Delaware Energy Institute
Competitive Seed Grant Program
Request for Applications

Total Seed Grant Budget: $700,000.

Award amount: Up to $150,000 for 2 years *per project*. Larger, center-like programs consisting of 2-3 projects and associated budgets are strongly encouraged. 1-3 collaborative projects and 1-2 larger programs may be funded.

Deadline: August 31, 2018 at 5:00pm

Anticipated start date: October 1, 2018

Purpose and Priorities of the Competitive Seed Grant Program

The Delaware Energy Institute is pleased to announce a call for proposals from University of Delaware PI's to allow interdisciplinary teams to address gaps in knowledge that constitute a barrier to competitive funding applications and to form the foundations for new interdisciplinary energy programs. This seed funding is contemplated to serve as a precursor to submitting multi-investigator, interdisciplinary, proposals for larger funding opportunities in the energy sciences such as NSF STCs, NSF ERCs, NSF CCIs, NSF INFEWS, DOE EFRCs, or for RAPID.

Priority will be given to proposals that 1) bring diverse teams together from two or more scientific disciplines within a college and ideally across colleges; 2) demonstrate a clear path for future fundability; and 3) are interdisciplinary and multi-investigator. New collaborations of teams of 2-3 PIs for a *single project* are strongly encouraged as are teams of 5-6 investigators to build visionary, large, well-integrated *programs* consisting of several projects. Areas of interest include but are not limited to:

- Circular economy (e.g., the nitrogen cycle, an electrochemical-based chemical plant, plastics recycling, energy-food-food waste, energy-water, etc.)
- Smart cities and urbanization (e.g., energy supply, storage, automation, sensing)
- Convergent solutions to energy that integrate social, policy, business to provide holistic solutions to energy problems. Their integration with technology in each project or program is strongly encouraged.
- Systems analysis (economics, well to wheel analysis, environmental footprint, optimization, control, etc.).
- Energy transition (e.g., how one transitions from a large scale grid based on a few power plants to a distributed, multi-source supply chain, how does one transform the infrastructure of transportation fueled via gas stations to EVs and autonomous cars, etc.).
- Energy enablers (e.g., materials, multiscale modeling) and data science for energy.

Evaluation

The proposals will be evaluated in terms of merit and impact on the UD infrastructure and their potential impact on building large, externally funded programs and centers. Additional criteria will be based on the Priorities and Areas outlined above.

Solicitation and Oversight of Proposals and Projects

The Deputy Director of the Delaware Energy Institute will be responsible for soliciting and receiving research proposals, and facilitating a selection process to identify and determine funding eligibility for the proposals.

Procedures for Submission and Review of Proposals

Complete proposals must be submitted as a single pdf document as an email attachment with "DEI Seed Funds Proposal" in the subject line to dei-info@udel.edu by 5:00 p.m. on August 31, 2018. Proposals will be reviewed by a panel of faculty including the Institute director, and award decisions will be made by October 1, 2018. All applicants will be notified of the award status via email.

Conditions of the Award

By receiving an award, the Lead PI agrees to:

1. Ensure the quality of the project and expend all monies within the time frame specified in the award letter;
2. Submit semi-annual reports and a review with a go/no-go decision at end of year 1. The review will consist of a written report and an oral presentation. Funding will be given annually up to two years and will be subject to alignment with DEI's priorities as well as progress and availability of funds.
3. Submit a final, written report no later than three months after the end date of the project. The report should be submitted electronically to dei-info@udel.edu;
4. Present findings and the impact of their work in appropriate venues; and
5. Notify the Institute director or deputy director of plans to submit a proposal based on the work supported by the project.

Proposal Preparation and Budget

All proposals must include the following components.
1) Cover sheet (one page) that includes:
    a. Project title
    b. Project start and end dates
    c. Name, title, department, and college of Lead PI and Co-PI(s).
    d. Phone number and email address of lead PI

2) Project Summary, 1 page maximum, margins of 1 inch, Arial font 11 or equivalent)
    a. Non-technical description of your project

3) Project Narrative (4-page maximum, not including references; margins of 1 inch, Arial font 11 or equivalent)
    a. Project justification and background
    b. Project objectives and deliverables
    c. Methodology
    d. Timeline
    e. Plan to secure future funding

f. Alignment with grand challenges outlined by federal agencies, the National Research Council, the National Academies or other major research roadmap

4) References (not part of the 4-page limit)

5) Budget and Justification
   a. Examples of budget items that may be included are:
      o Personnel costs including fringe benefits
      o Tuition (in accordance with UD policy)
      o Travel: Funds to support travel within the U.S. ($1,500 per person)
      o Supplies: Funds to conduct research
      o Other: Examples include cost to use fee-for-service facilities
   b. Examples of unallowable costs include:
      o F&A
      o PI's salary support
      o Equipment
      o Support for administrative personnel

6) Current and pending support in NSF format
7) Two-page biosketch for each investigator in NSF format

Questions for clarification should be sent to: dei-info@udel.edu