

STEM Catalyst Grants 2018

Request for Proposals

Applications are invited for the second STEM Catalyst Grant cycle, a highly competitive research grant program across the sciences, engineering and mathematics, offered through a collaborative effort of the College of Arts and Sciences, Hanley Sustainability Institute, and School of Engineering. The program is providing up to \$500,000 in total funding over two years to broadly support research across STEM fields. The award is intended to foster new and expand existing research programs that have the potential to rise to national prominence. Applications should articulate how the research advances the University of Dayton's commitment to the common good. Proposals from collaborative teams addressing multidisciplinary challenges are particularly encouraged. Proposals focused on curricular or cultural reform are outside the scope of this call.

Eligibility:

All faculty (tenured, tenure track and non-tenure track) are eligible to apply.

Award details:

The program will support research from May 16th, 2018 to May 15th, 2019. Proposal budgets may be customized by applicants to include faculty salary and benefits, student stipends/assistantships, materials, supplies, and other research expenses. Budgets should be appropriate to the scope of activities. We anticipate funding multiple proposals of focused to moderate scope or collaboration (<\$50,000). Up to two bold collaborative projects (<\$100,000) will also be funded.

Review process:

Awards will be reviewed in two categories. Proposals requesting under \$50,000 will be reviewed by a committee composed of representatives from the College of Arts and Sciences, Hanley Sustainability Institute and School of Engineering. Teams requesting \$50,000 - \$100,000 should submit a preliminary proposal. Full proposals at this award level will be received by invitation and reviewed externally. Following recommendations from internal and external reviewers, final award determinations will be made jointly by the heads of each participating unit.

Application Deadline:

Preliminary proposals from teams requesting over \$50,000 must be received by Tuesday, Nov 14th, 2017 at 5:00 p.m. Full proposals for this award level will be conducted by external review and considered by invitation only. Applications for proposals requesting <\$50,000 must be received by Thursday, January 11th, 2018 at 5:00 p.m. Awards are expected to be announced by Tuesday April 3rd, 2018.

Evaluation Criteria:

The proposal narrative should be written for clarity to a broad audience of STEM researchers and describe the significance and expected outcomes of the award. The application process is expected to be highly competitive (2017 funding rate of 23%). Reviewers will consider the following criteria in evaluating proposals:

- The significance of the research:
 - How will the research advance the discipline(s) or deliver a needed innovation?
 - How will the program deliver a broader societal impact and advance the University's commitment to serving the common good?
- The feasibility of the proposal:
 - Given the project rationale, work plan, team composition, budget and timeline, what is the likelihood of the described outcomes being achieved?
- The specific vision for the translation of this award to continued external funding:
 - What agencies or partners are aligned with and will be attracted by the research?
 - What are the specific funding mechanisms that will be sought and on what timeline?
- The effect of the Catalyst award on the research program:
 - Why is Catalyst funding necessary to help establish or advance the research program and how will it do so?
 - How and to what degree does Catalyst funding improve the likelihood of external sponsorship?

Only complete applications submitted by the deadline and consistent with the application instructions will be considered. Late or incomplete proposals will not be reviewed.

Acceptance Requirements:

For 2018 awards, a final report detailing the outcomes of the award: research outcomes, external funding applied for or received, manuscripts, etc. is due before May 18, 2019 or reapplication to this program. All grantees commit to pursuing external funding for Catalyst-sponsored research within 12-18 months of receipt of funds and to providing copies of submitted applications. Additional support for pursuit of external funding may be available. Scholarly work arising from this award must acknowledge this granting mechanism. Recipients of the summer 2018 awards are expected to share the results of the supported research internally at a forum designed for this purpose convened in the 2018-19 academic year.

Funding Restrictions:

Recipients may not receive more than 100% of their 12-month equivalent compensation. Faculty previously committed to 2018 summer teaching assignments may teach up to one summer course. Projects involving human or animal subjects must receive applicable IRB or IACUC approval prior to receipt of funds. Funds will be distributed beginning May 16th, 2018 and must be exhausted by May 15, 2019.

Application Instructions (Proposals <\$50,000):

Submit completed applications to STEMcatalyst@udayton.edu by 5:00 p.m. on Thursday January 11th, 2018. Questions can be directed to Doug Daniels (ddaniels2@udayton.edu) or Don Pair (dpair1@udayton.edu).

Applications should contain the following 6 elements, with parts 1-5 compiled as a single PDF

1. Project Proposal (maximum 6 pages):
 - a. Project title
 - b. Project team: Name and UD affiliation of each member
 - c. Abstract: maximum 200 words
 - d. Proposal narrative: Background, significance, methods and references. For collaborative applications, the role played by each member of the project team should be included, as well as the planned modes of collaboration/interaction among the project team
 - e. Expected outcomes: Timeline for the project and expected outcomes in:
 - i. Publications, scholarly advancement or innovation
 - ii. External funding from specific agencies and granting mechanisms, contracts, or external partnerships
 - iii. Broader societal impacts consistent with the University's commitment to advancing the common good
2. Budget Narrative that includes:
 - a. Total budget requested
 - b. Explanation of research expenses
 - c. Statement articulating how the project would change if project were funded at 50% of request.
3. Disclosures: Current, pending, or potential funding (internal or external), conflicts of interest, etc. for each applicant
4. Curriculum Vitae or Biosketch for each applicant
5. Signed statement of support from the department Chair for each applicant. A template form is included with this call for proposals.
6. Budget Template: A spreadsheet template for budgets is included with this call for proposals. Budgets must be submitted using this template.

Application Instructions (Preliminary Proposals \$50,000-\$100,000):

Submit completed applications to STEMcatalyst@udayton.edu by 5:00 p.m. on Tuesday November 14th, 2017. Questions can be directed to Doug Daniels (ddaniels2@udayton.edu) or Don Pair (dpair1@udayton.edu).

Applications should contain the following 4 elements, compiled as a single PDF

1. Preliminary Proposal (maximum 4 pages):
 - a. Project title
 - b. Project team: Name and UD affiliation of each member
 - c. Abstract: maximum 400 words
 - d. Preliminary proposal/executive summary: Background, significance, brief methods and essential references.
 - e. Expected outcomes: Timeline for the project and expected outcomes in:
 - i. Publications, scholarly advancement or innovation
 - ii. Sustainable improvements in research landscape or infrastructure at UD
 - iii. External funding from specific agencies and granting mechanisms, contracts, or external partnerships
 - iv. Broader societal impacts consistent with the University's commitment to advancing the common good
2. Budget synopsis that includes:
 - a. Total budget requested
 - b. Categorized budget: faculty salary and benefits, trainee stipend and benefits, equipment, supplies/materials, other
 - c. Optional explanation of any expenses
3. Disclosures: Current, pending, or potential funding (internal or external), conflicts of interest, etc. for each applicant
4. Curriculum Vitae or Biosketch for each applicant

Statement of support from department chair

I am aware of the application of _____
to the 2018 Catalyst grant program and support the ramifications of receiving the award,
including the applicant's commitment to the proposed research program, commitment to
pursuing external funding, and any required or voluntary changes to summer teaching
assignments.

Signature

Printed Name