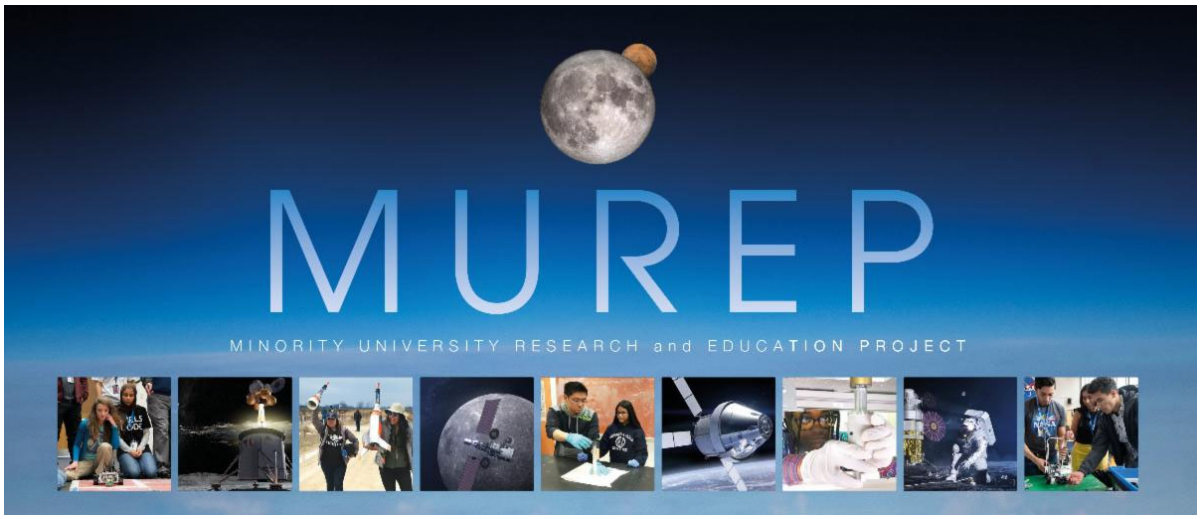

Events Happening Online

- **NCAS** information session: November 1 @ 3:30 PM EST | **Join Here**
- **Blue Skies** information session: November 2 @ 3:30 PM EST | **Join Here**
- National ISAM Consortium COSMIC Kickoff: November 7 & 8 | **Register**
- **Human Lander Challenge** information session: November 8 @ 2:00 PM EST | **Join Here**
- **NCAS** information session: November 9 @ 4:30 PM EST | **Join Here**

Funding Opportunities

Research Opportunities in Space and Earth Sciences (ROSES) 2023

ROSES is an omnibus solicitation with individual program elements, each with its own due date(s) and topic(s). You can view the list of ROSES opportunities in Table 2 (organized by due date), Table 3 (organized by research), or by open program elements. Together, these program elements cover the wide range of basic and applied supporting research and technology in space and Earth sciences supported by NASA's Science Mission Directorate. Visit the **SARA ROSES blog** for updates, clarifications and amendments. Current ROSES opportunities include:

- A.65 FireSense
- A.66 CYGNSS for Action: Phase-1 Studies
- B.21 Heliophysics Citizen Science Investigations
- C.23 Analog Activities to Support Artemis Lunar Operations
- E.6 Fundamental Physics

- F.8 Supplements for Open-Source Science

Award Amount: 1-3 awards totaling $4.5M/year for 5 years
Information Site: Visit the **GLOBE Implementation Office site** to learn more
Information Session: Pre-proposal Telecon **slides available here** & **recording available here**
Proposal Deadline: Step-2 Proposals due December 20
Contact: **amy.p.chen@nasa.gov** (please use subject line: A.40 Questions and Comments)

- ***Latest Update***: The **Global Learning and Observations to Benefit the Environment (GLOBE) Program** is a worldwide science and education program that provides opportunities to better understand, sustain, and improve Earth's environment at local, regional, and global scales. The Earth Science Division of NASA's Science Mission Directorate is soliciting proposals through the **ROSES-2023 competitive program element A.40** for an organization or a team of multiple organizations to host the GLOBE Implementation Office (GIO) and collaborate with NASA in the implementation of GLOBE, with the objective of strengthening the programmatic support for GLOBE and enhancing the value of GLOBE to its worldwide community of students, educators, scientists, citizen scientists, and partners.

Award Amount: Requests may not exceed $300K for 2 years
Information Site: Visit the **SMD Bridge Program Seed Funding website** for FAQs
Information Session: Please see the **link to the slides**
SMD Relevance: Please reference **here** on determining relevance to Science Mission Directorate
Proposal Deadline: Proposals accepted on a rolling basis through March 29, 2024
Contact: **padi.boyd@nasa.gov**

- NASA's Science Mission Directorate (SMD) is seeking proposals for seed funding awards to provide support for faculty investigators and their students to carry out NASA-relevant research. The goal of the SMD Bridge Program is to develop sustainable partnerships among institutions historically under-resourced by NASA.

Stay Up To Date With These Opportunities and More

Changes to Conflict of Interest Disclosure Requirements: On August 21, 2023, NASA's Office of Procurement published **Grant Information Circular (GIC) 23-07** which implements revisions to the NASA "*Grant and Cooperative Agreement Manual*" (**GCAM**) section 3.3, "Conflicts of Interest Policy", and establishes a new term and condition, "D39: Conflict of Interest Policy Requirements". The term and condition will apply to new and amended awards starting **December 1, 2023.** Please contact **Chris Murguia** with any additional questions.

Create Your NSPIRES Profile: To get a jumpstart on applying for future funding opportunities, visit the **NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES)** website and create an account.

Need assistance setting up your account? **Contact nspires-help@nasaprs.com**. Be sure to register for their newsletter to get announcements on new funding opportunities and calls for reviewers where you can share your subject matter expertise.

Faculty Opportunities

Calling all MSI Faculty! NASA needs YOU to serve as a Principal Investigator (PI) for a team of your students to participate in interdisciplinary competitions available this Fall and Spring. Here are just a few of the benefits you may gain from supporting your student's participation in NASA competitions listed below in the Student Opportunities section of this newsletter:

- Resume-building experience as a NASA PI
- Connection to NASA SMEs
- Networking with NASA and Industry leaders
- Monetary awards for winning MSIs
- Connection to NASA funding opportunities
- Prestige for faculty and MSI

CubeSat Launch Initiative Opportunity

Information Site: Read the **CubeSat Launch opportunity announcement** to learn more
Proposal Deadline: November 17 @ 5:00 PM EST
Contact: **Jeanie.m.hall-1@nasa.gov**

NASA's Space Operations Mission Directorate (SOMD) anticipates making launch opportunities available for a limited number of CubeSats to a variety of U.S. CubeSat developers. The **CubeSat Launch Initiative** (CSLI) will provide or facilitate flight opportunities to low-Earth orbit (LEO) currently planned for 2025-2028. Proposed CubeSat investigations must address an aspect of Education, Science, or Technology Development/Demonstration or NASA Workforce Development encompassed by NASA's strategic goals and objectives as identified in the NASA 2022 Strategic Plan and other NASA strategic documents. Knowledge and data gained from these payloads will be shared with NASA.

Biosignatures IDEAS Lab

NASA's Astrobiology Program invites scientists at US Institutions to apply for a Biosignatures IDEAS lab, a hybrid workshop to develop new and innovative grant proposals through real-time peer review.

The workshop will include several virtual pre-meetings, three days of in-person sessions from February 6-8, 2024, and three full-day virtual sessions (February 16th, 23rd and March 1st).

For more information, and to apply for this workshop, please visit the **official site**.

NASA's Space Tech Catalyst Prize

NASA's **Space Tech Catalyst Prize** needs your help identifying individuals or organizations that contribute to the growth and development of underrepresented and diverse innovators, researchers, technologists, and entrepreneurs in space technology.

- Who do you know that might be a great **candidate** for this competition? (No prior relationship with NASA needed).
- Would you be willing to be an **ambassador**? Ambassadors will connect with their networks and communities to share information about the challenge and to help us build relationships with ongoing activities within STMD/ESIP. (Time commitment is a few hours between now and February).
- Would you be willing to be a **judge**? Judges evaluate and score applications during the last week of February 2024. (Time commitment is about 5 hours).

For more information on the competition, submission process, evaluation criteria, and cash prizes, visit the **official website**.

2024 ImaginAviation Aviation Showcase

On February 27-29, 2024, ARMD Transformative Aeronautics Concepts Program will be conducting its annual aviation showcase event, **imaginAviation 2024**.

Watch Parties:
Watch parties are intended to create an imaginAviation in-person experience that includes discussing the presentations and socializing/networking with students, professors, and the community. Schools may also have the potential for outreach through livestreaming and organized competitions. The first 10 watch parties that register and advertise their event will also receive a box of NASA promotional items to share at their watch party.

There is plenty of time to **register your school** to host a watch party on campus. Once registered, a package of information will be sent to assist you in planning and coordinating your watch party. If you are unsure if your school will be able to participate, but you would really like to have one, please register so we can send you the information and we will help in any way we can.

Requirements for Watch Party Preparation:
- Reserve a room with a large screen, internet connection, audio speakers, and comfortable chairs
- Advertise the event through school email lists, newsletters, event calendars, and social media
- Utilize our ideas, or yours, to draw students/community to your event

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NASA TechLeap

NASA is calling on innovators to help solve the challenges in rapidly testing technology payloads across a wide range of commercial flight vehicles and test environments. As NASA explores the unknown in air and space, the agency is making increased use of commercial suborbital vehicles, spacecraft, and lunar landers to

help advance new capabilities. However, the process to ensure payloads can properly interface with a host vehicle is currently complex, time-consuming, and can vary greatly from vehicle to vehicle, as well as between suborbital flights, orbital flights, and beyond.

The **NASA TechLeap Prize's Universal Payload Interface Challenge** invites applicants to propose an optimized "system of systems" to enable easy integration of diverse technology payloads onto various commercial suborbital vehicles, orbital platforms, and planetary landers. The proposed universal payload interfaces should seamlessly adapt a wide range of small space payloads – be they technologies, laboratory instruments, or scientific experiments – for flight testing.

National ISAM Consortium COSMIC Kickoff

COSMIC, a collaborative effort between government, industry, and academia aims to advance ISAM capabilities for the benefit of the nation with a mission to bridge the gap between research, industry, and policy. The kick-off is ***November 7-8*** at the ***University of Maryland, College Park***, with virtual attendance options. This kick-off will bring together experts, thought leaders, and stakeholders from government, industry and academia to discuss and define the future of ISAM. There will be three distinguished keynote speakers, including NASA Deputy Administrator Pam Melroy, Dr. Ezinne Uzo-Okoro from te White House Office of Science & Technology Policy, and Major General John M. Olson for the US Space Force.

Full details about the Kickoff can be found on the **official site.**

Stay Up to Date With These NASA Online Resources

Submit your Capability Statement to the MSI Exchange! A capability statement is a resume-like tool that helps you identify teaming partners for competitive awards with NASA, industry, and academia. MSIs who are listed on the **MSI Exchange** can showcase their capability statement for visibility to future academic and industry collaborators. Register for the next capability statement training to learn best practices on how to create or update your MSI's document, or submit your capability statement to the MSI Exchange at **NASA-MSIExchange@mail.nasa.gov.**

Sign up to be a proposal reviewer! A great way to learn the NASA solicitation proposal process, contribute to your professional development, and support the mission of NASA is to sign up to be a proposal reviewer through NSPIRES. Whether you're new to the federal awards process, or a seasoned veteran in applying for NASA solicitations, share your time and perspective and get a feel for what makes a good proposal to inform your future submissions. Create an **NSPIRES account** and sign up to be a reviewer as opportunities arise!

Check out NASA TechPort! If you are looking for information about NASA-developed technologies that can be utilized or built-upon, or to see where there may be gaps to fill, check out **NASA TechPort**. Showcasing NASA's portfolio of active and completed technology projects, TechPort contains information for over 15,000 NASA-developed technologies, representing over $12 billion in applied research and experimental development investments. TechPort allows technologists and researchers to find technologies by organization, maturity, technology area/discipline, and work location. Each record has detailed information about the development including the benefits provided, research findings, partners/collaborators, points of contact, and more. Take a tour of the

website and see how your research and expertise may be able to connect to NASA technologies.

CONNECT with NASA's Community of Practice for Educators! NASA CONNECTS offers users a chance to connect and collaborate with educators and NASA scientists, engineers, and other experts nationwide. Sign up today to access NASA resources, join groups focused on your interests, and gain access to exclusive events.

Year of Open Science! NASA is offering new training opportunities with NASA's Transform to Open Science (TOPS) summer schools and virtual cohorts. These events promote understanding of open science using an introductory curriculum called Open Science 101, which helps learners increase their knowledge and skills in specific disciplines.

Student Opportunities

There are many opportunities for college students to engage with NASA, including competitions and challenges! Here are just a few of the benefits students may gain from participating in the opportunities listed in this section:

- Resume-building experience
- Paid internship potential
- Skill development and enhancement
- Senior project opportunities
- Connection to NASA Subject Matter Experts
- VIP tour of NASA facilities
- Campus and community impact

First Nations Launch

Audience: Students from **all majors** at TCUs, NASNTIs, & institutions with AISES chapters
Information Site: Visit the FNL site to learn more
Application Deadline: Gateway applications due December 18
Contact: rcannon@carthage.edu

The First Nations Launch (FNL) annual competition offers students the opportunity to work together as a team to demonstrate engineering and design skills through direct application in high-powered rocketry. Teams are guided through the engineering process on one of three tracks (Gateway, Moon, and Mars) to design, build, and fly high-powered rockets.

Don't have any engineering, design, or rocketry skills yet? Students from all majors can sign up for the no experience necessary Gateway track where they'll receive all the instruction and support they need to design, build, and fly their first rocket! Teams also give back to their communities by conducting outreach and serving as role models to inspire the next generation of explorers. U.S. teams are eligible to receive up to $4,000 towards travel and project development based on availability of U.S. funds.

2024 BIG (Breakthrough, Innovative, and Game-changing) Idea Challenge

Award Amount: between $50,000 and $150,000
Audience: Undergraduate and/or graduate students at accredited U.S.-based colleges and universities officially affiliated with their state's Space Grant Consortium
Information Site: Visit the **BIG Idea Challenge site** to learn more
Application Deadline: Proposals due February 1, 2024
Contact: **bigidea@nianet.org**

The 2024 BIG (Breakthrough, Innovative, and Game-changing) Idea Challenge invites teams of students and their advisors to submit proposals demonstrating inflatable technologies, structures, and systems for lunar operations. Finalist teams will spend nine months further designing, developing, building, and testing their proposed concepts, which they will present to a panel of NASA and industry judges at a Forum Nov. 5-7, 2024. The BIG Idea Challenge is open to teams comprised of up to 25 undergraduate and/or graduate students at accredited U.S.-based colleges and universities officially affiliated with their state's Space Grant Consortium.

Not a Space Grant member? No problem! **Non-Space Grant affiliated universities may partner with a Space Grant affiliated academic institution** who takes a primary role on the project. There may also be other ways to participate.

The Breakthrough, Innovative, and Game-changing (BIG) Idea Challenge is a sponsored by NASA through a unique collaboration between the Space Technology Mission Directorate (Game Changing Development Program) and the Office of STEM Engagement (Space Grant Consortium) and is managed by a partnership between the National Institute of Aerospace (NIA) and the Johns Hopkins University Applied Physics Lab (JHU/APL).

NASA Community College Aerospace Scholars (NCAS) – Mission 1: Discover

Audience: Community college students
Information Site: Visit the **NCAS site** to learn more
Information Session: November 1 @ 3:30 PM EST | **Join Here**
Application Deadline: December 11
Contact: **JSC-NCAS@mail.nasa.gov**

NASA Community College Aerospace Scholars (NCAS) Mission 1: Discover registration is now open through December 11, 2023! Commencing in February, Mission 1: Discover takes students through a 5-week, self-paced online course where they gain broad knowledge of NASA's mission directorates and discover NASA career paths. Students can expect to hear from subject matter experts and learn about NASA's missions dedicated to space exploration, technology, and aeronautics research. Mission 1: Discover is the first of three missions designed to challenge and build student knowledge and skills by focusing on NASA's mission goals, team collaboration, and career pathways. Mission 1: Discover sets a baseline for all participants wishing to pursue subsequent NCAS missions. For example, Mission 2: Explore is an online mission planning simulation where community college students are prepared for eligibility to Mission 3: Innovate, an engineering design challenge.

Engineering design challenges are hosted at a partner institution or a NASA field center. NCAS alumni are also eligible for NASA internship opportunities.

University Student Research Challenge (USRC)

Award Amount: up to $80K
Audience: Students attending accredited U.S.-based colleges and universities
Information Site: Visit the [USRC site](#) to learn more
Application Deadline: November 9 @ 5:00 PM EST
Contact: nasa-roa@nasa.gov

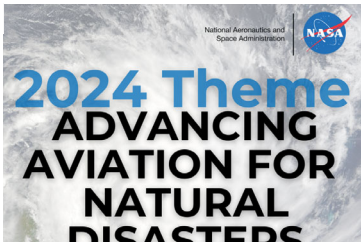
NASA's Aeronautics Research Mission Directorate seeks to challenge students to propose new ideas or concepts relevant to NASA aeronautics through the [University Student Research Challenge (USRC)](#). USRC will provide students with grants for their projects and with the challenge of raising cost share funds through a crowdfunding campaign. The process of creating and implementing a crowdfunding campaign acts as a teaching accelerator- requiring students to act like entrepreneurs and raise awareness about their research among the public. NASA's ARMD goal for this solicitation can be accomplished through project ideas such as advancing the design, developing technology or capabilities in support of aviation, by demonstrating a novel concept, or enabling advancement of aeronautics-related technologies.

Become a NASA Partner Eclipse Ambassador

In October 2023 and April 2024, two solar eclipses will be criss-crossing the US. In an exciting NASA partnership, undergraduate students and eclipse enthusiasts will be partnered to prepare their local communities for the awe and wonder of this unique celestial alignment. Training, partnerships, resources, and connections with local underserved partners are provided. Outreach can be done before and between the eclipses - there's no commitment when the shadows arrive. Undergraduates will also receive a stipend, plus opportunities to further their involvement in NASA programs.

[Apply today](#) or find someone near you on our [Eclipse Ambassador Map](#)!

NOW OPEN: NASA's 2024 Gateways to Blue Skies Competition: Advancing Aviation for Natural Disasters



Audience: Undergraduate and graduate students attending accredited U.S.-based colleges and universities
Information Site: Visit the [Blue Skies site](#) to learn more
Information Session: November 2 @ 3:30 PM EST or January 25, 2024 @ 3:30 PM EST | Submit questions [here](#)
Application Deadline: Proposals due February 27, 2024

Contact: BlueSkies@nianet.org

The annual Gateways to Blue Skies Competition encourages collegiate students to engage with climate change via aviation-related future capabilities. In the **2024 Gateways to Blue Skies Competition**, collegiate student teams will conceptualize, in terms of feasibility and viability, aviation-related system(s) that can be applied to one phase of management for a chosen type of natural disaster by 2035**.** As climate change increasingly influences the frequency and severity of natural disasters on a global scale, opportunities to contribute at the intersection of technological advancement, aviation, and natural disasters grow in both number and importance. NASA Aeronautics is dedicated to expanding its efforts to assist commercial, industry, and government partners in advancing aviation related systems that could help prepare for natural disasters, lessen their impacts, and speed up recovery efforts. Based on a review of proposal and video submissions by a panel of NASA and industry subject matter experts, up to 8 finalist teams will be selected to receive an $8,000 stipend to further develop their concept and facilitate full participation in the Gateways to Blue Skies Competition Forum, held at NASA's Ames Research Center in Mountain View, CA in May 2024.

2024 High-Altitude Student Platform

Audience: Student teams from universities and community colleges worldwide
Information Site: Visit the **High Altitude site** to learn more and apply
Proposal Deadline: Application due October 30
Contact: hasp@lsu.edu

Student teams are invited to develop experiments to fly to the edge of space on a NASA high-altitude research balloon. The annual project, supported by the NASA Balloon Program Office and the Louisiana Space Grant Consortium, provides near-space access for 12 student experiments. Typically, the flights last 15 to 20 hours and reach an altitude of 122,000 feet. There is no cost for launch and flight operations. Student teams must raise funds to support payload development and travel, if necessary.

NASA Eddy Symposium: October 29-November 3

The overarching theme of the 4th Eddy Symposium is "Why Grand Challenges in Solar Terrestrial Physics Require Open Science and how to achieve it?" Please join us this fall at The Golden Hotel in Golden, Colorado to engage in leading-edge scientific discussions as we address the application of Open Science through four focused areas:

- Open Science Methods: Emerging Open Science Methodologies
- The Interconnection of Sun, Climate, and Society
- Risk and Resiliency to Space Weather Disruption
- (Exo)Planetary Atmosphere: the Impact of Stars and Solar Physics on Habitability & Life

For information about registration deadlines, registration fees, and student travel funding, visit the **Eddy Symposium site**. To submit an abstract, please fill out the **application form**. For any other questions, please email **krodd@ucar.edu**.

NOW OPEN: Call for Proposals for NASA's 2024 RASC-AL Competition

Audience: Undergraduate and graduate students attending accredited U.S.-based colleges and universities
Information Site: Visit the **RASC-AL site** to learn more and apply
Application Deadline: Proposals due March 7, 2024
Contact: **rascal@nianet.org**

The **2024 RASC-AL Competition** is seeking undergraduate and graduate teams to develop new concepts that leverage innovation to improve our ability to operate on the Moon, Mars and beyond. This year's themes range from developing large-scale lunar surface architectures enabling long-term off-world habitation, to designing new systems that leverage in-situ resources for in-space travel and exploration. Teams and their faculty advisors are invited to design and propose innovative solutions with supporting original engineering and analysis in response to one of the following four themes: Long Duration Mars Simulation at the Moon, Sustained Lunar Evolution, AI-Powered Self-Replicating Probes – an Evolutionary Approach, and Large-Scale Lunar Crater Prospector. Based on a review of proposal and video submissions, up to 14 finalist teams will be selected to receive a monetary award to further develop their concept and facilitate full participation in the RASC-AL Competition Forum, held in Cocoa Beach, FL in June 2024.

Human Lander Challenge (HuLC)

Audience: Full-time or Part-Time Students
Information Site: Learn more & apply **here**
Information Session: November 8 @ 2:00 PM EST | Submit questions **here**
Application Deadline: Proposals due March 4, 2024
Contact: **hulc@nianet.org**
NASA's 2024 HuLC competition seeks near-term, innovative solutions for Human Landing System (HLS) challenge areas that can help NASA understand, mitigate, and manage the impacts of lunar Plume-Surface Interaction (PSI). Up to 12

teams will be selected to receive $7,000 to continue developing their proposed concepts and compete at a Forum in Huntsville, Alabama in June 2024. $18,000 cash prizes available! Proposal categories include (but are not limited to): Trade Studies on Landing Trajectories that Minimize PSI; Reduction/Mitigation of Erosion (Cratering) and Ejecta during Descent, Landing, and Ascent; Development of PSI Flight Instrumentation/Measurement Methods and Concepts; Tracking Dust During Descent, Landing, and Ascent; Instrumentation Performance Through the Dust Cloud During Landing; HLS Asset Safety (ejecta damage, excessive lander heating, etc.); and PSI Modeling and Validation.

Internships, Fellowships, and Careers at NASA

Want to intern at NASA? To find out more about other NASA internships, visit the **NASA Internship site**.

Looking for a fellowship at NASA? The Space Telescope Science Institute is accepting applications for postdoctoral fellowships under the NASA Hubble Fellowship Program. Please see the **Announcement of Opportunity** for information on how to apply. The deadline is November 2.

Dreaming of a career at NASA? Create a **USAJOBS** account, upload your resume, and set your preferences for notifications of job opportunities open to the public at NASA or other departments of the federal government. Don't wait until you hear about an opening the day before it closes to get started. Be prepared to jump on those opportunities as soon as they're posted!

Stay Engaged with NASA MUREP!

We hope you enjoyed this week's update from your MSI Engagement Team. Stay engaged through our trainings and events, invite your STEM faculty and grants and contracts administrators to *subscribe to our newsletter*, create an *NSPIRES account* to propose to opportunities and sign up to be a reviewer, and send your capability statement to *NASA-MSIExchange@mail.nasa.gov* to get the ball rolling!
We look forward to supporting your success!