

# STEM Catalyst Grants 2019

## Request for Proposals

Applications are invited for the third STEM Catalyst Grant cycle, a highly competitive research grant program across the sciences, engineering and mathematics, offered through collaborative sponsorship of the College of Arts and Sciences, School of Engineering, and Office of the Provost. 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 16<sup>th</sup>, 2019 to May 15<sup>th</sup>, 2020. Proposal budgets may be customized by applicants to include faculty salary and benefits, student stipends/assistantships, materials, supplies, and other expenses in support of research or **pursuit of external sponsorship**. Budgets should be appropriate to the scope of activities. We anticipate funding multiple proposals of focused to moderate scope or collaboration (\$5,000 - \$50,000) and up to one bold collaborative project (<\$100,000).

### **Review process:**

Awards will be reviewed in two categories. Proposals of \$5,000 - \$50,000 will be reviewed by a committee composed of representatives from the College of Arts and Sciences 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 Deans of the College of Arts and Sciences and School of Engineering.

### **Application Deadline:**

Preliminary proposals from teams requesting over \$50,000 must be received by Tuesday, Nov 25<sup>th</sup>, 2018 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 and invited team proposals must be received by Tuesday, January 15<sup>th</sup>, 2019 at 5:00 p.m. Awards are expected to be announced by Tuesday April 2<sup>nd</sup>, 2019.

**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. 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:
  - Why is Catalyst funding necessary to help establish the investigator(s) or 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 2019 awards, a final report detailing the outcomes of the award: research outcomes, external funding applied for or received, manuscripts, etc. is due before May 15th, 2020 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 2019 awards are expected to share the results of the supported research internally at a forum designed for this purpose convened in the 2019-20 academic year.

**Funding Restrictions:**

Recipients may not receive more than 100% of their 12-month equivalent compensation. Faculty previously committed to 2019 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, 2019 and must be exhausted by May 15, 2020.

**Application Instructions (Proposals \$5,000 - \$50,000):**

Submit completed applications to [STEMcatalyst@udayton.edu](mailto:STEMcatalyst@udayton.edu) by 5:00 p.m. on Tuesday, January 15<sup>th</sup>, 2019. Questions can be directed to Doug Daniels ([ddaniels2@udayton.edu](mailto:ddaniels2@udayton.edu)) or Don Pair ([dpair1@udayton.edu](mailto: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 expenses in support of research or pursuance of external sponsorship
  - 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: A budget spreadsheet is included with this call for proposals. Budgets must be submitted using this template.

**Application Instructions (Preliminary Team Proposals < \$100,000):**

Submit completed applications to [STEMcatalyst@udayton.edu](mailto:STEMcatalyst@udayton.edu) by 5:00 p.m. on Tuesday November 25<sup>th</sup>, 2018. Questions can be directed to Doug Daniels ([ddaniels2@udayton.edu](mailto:ddaniels2@udayton.edu)) or Don Pair ([dpair1@udayton.edu](mailto:dpair1@udayton.edu)).

Applications should contain the following 2 elements, compiled as a single PDF

1. Preliminary Proposal (**maximum 3 pages**):
  - a. Project title
  - b. Project team: Name and UD affiliation of each member
  - c. Abstract: maximum 400 words
  - d. Proposal executive summary: Background, significance, and specific aims
  - 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
  - f. Estimated total budget
2. 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 and to  
pursuing external funding. I have reviewed and support potential impact to the  
department, including required or voluntary changes to summer teaching assignments  
or **graduate student tuition remission** not included in the Catalyst budget.

- Graduate student tuition will be paid by departmental funds
- Graduate student tuition will NOT be paid by departmental funds

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name