



RESEARCH SEED GRANT FUNDING OPPORTUNITY

Call for Proposal Deadlines: September 15, 2021, January 15, 2022, and May 15, 2022

Notice of Funding Opportunity Summary

The Oklahoma NSF EPSCoR program is announcing the availability of funding to stimulate high-risk, high-impact, and potentially transformative research to develop and test science-based solutions for complex (“wicked”) problems at the intersection of land use, water availability, and infrastructure in OK.

Seed Grant proposals will be accepted by OK NSF EPSCoR from any Oklahoma institution of higher education. Funding will be awarded for projects of up to 1-year duration. The maximum award amount for a single award is \$75,000; however, smaller proposals are encouraged.

Deadline

Multiple proposal deadlines are provided throughout the year in order to provide timely support for highly competitive proposals. **The deadlines under this call for proposals are as follows: September 15, 2021, January 15, 2022, and May 15, 2022.**

We expect to fund approximately two proposals for each of these funding cycles depending on availability of funding and competitiveness of submissions.

Proposal materials should be submitted via email to Valerie Phillips, Oklahoma NSF EPSCoR Project Administrator at vphillips@okepscor.org, and Dr. Kevin Wagner, Oklahoma NSF EPSCoR Project Director, at kevin.wagner@okstate.edu.

Important: Proposals must be approved prior to submission by the appropriate grants office (i.e. the office processing the award if funded).

Program Description and Objectives

Seed grants are provided via the NSF EPSCoR Research Infrastructure Improvement Track-1 project titled [*Socially Sustainable Solutions for Water, Carbon, and Infrastructure Resilience in Oklahoma \(S³OK\)*](#) and as such should contribute to the broader research of the project.

The unifying research question of this project is: Can science-based assessment of the intersections of wicked problems, coupled with systematic and iterative engagement with OK opinion leaders and input/feedback from members of the OK public, result in development of socially sustainable solutions? Key challenges being addressed by the project include shifting subseasonal to seasonal weather patterns; wastewater reuse; carbon sequestration via terrestrial processes; increasing wildfire threats; resiliency of water, electric, and transportation infrastructure; and related social dynamics.

Research Priorities

Proposals are being requested for research that contributes to the broader research of the S3OK project and addresses the key challenges as outlined above. Research may include physical, biological or social sciences, engineering, as well as projects that advance related data science, data analytics, informatics, and data visualization.

Highest priority will be given to **proposals that:**

1. **Advance research in at least one of the following areas:**
 - a. **Water availability concerns**, including but not limited to addressing land use/misuse, conservation/water supply, cost of water-reuse, acceptance/adoption of new research in agriculture and water re-use inefficiencies, or advancing preventative measures to combat climate extremes
 - b. **Water quality concerns**, including but not limited to addressing run-off, acceptance/adoption of new research in agriculture, marginal quality groundwater, or re-use of MQW
 - c. **Aging and inadequate infrastructure** (particularly electric and transportation, including transport of water), including addressing the high costs associated with replacement and maintenance of infrastructure and infrastructure improvements that can withstand climate extremes
2. Achieve **broader impacts:**
 - a. Help attract and leverage large grants and/or corporate investment
 - b. Involve Primarily Undergraduate Institutions and/or Minority Serving Institutions (PUI-MSI) in Oklahoma (at least one project led by or involving PUI-MSI faculty will be supported)
 - c. Involve early career faculty (particularly new EPSCoR faculty hires) and/or underrepresented groups

Funding Information

Proposals totaling up to \$75,000 (direct plus IDC) will be accepted; however, smaller proposals are encouraged. Grant recipients are allowed to charge institutionally negotiated indirect cost rate on the prime award.

Project Period

Grants will support projects up to one year.

Eligibility

Individual researchers and research teams comprised of researchers at any institutions of higher education in Oklahoma are eligible to apply. We encourage diverse participation particularly early career faculty (e.g., new EPSCoR faculty hires) and PUI-MSI faculty in Oklahoma. Multiple proposals from the same researcher(s) are welcome as long as each application represents a distinct research project.

Review and Selection Process

Proposals will be evaluated in conjunction with the three deadlines described previously by the Oklahoma NSF EPSCoR Program Council, and strategically awarded by the Oklahoma NSF EPSCoR project director in consultation with the Administrative Council.

Selection Criteria

Evaluation elements will include the following:

| Review Criteria |
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| Relevance: Degree to which proposal addresses research priorities and/or advances S ³ OK research |
| Scientific Merit: Innovative &/or significantly contributes to knowledge in field; scientifically sound and appropriate methods used; cognizant of past work and status of the science |
| Qualifications of Project Personnel, Adequacy of Facilities, and Project Management |
| Potential for Expanding Funding: Likelihood that large grants and/or corporate investment will result. Projected timeline for developing a subsequent proposal to a federal agency or a private entity must be mentioned in the proposal. |
| Broadening Participation: Level of involvement of OK PUI-MSI faculty, early career faculty (including new EPSCoR faculty hires), and underrepresented groups |

Proposal Guidelines

Proposals must adhere to the following formatting guidelines:

- Font size must be at least 12 point
- Margins must be at least one inch in all directions
- Line spacing must not exceed six lines of text per vertical inch
- Page size must be letter (i.e., 8.5 inches × 11 inches)

Proposals are limited to 5 pages and must include the following:

- PI Information: Name, Title, Institution, and Department
- Co-PI information: Name(s), Title(s), Institution(s), and Department(s)
- Project Title
- Research Priority(ies) Addressed (see list above)
- Statement of Problem Addressed
- Nature, Scope, and Objective(s) of Project
- Methods and Procedures
- Expected Outcome, Statement of Results or Benefits
- Potential for Expanding Funding
- Number of undergrad students, graduate students and/or post docs supported
- Detailed budget (not included in page count)
- References Cited (not included in page count)
- 2-pg CVs (per NSF format) for PIs and co-PIs (not included in page count)

Important: Prior to submission, proposals must be approved by the appropriate grants office (i.e. the office processing the award if funded).

Reporting and Other Programmatic Requirements

All outputs of your supported research must acknowledge OK NSF EPSCoR. Recipients will be required to report on research results and impacts, including students supported, publications, presentations, conference proceedings, etc. using the OK NSF EPSCoR online reporting system. Further, recipients may be requested to provide a presentation to the OK NSF EPSCoR Annual Meeting, respond to a survey questionnaire from the program evaluators, and provide appropriate information needed to produce a short article about completed research to be featured in the OK NSF EPSCoR newsletter.