Sara Nelson, Director Iowa State University Department of Aerospace Engineering 1234 Howe Hall, 537 Bissell Road Ames, Iowa 50011-1096



ISGC Office: 515-294-3106
E-mail: <a href="mailto:isgc@iastate.eduwww.iaspacegrant.org">isgc@iastate.eduwww.iaspacegrant.org</a>
<a href="mailto:www.facebook.com/NASAlowaSpaceGrant/www.twitter.com/lowaSpaceGrant/www.twitter.com/lowaSpaceGrant">isgc@iastate.eduwww.iaspacegrant.org</a>
<a href="mailto:www.facebook.com/NASAlowaSpaceGrant/www.twitter.com/lowaSpaceGrant">isgc@iastate.eduwww.facebook.com/NASAlowaSpaceGrant/www.facebook.com/NASAlowaSpaceGrant/www.twitter.com/lowaSpaceGrant</a>

## **Academic Projects – Request for Proposals**

Release: May 8, 2024 - Deadline: August 30, 2024

## Overview:

The NASA <u>lowa Space Grant Consortium (ISGC)</u> is conducting a competition to award two grants of \$10,000 each for Academic Projects that support research aligning with any of the five NASA <u>Mission Directorates (MD)</u>. The MDs include: Aeronautics Research (<u>ARMD</u>), Exploration Systems Development (<u>ESDMD</u>), Science (<u>SMD</u>), Space Operations (<u>SOMD</u>), and Space Technology (<u>STMD</u>). Proposed projects must align with the MD scientific pursuits and NASA's mission/strategies at ISGC Academic Affiliate campuses. As our base programs are limited to the four <u>core institutions</u>, the ISGC has created this opportunity for the non-core <u>Academic Affiliates</u>. This allows all our academic institutions to participate in mission directorate NASA research. At present, faculty at Des Moines Area Community College (<u>DMACC</u>), <u>Loras College</u>, and <u>Morningside University</u> are eligible to apply.

The ISGC works to coordinate and improve Iowa's future in NASA related Science, Technology, Engineering and Math (STEM); and to stimulate research education and outreach activities throughout the state that contribute to NASA's mission. The Consortium outcomes shaped this call and were described in the response to the NASA National Space Grant CAN for 2020-2024 derived from the ISGC affiliate program review, NASA's 2018 strategic plan, and Iowa's STEM priorities. The following areas will be addressed by these new Academic Projects:

- Promote and support student experiences through internships, fellowships, and scholarships.
- Engage applied research at higher education institutes to assist in solving NASA Mission Directorate challenges.
- Educate and engage precollege STEM students and educators to prepare the next generation of explorers.
- Elevate the impact of the ISGC across Iowa.
- Promote the involvement of women, underrepresented minorities, persons with disabilities, and U.S. military veterans.

Each Academic Affiliate is eligible to submit proposals for this program. Proposals must target the NASA MDs and be a good fit for our academic affiliates. Proposals must identify how they will support student recruitment and retention efforts in the STEM fields at the respective campus. To be considered for selection, a program must be conducting innovative research directly aligned with the MDs. Engaging undergraduate students with the project is encouraged and will strengthen the proposal. Priority will be given to proposals which collaborate with other affiliates (including our Core Institutions). Projects will be selected through a competitive process that will use the selection criteria put forth in this RFP. Projects that are successful in year one will be eligible to apply in subsequent years. All awards are dependent upon NASA funding availability. To better understand

NASA and the ongoing work and priorities within the Mission Directorates, please visit: <a href="https://www.nasa.gov/about/org\_index.html">https://www.nasa.gov/about/org\_index.html</a>.

**Eligibility:** Competition is open to faculty from DMACC, Loras, and Morningside. All direct funded (supported) participants (faculty and students) must be U.S. citizens. Those who are involved in the administration of this activity, but are not directly compensated, need not be U.S. citizens.

**Request:** Eligible investigators may submit proposals with a period of performance beginning September 1, 2024, through June 21, 2025. To see if their ideas fall within the scope of this opportunity, prospective applicants are encouraged to open discussion with the ISGC administrative team:

- Director, Sara Nelson, sdnelson@iastate.edu
- Assistant Director, Matthew Nelson, mnelson@iastate.edu
- Program Specialist II, Hailey Waller, hewaller@iastate.edu

## **Proposal Content:**

- Title Page: project title, Principal Investigator name, and contact information.
- Project Description (five-page maximum, 12 pt. font):
  - a. Background
  - b. Goals of the project
  - c. Description of how the proposed activity will support the selected mission directorates and build a new collaboration with NASA.
- Budget and budget narrative (two-page maximum)
  - a. Budget and justification that explains, in itemized detail, the ISGC amount requested and non-federal match contributions from the proposing institution (see g. below)
  - b. Cost-share can be cash and/or in-kind contributions of faculty or staff release time.
  - c. Charging indirect on NASA funds is not allowable (see the ISGC budget template for list of unallowable expenses).
  - d. Waived indirect from NASA funds and cost share may be counted towards meeting the total match required.
  - e. Awards of \$10,000 require match of 1:1 per award (i.e., \$10,000).
  - f. Equipment purchases, facility construction or renovation, and foreign travel are not permitted (the definition of equipment is >\$5,000 per item).
  - g. The ISGC excel budget template is required, and is available online at: <a href="https://www.iaspacegrant.org/funding/faculty/">https://www.iaspacegrant.org/funding/faculty/</a> or <a href="https://www.iaspacegrant.org/files/2024/05/Budget-template">https://www.iaspacegrant.org/files/2024/05/Budget-template</a> PY35-Acad-Projs.xlsx.
- Curriculum vitae of Principal Investigator (two-page maximum).
- Matching funds commitment letter from the authorized fiscal agent of the institution.

**Criteria:** An effective proposal is one that: shows how the proposed research will advance the NASA work being done in the selected MD. Proposals should include descriptions of how the project will build new collaborations with one or more NASA centers that align with documented NASA and State of Iowa needs and priorities, involves other ISGC affiliates (where appropriate), provides adequate matching funds, has a high potential for the research continuing when ISGC funding ends and will produce papers, presentations, other publications, talks, posters, and/or patents/licenses.

Criteria	Topics	%
Scientific and Educational Merit	Scientific, technical, and educational merit of the proposed project. Proposal is relevant to the STEM goals of NASA ISGC, lowa and/or proposing institution. Builds new collaborations with one or more NASA centers that align with documented NASA and State of Iowa needs and priorities, involves other Space Grant affiliates (where appropriate). Has a plan to attract and engage students.	30%
NASA Relevance	The degree to which this proposal is relevant to NASA MDs.	25%
Management	Competency of the proposers to carry out the plan and achieve the stated goals. Potential of the project to increase undergraduate retention and achievement, particularly for women and underrepresented groups. Includes students in research project. Demonstrates likelihood of sustaining.	15%
Evaluation	Based on evaluation metrics below in Reporting.	10%
Budget	Adequacy and appropriateness of the budget to carry out the project, including institutional contributions or other non-federal matching funds.	20%
	Total	100%

Reporting: Required reports include a progress report due February 28, 2025 and final report required 30 days after the project closes or no later than July 21, 2025. The final report will include an evaluation of the project's effectiveness relative to the proposed objectives and other standard ISGC and NASA reporting requirements. Future funding is contingent upon all reporting requirements being met annually. Awardees will submit the progress and final reports through the ISGC portal for faculty reporting on our website at: <a href="https://www.iaspacegrant.org/faculty-forms-and-reports/">https://www.iaspacegrant.org/faculty-forms-and-reports/</a>. All awards are dependent upon NASA funding availability. Evaluation metrics will include:

- 1. number of students (including demographics) involved in hands-on research,
- 2. demonstrated scholarship as measured by papers, presentations, other publications, talks, posters and/or patents/licenses produced,
- 3. NASA collaborations established or strengthened,
- 4. additional funding acquired.

**Proposal Submission Procedure:** Proposals in Microsoft Word format are to be submitted to the ISGC office via this link: <u>Academic Projects Submission</u> by **August 30, 2024**. The budget should be submitted in Excel format using the ISGC template, illustrated below and available for download at: <a href="https://www.iaspacegrant.org/files/2024/05/Budget-template\_PY35-Acad-Projs.xlsx">https://www.iaspacegrant.org/files/2024/05/Budget-template\_PY35-Acad-Projs.xlsx</a>. (Two sheets are provided: the budget template, and justification.)

ISGC Budget template for proposal submission					
Academic Affiliate: (insert academic afflilate) P.I. (insert name here)	NASA	МАТСН			
ISGC Academic Project: (insert project title)	ISGC Funds Request	Non-Federal (Cost Share)			
Salary+Fringe (Faculty)		\$0	\$0		
Salary+Fringe (Graduate Students)		\$0	\$0		
Wages+Fringe (Undergraduates)		\$0	\$0		
Supplies and Services		\$0	\$0		
Travel (Domestic)		\$0	\$0		
Tuition		\$0	\$0		
TOTAL DIRECT COSTS		\$0	\$0		
Modified Total Direct Costs (MTDC)	Modified Total Direct Costs (MTDC)				
(NOTE: MTDC = Total Direct Costs - Tuition)		\$0	\$0		
INDIRECT COSTS			\$0		
NASA Indirect (see rates below)	10.0%		\$0		
Match Indirect (see rates below)	10.0%		\$0		
TOTAL BUDGET		\$0	\$0		
Notes:					
Use affiliate appropriate government approved	indirect rate as s	hown below:			
DMACC = 37% of salary and fringe only;	muncet rate as s	nown below.			
Loras College = 10%;					
Morningside University = 58.5% of salary and fringe only.					
Match requirement is 1:1					
Change/add expense type as appropriate, add ro	ws as needed.				
Check all calculations for accuracy when adding	g rows.				
Include budget justification below, or as a sep	arate word doc	ument.			
That which is not allowable from the NASA fun	ding is also not	allowable as Ma	utch and/or		
Cost Share.					
Unallowable expenses include:					
☐ Indirect charges (waived indirect costs m	-	owards match)			
☐ Equipment (defined as >\$5,000 per item	)				
☐ Foreign travel					
☐ Facility renovations					
Promotional materials (i.e. t-shirts, swag, etc.)					
Non-U.S. citizen reimbursements (i.e.trav		·			
□ Non-U. S. citizens may participate, but ca	annot receive dii	ect support.			