



HSRU ASCEND^R Fellowship Institutional Participation Overview

ABOUT ASCEND^R

The ASCEND^R (Advancing STEM Careers through Education, Networking, Development, and Research) Fellowship is a one-year, cohort-based program designed to prepare doctoral students in STEM disciplines for careers and research opportunities connected to the Department of War (DoW) science and technology research enterprise.

Designed for doctoral students nearing the dissertation phase and conducting research aligned with defense-relevant STEM priorities, ASCEND^R combines fellowship support, faculty mentorship, professional development, and opportunities to build connections across the HSRU network.

THE FELLOWSHIP EXPERIENCE

Selected ASCEND^R Fellows receive:

- \$12,500 fellowship award
- Faculty-mentored research guidance at their home institution
- Professional development experiences focused on defense research and innovation
- Access to a national network of fellows, faculty mentors, and research leaders
- Travel support to participate in the annual HSRU convening and present their work

KEY DATES

- Participation letters released - September 25
- Participation letters due - October 16
- Application opens - October 19
- Application deadline - Jan 31
- Award announcements - Early April

WHAT INSTITUTIONS SHOULD KNOW

Participation in ASCEND^R provides HSRU member institutions an opportunity to connect eligible doctoral students with a national fellowship experience focused on research, professional development, mentorship, and career preparation.

Institutions that choose to participate will be asked to promote the fellowship opportunity to eligible doctoral students. Students apply directly to the program through the HSRU InfoReady portal. Opting into the program does not obligate an institution to have applicants or guarantee that a student from the institution will be selected.

If a student is selected, the HSRU will work with the fellow's home institution to establish the administrative support necessary for participation. This will include:

- designating an institutional PI or appropriate liaison,
- coordinating a subcontract with HSRU,
- administering fellowship funds through established institutional processes,
- and providing ongoing guidance and assistance to any selected fellow(s) throughout the one-year fellowship experience.

Additional implementation guidance and program requirements will be provided to institutions with selected fellows.

ASCEND^R RESEARCH FUNDING OPPORTUNITY

CALL FOR PROPOSALS

2027–2028 FUNDING CYCLE

Released: September 25, 2026

I. Introduction and Program Overview

ASCEND^R — Advancing STEM Careers through Education, Networking, Development + Research — is a multi-institutional initiative of the Alliance of Hispanic Serving Research Universities (HSRU) designed to strengthen engagement of HSRU institutions, faculty, and graduate students in research and talent development aligned with national defense priorities. ASCEND^R is supported by the Department of War (DoW) through a Congressionally established program supporting basic research initiatives and managed by the STEM Office within S&T Foundations.

ASCEND^R Research

ASCEND^R Research is a competitive funding program supporting faculty-led research within designated DoW Critical Technology Areas. The program is designed to increase the participation of highly qualified early- to mid-career HSRU faculty in defense-relevant research and strengthen their capacity to connect their research expertise with DoW priorities, while integrating graduate students into funded research projects. PIs and any Co-PIs of selected projects also participate in the ASCEND^R Leadership Program as an integrated faculty development component of the program.

ASCEND^R Leadership

ASCEND^R Leadership complements the funded research experience by providing participating faculty with structured exposure to national security challenges, DoW research priorities, and the broader defense research enterprise. Activities may include briefings with DoW leaders and technical experts, military operational experiences and site visits, and leadership and innovation roundtables. The program is designed to strengthen faculty capacity for continued engagement and future research opportunities within the defense research enterprise.

II. Critical Technology Areas

For the 2027–2028 funding cycle, proposed research must contribute to one or more of the six DoW Critical Technology Areas identified for this competition. Proposals may address a Critical Technology Area directly or advance foundational, enabling, or cross-cutting research with a clearly articulated connection to one or more of the areas

1. Applied Artificial Intelligence (AAI)

Research that advances the effective application of artificial intelligence, machine learning, data analytics, and related computational methods to improve decision-making and operational

efficiency. Relevant research may include algorithms, data methods, autonomy, human-machine teaming, modeling and simulation, trustworthy and assured AI, and approaches that enable reliable AI adoption across defense domains.

2. **Biomanufacturing (BIO)**

Research that harnesses living systems, biological processes, and bioengineering to produce critical materials, substances, or capabilities at scale. Relevant research may include bioprocess development, synthetic biology, biofabrication, scale-up, quality and reproducibility, and approaches that reduce supply-chain vulnerabilities and strengthen resilience.

3. **Contested Logistics Technologies (LOG)**

Research that enables forces to operate and sustain missions when transportation, supply networks, communications, or infrastructure are disrupted, degraded, or denied. Relevant research may include energy storage and power systems, resilient supply networks, predictive logistics, autonomous or distributed resupply, maintenance and sustainment, and production at the point of need.

4. **Quantum and Battlefield Information Dominance (Q-BID)**

Research that advances technologies needed to maintain information advantage in degraded or denied environments, including resilient communications, precision navigation and timing, sensing, and electromagnetic-spectrum maneuverability. Relevant research may draw on quantum science and engineering, radio-frequency technologies, photonics, radar and electronic warfare, secure networks, signal processing, and other approaches that improve the availability, accuracy, and survivability of battlefield information.

5. **Scaled Directed Energy (SCADE)**

Research that advances scalable and affordable high-energy laser and high-power microwave capabilities for the precise neutralization of threats. Relevant research may include energy sources, materials and components, power and thermal management, beam generation and control, modeling and testing, manufacturability, and approaches that overcome cost and production barriers.

6. **Scaled Hypersonics (SHY)**

Research that enables the affordable and scalable development of systems operating at Mach 5 or greater. Relevant research may include propulsion, aerothermodynamics, high-temperature materials and structures, thermal protection, guidance, navigation and control, sensing, modeling and simulation, testing, and manufacturing approaches that improve speed, precision, survivability, and production at scale.

OPTION:

Cross-Cutting and Enabling Research

Proposals may address foundational, enabling, or interdisciplinary research that contributes to more than one Critical Technology Area or does not fit neatly within a single area. This may include research in materials, energy, sensing, computation, modeling and simulation, advanced manufacturing, human performance, social and behavioral sciences, or other fields that enable progress within the DoW Critical Technology Areas.

Applicants using this pathway must identify at least one of the six Critical Technology Areas to which the proposed research is expected to contribute and clearly explain the connection, potential defense relevance, and pathway through which the work could enable future research or capability development.

III. Funding, Eligibility, and Participation Requirements

A. Funding Amount and Project Period

- Up to \$200,000 per project.
- Approximately 10–15 projects are anticipated for the 2027–2028 funding cycle, subject to funding availability.
- Project Period: August 1, 2027–July 31, 2028.

B. Institutional Eligibility and Submission Limit

- Proposals may be submitted by HSRU member institutions in good standing with the Alliance.
- Each eligible institution may submit a maximum of two proposals for the 2027–2028 funding cycle.

C. Principal Investigator Eligibility

- The Principal Investigator (PI) must be research faculty or tenure/tenure-track faculty at an eligible HSRU member institution.
- Co-PIs are optional and, if included, must meet the same individual eligibility requirements as the PI.
- The PI must be an early- to mid-career investigator, approximately within the first eight years of their professional research career.*
- An individual may serve as PI on only one proposal.
- PIs and any Co-PIs participating in a currently funded ASCEND^R Research project are not eligible to serve as PI or Co-PI during the 2027–2028 funding cycle.

**The eight-year timeframe is intended as general guidance in identifying the career stage appropriate for this program and is not an absolute eligibility threshold. ASCEND^R Research is intended for investigators with demonstrated research expertise whose work has strong potential for alignment with DoW priorities and who are positioned to benefit from expanded engagement with the DoW research enterprise. Preference will be given to investigators with limited prior experience leading DoW-funded research.*

D. Leadership Program Participation Requirement

- The PI and any Co-PIs included on a proposal must agree to participate in the ASCEND^R Leadership Program if the proposed project is selected for funding.
- Participation requirements apply individually to the PI and each Co-PI.

E. Graduate Research Assistant Requirement

- Each proposed project must include at least one Graduate Research Assistant who will be meaningfully integrated into the research project.
- The Graduate Research Assistant must be enrolled at the start of the project and maintain enrollment eligibility throughout the project period.

F. U.S. Person Requirement

- The PI, any Co-PIs, and Graduate Research Assistant(s) participating in the proposed project must be U.S. Persons, as required under the ASCEND^R federal award.
- For purposes of this funding opportunity, eligible U.S. Persons are U.S.-born or naturalized U.S. citizens.

IV. Proposal Preparation and Submission

A. Required Components

1. **Biographical Sketch** – SciENCv-generated NSF Biographical Sketch Common Form; required for the PI and each Co-PI.
2. **Current and Pending (Other) Support** – SciENCv-generated NSF Current and Pending (Other) Support; required for the PI and each Co-PI.
3. **Proposal Narrative** – 5 pages maximum, not including references.
4. **References Cited** – 1 page maximum.
5. **Budget Detail** – ASCEND^R Budget Template
6. **Budget Justification** – 1 page maximum.
7. **Graduate Student Mentorship Plan** – 1 page maximum.
8. **Leadership Interest and Commitment Statement** – 500 words maximum per investigator; required for the PI and each Co-PI.
9. **Institutional Authorization Form** – Required if the proposal is submitted directly by the PI. *See Section V. Submission Process.*

B. Proposal Narrative Requirements

The Proposal Narrative should provide a clear and concise description of the proposed research and should be understandable to experienced researchers who may not be experts in the specific field. The narrative must include the following:

- a) **Background and Rationale:** Describe relevant prior work in the field, existing challenges or limitations of current approaches, and how the proposed research will address those challenges.
- b) **Objectives and Relevance to DoW Priorities:** State the objectives of the proposed research and the significance of the anticipated results relative to prior work. Describe how the proposed research relates to and is expected to contribute to one or more of the DoW Critical Technology Areas identified for this funding cycle. Explain the potential significance of the proposed work within the identified technical area and how successful completion could position the research for continued development, future external funding, or engagement with the DoW research enterprise.
- c) **Research Plan and Timeline:** Describe the approach for accomplishing the proposed objectives, including procedures, activities, anticipated risks, milestones, and a timeline for completion within the project period. If applicable, identify research involving human subjects or animals. Required IRB/IACUC approvals will be addressed prior to the initiation of applicable research activities.
- d) **Investigator Qualifications and Project Roles:** Describe the PI's qualifications, research expertise, and relevant accomplishments that demonstrate the ability to successfully conduct

the proposed research. If Co-PIs or other collaborators are included, identify their roles, expertise, and contributions to the project and describe how responsibilities will be coordinated.

C. Graduate Student Mentorship Plan Requirements

A Graduate Student Mentorship Plan is required for each Graduate Research Assistant included in the proposed project. Each plan should describe the student's anticipated role in the research; the mentoring and supervision that will be provided; opportunities for research, academic, and professional development; and how the experience will contribute to the student's development as a researcher.

Applicants may consult the Council of Graduate Schools mentoring resources for guidance on mentorship practices.

D. Leadership Interest and Commitment Statement Requirements

The PI and each Co-PI, if applicable, must submit an individual Leadership Interest and Commitment Statement (**500 words maximum per investigator**). The statement should help reviewers understand the investigator's alignment with the objectives of ASCEND^R, how participation would strengthen their engagement with the DoW research enterprise, and what they would contribute to the faculty cohort.

Each statement should address:

- the investigator's interest in participating in the ASCEND^R Leadership Program;
- how participation would support their development and future engagement with the DoW research enterprise;
- their level of prior experience with DoW or other defense-related research, including sufficient context to demonstrate alignment with the intended career and experience level of the program; and
- the perspectives, expertise, or experiences they would contribute to the faculty cohort.

E. Budget Guidance

- a) ASCEND^R Budget Template provided should be used for Budget Detail.
- b) Budget justification should provide additional detail for dollar amounts appearing within each object class category.
- c) Requested funds must be necessary and directly related to the proposed research and should reflect the scope and needs of the project.
- d) PI and Co-PI salary support may be requested in proportion to the effort required for the proposed project, up to a maximum equivalent of two summer months per individual. Requested effort should be appropriate to the investigator's role and responsibilities on the project.
- e) Funds may not be used for dual compensation or overload.

- f) Financial support for at least one Graduate Research Assistant must be included in the proposed budget. Support may include salary or stipend, tuition remission, travel, and other allowable costs associated with the student's participation in the project.
- g) Funds may be requested for travel to conferences, workshops, meetings, or other activities directly related to the proposed research.
- h) Real property and equipment may not be acquired with ASCEND^R subaward funds.
- i) Cost sharing is permitted but not required.
- j) Indirect costs may be requested in accordance with the submitting institution's federally negotiated indirect cost rate.
- k) Additional requirements, restrictions, or limitations applicable to the ASCEND^R federal award may apply to funded projects and will be incorporated into the subaward as required.

V. Submission Process

A. Institutional Notice of Participation

Institutions intending to participate in the 2027–2028 funding cycle must submit an **Institutional Notice of Participation** by the date identified in *Section VIII*.

- The Institutional Notice of Participation form will be provided directly to institutional research offices and made available on the ASCEND^R Research website.
- The notice confirms the institution's intent to participate and identifies an institutional point of contact for the funding cycle.
- The notice does not require identification of individual proposals or PIs.

B. Institutional Selection and Authorization

As a limited-submission funding opportunity, institutions determine their own process for identifying and authorizing proposals for submission.

- Once selections are made, proposals may be submitted by an authorized Research Administration Officer.
- If a PI is authorized by the institution to submit directly, the PI must include the ASCEND^R Institutional Authorization form with the application confirming authorization to submit on behalf of the institution.

C. Proposal Submission

Final proposals must be submitted through the HSRU InfoReady portal by the application deadline.

- All required application components identified in Section IV must be included.
- The InfoReady portal and required forms and templates will be available through the ASCEND^R Research website.
- Submission instructions, including portal access and account setup guidance, will be available on the website.

VI. Merit Review Criteria

ASCEND[®] Research awards are intended to generate impactful research outcomes, strengthen defense-relevant research capacity, support graduate student development, and position participating investigators for subsequent external funding and long-term engagement with the defense research enterprise.

1. Technical Merit, Innovation, and Research Potential

Quality, rigor, and appropriateness of the proposed research; significance and innovation of the research objectives; qualifications and expertise of the investigator(s); and potential of the work to produce meaningful research outcomes and establish a foundation for continued research or future external funding.

2. Alignment with DoW Priorities and ASCEND[®] Research Goals

Relevance and expected contribution of the proposed research to one or more of the designated DoW Critical Technology Areas identified for this funding cycle.

3. Feasibility and Budget Appropriateness

Feasibility of the proposed scope, research plan, timeline, and milestones within the one-year project period and alignment of the requested budget with the proposed work.

4. Graduate Student Integration and Mentorship

Meaningful integration of graduate student researcher(s) into the proposed research; quality of the mentorship plan; and potential contribution of the experience to students' research, academic, and professional development.

5. Leadership Program Alignment and Potential

The PI's and any Co-PIs' interest in and potential to benefit from deeper engagement with the DoW research enterprise, commitment to Leadership Program participation, and potential to contribute their research expertise and perspectives to the faculty cohort.

VII. Award Administration and Recipient Responsibilities

A. Funding and Subaward Administration

ASCEND[®] is supported by the U.S. Department of War through the National Defense Education Program (NDEP), Federal Award No. HQ00342520001. Research projects selected through this competition will be funded through subawards administered by The University of Texas at El Paso (UTEP), the recipient and administering institution for the federal award.

- Following selection, UTEP will coordinate with the appropriate research administration office at each selected institution to initiate and complete the subaward process.
- Selected institutions will provide the institutional and project documentation required to establish the subaward. Where possible, information provided through the application process will be used to facilitate this process.
- Detailed subaward requirements and award administration procedures will be communicated directly to selected institutions.

B. Federal Award and Subaward Requirements

- Funded projects are subject to applicable requirements of the ASCEND^R federal award and the terms and conditions incorporated into each institutional subaward.
- Applicable federal requirements, restrictions, and flow-down provisions will be communicated through the subaward process.

C. Research Security Training

- PIs, Co-PIs, Graduate Research Assistants, and other personnel participating in funded research must complete applicable research security training requirements.
- Subrecipient institutions are responsible for ensuring that participating project personnel complete training that meets applicable federal requirements.

D. Reporting Requirements

- Funded projects will be required to submit periodic progress reports and a final report.
- Reporting requirements, timelines, and instructions will be provided as part of award administration.

VIII. Key Dates

Request for Proposals Release: September 25, 2026

Institutional Notice of Participation Due: October 23, 2026

Submission Portal Opens: November 2, 2026

Proposal Submission Deadline: February 1, 2027

Anticipated Selection Notification: First week of May 2027

Project Period: August 1, 2027–July 31, 2028

Information sessions, office hours, and other application support opportunities will be posted on the ASCEND^R Research website.

IX. Questions and Program Contacts

A. Program and Application Questions

Prospective applicants should first consult their institutional research office regarding institutional requirements and submission procedures. Additional ASCEND^R Research information, application resources, and updates are available through the ASCEND^R Research website.

ASCEND^R Research Website: <https://ascendr.hsrp.org/research>

Program Questions: hsrp@utep.edu

B. Federal Award and Subaward Questions

Research administration offices with pre-submission questions regarding applicable federal award requirements or anticipated subaward terms may contact:

UTEP Office of Sponsored Projects, Contracts & Agreements: agreements@utep.edu

Please reference **ASCEND[®], PI: González, Federal Award No. HQ00342520001** in the inquiry.

The ASCEND[®] Research is part of the HSRU ASCEND[®] Consortium — Advancing STEM Careers through Education, Networking, and Development + Research — a multi-institutional initiative funded by the DOW National Defense Education Program (NDEP), advancing research, talent, and innovation in defense-relevant STEM fields aligned with national priorities.



To learn more, please visit HSRU.org.