

Research Infrastructure Program (RIP)

Applications Open: October 25, 2019 **Application Deadline:** December 4, 2019 **Award Announcements:** February 21, 2020

Awards*:

Multi-institutional Awards: up to \$20,000** Major Awards: up to \$10,000 Minor Award: up to \$5,000

*Based on availability of funds. **Projects demonstrating collaboration between two- and four-year campuses or multiple four-year campuses will be eligible for the multi-institutional award.

Purpose: The Wisconsin Space Grant Consortium (WSGC) Research Infrastructure Program is designed to provide support to faculty and research staff from the <u>WSGC universities and colleges</u> seeking to initiate a new or continue a current research program, as well as from the <u>WSGC industrial affiliates</u> to establish a space-related research program. The awards provide faculty and research staff support for a variety of activities related to developing space science, aerospace, and space-related research infrastructure.

Programs should do two or more of the following:

- Emphasize new lines of space-related research.
- Increase research capability.
- Build research infrastructure.
- Establish research collaborations.
- Initiate research opportunities in line with the NASA Mission Directorates (For more information on NASA Directorates, see <u>spacegrant.carthage.edu/about/mission/directorates</u>).
- Enhance research collaborations, mentorships, and other opportunities with NASA Centers.
- Establish collaborations among faculty from liberal arts colleges with faculty from research-intensive doctoral universities, Wisconsin aerospace industries, and NASA Centers.
- Implement research activities linking academic and industrial affiliates, including workshops, seminars, internships, data transfer, and technology transfer.

Successful proposals will combine a robust, relevant research project with a plan that fully integrates students into meaningful, high-caliber, significant research experiences from 10 weeks to a full or academic year, culminating in a presentation. Awards will be based on the proposal topic, quality, credentials of the investigator(s), the probability of success in developing space-related research infrastructure, and specific plans on how this seed funding will help to build this research program.

To Apply:

- Register on the WSGC website (<u>https://spacegrant.carthage.edu/forms/account/login</u>) Returning applicants will be required to update registration information annually.
- <u>Sign in</u> and submit the <u>Grant Application Form</u> (applicants may apply to multiple funding programs) and supporting documents.

Application Requirements:

- Students funded through this grant must be U.S. Citizens.
- Faculty and research staff at all <u>WSGC universities and colleges and staff at WSGC industrial affiliates</u> are eligible.
- Research initiatives must focus on NASA-related activities including: earth and atmospheric sciences, astronautics, aeronautics, space sciences, and any other space-related fields (*e.g. agriculture, business, law, medicine, nursing, social and behavioral sciences, space architecture, and space biology).*
- Research initiatives must align with at least one of NASA's Mission Directorates: <u>Aeronautics Research</u>, <u>Human Exploration and Operations</u>, <u>Science</u>, and/or <u>Space Technology</u>.
- The Consortium especially encourages applications from women, minorities and persons with disabilities.
- Minimum 1:1 match

Current and Past Award Winners

Supporting Material Required with Application: Submit a proposal addressing each of the six categories listed below. Be sure to clearly label each category within the proposal. Applicants will be asked to upload the proposal at the bottom of the application. It should not exceed 15 pages, including figures.

- Introduction/Summary: Summarize the project in one page or less. Important issues to address here and in the body of the proposal are why the topic is of interest to NASA and how this project will build infrastructure or lead to the development of a larger proposal effort to NASA or another government agency. Detail how this project aligns with the goals of one or more <u>NASA Directorates or Centers</u>. Please be specific <u>(Aeronautics Research, Human Exploration and Operations Mission Directorate, Science, Science Technology, Other)</u>.
 Because the WSGC is required to demonstrate the alignment of each of our projects with NASA Directorate or Center goals, proposals that do not demonstrate such alignment will not be funded. Provide references of related work. Be aware that not all of the WSGC review panel members are likely to be experts in this area, so make sure to provide fundamental information on the project topic.
- 2. Background: Summarize current and previous research on the topic. Provide references of related work. Be aware that not all of the WSGC review panel members are likely to be experts in this area, so make sure to provide fundamental information on the project topic. If the applicant has received previous funding from the WSGC Research Infrastructure Program, the proposal must demonstrate that the past research project has met the goals and objectives of the Research Infrastructure Program. The applicant should provide specific information on how the research led to larger proposal submission(s), broader collaborations, etc. As this is a seed grant program, priority for funding will be given to those projects that can demonstrate strongest growth in Wisconsin's aerospace infrastructure. Also include the previous support from the WSGC Research Infrastructure Program (title, date, amount).
- **3. Proposed Activities:** Describe the research objectives, methods and expected outcomes. Indicate types of presentations and/or papers which will be a by-product of this project. Be sure to provide fundamental information on the research.
- 4. Time Line: Please provide dates indicating the project start and finish date, as well as any important milestones. Applicants will be required to submit an Interim Report and a Final Report.

5. Budget: Provide a budget summary for the proposal that shows labor (people, hours, rates and total), travel details (where, transportation costs, hotel costs, meal costs) and any other costs (with equivalent detail). All funds should be expended prior to September 30, 2020.

Proposed Budget Template			
Organization			
Period of Performance/ to/			
Budgets must be expended and periods of performance must be completed prior to September 30, 2020.			
BUDGET ITEM	WSGC	MATCH SOURCE*	TOTAL
			Í
	Match is required on all faculty, outreach, and industry proposals. Add additional match columns if there is more than one source of matching funds. Indicate the source of each match.		
Salaries and Fringe Total**		e source of matering funds. Indicate in	
Include name and role for each individual receiving salary and fringe through WSGC and Match funding.			
Travel Total***			
Include Location			
Participant Support Total			
Include name and role for each student/individual receiving a stipend through WSGC and Match funding.			
Materials and Supplies Total****			
Other Direct Costs			
Indirect Costs			
Match Only. Include Indirect Rate and basis			
Total	\$ -	\$ -	\$ -

- * A minimum 1:1 project match is required. Add more match columns if there is more than one source of matching funds. Indicate the source of each match.
- ** The Research Infrastructure Program will normally provide funding for labor, including collaborators and students.
- *** WSGC financially supports travel to and from the Wisconsin Space Conference only if expenses are included in this budget proposal. Travel will be considered if it is fundamentally important to the project. Out of country travel cannot be funded. Please delineate between air, ground, lodging, and meal expenses.
- **** WSGC will not <u>fund</u> overhead. Any institutional overhead must be applied as matching funds. Given budget limitations, we will likely not support any amount for equipment or rental of facilities. We highly recommend alternative means to purchase equipment or materials needed for the project and apply them as matching funds.
- 6. CV*: Please include an updated two page CV. **Note: This grant only allows one Principal Investigator to be listed on the application.*

Award Acceptance Requirements: As part of the award acceptance, awardees will be asked to attend the Annual Wisconsin Space Conference as outlined in the award agreement and submit the following documents on the WSGC application website under <u>Program Applications/Professional Student Programs</u>.

- Award Agreement Letter
- Institution W9

- Media Release Form
- One-Paragraph Biography

- PI Professional Photo
- Quarterly Invoice with Receipt Copies
- Verified Program Match Form
- Office of Education Survey must be completed by December 15, 2020
- Interim Report (if period of performance is greater than 6 months)

Please direct questions about the **<u>Research Infrastructure Program</u>** to:

Gubbi Sudhakaran

Associate Director for Research Infrastructure. WSGC Associate Dean, College of Science and Health University of Wisconsin-La Crosse Phone: 608-785-8431 Fax: 608-785-8403 E-mail: gsudhakaran@uwlax.edu

- Summary/Final Report (due 30 days after the project end date)
- Present project at the Annual Wisconsin Space Conference
- 2-3 project photos featuring faculty/students

Wisconsin Space Grant Consortium Carthage College 2001 Alford Park Drive Kenosha, WI 53140 Phone: 262-551-6054 E-mail: spacegrant@carthage.edu



This funding opportunity is made available for the pursuit of space-related research and/or activities through the National Space Grant College and Fellowship Program: NASA Training Grant #NNX15AJ12H. Catalog of Federal Domestic Assistance (CFDA) number for this award is 43.008. Award recipients are subject to the terms of this award.

All awards are fully competitive awards of opportunity in which applications are reviewed by the WSGC Technical Advisory Panel and other experts as needed. Awards are made by the Assistant Director based on recommendations from the Associate Director.