

The Institute for CyberScience 2018 Seed Grant Program

STATEMENT OF PURPOSE

The Penn State Institute for CyberScience (ICS) created the ICS Seed Grant Program as a way to advance computation-enabled and data-enabled research by Penn State faculty. ICS Seed Grants are intended to support interdisciplinary research groups as they prepare to pursue major awards from external granting agencies by providing an initial investment that lays the groundwork for the larger proposal. Grants are also available to support the organization of a national or international research conference, held at Penn State, that encourages computation-enabled and data-enabled interdisciplinary research. The themes of this year's Seed Grant Program are "Health", "Methodology" and "Environment and Energy." ICS is particularly interested in proposals related to the 'Driving Digital Innovation' section of the PSU strategic plan.

TIMELINE

ICS will begin accepting proposals on December 4, 2017. **Proposals should be [submitted online](#) no later than 5:00 pm on January 19, 2018.** Award recipients will be announced in March of 2018.

REQUIREMENTS

ICS Seed Grants will be awarded to projects that:

- facilitate the development of competitive proposals to external funding agencies
- pursue significant research efforts and/or initiatives, such as establishment of centers of excellence
- enhance the visibility of Penn State

Collaborative, interdisciplinary projects in emerging areas will be given priority. Principal Investigators (PIs) must be tenured or tenure-track professors with proven standing in their respective fields.

Team leads are encouraged to have a discussion with ICS leadership about proposal concepts prior to the submission deadline. Direct inquiries to Guido Cervone at ics-seed-grants@ics.psu.edu.

TERMS

Awards: ICS will distribute up to \$400K through the 2018 Seed Grant Program by making up to 25 awards to Penn State faculty. Proposals where senior and junior faculty members collaborate will be considered favorably.

- Research awards are for one year of funding and will be structured as follows:
 - up to \$5K for an award to a single researcher
 - up to \$10K for a project that brings together multiple faculty in a single college
 - up to \$25K for a project where faculty collaborate across colleges

NOTE: Proposals from Penn State Commonwealth Campus faculty collaborating across departments can be considered for the larger grant amounts

 - Multi-college projects involving ICS Associates (including ICS Co-hires) are eligible for up to \$35K

- Conference awards are for up to \$4K to support the organization of a conference at Penn State

Budget stipulations: The budget can be for post-doctoral or student support. A portion of the budget can be used to access hardware, software, and instrumentation for computation and data-enabled research, including

- ICS-ACI services such as computing or storage
- ICS-ACI advanced technical services to optimize codes, develop workflows, or create visualizations

Infrastructure, such as equipment, may not be purchased with Seed Grant funds.

Faculty salary is not allowed under the Seed Grant Program.

Eligibility: Faculty members who received an ICS Seed Grant in 2016 or 2017 (either as the PI or co-PI) are not eligible for an award in 2018.

ICS Seed Grant recipients will be required to:

- Submit an Interim Report (at 6 months after project start) and a Final Report (at 1 year after project start)
- Submit Follow-up Reports 1 year and 2 years after project completion
- Present a poster at an ICS-sponsored event
- Serve as an ICS Seed Grant proposal reviewer in 2019
- Submit at least one significant external-to-PSU research proposal within three years of receiving the 2018 Seed Grant

The Interim Report will include a description of the progress made, plans for seeking additional funding, and a brief financial accounting. Non-performance may be cause for award suspension.

The Final Report will include information on how many graduate and undergraduate students were involved or supported in the research project, how many conference presentations and journal publications were enabled by the award, how many proposals have been or will be submitted as a result of the award, and where those proposals were/will be submitted. The report will also include an abstract describing the award's impacts suitable for uploading to the ICS website.

Follow-up Reports will include a list of publications, proposals submitted, and grants received, based upon the work done in the seed grant.

Full instructions for preparing the Interim and Final Reports will be distributed to award recipients closer to the report due dates.

ICS SEED GRANT PROPOSAL FORMAT

Submit your proposal as a pdf by uploading it to the ICS Seed Grant website (ics.psu.edu/seed-grant).

- Research Support Proposals
 - i. Summary (2 pages maximum)
 - Project/Concept title
 - PIs, co-PIs and their affiliations (department, college, institute)
 - Total amount requested
 - Project duration (if less than 1 year)
 - Project Start Date
 - Abstract or executive summary
 - Projected outcome or impact, for example:
 - Modes of student involvement (undergraduate and graduate)
 - Anticipated research-focused conference and/or journal papers
 - List of external funding bodies and/or programs to which application(s) for further funding will be sent after seed grant work is completed
 - ii. Proposed project/concept (4 pages maximum)
 - Page count includes all figures, tables, and citations
 - 12-point font with 1-inch margins, double-spaced
 - Applicants should focus on addressing the Review Criteria described below
 - iii. Itemized budget and budget justification, including any cost sharing. (NOTE: If resources will also come from industry or PSU unit, provide a letter committing to those resources.)
 - Budget calculations should not include the cost of fringe benefits or F&A
 - Faculty salary and equipment purchase will not be supported
 - iv. Letters of Support
 - From department head in PI's department (required)
 - Industry and sponsor letters are welcome
 - A brief "affirmation of participation" letter from each co-PI is required
 - v. One-page biographies of PI(s)
- Conference Support Proposals
 - i. Summary (2 pages maximum)
 - Brief description of the conference, including its relation to any regularly scheduled conferences
 - Why this conference is important for the PIs and for Penn State
 - How it aligns with the ICS mission
 - A rough outline of the conference agenda
 - ii. Itemized budget and budget justification (including any cost share)
 - Description of how the funds will be used
 - iii. One-page biographies of PI(s)

REVIEW CRITERIA

ICS Seed Grant proposals will be ranked on how they address the following:

- **Alignment with ICS and PSU priorities**
 - How does the project align with the mission and vision of ICS?
 - Read more at <https://ics.psu.edu/who-we-are/mission/>
 - How does the project align with the vision and priorities of the University?
- **Research Strengths**
 - What is the scientific impact of the proposed research?
 - Are the expected research results important and worth funding?
- **Potential/Sustainability**
 - What is the probability that the research will lead to the expected results?
 - What is the likelihood that the project will lead to further substantial funding from outside the University?

Questions? Write to Guido Cervone, ICS Associate Director at ics-seed-grants@ics.psu.edu. We look forward to seeing your proposal.