Interdisciplinary Research Grants
Request for Proposals *Fall, 2026*

The DeLTA Center is inviting undergraduate, graduate and post-doctoral members to submit proposals for funding small research projects during the 2027 calendar year. This year, in addition to the typical DeLTA grants, we are opening calls for a special track for projects targeting ***Multimodal Learning and Development*** **(ML&D)** in collaboration with DeLTA member, Callie Sung's lab. Details on this special-track RFP, including eligibility and evaluation criteria, are below.

Deadline: 11/23/2026

Standard Funding Opportunity: DeLTA Interdisciplinary Research Grant s

This program of the DeLTA Center—now in its 23rd funding cycle—generally funds *interdisciplinary research projects* that span multiple disciplinary approaches to learning and development. Our goal is to seed new and exciting trainee-led research that creates or enhances collaboration across the DeLTA Center and that highlights the unique contributions of a multi-disciplinary center. Work with animals, typical developing humans (including infants, children, adults and older adults), atypical populations, or computational models are all encouraged. Work need not focus only on traditional developmental change (in children) – learning, aging and other sorts of change are also encouraged We especially encourage new or emerging work, though we will also consider ongoing collaborative projects. Project should embrace the multi-level developmental systems approach to development that is the core of the DeLTA Center.

There are no hard and fast rules about what counts as interdisciplinary. This will be evaluated by the reviewers (who are other trainees in the center). In the past, this group has favored projects that bridge two or more labs, and preferably from different departments. But projects that are highly interdisciplinary within a single department (or even a single lab) can also be funded at their discretion. The key is innovation, and a mixture of ideas that might not normally come together. It can be helpful in some cases to establish a multi-disciplinary (but not necessarily multi-departmental) advisory committee, but this is not necessary.

Post-docs, graduate students, undergraduates and other trainees are eligible to apply, though the project must be clearly led by the trainee. Applications originating from multiple trainees are encouraged, though there must be faculty sponsorship for the project. Applicants and their mentors are typically expected to be members of the DeLTA Center, or to become active in the center if their grants are funded. This is evaluated holistically alongside other aspects of the projects by the review committee.

Up to $1500 is available for each funded research project; budgets larger than that may be considered with justification. Funds can be used for supplies, participant compensation, staff assistance, or equipment. Conference travel is not permitted, though travel for collaborative purposes may be. Other expenses may be allowed at the discretion of the DeLTA Center Director. Please ask in advance. All awardees will be expected to present their research findings at a DeLTA Center meeting. DeLTA research grant applicants may also have their grant considered for the ML&D award. While the maximum amount is identical at $1500, this will provide access to lab equipment and time, as well as methodological support (with approval from Prof. Sung).

Special Funding Opportunity: Multimodal Learning & Development (ML&D)

This year, the DeLTA Center and the *Advanced Learning Traces* (ALT) Lab in the College of Education are pleased to announce a special track for multimodal data collection. This progra is intended to make the advanced multimodal learning technologies available in the ALT Lab available to the wider community of people who seek to understand learning.

The ALT lab, located at the Lindquist center, is a spacious, ADA-accessible 700 square foot room designed to run naturalistic observation studies on the process of learning and human development. In addition to classroom furniture, the lab has the following equipment for data collection.

- Two wearable eye trackers with two adult-sized and one child-sized frames (Pupil Neon)
- Five electrodermal activity bracelets (Empatica EmbracePlus)
- Two laptops (Ecological momentary assessment, activity logger, writing logger)

- Two high-resolution voice recorders (RODE Wireless GO, Gen 3)
- Two high-resolution webcams and tripods (Logitech MX brio)
- Whole-room computer vision system to track joint location and movement
- One study computer with dedicated GPU; One PC with remote-accessible storage

More information on the lab facilities and the types of research questions they can be used to address can be found at alt.lab.uiowa.edu. Interested applicants are highly encouraged to stop by the drop-in lab opening event, to be held at 2pm, Thursday November 12th. Please see the lab home page for details and to register in advance (registration link: https://bit.ly/alt_rsvp). Please register in advance via the lab home page for directions and other information about the event. Light refreshments will be provided.

Eligibility and evaluation criteria differ from the main track in the following ways.

- To be eligible for the special track, applicants must propose a research project that uses one or more pieces of equipment at the ALT lab for data collection.
- The ML&D track particularly welcomes applied research on human learning, such as the development of data- and technology-driven tools for learning (broadly defined), the evaluation of technologies and interventions for human learning (broadly defined), or multimodal studies of human-computer (human-data, human-AI) interaction.
- In addition to the applicant's primary faculty mentor, the Lab PI (Callie Sung) is expected to serve as methodological advisor, though the level of involvement may vary by needs and interest. As such, projects related to either of the Lab's two areas of particular interest—AI and human learning, or ADHD and other learning disabilities—may be especially well suited for closer mentorship and collaboration with the Lab members and PI. However, alignment with these areas is not required and will be considered only alongside other criteria on merit and feasibility.
- Projects that apply for this track are not expected to formally bridge two or more labs in the same way as standard DeLTA grants (though obviously the ALT Lab will be involved at some levels). However, funded projects are likely interdisciplinary, connecting fields such as psychology, education, computer science, neuroscience, and communication.

Awards made under this program will be reviewed under a special process, consulting both the student reviewers and the ALT lab PI, with more emphasis on suitability for a collaboration with the ML&D lab and less on traditional review criteria applied for DeLTA grants. Finalists, selected based on the proposal, may be invited to a short zoom interview with the ALT lab PI to discuss project and mentoring plans.

ML&D Awards have a maximum funding of $1,000. However, applicants can elect to have their grant also considered as a standard DeLTA award which can bring the total award to $1500. Approval as a primary DeLTA grant is not required for funding by the ML&D program. Applicants must indicate if they are applying to one or both of the tracks in their application. Similarly to the main track, applicants or their home or collaborating lab should either be an active member of the DeLTA Center, or plan to become an active member in 2027. Applicants applying for both tracks should carefully consider and specify in their proposal how their project meets the overlapping, but slightly distinct eligibility criteria of the two tracks.

Proposal instructions

The first page should use the attached cover page and be signed by the student PI(s) all of the faculty mentors. Please make sure that the project description is copy and paste-able (not a scan) so that it can be posted to the website, distributed over email, etc. The cover page does not count against the page limits.

The project description should not exceed three pages (this limit does not include the cover page, references, CV or other materials). Please use a font no smaller than 11 pt Arial, with margins no smaller than .5". Single spaced text is fine (and typical). Shorter proposals are acceptable. The project description should address the following topics. These can be done in separate sections or as part of an overall narrative.

Any project applying for either of the tracks must address the following issues (any order is fine). There are specific questions below for both standard DeLTA proposals and for ML&D proposals If you would like to have your proposal considered for both, you must address all of these questions.

Common items:

- *Research aims and background:* A short synopsis of your question, and why it is important.
- *Approach* and how you intend to answer your questions. Make sure you include some details about how the project will be executed – who will do what, how both (if multiple) labs are involved, and a rough timeline of activities.
- *Projected outcomes*: What will this project lead to? Will the project provide pilot data for a grant or dissertation? Is this the beginning of a longer-term line of research? Will it lead to a conference presentation or journal publication?
- *Intellectual Contributions:* What are the intellectual contributions of the project? What are the material contributions of each lab/mentor and what specifically will the student be doing? Will there be other people involved and what will they do?
- *Revisions.* Applications that are revised from prior funding cycles may include <u>one additional page</u> summarizing changes that were made in response to the prior round of reviews, or addressing and rebutting the concerns.

DeLTA program applications are also expected to address:

- ***Interdisciplinarity, Innovation and Developmental Systems – DeLTA Fit****:* A description of how your project is innovative, how it will build on multiple approaches, and how it is consistent with the broader theme of developmental systems. How does this project (and the applicants/mentors) fit into the broader intellectual mission and culture of the DeLTA Center.
- ***Fit of the project to the Funding Goals****:* How does this project fit into the research programs of the sponsoring lab(s) and the research program of the applicant? Will this project lead to longer-term collaborations between labs? How will it leverage the strengths of multiple labs? Does this project reflect a merging of long-term research interests of both labs? Or is it receiving technical or intellectual expertise from one lab to benefit primarily questions from the other? Or is it something genuinely new to both?

ML&D program applications *are also expected to address:*

- ***ALT Lab Contributions.*** What is the expected level and types of support required from the ALT lab on methodology or other parts of the project? What will the contributions of the primary mentor(s) be? What are the material contributions of each lab/mentor and what specifically will the student be doing? Will there be other people involved and what will they do?
- ***Data collection and analysis:*** What sources of data will the project collect, including but not limited to data that can be collected from the ALT Lab facilities? What are your plans for how you will analyze this data? This may require reviewing prior research in your field that has used similar data sources. A concise, practical, and high-level overview of data analysis plans is preferred. Include prior experience (if any) with high-frequency or specialized data sources, e.g., log data, stationary eye-trackers or neuroimaging tools. Also describe programming, software, and other relevant data analysis skills and experience if any.

After the project proposal, applicants should include three additional documents. This does not count against the page limit.

1) *Budget:* How will the money be used. Please include both a table of expenses, and justification describing how you reached these amounts (a standard NIH style budget justification is fine). If a larger than usual budget is requested, justification should be included. If the necessary budget to complete your project is larger than the funding limit, please include a statement as to how the project can be completed if funded at a lower amount.
2) The applicant's complete CV.
3) A short bio of the mentors (this should include department/background, research interests, a sentence or two about how this project fits with their work, and references of up to five representative publications that are relevant to this project.

This funding mechanism is open to both new proposals and revisions of proposals that were submitted during previous review cycles. For revisions, we will make every attempt to use at least one of the reviewers from the prior cycle. Bear in mind that the best proposals tell a clear, persuasive story, and emphasis the importance of the work, the scientific questions, not necessarily the details. Reviewers are generally more interested in *why* you want to do what you propose, not *what* you propose to do. Proposals should be written for a broad audience with some background in learning and/or development.