

REQUEST FOR PROPOSALS FOR SEED GRANT FUNDING for FY 2023 **DUE DATE: June 10, 2022**

The Institute for a Secure and Sustainable Environment (ISSE) at the University of Tennessee makes annual funding available for multi-disciplinary, multi-investigator research and support. For fiscal year 2023, ISSE will award three or four seed grants to support research projects that are **related to environmental sustainability** and have potential for external funding opportunities. The topics of interest include but are not limited to

- Modeling sustainability and resilience, especially for regional systems, under climate change or other social and environmental stressors.
- Modeling climate change and its effects on systems pertinent to environmental and investigation of mitigation strategies.
- Monitoring, modeling, and control of building environment for human health, energy conservation, and productivity.
- Hydrology in the broad sense, e.g., ecohydrology, water resources management, agricultural water for food and fiber, potable water reuse system, sensor development with large database processing, and socio-hydrology.
- Flood prediction and modeling enhancements quantifying flood risk and protecting infrastructure.
- Green and sustainable infrastructure that improves environmental and social justice.
- Electric vehicle adoption and charging infrastructure planning.
- Systems or engineering solutions to reduce nutrients and pollutants (e.g., nano/microplastics, phosphorus removal from advanced treatment methods, etc.) in water.
- Technologies and analyses for carbon sequestration.
- Satellite technology for remote sensing: inventory and assessment of natural resources and processes.
- Addressing disruptions caused by economic and technological transitions. and
- Environmental health.

The aim of this seed grant is to support project teams as they develop interdisciplinary collaboration and build the capability to secure external funding. ISSE expects the funded teams to submit at least one external grant proposal and one article to a peer-reviewed publication with necessary acknowledgement to ISSE.

Proposals should request no more than \$50,000/year, but ISSE will consider larger amounts for extraordinary and exceptional proposals. Expense for building collaborative networks with other institutions is encouraged. ISSE seed grant funding will begin on July 1, 2022, and terminate on June 30, 2023. Multi-year funding will require submission and approval of a new seed grant proposal in subsequent funding years.

Please take note of the following:

- Project teams must include multiple investigators across multiple disciplines. PIs **must be** UT faculty or staff. UTIA faculty submitting a proposal must have at least one UTK faculty member as Co-PI. A collaboration with ISSE researchers is also encouraged. Please check ISSE research and faculty at isse.utk.edu.
- Eligible expenses are shown on the budget worksheet. There is no F&A. Funds **may be used for faculty support** such as a “buy out” for teaching commitments if agreed upon by the PI’s department head.
- Researchers may be the PI on only one proposal submission.
- The UTK portion of the required external proposals generated based on ISSE seed grants **must be submitted through ISSE**. ISSE staff is happy to assist with the proposal preparation and submission process. If the PI is a UTSI faculty member, there should be a partner at UTK, and the UTK part of the external proposal should go through ISSE.
- The enclosed coversheet must be completed and signed by each team member and his or her department head.

Each application should include the following components. Proposals should be no more than three pages and contain the following:

- a) Completed and signed coversheet (see enclosed; it is not counted in the three pages),
- b) Detailed budget, including travel plans for developing external proposals submitted on the Seed Grant Proposal Budget Worksheet (see attached; it is not counted in the three pages), and
- c) Proposal description with no more than three pages, including
 - o List of the research team members and their affiliations.
 - o Objectives and rationale.
 - o Technical approach and research plan.
 - o Collaboration plan, including possible collaboration with ISSE researchers.
 - o Proposal development plan, including a list of at least two programs or agencies that could serve as possible funding sources for a subsequent external grant proposal (with a targeted grant amount) along with a detailed plan to develop the external proposal(s).
 - o Dissemination plan, such as publications for peer-reviewed articles. and
 - o Timeline for all deliverables.

Please email your proposal (with cover sheet and budget worksheet) by **June 10, 2022**, to Dr. Mingzhou Jin at jin@utk.edu and copy Lissa Gay at lissa@utk.edu.

ISSE Funding Support Agreement Cover Sheet

We understand 1) that teams receiving support under this opportunity are expected to submit one or more multi-investigator, external, follow-on funding proposals through ISSE and 2) that we must submit one or more articles on this seed grant research to peer-reviewed publications.

The following terms will apply to any successful **external** grant proposals resulting from ISSE seed grants:

- Faculty and their departments will receive full credit for their contributions to any funded external proposals according to the percent credit indicated on the UT (Cayuse) proposal form.
- Under the new Budget Allocation Model, ISSE will continue to distribute funds as it has before: 30% of RIF generated from successful external proposals will flow to ISSE. Out of it, 15% will flow back to the College or Department of the faculty members (according to the percent credit indicated in Cayuse); 15% will be retained by ISSE and used by the PIs.
- UTIA faculty submitting external proposals must have a UTK Co-PI and route the UTK part through ISSE.
- ISSE will manage all project accounts.

Please have each project team member and his or her department head sign below and attach it as a coversheet to your three-page proposal:

Investigator Name (please print name and sign)	% Effort on Seed grant	Date	Department Head (please print name and sign)	Date