



## **Virginia Space Grant Consortium**

### **New Investigator Program Request for Proposals**

**Proposals Due: March 1, 2019**

**Award Period: June 1, 2019 – May 31, 2020**

*Note: Research must be completed within the award period. No extensions can be permitted beyond the award period.*

## **Summary**

The New Investigator Program is designed to strengthen Virginia's research infrastructure by providing startup funding to Virginia Space Grant university personnel who are conducting research that is directly aligned with NASA's mission. NASA's research interests embrace a wide range of science, engineering, computational and other disciplines. This opportunity is available to those who have yet to become established researchers. **Awardees must be tenure track faculty who are within the first five years of their academic careers and they must be U.S. citizens or Lawful Permanent Resident as defined by the United States Citizenship and Immigration Services.** Faculty may propose research within the full range of NASA's missions and activities.

## **Background**

The Virginia Space Grant Consortium (VSGC), established in 1989, is an active member of the NASA National Space Grant College and Fellowship Program. VSGC has five university members: *College of William and Mary; Hampton University; Old Dominion University; University of Virginia and Virginia Tech*. NASA members include: *NASA Langley Research Center and NASA Wallops Flight Facility*. State agency members are: *Virginia Department of Education; State Council of Higher Education for Virginia; Virginia Community College System; Science Museum of Virginia and Center for Innovative Technology*. Other members are: *Math Science Innovation Center of Richmond and the Virginia Air and Space Center* in Hampton. The Consortium seeks to promote science, technology, engineering and mathematics (STEM) education, research and workforce development in the Commonwealth through faculty and student programs; scholarships, fellowships, and internships; teacher professional development programs; public programs and programs to build university research infrastructure.

## **I. Project Overview and Guidelines**

### **A. Award Range**

Virginia Space Grant Consortium anticipates making five awards with the maximum individual award of up to \$10,000, pending anticipated NASA funding. Proposing institutions are required to provide 1:1 non-federal cost matching. In other words, if \$10,000 is requested from Virginia Space Grant Consortium, then \$10,000 must be provided as match. Note that indirect costs may not be charged for this award; however, they may be included as unrecovered IDC costs as part of the match requirement.

### **B. Eligibility**

The competition is open to tenure track faculty at Virginia Space Grant Consortium university member institutions: Virginia Tech; University of Virginia; Old Dominion University; Hampton University; and College of William and Mary. **Awardees must be in the first five years of their academic career.** Individuals must be qualified to serve as a principal investigator at their respective institution and be a U.S. citizen or Lawful Permanent Resident. Any student supported with award funds must also be a U.S. citizen or Lawful Permanent Resident. Virginia Space Grant Consortium encourages proposals from females, members of underrepresented minority groups, and persons with

disabilities. Submission is limited to one proposal per investigator; *an investigator may receive only one Virginia Space Grant Consortium New Investigator Program award in her/his academic career.*

*Note: Research must be completed within the award period. No extensions can be permitted beyond the award period.*

## **II. Proposal Content**

### **A. Title Page (1 page)**

The cover page must include the following items: project title; period of performance June 1, 2019 – May 31, 2020; PI name; institution; address; phone; fax; and email. A brief description of the proposed research initiative and concurrence signatures from the Principal Investigator and the Authorizing Official of the proposing institution and the program name (Virginia Space Grant Consortium New Investigator Program) must also be included.

### **B. Project Description (5 pages maximum)**

The PI is expected to use these discretionary funds to further establish his/her professional career through new research or expansion of existing research. Examples of things to consider include: support for graduate or undergraduate students; publication costs; travel funds to establish collaborative relationships with NASA/industry researchers; regional/national travel costs to conferences and meetings; summer salary support; and/or disposable research materials (not an all-inclusive list). Funds may not be used to purchase equipment. This section of the proposal should include the following:

- Detailed description of the proposed research;
- Relevance of proposed research to NASA's Mission;
- Number of students supported through research efforts;
- Description of how funding will impact investigator's career; and
- Description of past projects or student funding supported by Virginia Space Grant Consortium (if applicable).

### **C. Vita (2 pages)**

Include a vita for the proposed Principal Investigator of no more than two pages.

### **D. Support Letters (2 letters)**

Include a letter of support and commitment from each of the following:

- 1) Research colleague - this letter should emphasize the importance of the proposed research to the field, as well as the ability of the PI to conduct research.
- 2) Department Head or Research Center/Laboratory Director – this letter should outline the importance of the proposed research to the department and the direction of the university.

### **E. Budget and Budget Narrative (2 pages)**

Provide a detailed budget using the format outlined in Appendix A along with a budget

narrative. Each budget should include expense summaries as well as the 1:1 non-federal cost match requirement. Specific budget details are noted below:

- Direct salary expenses for PI and students should be separated by titles or disciplines with hours or percentage of effort, and total amounts for each position. All individuals, including students, supported with Virginia Space Grant Consortium funds must be U.S. citizens or Lawful Permanent Residents.
- Proposed travel should include the number of trips, destination, duration, etc. International travel is not allowed.
- Facilities and administrative indirect costs. Unrecovered facilities and administrative costs may be used for required cost matching. The detailed budget must include a description of the required 1:1 (100%) non-federal matching funds.
- The NASA Grant and Cooperative Agreement Handbook, Sections A and B, located at <http://ec.msfc.nasa.gov/hq/grcover.htm>, provides additional information on uniform administrative requirements for grants and cooperative agreements with institutions of higher education.

#### **F. Current and Pending Support**

Identify current and pending support of the Principal Investigator, including: source of support; project title; amount of award; period covered by award; months or percent of time committed by the investigator during the award period; and location of research.

### **III. Proposal Format**

The following guidelines and restrictions apply to all proposals. Proposals not meeting these requirements may not be considered.

- Proposals should be one-sided, single-spaced on standard 8 1/2 x 11 paper, no smaller than 12-point font and with no less than one-inch margins throughout. Illustrations, tables, charts, exhibits, etc. should not contain less than 10 point font text.
- All pages must be numbered sequentially.
- Proposals should contain only appendices and attachments specifically called for.
- All information you wish for reviewers to consider should be included in your proposal. It is not acceptable to refer reviewers to websites or other external sources for additional information or as evidence for your narrative. Additional appendices and attachments are not allowed.

## **IV. Proposal Submission**

The proposal should be submitted electronically by March 1, 2019. Email one complete PDF file to vsgc@odu.edu. The PDF file **must** contain all required signatures.

General questions as well as questions concerning alignment with NASA research interests should be addressed to Mary Sandy, VSGC Director, [msandy@odu.edu](mailto:msandy@odu.edu). The Consortium's phone number is 757-766-5210.

## **V. Proposal Review and Evaluation**

Proposals will be reviewed by a panel of individuals who are scientifically literate, but not necessarily experts, in the proposed field of research. Proposals will be grouped into "research areas" based on information provided by the PI during proposal submission.

Parameters have been established by the Virginia Space Grant Consortium for evaluation in the following major areas:

- Research plan (30%);
- Alignment of research to NASA's Mission (30%);
- Budget alignment to research plan (15%);
- Professional letter of support from research colleague; commitment by PI's institution to the investigator and the proposed research as indicated by the letter of support from the university and/or cost matching (15%);
- Compelling case for the need for this support to further the investigator's research career (10%).

## **VI. Reporting Requirements**

### **Final Report**

A final report is due July 1, 2020. This report must contain the following:

- 1) Executive summary of the project that is suitable for publication. The executive summary should be no more than 250 words.
- 2) Statement on how funding assisted the investigator.
- 3) List of papers submitted for publication during the period of this award. Include title, publication, date of publication, author list, and a copy of the paper.
- 4) List of all presentations delivered during the period of this award. Include presentation title, location, date, and a copy of the presentation.
- 5) List of all conferences attended during the period of this award. Include conference title, location, dates, and if investigator presented.
- 6) List of all proposals submitted during the period of this award. Include proposal title, announcement of opportunity title, name of sponsor, proposal due date, role of investigator, and funding status.
- 7) List of all patents that were applied for and/or approved during the period of this award.

- 8) List of pending and actual support for investigator. Include source, PI, % time, and role of investigator.
- 9) Budget summary that details all project expenditures and includes a comparison of the proposed budget to actual expenditures for all budgeted categories.
- 10) Signed statement of cost sharing from PI's Office of Sponsored Programs.

## **VII. Other Requirements**

### **A. Acknowledgment of Support**

An acknowledgment of Virginia Space Grant Consortium support (logo and written) must appear in all publications of any material based on this funding in the following terms: "Supported by the Virginia Space Grant Consortium." The VSGC logo can be downloaded from [www.vsgc.odu.edu](http://www.vsgc.odu.edu).

### **B. Post Award Reporting Requirements**

Awardees may be asked to present a seminar on their research activities to another Space Grant University and/or NASA Center.

### **C. Audit and Records**

Financial records, supporting documents, statistical records, and other material pertinent to this grant shall be retained by the grantee for a period of at least three years after the final payment following submission of the final project report and shall be made available to Virginia Space Grant Consortium, the Old Dominion University Research Foundation and/or NASA upon request.

### **D. Payment**

Funding will be provided at the time of the award and will be issued through the Old Dominion University Research Foundation (ODURF) to the Office of Sponsored Programs at awardee institution. A full accounting of funds, including required match, must be included with the final report to VSGC and ODURF no later than July 1, 2020.

### **E. Notification of Absence**

Virginia Space Grant Consortium shall be notified prior to the Principal Investigator's absence from campus for a period of four months or more. Prolonged absences from the campus for non-project related purposes are subject to Virginia Space Grant Consortium review.

### **F. Transfer of Awards**

If the principal investigator leaves the grantee institution or otherwise relinquishes active direction of the project, the institution must notify VSGC as soon as possible and the award will be terminated. Awards may not be transferred if the PI leaves the grantee institution to another institution that is not an active academic member of the Virginia Space Grant Consortium.

**G. Suspension or Termination**

This grant may be suspended or terminated if the grantee fails to comply with all the terms and conditions of the grant.

**H. Nondiscrimination**

No person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination under this grant on grounds of race, color, national origin, religious affiliation, physical disability, gender, or sexual orientation.

**I. Compliance with Regulations**

The investigator must abide by all state and federal regulations related to research.

**IX. Supplemental Information – Virginia Space Grant Consortium Guiding Documents**

The following should be considered guiding documents for understanding the scope of NASA's research interests:

NASA Aeronautics Strategic Implementation:

<https://www.hq.nasa.gov/office/aero/pdf/armd-strategic-implementation-plan.pdf>

NASA's link to Earth Science Decadal Study:

<https://science.nasa.gov/earth-science/decadal-surveys>

NASA's Vision for Space Exploration:

<http://www.nasa.gov/exploration/home/index.html>

Mission Directorate Links of Interest (Can also be reached at [www.nasa.gov](http://www.nasa.gov)):

- [Space Technology](#) - Develop the crosscutting, advanced and pioneering new technologies needed for current and future missions, benefiting the aerospace industry and other agencies, and addressing national needs.
- [Aeronautics Research](#) - Enable a safer, more secure, efficient, and environmentally friendly air transportation system.
- [Human Exploration & Operations Mission Directorate](#) - Operate the International Space Station and prepare for human exploration beyond low Earth orbit.
- [Science](#) - Exploring the Earth-Sun system, our own solar system, and the universe beyond.

**X. Point of Contact**

Questions regarding this announcement should be directed to:

Mary Sandy, VSGC Director, [msandy@odu.edu](mailto:msandy@odu.edu).

The Consortium's phone number is 757-766-5210.

**APPENDIX A**  
**NEW INVESTIGATOR – PROPOSED BUDGET**

Institution: \_\_\_\_\_  
PI: \_\_\_\_\_

**AWARD AMOUNT: \$\_\_\_\_\_ ; COST SHARE COMMITMENT:**

\$\_\_\_\_\_

*(The award amount and cost-share commitment should match what is reported below)*

**Note: Funds may not be used to purchase equipment.**

Budget Category	NASA Funding	Cost-Share	TOTAL
Salaries	\$ _____	\$ _____	\$ _____
Fringe Benefits	\$ _____	\$ _____	\$ _____
Supplies	\$ _____	\$ _____	\$ _____
Services	\$ _____	\$ _____	\$ _____
Equipment	\$ ____ XXX ____	\$ _____	\$ _____
Student Salaries/Stipend	\$ _____	\$ _____	\$ _____
Other (Explain)	\$ _____	\$ _____	\$ _____
Indirect Costs*	\$ ____ XXX ____	\$ _____	\$ _____
<b>TOTALS</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>

*\*The Virginia Space Grant Consortium does not cover facilities and administrative costs. Unrecovered facilities and administrative costs may be used for required cost matching.*

**Budget Narrative: (please attach on a separate sheet)**