Space Technology Mission Directorate (STMD), Human Exploration and Operations Mission Directorate (HEOMD), and Aeronautics Research (AR).

1.2 Eligibility

Proposals will be accepted from Oregon Space Grant Consortium affiliate member institutions. Beyond the normal approval of the institution's Authorized Organization Representative, each proposal must include an approval signature of the OSGC Affiliate Representative. For a list

of eligible institutions and Affiliate Representatives, visit:

<https://spacegrant.oregonstate.edu/members-oregon-nasa-space-grant-consortium>

1.3 Availability of Funds and Period of Performance

Oregon Space Grant Consortium's ability to make awards is contingent upon the availability of awarded funds from the NASA Office of STEM Engagement. During the period of February 22, 2020 through June 30, 2021, a total of \$50,000 has been allocated to this program. OSGC anticipates making up to 4 -6 awards ranging between \$5,000 to \$15,000 each.

1.4 Schedule of Awards

Selection notifications will be communicated electronically from Oregon Space Grant Consortium to the institution's Authorized Organization Representative (AOR), the Principal Investigator (PI) and the institution's OSGC Affiliate Representative.

2. Proposal Format Guidance

- Cover Pages (*Page limit: As needed*)
- Proposal Executive Abstract (*Page limit: 1*)
- Principal Investigator (PI) Curriculum Vitae (*Page limit: 2*)
- Body of Proposal (*Page limit: 5*)
- Appendices (*Page limit: As needed*)
 - Budget Table
 - Narrative and Details
 - Milestones

General Format: Proposals shall use standard size 8 ½" x 11" paper with at least a 12-point font with a minimum 1" margin on all sides of each page. Proposals shall use an easily readable font such as Times New Roman, Calibri, Arial, Helvetica, Georgia or Garamond. Illustrations, tables and charts shall not be smaller than an 8-point font.

2.1 Proposal Content (required information)

Cover Pages (*Page limit: As needed*)

Principal Investigator (PI)/Institution OSGC Affiliate Representative's information (address, phone, email), proposal title, total amount requested, period of performance, submitting institutional information, and appropriate signatures.

Proposal Executive Abstract (*Page limit: 1*)

This section shall concisely describe the content and scope of the project and identify the objective(s), methodology, and intended results.

Body of Proposal (*Page limit: 5*)

The proposal shall demonstrate how the research project and activities provide:

- Basic resources needed to develop authentic hands-on student experiences in science and engineering disciplines
- Experiences rooted in NASA-related, STEM-focused questions and issues, and the incorporation of real-life problem-solving
- Experience associated with which of the following NASA mission directorates: Science Mission Directorate, (SMD), Space Technology Mission Directorate (STMD), Human Exploration and Operations Mission Directorate (HEOMD) and Aeronautics Research (AR)

2.1.1 Required Appendices

Budget: Narrative and Details (Page limit: As needed)

Provide a budget spreadsheet for the proposed work. A budget narrative/description is also required and shall accompany the spreadsheet. The proposed budget shall be adequate, appropriate, reasonable, realistic, and demonstrate the effective use of funds to align with the proposed projects.

- The budget shall reflect clear alignment with the content and text of the proposal.
- The budget shall contain sufficient cost detail and supporting information to facilitate a speedy evaluation and award. In order to expedite the evaluation of the proposal, it is highly recommended that the proposal text reference specific and consistent budget categories and vice-versa.
- Direct labor costs shall be separated by titles (e.g. director, program manager, program coordinator, graduate research assistant, clerk, etc.) with estimated hours, hourly rates, and total amounts of each.
- Other costs (with each significant category detailed) shall be explained in reasonable detail and substantiated whenever possible.
- Domestic travel shall include the purpose, the number of trips and expected location, duration of each trip, airfare, and per diem. Domestic travel shall be appropriate and reasonable to conduct proposed activities. Foreign travel is not permitted under this OSGC program.

Budget Restrictions

Equipment purchases shall not be made using OSGC funds. According to **2 CFR 200.33**, the definition of equipment is: *Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or \$5,000. See also §§200.12 Capital assets, 200.20 Computing devices, 200.48 General purpose equipment, 200.58 Information technology systems, 200.89 Special purpose equipment, and 200.94 Supplies.*

2.2 Proposal Evaluation Criteria

Proposals will be reviewed and evaluated by OSGC staff for compliance with this request for proposals and by a review panel appointed by the OSGC Director. Award decisions are made by the OSGC Director. All sections of the proposal (see Proposal Content section, Section 2.1) will be individually evaluated. Quality of content and adherence to specified format as described in the solicitation will be considered. Funding will not be awarded unless the proposal meets all solicitation requirements.

2.3 Annual Progress Reports, and Final Reports

The Principal Investigator shall provide an annual performance report to the OSGC Director. This report shall include a Student Data Table and Expenditure Summary (template will be provided by OSGC). For awards of less than one-year duration, the annual report will serve as final project report. For multi-year awards, the final close-out report will contain a summary of overall program achievements, expenditure report, and shall by reference include all submitted annual reports.

In addition, should articles be published in peer-reviewed journals or papers from conferences arise from the work, OSGC shall be contacted so the work can be made accessible to the public through NASA's PubSpace at <https://www.nihms.nih.gov/db/sub.cgi>. PubSpace provides free

access to NASA-funded and archived scientific publications. Research papers will be available within one year of publication to download and read.

2.4 Proposal Submission Instructions

All proposals shall be submitted via email attachment to the OSGC Director:

Jack.Higginbotham@oregonstate.edu.

Proposal Submission Date and Time: Proposals are received and reviewed throughout the calendar year. Awards are made on a monthly basis. Proposals are due by 11:59 p.m. (PDT) on the final day of each month.

2.5 Inquiries

Inquiries regarding the submission of proposal materials should be addressed to:

Jack Higginbotham, Ph.D.

Director, Oregon Space Grant Consortium

Jack.higginbotham@oregonstate.edu

542-737-9949