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 theme of this year’s Seed Grant Program is “Driving Digital Innovation.”

TIMELINE
ICS will begin accepting proposals on December 2, 2016. Proposals should be submitted online no later than 5:00 pm on January 17, 2016. Award recipients will be announced in early March of 2017.

REQUIREMENTS
ICS Seed Grants will be awarded to projects that:

- facilitate the development of competitive proposals to external funding agencies
- pursue center-scale efforts or establish centers of excellence
- enhance the visibility of Penn State

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

Team leads are welcome to interact with ICS leadership as they develop their proposal projects/concepts. Direct inquiries to Guido Cervone at ics-seed-grants@ics.psu.edu.

TERMS
Awards: ICS will distribute up to $400K through the 2017 Seed Grant Program by making up to 25 awards to Penn State faculty.

- 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

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

Proposals where senior and junior faculty members collaborate will be considered favorably.

Budget stipulations: 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 for visualizations

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

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

ICS Seed Grant recipients will be required to:

- Submit an Interim Report (at 6 months) and a Final Report (at year end)
- Present a poster at an ICS-sponsored event
- Serve as an ICS Seed Grant proposal reviewer in 2017
- Submit at least one significant external research proposal within three years of receiving the 2017 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.

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 using InfoReady Review (instructions available at 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)
• Abstract or executive summary
• Projected outcome or impact, for example:
  o Modes of student involvement (undergraduate and graduate)
  o 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 (5 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.)
• Seed grants do not cover faculty salaries and the grant budget limits must include fringe or other salary-related expenses

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 and Innovation
  o How does the project align with the mission and vision of ICS?
    ▪ Read more at https://ics.psu.edu/who-we-are/mission/
  o How does the project align with the vision and priorities of the University?
  o Does the grant facilitate early-stage research not otherwise readily supported?

• Impact of Funding
- How can seed funds increase the competitiveness of the proposed research?
- What specific big opportunities will the project enable or target, e.g. ERC or STC?

**Research Strengths**
- What impact has the faculty member or team had in this space?
- What pending/current/previous awards are pertinent to this proposal?

**Scope of Work/Deliverables**
- What activities/research will be performed? How significant are the goals?
- How impactful are the outputs and outcomes on the field?

**Potential/Sustainability**
- What is the likelihood that the project will lead to further substantial funding from outside the University? Preference will be given to projects that show the capability to become self-supporting.

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