



# Thematic Labs Program

## Request for Proposals 2025–2027

### Program Description

The Texas A&M Institute of Data Science (TAMIDS) solicits proposals to establish further Thematic Labs operating under the auspices of TAMIDS in the area of **Artificial Intelligence** (incorporating elements of **Machine Learning** and **Data Science**). Labs will focus on foundations of AI, or applications and the transition of AI into specific domains, or a combination of these. Each Thematic Lab will develop research, knowledge, and resources around its thematic area that will position Texas A&M to be at the leading edge of AI research and make Texas A&M more competitive for external funding. TAMIDS will support each Thematic Lab for a two-year period through seed funding for new research activities, efforts from TAMIDS’s administrative and research personnel, engagement with TAMIDS programs and partners, and organizational and logistical support. Through this program, TAMIDS aims to foster the development of sustainable ecosystems around labs that will be leaders in their thematic areas.

### Impact Criteria

Recent years have seen enormous innovation in AI foundational methods, computational technologies, and opportunities for application. In order to build on advances in AI and to complement TAMIDS existing investments in Data Science, the program seeks submissions with a demonstrated focus in AI that meet the following criteria:

- A. Research Impact:** Advance and innovate in frontier or foundational areas of AI and/or leverage these for high impact in domain applications, emphasizing areas not supported by similar Texas A&M programs.
- B. Strategic Impact:** Address or enable research on societal challenges, strategic priorities, or emerging opportunities for AI at the state, regional, and national level.
- C. Funding Impact:** Submit one or more large-scale proposals for extramural funding during the two-year support period.
- D. Ecosystem Impact:** Enable future research by expanding Texas A&M’s knowledge base around AI in the thematic area and/or establishing AI-driven capabilities or infrastructure.
- E. Alignment Impact:** Leverage or build on Texas A&M resources and investments in AI knowledge and related infrastructure.

### Lab Members and Stakeholders

- ❖ **Members:** Each Thematic Lab is organized by a team of four to six eligible Texas A&M personnel (see below for eligibility requirements), one of which is the Lab director. Members conduct the Lab’s projects and programs with roles defined in the proposal.
- ❖ **Postdoctoral Researcher:** TAMIDS supports a postdoc who serves as a collaborative nexus between members and aids in driving research activities. The postdoc is not included in the count of proposed members.



- ❖ **Stakeholders:** Individual or organizational stakeholders at Texas A&M that expect to benefit from lab activities (from ecosystem impact) or contribute to its success (through alignment impact).

## Lab Activities

- ❖ **Conducting Pilot Research Projects:** Labs propose and receive funding for two pilot research projects in the thematic area.
- ❖ **Increasing Texas A&M's Capacity:** Labs create and share new methods, datasets, and software that expand Texas A&M's capacity in the thematic area. Labs may also create or contribute to infrastructure resources that enable future research.
- ❖ **Disseminating Research Outcomes:** Labs increase Texas A&M's visibility and broaden the impact of their research outcomes through tutorials, workshops, student research, and outreach activities to widen proficiency, participation, and literacy in their thematic area.
- ❖ **Engaging with the TAMIDS Community:** TAMIDS assists with dissemination and helps labs engage with the broader TAMIDS ecosystem. Lab members have opportunities to participate in TAMIDS activities such as serving on review panels or contributing expertise to other Thematic Labs by consultation, collaboration, development of research proposals, and connecting with industry partners.

**Drew Casey**, TAMIDS Assistant Director for Program Engagement, supports *Thematic Labs* with developing and implementing education and outreach activities.



## Thematic Lab Support

TAMIDS provides annual support in each of 2 years comprising \$55,000 for members and research support, plus full salary of a lab postdoc employed by TAMIDS, and administrative support for engagement, events, proposal development and website operations. Lab operation should commence by 09/01/2025; financial support will be made available in advance of that date.

## Financial Support

Each lab will receive support from TAMIDS during each of its **first two (2) years of operation:**

- ❖ **Research Seed Funding:** TAMIDS provides **\$20,000** for each of two pilot research projects, which must support graduate students or postdocs at one of the eligible organizations.
- ❖ **Member Stipend:** The Director receives a **\$5,000** research stipend. A separate **\$10,000** stipend is split amongst the other members. There are no usage restrictions on these funds.
- ❖ **TAMIDS Postdoctoral Researcher:** A postdoctoral researcher employed by TAMIDS who collaborates with lab members in pilot projects and ecosystem development. The duties of the postdoc will be set by the lab director in consultation with the TAMIDS Director.

**Alternatives to Postdocs:** In exceptional circumstances, graduate students or technical professionals can be supported instead. The lab proposal must justify the necessity of this arrangement and describe the supported person's role in meeting the Lab's goals.

## Administrative Support

TAMIDS provides the following support for Lab activities:

- ❖ **Engagement Support:** TAMIDS staff will engage the lab with TAMIDS's network of programs and participants to promote knowledge dissemination and ecosystem development. TAMIDS staff can provide assistance in event planning, operations, and communications, including web presence, social media, and marketing.
- ❖ **Proposal Development:** Submission of proposals through TAMIDS (by inclusion as a center / institute in MAESTRO) is encouraged, in which case proposal development support will be provided by TAMIDS staff. The allocation of unit IDC will follow existing administrative arrangements where these exist, or by reasonable sharing as agreed.
- ❖ **Lab Website:** Each lab operates an independent website or segment of the TAMIDS website ([LINK](#)) to highlight the lab's members and activities. TAMIDS can support the development and hosting of the website, but each lab is responsible for maintaining the website's content.

## Sustainability

TAMIDS aims to foster the development of ecosystems in each lab focus area that are sustainable beyond the two-year funding period, with lab activities and research expenditures continuing at the same or greater level.

- ❖ **Proposals developed by the lab:** Proposals arising from the postdoc's work should include funding commensurate with the postdoc's effort in the proposed work. Any such award will not reduce TAMIDS funding for the postdoc and will instead extend the support period. Any lab proposals that leverage substantive organizational contributions from TAMIDS capabilities and facilities should include TAMIDS in the centers and institutes IDC distribution.
- ❖ **Continuing support:** TAMIDS will continue administrative support beyond the two-year initial period for Thematic Labs that meet their goals for research and ecosystem development, and submission of funding proposals.
- ❖ **Lab initiatives:** Proposals should describe other steps that the lab will take to promote sustainability.

## Eligibility and Requirements

**Members:** The Lab's team of four to six members must meet the following requirements by the time of the proposal submission:

- ❖ **Eligible Organizations:** Members must have administrative location at Texas A&M University (TAMU) at College Station and associated campuses and organizations (including the *Health Science Center*), *Texas A&M Engineering Experiment Station (TEES)*, *Texas A&M Engineering Extension Services (TEEX)*, *Texas A&M AgriLife Research*, *Texas A&M AgriLife Extension*, or *Texas A&M Transportation Institute (TTI)*.
- ❖ **Administrative Location (Adloc) Eligibility:** The collective adlocs of the members must encompass at least two (2) departments with eligible organizations.
- ❖ **Principal Investigator (PI) Eligibility:** All lab members must be PI-eligible<sup>1</sup>.

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<sup>1</sup> PI Eligibility is established by Texas A&M [SAP 15.01.01.M5.01](#)

- ❖ **Member Submission Limit:** Each person can be a member of no more than one Thematic Lab proposed in the current cycle.
- ❖ **Lab Director Eligibility and Limit:** In addition to the eligibility as a member, the proposed Lab director (i) may not be the director of a current Thematic Lab, and (ii) must be a tenure-track or tenured faculty member or have an equivalent role.

**Thematic Overlap Restrictions:** Priority will be given to proposals whose theme does not overlap significantly with existing Thematic Labs or projects currently funded by the X-Grants, TPT program, or similar Texas A&M programs. However, the lab may build on such projects to foster the growth of a distinct new ecosystem. Therefore proposers should distinguish between the proposed work and any related work supported in other programs or Thematic Labs.

## Proposals for New Thematic Labs

Here are the dates and deadlines for the proposal submission:

Call for Proposals Announced	March 10, 2025
Informational Session	March 20, 2025, 1–2 pm
Proposal Deadline	April 21, 2025, 11:59 pm CST
Awards Announced	May 19, 2025

Proposals should be submitted as a **single PDF file** via [Qualtrics Form](#) by **April 21, 2025, 11:59 pm CST** using the structure detailed below.

**Proposal Structure:** The proposal packets must be submitted as a single PDF file using Arial 10pt font (minimum) with one (1) inch margins all around. Page limits are as follows::

1. Cover Page — one (1) page
2. Lab Theme and Impacts — Two (2) pages.
3. Pilot Research Project Overviews — two (2) pages total (one page on each project)
4. Lab Team — one (1) page
5. Member Resumes — two (2) pages per member
6. (Optional) Stakeholder letters — one (1) page each
7. (Optional) Any other information — one (1) page

You can download an [optional proposal template](#) from TAMIDS's website. You do not need to utilize the template; it is entirely optional and can be modified to meet your needs.

### Proposals must contain the following details:

**1. Cover Page** [one (1) page maximum]:

- **Heading:** "TAMIDS Thematic Lab Proposal "
- **Proposed Lab Name** [100 characters maximum]
- **Members:** The name, title, department, institution, email, and lab role of the members, starting with the lab director.

- **Lab Summary** [200 words maximum]: Briefly describe the goals and objectives of the proposed lab and its overall research thrust.
- **Stakeholders**: The names and affiliations of individual or organizational stakeholders.

**2. Lab Theme and Impacts** [two (2) page maximum]: Describing the lab's thematic area and providing a compelling case for the lab to fulfill the programmatic **Impact Criteria**, namely:

- **Research Impact**: Describe the research challenges the lab will address and why and to whom they are important. Describe the overall goals of the pilot research program, and how its products will address the challenges and position the lab for future research.
- **Strategic Impact**: Describe the societal challenges, strategic priorities, and/or opportunities for AI at the state, regional, and national levels that the lab addresses, citing needs and priorities defined in policy reports by industry, government, or expert organizations.
- **Funding Impact**: List one or more extramural funding opportunities to which large-scale proposals will be submitted during the two-year Lab lifetime. If collaborators outside the lab are envisaged (including collaborators external to Texas A&M), the lab proposal should describe how the lab will involve the collaborators in preparatory research for submission.

To promote robustness to potential changes in the funding landscape, proposers are encouraged to target a variety of funding source types: federal, state, industry, and private foundations. Awardees will be allowed to change their target grants with justification.

- **Ecosystem Impact**: Describe how the Lab will expand Texas A&M's knowledge base around AI in the thematic area, and what specific activities will be undertaken, including development of any capabilities and infrastructure that will become available for other researchers. The proposal should identify lab members responsible for implementation, and any TAMIDS support that can help fulfill the lab ecosystem development goals. The proposal may include letters from individual or organizational stakeholders stating how lab activities will benefit them; see item 6 below.
- **Alignment Impact**: The proposal should identify current or anticipated Texas A&M resources and investments for AI that the lab will build on or leverage, and describe how the Lab's use of these resources creates pathways for broader access and opportunities for research. The proposal may include letters from individual or organizational stakeholders stating how their resources align with or support the lab proposal; see item 6 below.
- **Sustainability**: Describe specific actions that will be taken to promote sustainability beyond submission of proposals and programmatic expectations described above.

**3. Pilot Research Projects** [two (2) pages total, one (1) page for each project]:

- **Heading**: Pilot Project Title, Lead member, and other lab members involved.
- **Problem Description & Motivation**: Describe the research problem, its novelty and importance relative to needs and opportunities, and how its solution will advance the state-of-the-art and enable further work in the thematic area.

- **Preparation and Preliminary Results:** Describe the preparation of the team for the proposed work, including their prior research results, data resources, and other capabilities that they will leverage. The proposal should describe existing team collaborations that the proposed work builds on, or how the work combines complementary expertise of team members.
- **Proposed Research and Approach:** Describe the project approach, including the following where relevant: AI methodologies used or developed, computational platform and requirements, datasets and analytical tools used, evaluation metrics, risks or impediments to success, and potential workarounds to these.
- **Outcomes and Products:** Describe the anticipated results and products from the pilot, with milestones and timeline, and how they will strengthen the positioning of the lab for submission of large-scale research proposals.
- **Ecosystem Aspects:** How will the project advance the ecosystem development aims for knowledge, capabilities, and community, and which team members will steer this aspect of the project?
- **Project Budget:** How will the \$20,000 annual funds be used?

*Any bibliographic references and figures used do not count toward the page limit and should be included at the end of the proposal.*

**4. Lab Team and Preparation** [one (1) page maximum]:

- **Team Preparation:** Describe the preparation of the team members for the proposed research, including experience and expertise. Detail the experience of the lab director in the lead or other significant roles in developing proposals and teams at the scale and area planned for the lab, and funding received.
- **Team Coherence:** Describe the coherence of the member team for the selected theme, e.g., through existing research collaborations; shared use of systems, data, or methods; or linkages through shared interest in broad technical, societal, regional, or national challenges.
- **TAMIDS Postdoc:** Describe the role of the TAMIDS postdoc in the Lab, including activities in pilot projects and ecosystem development. The postdoc should be an agent for collaboration across the lab and not be tied to a single project or member. Specify required or preferred skills and experience, and Include a resume of any person identified for this role.

**5. Member Resumes:** Provide resumes, each two (2) pages maximum, for each lab member and any candidate for the TAMIDS postdoc position.

**6. Stakeholder Letters:** Include letters of support, each one (1) page maximum, from individual or organizational stakeholders in Texas A&M. For stakeholders benefiting from lab ecosystem impact, letters should state how the lab outcomes will be utilized. For stakeholders leveraged by the lab for alignment impact, letters should detail any in-kind contributions that will support lab activities or projects, such as personnel effort, additional funding, or in-kind contributions. Organizations that contribute funding to the lab will be recognized as co-sponsors through lab branding and publicity. Letters are not required from stakeholder organizations that support the lab through their regular operations.

7. (Optional) **Any other information** [one (1) page maximum]: Proposers may include additional information for consideration.

### Assessment Criteria

Each proposal will be assessed based on (i) its alignment with TAMIDS's *Thematic Labs* program goals and requirements including member eligibility and restrictions, and thematic overlap considerations;; (ii) the proposed research program and the anticipated impacts of the proposed lab (see above); (iii) the strength of the proposed team, their preparation, and their contributions to the Lab; (iv) the proposed pathways for sustainability including targeted extramural funding.

## Post Award and Operations

### Thematic Lab Launch

- ❖ **Operating Agreement:** The proposal, incorporating feedback from the TAMIDS review, will serve as the roadmap for the operation and activities of the Lab.
- ❖ **Kick-Off Meeting:** TAMIDS will host a kick-off meeting with awarded lab members, including representatives from current *Thematic Labs*.
- ❖ **Postdoc:** TAMIDS will coordinate with the lab director to recruit the postdoc
- ❖ **Schedule:** Lab operations should commence by 09/01/2025; financial support will be made available in advance of that date.

### Review, Reporting and Sustaining Support

- ❖ **Reporting:** The *Thematic Lab* leader(s) will deliver a progress report each year at TAMIDS's annual meeting and during the lab's thematic workshop event and a final written report within six (6) months of the end of the support period.
- ❖ **Coordination:** The lab leader and the TAMIDS director will meet three (3) times a year to assess lab outcomes and program effectiveness and adjust the lab's objectives and identify opportunities for TAMIDS to enhance the lab impact.
- ❖ **Proposals developed by the lab:** Proposals arising from the postdoc's work should include funding commensurate with the postdoc's effort in the proposed work. Any such award will not reduce TAMIDS funding for the postdoc and will instead extend the support period. Any lab proposals that leverage substantive organizational contributions from TAMIDS capabilities and facilities should include TAMIDS in the centers and institutes IDC distribution.
- ❖ **Continuing Support:** TAMIDS will continue administrative support beyond the two-year initial period for Thematic Labs that meet their goals for research and ecosystem development, and submission of funding proposals.

## PROGRAM CONTACT INFORMATION

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## Frequently Asked Questions

- **How many Thematic Labs will be funded?**  
Up to two Thematic Lab awards are anticipated in the current cycle.
- **Why is there a limit to the number of proposed lab members?**  
The *Thematic Lab* should have focused interlocking goals for research, education, resources, and broader ecosystem development, with specified members taking on roles to implement these. The limit aims to promote tight coordination between lab members.
- **Can a lab member have more than one role specified on the title page?**  
Yes, but distributing roles amongst lab members is encouraged to sustain involvement in the lab operations.
- **Why are team members limited to one proposal?**  
This limit encourages team members to commit to playing a substantive role in their chosen proposal.
- **Can Labs acquire additional members after commencing operations?**  
Awarded Labs may add affiliate members from any organization (within Texas A&M or external) as a way to build community and collaboration, including, but not limited to, individual stakeholders. Affiliate members do not receive funding from the Lab.