ASCEND[R] Research Grant Program Competition (Y1)
Call for Proposals
August 2026- June 2027

Program Description

ASCEND[R] Research is a competitively funded DOD research program that is aligned to the U.S. National Defense Science and Technology Strategy and the DOD Critical Technology Areas and part of the HSRU's Advancing STEM Careers through Education, Networking, Development + Research (ASCEND[R]) Initiative (for more information about ASCEND[R] visit www.hsru.org) For this opportunity, research priority areas are: Advanced Materials, Human-Machine Interfaces, and Space Technology.

Through this competitively funded research program, HSRU Alliance member institutions' research strengths will be leveraged, faculty leadership development will be provided, and graduate student researchers will be integrated. This research program will have the aims to (1) expose both faculty and students to military operations and defense and national security real-world challenges, (2) deploy and enhance the research environments conducive for the successful progression and participation of the students in the process (e.g. mentoring, professional development, and financial support), and to (3) conduct research and deliver research outcomes to meet DOD technical challenges/gaps.

Limit on number of proposals per university: 2

Dates

Request for Proposals Open: 20 November 2025
Q&A portal open: 21 November 2025 through 19 December 2025 11:59 PM EST
Full Proposal Due: 27 February 2026 11:59 PM EST
Anticipated Award Announcement: May 2026
Anticipated Cohort Start Date: 16 August 2026

Please check the HSRU.org website regularly for updates.

Eligibility Requirements

The proposal must originate from an HSRU member institution in good standing.

1. Principal Investigator and Co-Principal Investigator(s) must be a Research Faculty member or Tenure/Tenure Track Faculty member that is early to mid-career, defined as within the first 8 years of their professional career.
2. The Principal Investigator must hire and integrate at least one Graduate Research Assistant for this project. The graduate assistant must be enrolled at the start of the project and maintain enrollment eligibility throughout the proposed project.
3. All PIs, Co-PIs, and the graduate assistant working on this project must be U.S. Persons, defined as U.S. born or U.S. Naturalized Citizen.

4. The Principal Investigator and Co-PIs must agree to jointly participate in the ASCEND^{R} Leadership Program.

Submission Requirements

1. **NSF Biographical Sketch of the PI and Co-PIs** (OMB-3145-0058)
2. **Proposal Narrative.** (4 pages max) Note: Cited references are not counted in the page limit. References (1 page limit) will be uploaded as a separate document.
   Project Description: Project description should be written in a way that would be sufficiently understandable to experienced researchers, but not necessarily experts in their field. The Project Description must contain the following elements:
   a. **Background Statement:** Include a brief statement on related prior work in the field (how it is done today), existing challenges or limitations of the current approaches, and how the proposed research will address those challenges. If applicable, also mention how teaming will advance the competitiveness for external funding. Describe the level of existing collaboration on this topic (e.g., new team, new topic, etc.).
   b. **Statement of Objectives:** Explain the objective of your proposal (what are you trying to do) in clear terms. Identify the significance of the anticipated results relative to prior work and its value if successful.
   c. **Plan of Work:** Provide an appropriate plan for meeting objectives, with a clear explanation of procedures, activities, risks, timeline, and milestones; if applicable, a plan for effective human/animal use and safety including any required IRB/IACUC protocols will be submitted after contract award. Include a graduate student mentorship plan. Describe PI qualifications and related experience to conduct a project. For Co-PIs, identify the contribution of each Co-PI and provide a clear plan of collaboration among all investigators.
3. **Budget Justification** (1 page limit) and **Budget Detail** (1 page limit). Use NSF Budget Template format. Note: Graduate Student must be included in the budget.
4. **Mentorship Plan** (1 page limit). See the Council of Graduate Schools- Mentoring tools for guidance on mentorship resources and best practices.
5. **Leadership Interest and Commitment** (1 page limit). Letter or statement of commitment to the leadership program that addresses the faculty member's interest in the program, what they hope to gain from it, and what they can contribute to the cohort.

For additional information check with your institutional research office or the HSRU website.

ASCEND^{R} Research Grant Program Competition (Y1)
Call for Proposals Supplementary Document

ASCEND^{R} Research

1. Expanded Description of Research/SOW

This is a competitively funded DOD research program that is aligned to the U.S. National Defense Science and Technology Strategy and the DOD Critical Technology Areas. Current areas for this effort include **Advanced Materials, Human-Machine Interfaces, and Space Technology.**

a. **Advanced Materials:** Advanced materials explore innovative new materials and novel manufacturing techniques that can dramatically improve many of the Department's capabilities. Materials that have higher strength, lighter weight, higher efficiency, and can handle more extreme temperatures will have the potential to better protect our service members and enhance their ability to accomplish their missions.
b. **Human-Machine Interfaces:** Human-Machine Interface refers to technologies related to human-machine teaming and augmented and virtual reality. Rapid advancements in this technology will have many benefits for our service members. Highly immersive, realistic training environments provide real-time feedback to enhance warfighter performance. Intuitive and interactive human-machine interfaces enable rapid mission planning and mission command by providing a common operational picture to geographically distributed operations.
c. **Space Technology:** Space technologies include Space flight, Space Communication, human space flight, cognitive reasoning, space power, and other technologies needed to maintain space operations. With rising threats and increasing dependence on space-based systems, the Department's space strategy must shift away from exquisite satellites to a more robust and proliferated architecture. Novel space technologies are necessary to enable resilient cross-domain operations. The space strategy must incorporate technologies that enhance the Department's adaptive and reconfigurable capabilities in space situational awareness, space control, communication path diversity, on-orbit processing, and autonomy.

Through this competitively funded research program, HSRU Alliance members leverage research in emerging technology while integrating graduate student researchers. This research program will have the aims to (1) expose both faculty and students to military operations and defense and national security real-world challenges, (2) deploy and enhance the research environments conducive for the successful progression and participation of the students in the process (e.g. mentoring, professional development, and financial support), and to (3) conduct research and deliver research outcomes to meet DOD technical challenges/gaps.

2. ASCEND^{R} Leadership Program

The ASCEND^{R} Leadership Program is designed to introduce distinguished HSRU faculty to national security challenges and the defense enterprise through military operational engagements and experiences; interactions with top-level DOD officials, senior military commanders; participation in defense leadership innovation roundtables and other informative activities with the purpose of exposing faculty to the complex military operations, existing

challenges that creates a defense-informed research faculty group postured to offer new innovative solutions and research pathways. This program will broaden faculty researchers' engagement with DOD while also building support for serving as effective mentors to other faculty and graduate students in these types of partnerships. More information on this program as well as the engagement requirements can be found at the following site: https://www.hsru.org/initiatives/ascendr/research.

3. **Allowable Use of Funds.**
    a. All requested funds (e.g., student support, consumables) must be integral to the research and not available within the department, college, institute, or center.
    b. Funding requests for PI/Co-PI(s) are allowed as a percentage of effort up to two summer months equivalents.
    c. Funds may be used for travel to attend conferences, workshops, or meetings specifically aligned with research.
    d. Funds may not be used for dual compensation or overload.
    e. Proposers are encouraged to ensure they request funds within the allowable range that matches the need for the proposed work.
    f. Cost Share is allowed but not required.
    g. Allowable indirect cost per Federal negotiated rate.
    h. Graduate Research Assistant support must be included, which could be salary, tuition remission, travel support, or other financial support to fund their participation.
    i. The subrecipient cannot acquire any real property or equipment under the subaward.

4. **Submission Instructions**
    - Submission should be completed through the HSRU InfoReady portal available through the HSRU website.
    - Applications should be submitted by a designated individual authorized by the member institution, following completion of the internal competition.
    - New users will need to create an account.

5. **Deliverables**
    - Recipients of funding for this program must submit bi-annual interim progress report and a final report 30 days after the end of the award period. Instructions will be provided after the award.
    - Requests for budget modifications or no-cost extensions must be submitted no later than 90 days before the end of the award period for approval.
    - Failure to comply with the indicated deliverables may result in disqualification or participation in seed funding programs in the future. Additional guidance will be provided through the awarding process.

Please use this form to submit your questions: ASCENDR Research - Open Question Period Form