

FY25 Request for Catalyst Proposals

The Graham Sustainability Institute is soliciting **catalyst grant** proposals from faculty at the University of Michigan's (U-M) Ann Arbor, Dearborn, and Flint campuses for projects that address critical sustainability challenges by:

- Developing new, user-driven, collaborative research ideas; or
- Translating existing research for real-world application.

Applications from all disciplines are welcome, including STEM fields, social sciences, professional schools, humanities, and the arts. Proposals may address **any sustainability topic** and must adopt a **user-driven approach**.

Catalyst grants offer up to \$15,000 for projects lasting up to 12 months. Approximately five grants will be awarded in this cycle.

KEY DATES

November 1, 2024 (11:59 PM ET)	Mandatory letter of intent due; we encourage earlier submissions to allow for greater feedback
January 27, 2025 (11:59 PM ET)	Proposals due
March 2025	Funding notifications
May 1, 2025	Anticipated project start date

This is a recurring funding opportunity with RFPs released in the fall and/or winter, as resources allow. This will be the only solicitation released for the 2024-2025 Academic Year.

SUPPORTING DOCUMENTS

All supporting documents and access to the online application form can be found on the catalyst grant webpage at: https://graham.umich.edu/catalyst/grants.

QUICK LINKS

- Catalyst Grant Characteristics
- Catalyst Grant Objectives and Anticipated Activities
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- Requirements for Catalyst Grant Recipients
- Additional Eligibility Requirements

CATALYST GRANT CHARACTERISTICS

All catalyst grant projects must:

- Advance sustainability Sustainability here is defined by the problems it addresses, not
 the disciplines involved. While sustainability may be broadly understood, all catalyst grant
 projects advance sustainability by applying solutions-driven scholarship and practice to
 safeguard the planet's life-support systems and enhance the well-being of present and
 future generations. They incorporate environmental, economic, and sociocultural
 dimensions (though these need not be equally emphasized), and draw from diverse
 disciplines, including natural, social, engineering, design, and health sciences, as well as
 the humanities, arts, professions, and practical experience in business, government, and
 civil society.
- Adopt a user-driven approach Projects identify and engage "intended users"—partners
 outside academia who will apply the project's outputs (e.g., findings, tools, information) to
 influence real-world decision making and practice. These users should actively inform the
 proposal and have ongoing, meaningful opportunities to shape the project throughout its
 development to ensure it remains relevant to their needs. Users can come from sectors
 such as government, industry, NGOs, or community groups, and there should be a clear
 connection between the project's focus and the intended users' roles or needs.
- Collaborate across disciplines Projects bring together a strong team representing faculty from at least two disciplines and at least two U-M academic or research units.¹

CATALYST GRANT OBJECTIVES & ANTICIPATED ACTIVITIES

Catalyst grants can support a range of projects, but all proposals require a user-driven approach and must be designed to achieve at least one of the RFP objectives described below. For either objective, if the catalyst grant would support a portion of a larger effort, the **proposal must focus** on the specific work the catalyst grant would enable.

Objective 1: Develop new, user-driven, collaborative research ideas

These early-stage projects help to better define a problem and clarify user needs. **All Objective 1 projects should be advancing toward future user-driven projects.** Example activities include, but are not limited to:

- Partnership building and engagement activities (e.g., meetings, workshops) that foster reciprocal relationships in order to understand user needs and identify a collective set of research priorities;
- Synthesis of existing data to identify knowledge gaps and needs relevant to decision-making; and
- Collection and analysis of data (numeric, textual and/or visual) in collaboration with users to refine and/or scope a larger collaborative research project.

¹ See the Eligibility section on page 3 and guidance at the end for more details on the disciplinary and unit diversity requirements.

Objective 2: Translate existing research for real-world application

These projects engage users and build on prior research accomplishments to advance their real-world application. **Objective 2 projects must develop at least one translational product (tool, guidance, creative work, etc.)** that supports a user's understanding, decision-making or action. Activities may include, but are not limited to:

- Development or refinement of decision-making tools, guidance or recommendations for a user:
- Translation and dissemination of research findings for specific audiences;
- Training and/or capacity-building for users or other identified individuals/organizations;
 and
- Small-scale evaluation of a pilot or proof of concept.²

COLLABORATION & USER INTEGRATION

All proposals must clearly identify, engage, and be responsive to the interests and needs of the intended users of the project outputs. The objective and type of work proposed should dictate the approach to engagement as well as the breadth and depth of engagement planned during the project. Some projects may engage multiple intended users and various other stakeholders and partners, while others may collaborate closely with a single, highly relevant user.

All proposals must:

- Identify the primary user(s) and their needs;
- Describe how the user's input informed the proposal;
- Describe a process that ensures iterative and meaningful engagement with the user(s), including mechanisms for being adaptive and responsive to their input; and
- **Provide at least one letter of support from an intended user** that demonstrates their interest in the project.

ELIGIBILITY

Proposed projects must be led by a U-M employee eligible to serve as a U-M Principal Investigator (PI).³ U-M Faculty from the Flint, Dearborn, and Ann Arbor campuses are eligible to serve as a PI or Co-Investigator (Co-I).

All proposals must involve collaboration across disciplines and the U-M campuses. There **MUST** be representation of at least two disciplines AND at least two U-M academic or research units (<u>U-M faculty handbook</u>) among the U-M faculty or researchers listed as PIs and Co-Is. The disciplinary and unit requirements are distinct. For instance, meeting the unit requirement may not be sufficient to meet the disciplinary breadth requirement. Teams with investigators from different campuses are encouraged. See the <u>guidance</u> at the end of the RFP for additional details.

² In general, catalyst grants are not intended for solely implementation projects. Projects may include a pilot or proof of concept, but it should be clear how the work supports broader decision-making or action.

³ The definition of a U-M PI can be found at: http://orsp.umich.edu/principal-investigator-pi.

REVIEW PROCESS AND CRITERIA

Proposals will be evaluated using the criteria listed below by Graham Institute staff and U-M faculty with relevant expertise. The Graham Institute seeks to support a diverse group of grant recipients and to be inclusive of new collaborations. These goals will be taken into consideration when making final funding decisions after the review is complete.

Criteria rated on a 1-4 scale (Poor to Excellent):

Sustainability focus

o Does the proposal clearly articulate the relationship of the work to sustainability, including environmental, economic and sociocultural dimensions (recognizing some dimensions may be more prevalent than others)?

Project approach

- o Does the proposal include an appropriate, sufficiently detailed, and technically sound plan to achieve the project outputs and meet the identified RFP objective(s)?
- o Are team members' roles well-defined? Is it clear how insights from the multiple perspectives/disciplines will contribute to and be integrated into the project?

• Collaboration and user engagement

- o Does the project identify a specific user(s) and clearly articulate their needs?
- o Does the proposal incorporate an appropriate strategy for user engagement, including mechanisms and a timeline for soliciting input from users and incorporating their feedback in order to inform and/or adapt the project outputs, and a rationale for why that specific approach was chosen by the team?
- o Is there evidence of the user's commitment to continued involvement in the project corroborated in letters of support?

Feasibility

- o Is the timeline realistic for the proposed work, and does it include sufficient time to work with intended users, integrate their input and complete proposed project outputs?
- o Is the budget appropriate for the proposed work, and does it include sufficient resources to support meaningful participation of project partners?

• Scholarship

o Does the proposal articulate how the project will advance understanding or contribute to scholarship?

Students

o Does the proposal articulate compelling opportunities for U-M students? These need not be supported directly by the catalyst grant.

LETTER OF INTENT REQUIREMENTS

Applicants are required to submit a brief LOI by 11:59 PM ET on Friday, November 1, 2024. Proposals submitted without first submitting an LOI by this deadline will NOT be considered.

Information gathered through LOIs will be used to alert program staff to the level of interest in the funding opportunity and guide recruitment of reviewers. Program staff may initiate discussions with applicants based on information provided in the letters—particularly if there are any concerns regarding alignment with the goals and minimum requirements of the funding opportunity; however, applicants do not need an invitation to submit a proposal. LOIs are not binding, and changes are permitted in the proposal.

LOIs should be provided as a single pdf file that includes the following information:

- 1. <u>Draft project title</u>
- 2. <u>Project team</u> PI and Co-I(s) names, contact information, position title and academic unit/organization
- 3. <u>RFP objective</u> Indicate the eligible <u>RFP objective(s)</u> to which your project relates
- 4. <u>Project summary</u> Provide up to one page describing the planned work, including the intended user(s), activities/methods, outputs, and outcomes.
- 5. Relationship to existing efforts Briefly describe how the proposed work would build upon existing work and/or enable new efforts.

To submit your LOI, click on the application link on the catalyst grant webpage (https://graham.umich.edu/catalyst/grants), log in with your UM credentials, and follow the directions. You will receive a single confirmation email when you have successfully saved your LOI for the first time. Save this email; it will include a link you may use to return to your LOI and make edits until the deadline, which is also the same link you will use to submit your proposal.

PROPOSAL REQUIREMENTS

Proposals must be submitted by 11:59 PM ET on Monday, January 27, 2025.

Proposals must be submitted as a single pdf file using 12-point Times New Roman font, single-spacing, and one-inch margins, and be organized using the headings below. Proposals must include a title page, a project narrative, and appendices as outlined below.

Title page (1 page maximum)

Organize your title page using the following headings:

- 1. Project title
- 2. <u>Principal investigator</u> (primary contact for project) Name, title/position, U-M unit, telephone, mailing address, and email address
- 3. <u>Co-investigator(s)</u> Name, title/position, U-M unit, institution, telephone, and email address
- 4. <u>Additional team members</u>, if applicable (anyone receiving project resources or contributing significant resources to the project) Name, institution, telephone, email address, and nature of the contribution, if relevant.

- 5. <u>Project start and end dates</u> Projects should start on May 1, 2025 and end no later than June 30, 2026
- 6. <u>Budget request</u> Requested dollar amount up to \$15,000
- 7. RFP objective Indicate the eligible RFP objective(s) to which your project idea relates
- 8. <u>Non-technical summary</u> Provide a 250-word summary suitable for a non-technical audience. Include the project's objectives, responsiveness to user needs, planned outputs, and anticipated outcomes.

Project narrative (5 pages maximum)

Organize your narrative <u>using the following underlined headings</u> and <u>subheadings</u>. Suggested page lengths for sections are offered.

- 1. <u>Project objective & response to user need (~1.5 pages)</u> Include the following information, using an organizational structure that best suits the proposal topic.
 - Concisely state the activity being proposed (2-3 sentences) and be explicit about the <u>RFP objective(s)</u> you seek to achieve.
 - State the sustainability challenge the project proposes to address, the need for the activities being proposed, and what the project will accomplish. Discuss the importance and context, making clear how it includes different dimensions of sustainability-environmental, economic, and sociocultural-recognizing they may not be equal.
 - Identify the project's primary intended user(s) and their connection to the proposal topic and current needs. Describe how their input helped to shape the project and how they anticipate applying the project findings and using outputs in their work. This should be corroborated by letters of support in the Appendix. Refer to the <u>guidance</u> at the end for additional user details.
 - Be explicit about whether the project is building on existing work or enabling new efforts. If you are building on existing work, explain how the proposed work is distinct. (If the catalyst grant is being sought to support a portion of a larger effort, state that explicitly, very briefly describe the broader work, and explain why a catalyst grant is needed to support the distinct, complementary activities outlined in the proposal.) The rest of the proposal must focus on the specific activities, outputs, and outcomes the catalyst grant would enable.
- 2. Project approach (~2 pages) The approach should describe integrated technical and collaborative processes, opportunities for meaningful input from users, and effective coordination of project team members. Given the extra time often required for user engagement and team collaboration, proposals should scale the work appropriately and build buffers into the timeline so that the project can be completed within twelve months. Be sure to include the following information, using an organizational structure that best suits the proposal topic.
 - Describe the project approach, including the specific activities and/or methods you will use to develop the project outputs. The approach should draw upon the multiple disciplines on the team.

- Describe the collaborative process that will be followed to ensure iterative and meaningful engagement with users.
 - (1) This includes specific mechanism(s) and a timeline for soliciting users' input and feedback during the project in order to inform and/or adapt the project outputs. Explain why that approach was chosen (e.g., leveraging an existing working group because it is an efficient way to engage the users, integrating individuals onto the team because they have a skill or expertise relevant to completing the project).
 - (2) This should also demonstrate how users will benefit from involvement in the project and an understanding of the support they may need to participate in the project as intended.

Please note: Graham Staff are able to help support project teams with engagement strategies with intended user(s). Please reach out to Graham staff before RFP submission to discuss requested Graham support for partnership building activities.

- Briefly identify required data sources and describe how the team will access them. Given the timeline of the grants, projects should already have or be able to access sufficient information quickly for an effective analysis or synthesis.
- 3. Outputs and outcomes (~0.5 page) Separately list the project outputs and anticipated outcomes, clearly distinguishing between the two. (See definitions and examples in the box below). Describe these briefly, clearly stating how the outputs address user needs and how they will help lead to the anticipated outcomes. Recall that all Objective 1 projects should be advancing toward future user-driven projects, and all Objective 2 projects must develop at least one translational product (tool, guidance, creative work, etc.) that supports a user's needs.

Outputs are specific products created or services delivered during or upon project completion. There are often multiple outputs for catalyst grants, but **the main outputs should be designed to meet user's needs.** Examples include, but are not limited to:

- A refined collaborative research question informed by user engagement and initial data collection and analysis;
- Academically sound collections of data, images, objects, and texts; and/or their analysis and synthesis to meet a user need;
- Translational products that address user needs (e.g., reports, white papers, guides, recommendations, factsheets, scenarios, tools);
- Events such as conferences, workshops, stakeholder meetings, trainings, cultural performances, art exhibits, etc.;
- Scholarly work (publications, presentations, creative work, etc.).

Outcomes are the expected impacts of the project process and outputs. The table below lists categories of outcomes that can prompt your thinking beyond what is easily quantified for a fuller plan for the project's outcomes. Given the short

duration of catalyst grant projects, we expect that projects will focus on achieving a few nearer-term outcomes.

Individual Capacity	Personal and professional growth, including skills (new or enhanced), awareness, and changes in mindset, leading to changes in practice, approach, capacity or behavior, including ways to put new awareness into practice.
Team Capacity	Personal growth at the team level including increased and deepened collaborative relationships, more team members with collaborative science experience and specific analytical and facilitative skills. This can also include enhanced capacity for pursuing external funding, or a team who is able to pursue or secure additional funding by the end of the project's lifetime.
Network Development	Expanded internal to U-M or external relationships that make a difference in the work; this could be new relationships, deepened existing ones, or increased connectivity among partners.
Contributions to the Field & Real-world Sustainability	Intellectual leadership and innovation, products and insights that enhance real-world application of natural, physical and social sciences, and the arts and humanities to support sustainability. Also includes new or refined decision-making, management, strategies, or action for projects user(s) or external partners
	through capacity building and real-world application of research findings.

- 4. <u>Scholarship & students (~0.25 page)</u> Briefly explain how the work will support faculty scholarship (e.g., development of new areas of inquiry and/or partnerships important for future scholarly work) and create opportunities for U-M students.
- 5. <u>Project team roles (~0.25 page)</u> Describe each team member's role on the project and their responsibilities (i.e., the activities/outputs to which they will contribute a table might be helpful) and how the integration of insights from the multiple perspectives contributes to the project. Do not merely summarize expertise evident from CVs.

Appendices

- 1. References
- Proposal approval form Complete the <u>Graham proposal approval form</u> found on the catalyst grant webpage. Please allow time to route this form for signatures according to the policies and procedures in your campus unit. Note: this is NOT the PAF routed through e-research.

- 3. <u>Timeline</u> Using the <u>timeline template</u> found on the catalyst grant webpage, identify anticipated start and end dates for the proposed work. Identify significant tasks/activities, including user engagement, and the outputs described in the narrative. **Reminder: Your timeline should include appropriate buffers for engagement and collaboration, and the work should be feasible for completion within the twelve-month project period.**
- Budget Using the <u>budget template</u> found on the catalyst grant webpage, include the budget for this project. Awards will be funded at a level of up to \$15,000 for twelve months. No indirect costs or equipment purchases will be allowed. Matching funds are not required.
- 5. <u>Budget justification</u> Provide a narrative that fully explains the relationship of costs to accomplish the proposed activities and the basis for cost estimates. If faculty salary support is requested, provide detail (for whom, nature and percent of appointment, period of time, amount).
- 6. <u>Financial support for broader efforts</u>, if applicable If catalyst grant funding is being sought for a portion of a larger effort, or if the catalyst grant will not cover the full cost of the proposed activities, identify other funding, pending or awarded, that is critical to the success of the catalyst work. Note which costs related to the catalyst grant scope of work (e.g., personnel, travel, supplies, etc.) this other funding would cover.
- 7. <u>Letters of support</u> Provide letters from individuals and/or partners confirming contributions to and support for the project. Include letters from the following:
 - A. Primary users engaged in the project. Letters should describe how they have been engaged in the development of the proposal, how they see themselves involved in the project if funded, and how they anticipate using the project outputs. All proposals must include at least one letter of support from an intended user.
 - B. Team members included in the project but not funded in the budget.
 - C. Individuals, groups, and/or institutions that have agreed to provide data/access to data or other resources necessary for the project not otherwise accounted for in the budget.
- 8. Resumes Include two-page resumes for each team member named on the proposal.
- 9. Other supporting documents You may include up to three pages of supporting documents as appendices.

Instructions for Submitting Proposals

To submit a proposal, access your application using the unique URL from your LOI confirmation email and the same UM login credentials. Follow the directions to update your team membership, if needed, and to upload your proposal as a single PDF.

REQUIREMENTS FOR CATALYST GRANT RECIPIENTS

Catalyst grant recipients will be required to:

Participate in two verbal project check-ins with Graham staff (kick-off and late project).

- Submit a brief mid-project report that describes progress on activities, outputs, and anticipated outcomes outlined in the proposal and any challenges experienced (~2 pages).
- Submit a brief final written report that describes the overall results and progress relating
 to the objectives, outputs, and outcomes presented in the original proposal and/or
 participate in a Graham-facilitated and supported project wrap up meeting to explore
 project outcomes and real world impact
- Share project outputs (e.g., articles, guides, tools, factsheets, other products for users) with the Graham Institute.
- Participate in a Graham-sponsored meeting or event with U-M sustainability researchers to share findings.
- Respond to Graham Institute surveys about the impact of the grant and project details.
- Mention Graham Institute support in any publications, presentations of project results, and formal project communications (press releases, social media, etc.), and provide information to Graham Institute staff related to these efforts.
- Respond to requests to review proposals during future funding cycles.

ADDITIONAL ELIGIBILITY GUIDANCE

The two-unit minimum requirement can be fulfilled by a PI and Co-I both within the College of Literature, Science, and the Arts (LSA) provided there is representation from at least two of the three LSA Divisions (i.e., Humanities, Natural Sciences, and Social Sciences). While other U-M units also have disciplinary diversity, this exception to the two-unit minimum is available solely for LSA based on the school's breadth and size.

The four UM-Dearborn colleges and five UM-Flint academic units are considered distinct units.

If an investigator (PI or Co-I) has a joint appointment (e.g., active appointments in multiple units), the primary home unit (i.e., the unit that pays at least 50% of salary) will serve as the unit that counts toward the two-unit minimum requirement.

These requirements do not limit the number of investigators on a team. The team may include multiple investigators from the same unit or same discipline so long as the team also meets both the unit and disciplinary requirements. Co-ls and team members from other institutions and organizations are allowed.

A PI with an active catalyst grant may not be listed as an investigator (PI or Co-I) on new catalyst grant proposals until the first project has finished. A principal investigator may not receive more than two catalyst grants.

QUESTIONS ABOUT THIS RFP

Please direct all questions related to this RFP to Maggie Allan, Collaborative Research Manager (maallan@umich.edu, 734-763-0749) or Sarah Miller, Collaborative Research Specialist (milsar@umich.edu, 734-763-4035).

Program staff will maintain and regularly update a **Frequently Asked Questions** available from the <u>catalyst grant webpage</u>.