Energy Research Seed Fund
Request for Proposals

Since 2014, the Duke University Energy Initiative’s Energy Research Seed Fund has kickstarted new interdisciplinary research teams to launch innovative projects—sparking collaboration among scholars from the basic sciences, engineering, social sciences, humanities, and other disciplines. The fund helps Duke researchers obtain important preliminary results they can use to secure external funding or otherwise expand future scholarly collaboration. Thanks to generous support from the Office of the Provost, Trinity College of Arts & Sciences, and the Pratt School of Engineering, we are pleased to invite proposals from Duke faculty to any of the following grant categories:

- **Stage-One Grants** will provide up to $45,000 for Duke faculty embarking on new interdisciplinary projects. At least two members of the proposed research team must represent different disciplines, schools, or departments. The performance period for Stage-One Grants is 12 months.

- **Stage-Two Grants** will provide up to $35,000 to carry projects currently supported by the Energy Research Seed Fund into their next research phase. Applications for Stage-Two grants should indicate successful completion of work conducted under the current grant and outline how additional funding will help make the team’s research more compelling to external funders.

- **Proposal Development Grants** will provide up to $25,000 for past Energy Research Seed Fund grantees to develop proposals for external funding. Applicants for these grants should provide a one-page proposal indicating how the funds will be used (acceptable uses include travel to meet with potential sponsors, support for Ph.D. student assistants, etc.), and how those uses will improve the likelihood of external funding.

Proposals are due Friday, February 14, 2020 (see submission details on the following page).

The Seed Fund program is open to proposals on energy-inspired research topics from researchers across a full spectrum of disciplines. This year, we particularly welcome proposals in the following areas:

- Energy humanities
- Energy data analytics and big data, especially projects that build on results from previous/existing Data+ teams or that are well-positioned to develop data that can be analyzed in a future Data+ project
- Energy materials, advanced alternative fuels, and renewables
- Energy markets, regulatory tools, and standards
- Grid reliability and resilience
- Energy access and inequality
Requirements

Eligible Applicants
The Principal Investigator must be a regular-rank faculty member at Duke University, but other investigators on the proposing team can be Duke faculty, staff, or students. Likewise, the proposed team may include external collaborators, but funding may only be used to cover the logistics (travel, etc.) of the collaboration.

Budgets
The budget for an Energy Research Seed Fund research team (or working group) can include supplies, salary support for research assistants, students, and technicians, and other justifiable research expenses. Faculty salary, tuition remission, and indirect costs are not allowable expenses. Travel expenses are allowable only if essential to conducting the proposed research activities and cannot include travel to scientific conferences. All proposal budgets must be submitted using this template provided or they will not be considered.

Application Content (Stage-One Grants and Stage-Two Grants)
Cover Page. Must include the following information:
- Proposal title
- Name, title, departmental affiliation, address, e-mail address, and telephone number of all proposed investigators
- Designation of a Principal Investigator or Co-Principal Investigators

Abstract (250 words maximum)

Research plan (3 page maximum – single spaced, 12 point font, 1” margins all the way around) Must include the following information:
- Statement of research objectives and their significance
- Work already completed related to the proposal, and any relevant preliminary results (Stage-Two Grant proposals should indicate how the project’s second year will build on results of research supported by the prior Stage-One Grant)
- Description of the research team (working group) and research setting
- Proposed methods and plans for data analysis
- Potential for sustained collaboration beyond the project term (Stage-Two Grant proposals should discuss the likelihood of external funding.)

Appendix materials (1 page maximum each—single spaced, 12 point font, 1” margins all the way around) Must include the following information:
- Research schedule and milestones
- Collaborative nature of the project
• Relevance to mission of the Duke University Energy Initiative (energy.duke.edu/about)
• Budget and justification (1 page maximum)
• Curriculum vitae OR NSF/NIH biosketch including current grant support limited to 4 pages for each investigator.

**Application Content (Proposal Development Grants)**
A one-page proposal describing the project and indicating how the funds will be used to increase the likelihood of external funding.

**Submission Format and Deadline**
Please combine all required elements into a single PDF document and submit via email—with ERSF Submission in the subject line—by **5:00 p.m. on Friday, February 14, 2019** to: Will Niver, Duke University Energy Initiative via email at: will.niver@duke.edu

**Review Criteria and Selection Process**
Proposals will be reviewed by an *ad hoc* review committee consisting of faculty with a broad range of expertise in energy-related fields. The reviewing committee’s goal is to identify the proposals that best meet the objectives of the Energy Initiative’s Energy Research Seed Fund: interdisciplinary collaborative research projects that will address crucial questions related to energy. The review process will consider: (1) the significance and potential impact of the research program; (2) the degree of innovation; (3) the scope of the interdisciplinary collaboration and relevance for the goals of the proposed research; (4) feasibility of the research project: (5) likelihood of development into a sustained collaboration; and (6) (for Stage-Two and Proposal Development Grants) likelihood of obtaining external funding. Final selections will be made by the Energy Initiative Director in consultation with the faculty review committee and other stakeholders, with the goal of applying the fund (approximately $200,000 for this round of awards) toward a diverse group of projects with a strong likelihood of success.

Awards will be announced in April 2020.

**Reporting Requirements**
Recipients will be expected to report on the project’s status and any related outputs (journal articles, conference presentations, external grants, etc.) at the end of the performance period.

**Inquiries**
Please direct questions to: Will Niver, Research Analyst, Duke University Energy Initiative via email at: will.niver@duke.edu