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

**Released: May 11, 2020; Deadline: July 31, 2020**

### **Overview:**

The NASA Iowa Space Grant Consortium (ISGC) (<http://www.iaspacegrant.org/>) is conducting a competition and will award two grants up to \$15,000 each for Academic Projects that support research aligned with one of NASA's Mission Directorates (MD). The Mission Directorates include: Science Mission Directorate ([SMD](#)), Space Technology Mission Directorate ([STMD](#)), Human Exploration and Operations Mission Directorate (HEO), and Aeronautics Research Mission Directorate (ARMD). Proposed projects will align with the MD scientific pursuits and NASA's mission/strategies at the non-core academic affiliate campuses. As the new base programs are limited to the four core institutions, the ISGC has created Academic Projects for the non-core academic institutions. This allows the non-core Academic Affiliates to participate in mission directorate NASA research. At present, faculty at Des Moines Area Community College ([DMACC](#)) and [Loras College](#) 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 the 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, and persons with disabilities.

Each Academic Affiliate is eligible to submit proposals for this program. Proposals must target the NASA MDs and be a good fit for DMACC and Loras College. 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 (with emphasis on women, underrepresented minorities, and persons with disabilities) and will

strengthen the proposal. Priority will be given to proposals which collaborate with other affiliates (not restricted to non-core academic affiliates). 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, click on this link: [https://www.nasa.gov/about/org\\_index.html](https://www.nasa.gov/about/org_index.html).

**Eligibility:** Competition is open to faculty (U.S. citizenship required) from DMACC or Loras. All direct funded 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 for research projects with a period of performance beginning July 1, 2020 through June 21, 2021. 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, Tomas Gonzalez-Torres, [isgcdirector@iastate.edu](mailto:isgcdirector@iastate.edu),
- Associate Director, Jay Staker, [jstaker@iastate.edu](mailto:jstaker@iastate.edu),
- Assistant Director, Matthew Nelson, [mnelson@iastate.edu](mailto:mnelson@iastate.edu).

**Proposal Content:**

- Title Page: Project title, Principal Investigator name, and contact information.
- Project Description (three-page maximum, single-spaced, minimum 12 pt. font, 1" margins):
  - 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
  - b. Proposer must be a U.S. citizen
  - c. Cost-share can be cash and/or in-kind contributions of faculty or staff release time
  - d. Charging indirect on NASA funds is not allowable
  - e. Waived indirect from NASA funds and cost share may be counted towards total match
  - f. Awards of \$15,000 require match of 1:1.25 per award (i.e. \$ 18,750)
  - g. Equipment purchases, facility construction or renovation, and foreign travel are not permitted (the definition of equipment is >\$5,000 per item)
  - h. The ISGC excel budget template is required, is included below, and also available online at: <https://www.iaspacegrant.org/funding/faculty/>
- 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 Mission Directorate. Proposals should include descriptions of how the project will build new collaborations with one or more NASA centers that aligns with documented NASA and State of Iowa needs and priorities, involves other Space Grant 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, Iowa and/or proposing institution. Builds new collaborations with one or more NASA centers that aligns 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's MD's.	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 course development. Demonstrates likelihood of sustaining.	15%
Evaluation	Plan for evaluation of the course developed or re-designed	10%
Budget	Adequacy and appropriateness of the budget to carry out the project, including institutional contributions or other non-federal matching funds.	20%
	<b>Total</b>	<b>100%</b>

**Reporting:** Required reports include a progress report due in February 2021 and final report required 30 days after the project closes or no later than July 21, 2021. 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. Evaluation metrics will include:

1. number of students (including demographics) involved in hands-on research,
2. demonstrated scholarship as measured by produce papers, presentations, other publications, talks, posters and/or patents/licenses,
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: [Academic Projects Submission](#) by **July 31, 2020**. The budget should be submitted in Excel format with the ISGC template, illustrated below. The template is also available for download at: <https://www.iaspacegrant.org/funding/faculty/>

<b>ISGC Budget template for proposal submission</b>			
<b>Academic Affiliate</b> <i>(insert name)</i>		<b>NASA</b>	<b>MATCH</b>
<b>P.I.</b> <i>(insert name here)</i>			
<b>ISGC Academic Projects Program</b>		<b>ISGC Funds</b>	<b>Non-Federal</b>
<i>Insert project/activity name here</i>		<b>Request</b>	<b>(Cost Share)</b>
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
<b>TOTAL DIRECT COSTS</b>		<b>\$0</b>	<b>\$0</b>
<i>Modified Total Direct Costs (MTDC)</i>		<b>\$0</b>	<b>\$0</b>
<i>(NOTE: MTDC = Total Direct Costs - Tuition)</i>			
<b>INDIRECT COSTS</b>			<b>\$0</b>
NASA Indirect (see rates below)	<b>37.0%</b>		\$0
Match Indirect (see rates below)	<b>37.0%</b>		\$0
<b>TOTAL BUDGET</b>		<b>\$0</b>	<b>\$0</b>
<b>Notes:</b>			
Use DMACC or Loras College appropriate government approved indirect rate. (DMACC = 37% of salary and fringe only; Loras = 10%)			
Match requirement is 1:1.25			
Change/add expense type as appropriate, add rows as needed.			
Check all calculations for accuracy when adding rows.			
<b>Include budget justification below, or as a separate word document.</b>			
<b>Unallowable expenses include:</b>			
<input type="checkbox"/> Indirect charges (waived indirect costs may be counted towards match)			
<input type="checkbox"/> Equipment (defined as >\$5,000 per item)			
<input type="checkbox"/> Foreign travel			
<input type="checkbox"/> Facility renovations			
<input type="checkbox"/> Promotional materials (i.e. t-shirts, swag, etc.)			
<input type="checkbox"/> Non-U.S. citizen reimbursements (i.e. travel, salary, wages)			
<input type="checkbox"/> Non-U. S. citizens may participate, but cannot receive direct support.			