Request for Proposals



Wanger Institute for Sustainable Energy Research (WISER) 2024 Cross-Disciplinary Seed Funding Grants (CSFG) [Posted: 2/5/2024]

The objective of the WISER Cross-disciplinary Seed Funding Grants (CSFG) program is to provide funding to initiate innovative programs that will use the results obtained during the project period to develop major proposals seeking external funding in areas of national interest that contribute to the pathway to a net zero and sustainable energy economy and society. Proposals based on new and innovative cross-disciplinary research concepts that are expected to be promising in attracting major external funding in the area of energy and sustainability are solicited. The proposals should be focused on **one or both** of these areas: 1) new areas of cross-disciplinary research of national interest, and/or 2) areas that are inline with WISER's current research centers and programs. Proposals that are only marginally related to the energy and sustainability area will be rejected without review.

GUIDELINES FOR SUBMISSION

Only Illinois Tech tenured and tenure-track faculty are eligible to serve as Principal Investigator (PI). In order to promote cross-disciplinary activities, both within Illinois Tech and with other institutions, the proposal must be submitted by the Illinois Tech PI and at least one other (internal or external) co-PI who must hold an appointment or position in a different discipline. (Note: External co-PIs may represent domestic or international institutions; however, funding must be used to support only Illinois Tech students.) Proposals that do not include a co-PI from a different discipline will be rejected without review. No subcontracts are allowed. The allowed funding must not exceed \$30,000. Each grant will be funded for a maximum of one year. The funds awarded will be released at the beginning of the project period, June 1, 2024, subject to the discretion of the Illinois Tech Controller's Office. Applicants are encouraged to use the format outlined in the proposal format section for their proposal submissions. Important Eligibility Stipulation: To assure that the CSFG projects continue to represent diverse cross-disciplinary research areas, all PIs and co-PIs who received CSFG awards in the past year are ineligible to apply as either a PI or a co-PI for the subsequent year's CSFG program. [View complete list of CSFG award winners.]

ROUTING SHEET (CAYUSE) INSTRUCTIONS

All PIs must complete a routing sheet in Cayuse. See the PI Resources page on the "Research: Office of Sponsored Research and Programs" webpage for further instructions. Contact osrp@iit.edu if you have questions regarding the routing sheet.

Note: These Instructions Deviate from OSRP's Routine Procedures.

- 1. Please start a Cayuse routing sheet as early as possible, but **do not submit** the routing sheet for departmental and college approval until you have uploaded the final proposal document in Step 5 below.
- 2. In the "Sponsor" field, search for "WISER" (and select "WISER" Wanger Institute for Sustainable Energy Research) as the sponsor.
- 3. In the "Affiliated Units" section, click on the link and select "WISER" as an affiliated unit.
- 4. Submit your proposal by uploading the final proposal document in the attachments tab in Cayuse. **DEADLINE**: **Proposals must be uploaded by 5:00 pm CT on Mon., April 1, 2024.**
- 5. After the final proposal has been uploaded, please submit the routing sheet for departmental and college approval. The Cayuse timestamp of the file upload, not the timestamp of the departmental approval, will be used to determine if the proposal has been submitted on time.

REPORTING REQUIREMENTS

Recipients are required to submit a progress report for the first half of the project period no later than December 31, 2024. Continuation of the second half of the allocated funding will depend on satisfactory demonstration of progress. A final technical report is required by July 1, 2025 and must include an outline for major proposal submission. A final presentation of CSFG project results will be required at the Spring 2025 meeting of the WISER Board of Advisors.

All programmatic or budgetary questions should be directed to Hamid Arastoopour, Director of WISER (arastoopour@iit.edu).

PROPOSAL FORMAT

Typeface, Size, and Page Formatting

Each proposal is limited to 4 pages (page content/length must be allocated specifically as outlined in "Required Content" section below) including figures, tables, and appendices (excluding references cited, budget, budget justification, and biographical sketches). Proposals should be submitted in either Times New Roman or Arial typeface using no smaller than size 11 font.

The title of the proposal must be placed at the top of the first page of the proposal and must read as follows: Cayuse#, WISER: Title of Project, PI Name and PI Department. *Note: The Cayuse number is generated from the routing sheet.*

Proposals that do not meet the formatting requirements or are received after the deadline will not be accepted.

REQUIRED CONTENT

Proposals should include the suggested sections described below. **However, proposals that exclude separate responses** to the required documentation outlined for <u>Sections 3, 4, and 5</u> will be rejected without review.

*Required Page Allocation: Content for Sections 1, 2, and 3 MUST NOT EXCEED a TOTAL of 2 PAGES

Section 1: Objectives

List the broad long-term objectives and identify the specific intended accomplishments of the proposed research. Indicate how the work will enhance the cross-disciplinary activities of the faculty involved and the specific plan for preparation and submission of cross-disciplinary proposals based on the results of the proposed work.*

Section 2: Background and Significance

Briefly sketch the background leading to the proposed work, critically evaluate existing knowledge, and specifically identify the gaps that the project is intended to fill. State concisely the importance and relevance of the proposed work by relating the specific aims to the broad long-term objectives.*

Section 3: Intellectual Merit of the Proposed Research Work and Proposed Research Tasks

Clearly specify the intellectual merit of the proposed research work and proposed tasks. Describe any new methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. As part of this section, provide a tentative timetable for the project. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised. Any proposals that include human or animal subjects must have the appropriate institutional approvals prior to the issuance of any award. Note: Proposals that <u>do not</u> include a separate section titled "Intellectual Merit of the Proposed Research Work and Proposed Research Tasks" and a detailed description of the intellectual merit of the

proposed research work and proposed research tasks will be rejected without review.*

**Required Page Allocation: Content for Section 4 MUST TOTAL 1 page.

Section 4: Collaborative Team

Explain in detail how the research team has been formed, describe the responsibilities of all team members, and provide a comprehensive explanation of why this collaborative effort is essential.

Note: Proposals that <u>do not</u> include a separate section titled "Collaborative Team" and detailed descriptions of the team formation/team member responsibilities/essential nature of this collaborative effort will be rejected without review. **

***Required Page Allocation: Content for Section 5 MUST TOTAL 1 page.

Section 5: Plans for Seeking External Funding

Clearly identify how the investigators will use the results of this proposed work to prepare a multi-investigator cross-disciplinary proposal, the agency/agencies and division(s) within the agencies and/or industries to which the investigators are planning to submit the proposal, the expected range of the total funding request, the timeframe for the submission, and an assessment of the potential success of the proposal. State how the resources requested from the CSFG will enable the development of these external proposals. Note: Proposals that <u>do not</u> include a separate section titled "Plans for Seeking External Funding" and a detailed plan for seeking external funding will be rejected without review. Note: Proposals that mention only the names of agencies and <u>do not</u> provide specific timelines and programs will be rejected without review.***

Section 6: Budget and Budget Justification (must not exceed 1 page)

Include a budget that **does not exceed \$30,000**. An explanation (budget justification) of how the expenditure of the CSFG funds would lead to results for developing strong proposals for external funding agencies **also must be included**. Lists of WISER CSFG allowable/unallowable expenditures are provided below.

Important Budget Stipulation for Awarded CSFG Projects: Reallocation of more than 10% of any budget item is not allowed; reallocation of any budget item of 10% or less may be allowed subject to the specific review and approval of the WISER director.

WISER CSFG Allowable Expenditures

- Illinois Tech graduate student support in the form of stipend or tuition (no support is allowed for students outside of Illinois Tech)
- Illinois Tech undergraduate student support in the form of hourly stipend
- Essential research supplies/equipment/services

WISER CSFG Unallowable Expenditures

- Faculty time and salary
- Indirect costs
- Travel
- Subawards

7) Biographical Sketches

Include a two-page (maximum) biographical sketch for each investigator. (Format may be similar to that used for NSF proposal submissions.) **Note: Current and Pending section** <u>is not</u> required.

REVIEW CRITERIA

(See next page for general review criteria.)

REVIEW CRITERIA

The following general review criteria will be used for the evaluation of the proposals.

Innovation and Technical Merit (40%)

Does the project employ novel concepts, approaches, or methods in a sustainable energy and/or sustainability related area? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies in a sustainable energy and/or sustainability related area?

Significant Impact of Proposed Work in a Sustainable Energy and/or Sustainability Related Area and Cross-disciplinary Nature of the Proposal (30%)

Does this study address a significant problem in a sustainable energy and/or sustainability related area? If the aims of the application are achieved, how will scientific knowledge be advanced and used by the multiple investigators in preparing future major research proposals? Is this a cross-disciplinary collaboration in which all investigators are contributing significantly to the proposed research in sustainable energy and/or sustainability?

External Funding Plan and Potential (30%)

Is the plan for seeking external funding appropriate and clearly defined? How is the proposal's potential to successfully attract external funding assessed?