

SPARKS: AI Collaborative Research Seed Competition for FY2025

Objective: To facilitate multidisciplinary collaborations focused on highly collaborative artificial intelligence (AI) research in three select focus areas, UT's Office of Research, Innovation, and Economic Development is launching the SPARKS: AI Collaborative Research Seed Competition.

Priorities: Three priority areas are the focus of this SPARKS: AI Collaborative Research Seed Competition for FY2025:

1. *AI in Medicine and Healthcare:* research that explores the transformative nature of AI in the health and medical fields;
2. *Fundamental AI for Science and Technology:* research focused on fundamental AI principles and mechanisms across science and technology, going beyond specific applications and focusing on the core understanding that will shape the future of AI; and
3. *AI in the Humanities and Social Sciences:* research that bridges the gap between technology and humanity, ensuring that AI serves as a tool for progress that aligns with society's values and aspirations.

The goal of this competition is to build stronger transdisciplinary collaborative teams across UT to address these important priority areas. Outcomes can include team pursuits of external funding, partnerships with industry and community stakeholders, and new collaborative courses and certificate programs under the newly launched Applied AI degree programs spearheaded by CECS.

Eligibility: The principal investigator should be a full-time tenure-line or research faculty member with a primary appointment at UT Knoxville, UT Institute of Agriculture, UT Space Institute, UT Graduate School of Medicine, or UT Health Science Center. Proposals in area 1 (AI in Medicine and Healthcare) must include investigators from both (a) UT Knoxville and (b) the UT Graduate School of Medicine or the UT Health Science Center. All eligible applicants must include eligible investigators from at least three departments and two colleges. They will engage in all three core functions of a land-grant institution: research, education, and outreach. They will also commit to pursuing external funding with the results of this internally funded research. External partners (funded from other sources) are welcome and encouraged. All proposed projects should be 1 year in duration.

Award Amount and Matching Requirements:

- Applicants can apply for up to \$100,000 per award for their research proposals that align with one of the three focus areas of this call. These proposals may be supplemented with additional funds, up to \$20,000 per award, to support collaborative course or certificate program development under the intercollegiate Applied AI degree programs being launched by CECS, for a topic consistent with the proposed research in one of the three focus areas. Cost share is not required but desired and will be considered when making selections.

Proposal Preparation Guidelines:

- **Project description (500 words max):** Provide an overview of your proposed project and overall goals. Be sure to address how this project engages in research, education, and outreach. For proposals that include curriculum development content, identify the names of faculty who will be co-developing the programs, and include course descriptions and student learning outcomes.
- **Curriculum Development Content (500 words max):** For proposals that include curriculum development content, identify the names of faculty who will be co-developing programs, and include course descriptions and student learning outcomes.
- **Team description (500 words max):** Describe the team involved in the project and any internal or external partnerships the project will promote. Be sure to address how the team reflects UT's land grant mission.
- **Work plan (500 words max):** Describe the work that will be done, how it supports research, education, and outreach, and provide a timeline with milestones for completion.
- **Outcomes and impact (500 words max):** Describe the assessment plan, potential outcomes, impact of the project, and deliverables. Be sure to include potential external funding opportunities that will be pursued as a team. Acceptable deliverables include:
 - A copy of a collaborative grant proposal submitted before the end of the project.
 - Establishment of partnerships with industry and the community that offers tangible results such as internships, scholarships, investments on equipment facilities that enhance UT footprint on AI in the priority research areas.
 - Creation of collaborative courses or certificates at undergraduate or graduate level under the umbrella of the Applied AI degree programs being launched by CECS as a campus wide collaborative effort.
- **Budget and budget justification (PDF upload, no word limit):** Outline your project budget providing justification for each category. Funds should be directed to labor, materials, and services necessary to achieve the proposed work/project. Indicate any sources of cost share. Indirect costs are not allowed. Funds may not be used for PI salary, but may be used for student, post doc, or technical staff support. A budget breakdown by investigator should also be provided, to clearly indicate the share of funds allocated to each.
- **List of collaborators:** Provide short CVs from the applicant and co-applicants (1-5 pages per CV) that demonstrate the investigators' qualifications and past activities that align with the proposed project.

Review Process: Experts will evaluate the proposals and make recommendations to ORIED. Reviewers will be asked to consider the review criteria in developing their evaluations and recommendations based on the merit and impact.

Award Timeline:

Proposal Due Date:	April 29, 2024, 5:00 pm
Department Head Review Due Date:	May 6, 2024, 5:00 pm
ADR Review Due Date:	May 13, 2024, 5:00 pm
Award Announcement:	May 31, 2024

Award Terms & Conditions: All types of projects should expend funds as allocated for each budget year, and during the performance period July 1, 2024 to June 30, 2025. Extensions will not be approved. Proposals requesting more than one year of funding will not be considered.

Award Funding Process: Due to UTK's BAM financial model prohibiting an Institutional Services Unit from transferring funds to academic units, seed funding will be processed at fiscal year-end (i.e., June 30, 2025) for actual expenditures during the performance period (July 1, 2024 to June 30, 2025). ORIED will reimburse the department's distribution account that collects actual expenditures of the seed project up to the approved seed funding amount awarded to the faculty member. Any overage of the award expenses will be the responsibility of the department. Additional information will be sent to the department business office with more detail on the reimbursement process.

Send all questions to avcrd@utk.edu.