

FY2020 Ohio State Sustainability Research Seed Grant Program: Request for Proposals

The **Sustainability Institute (SI)** and the **Center for Energy Research, Training, and Innovation (CERTAIN)** are pleased to announce the FY2020 Sustainability Research Seed Grant Program for The Ohio State University research community. This program offers multiple funding opportunities to foster sustainability and resilience research at Ohio State by supporting new interdisciplinary research teams and laying a foundation for convergence research.¹

Pre-proposals for the following two opportunities are now being accepted (due February 3). Full proposals will be selectively invited (~~due March 13~~ Deadline extended to Thursday, March 19, 2020 Monday, March 30, 2020). See pp. 2-6 for full details.

Track 1 – Interdisciplinary Research Teams in Sustainability or Resilience: Supports teams of scholars from two or more distinct disciplines engaged in scholarly work on sustainability topics, including resilience, and relating to one or more of the Sustainability Institute (SI) research program areas: healthy land, water, and air systems; smart and resilient communities; sustainable energy; circular economy; and sustainable resources.² Preference given to teams that include junior or early career faculty and have potential for external funding. Anticipate 3-5 awards of \$15,000 to \$25,000.

Track 2 – Interdisciplinary Research Teams in Sustainable Energy: Supports innovative research in the following areas: (i) Energy resources, including zero-emission fossil fuels, transition/bridge fuels, critical resources for renewable energy technologies, bioenergy and renewable fuels and resources; (ii) Environment-energy interactions, including the nexus of energy with greenhouse gas emissions detection, mitigation and removal, carbon capture, utilization and storage, climate change and resilience, air pollution, water use and impacts, ecosystem services, land use; (iii) Transition science, including integrated modeling of energy systems and other natural, engineering, or social systems. Preference given to proposals that include a strong science or technology component and have strong likelihood of external funding. Projects are co-funded by CERTAIN and SI. Anticipate 3-5 awards of \$25,000 to \$50,000.

The following opportunity is currently under development with a separate RFP planned for release in March:

Track 3 – Convergent Research Groups in Sustainability: Supports groups of scholars from distinct disciplines with interests relating to any clearly specified sustainability or resilience challenge. A group is defined as a minimum of three people from at least two different academic units and disciplines and may range in size and structure. This opportunity is intended to support a range of scholarly activities, including communities of practice and smaller research groups that are not

¹ As defined by the Office of Research, **interdisciplinary research** combines or applies data, techniques, theories, or approaches from two or more disciplines to advance fundamental understanding or solve a problem(s). **Convergence research** requires integration of knowledge, methods, and expertise from intellectually diverse researchers to form new, shared research frameworks to address vexing problems of science or society.

² See <http://si.osu.edu> for information about SI and its research areas and <http://certain.osu.edu> for information about CERTAIN and its research areas.

ready to propose a specific project. Anticipate 3-5 awards that cover direct costs and in-kind services in value of \$10,000 to \$25,000.

Proposal Instructions

Track 1 (Interdisciplinary Research Teams in Sustainability or Resilience) and **Track 2** (Interdisciplinary Research Teams in Sustainable Energy) proposals are currently being accepted. Teams may only apply for one of these opportunities and must clearly specify which one using the Track number. See page 1 for a description of each.

- A. **Scope of Projects:** Grants will support teams who engage in scholarship activities that most clearly build the capacity of interdisciplinary teams at Ohio State. The proposed research must be 1) conducted by a new interdisciplinary team, or 2) by an existing team who has not yet received external funding for the proposed research.
- B. **Fund Administration:** Grant funds will be transferred to an account designated by the department of the named Principal Investigator (PI).
- C. **Grant Duration:** Grant funds will be issued for up to one year from the effective date of the award. Time extension requests will be considered on a case-by-case basis.
- D. **Mid-project review and final report:** Grantees will receive 60% of the funds at the start, and the remaining 40% after providing a satisfactory mid-project progress report. SI will provide templates for submission of these reports. They should be concise, written for a general audience, include appropriate graphics (e.g. photos, charts), and suitable for publication via online or print media.
- E. **Eligibility:** The PI must hold an Ohio State appointment as a faculty or research scientist and must be an SI or CERTAIN faculty affiliate, before any funds are received. Team members' roles must be described on the team roster (see J. below), and each member must provide a **signed commitment**. The size and structure of the teams is open, but we encourage diverse, interdisciplinary teams involving multiple departments or colleges. External collaboration is permissible, provided it clearly supports Ohio State capacity building.
- F. **Funding:** Funds may not be used for capital improvements or faculty time. Any unused funds at time of final report shall be returned to SI or CERTAIN.
- G. **Matching Funds:** Cost sharing through matching funds, either cash or in-kind, is highly encouraged, and expected for larger grants. Funds may be obtained from internal sources such as other seed grants, new faculty startup funds, colleges, centers, or departments, and other Ohio State grant programs, as well as from external partners. Proposals should identify the potential for securing additional support in order to continue project funding beyond the 2020-2021 academic year.
- H. **Required Pre-Proposal:** Proposal teams must submit a brief **pre-proposal** to assure alignment with the RFP, and to allow the review panel to select teams for full proposal development. The pre-proposal must be in 12-point font with 1-inch margins, **up to two pages** in length. It should describe how the project fits with the goals of the FY2020 Sustainability Research Seed Grant program, including (a) the innovative concept and rationale, (b) the objectives, approach, and expected outcomes, (c) team qualifications, and (d) estimated total budget and matching funds. The pre-proposal will be reviewed within **two weeks**, and the PI will receive

word from the review panel as to whether a full proposal is invited. Save the filename as follows: "lastname,firstname_Preproposal_Track#", specifying which track opportunity chosen. **Upload the pre-proposal** in PDF format by **February 3, 2020 at 5 p.m. to <https://orapps.osu.edu/fundops/opportunity/4369>**. **Send any questions** to the SI Program Assistant: **Kathy Jackson** (jackson.2942@osu.edu, 614-688-1177).

- I. **Full Proposal Format:** The invited full proposal must be in 12-point font with appropriate spacing and 1-inch margins to ensure readability, and must be submitted as a **complete PDF document**. The proposal narrative **may not exceed 6 pages in length**, including charts, tables, graphs, and references, and brevity is encouraged. Narratives should include:
 1. **Descriptive Proposal Title.**
 2. **Lay Summary** (50-word maximum): A brief description written for a general audience.
 3. **Concept and Rationale:** Document the significance of the compelling challenge and describe how the project will address the challenge, engage Ohio State people and partners, build on existing work or partnerships, leverage new resources, and produce useful results.
 4. **Objectives, Approach, and Expected Results:** Describe specifically the project objectives, how the team plans to accomplish those objectives, the expected tangible outputs, and the expected short and long term benefits or results, including identifying at least one non-NSF potential source of funding for future related work (in narrative or logic model format).
 5. **Team Qualifications:** Describe the qualifications of the key team members, the capacity of the team to succeed, and how the team will achieve effective interdisciplinary collaboration.
 6. **Budget Justification:** Describe how the team plans to use the grant funding as well as any matching resources to carry out the project.

In addition to the proposal narrative, teams must provide a team roster with roles, responsibilities and signatures; and a budget form. **Invited full proposals should be uploaded** in PDF format by **March 13, 2020 ~~Thursday, March 19, 2020~~ Monday, March 30, 2020, at 5 P.M.** to <https://orapps.osu.edu/fundops/opportunity/4369>. Save the filename as follows: "lastname,firstname_Proposal_Track#", specifying which track opportunity chosen. **Send questions** to the SI Program Assistant: **Kathy Jackson** (jackson.2942@osu.edu, 614-688-1177).

- J. **Review Criteria:** All proposals will be reviewed according to the following criteria:
 - a. **Team Composition and Integration:** Appropriate representation from multiple disciplines, with clear description of how disciplinary knowledge of team members will be combined to achieve an interdisciplinary approach.
 - b. **Capacity Building:** Potential to build capacity of interdisciplinary research teams at Ohio State in the specified area of scholarship, and to lay a foundation for new convergence research in this area.
 - c. **Feasibility:** Likelihood of meeting or exceeding the stated project objectives; evidence that the interdisciplinary team has the capabilities required to perform

effectively.

- d. **Expected Impacts:** Potential knowledge or societal benefits resulting from this work; likelihood of generating external funding.
- e. In addition, the following criteria apply to the specific tracks:
 - i. **Track 1** (Interdisciplinary Research Teams in Sustainability or Resilience):
 1. Scholars from two or more distinct disciplines (e.g., physical sciences, natural or environmental sciences, humanities, behavioral or social sciences, engineering, policy or law, etc.)
 2. Relates to one or more of the Sustainability Institute (SI) research program areas: healthy land, water, and air systems; smart and resilient communities; sustainable energy; circular economy; and sustainable resources
 3. Inclusion of junior or early career faculty
 - ii. **Track 2** (Interdisciplinary Research Teams in Sustainable Energy):
 1. Strong science or technology component
 2. Addresses one or more of the following: (i) Energy resources, including zero-emission fossil fuels, transition/bridge fuels, critical resources for renewable energy technologies, bioenergy and renewable fuels and resources; (ii) Environment-energy interactions, including the nexus of energy with greenhouse gas emissions detection, mitigation and removal, carbon capture, utilization and storage, climate change and resilience, air pollution, water use and impacts, ecosystem services, land use; (iii) Transition science, including integrated modeling of energy systems and other natural, engineering, or social systems
- K. **Notification of Awards:** Applicants will be notified via e-mail about the outcomes of their proposals by ~~April 15, 2020~~ **April 24, 2020**. A summary of the successful proposals will be published on the SI website.
- L. **Acknowledgment of Support:** Any presentation or publications resulting from this research should appropriately acknowledge sources of funding support.
- M. **Official Project Timeline:** Projects will begin July 1, 2020 and conclude June 31, 2021. Mid- project reports will be due on January 15, 2021. A final report must be delivered to SI no later than September 30, 2021.
- N. **Proposal attachments:** The following two pages provide templates for the required attachments. These attachments must be completed properly and included with the proposal PDF file for the proposal to be considered.
 - **Team Roster**
 - **Budget Summary**



FY2020 Sustainability Research Seed Grant Application

TEAM ROSTER

Proposal Title:

Proposal Type (check one):

Track 1: Interdisciplinary Research Team in Sustainability or Resilience

Track 2: Interdisciplinary Research Team in Sustainable Energy

Team members, department and/or center/institute affiliations, and e-mail addresses	Team member's discipline(s)	Project roles and responsibilities	Signatures
PI, team lead:			



FY2020 Sustainability Research Seed Grant Application

BUDGET SUMMARY

Proposal Title:

Proposal Type (check one):

Track 1: Interdisciplinary Research Team in Sustainability or Resilience

Track 2: Interdisciplinary Research Team in Sustainable Energy

Item (and brief description)	Requested Funds	Matching Support
A. Salaries and Fringes		
B. Supplies		
C. Equipment		
D. Outreach		
E. Travel		
F. Services		
G. Other		
Totals		
	(\$50,000 maximum)	