



SMART FIRES STATEWIDE SEED FUNDING OPPORTUNITY
Deadline: September 20, 2024

<https://www.mtnsfepscor.org/opportunity/smart-fires-statewide-seed-funding-opportunity-0>

The Montana NSF RII Track-1 EPSCoR SMART FIRES project seeks proposals from Montana's two and four-year primarily undergraduate campuses that expand STEM and prescribed fire and smoke science education and workforce development opportunities for students.

BACKGROUND

The *Sensors, Machine Learning, and Artificial Intelligence in Real Time Fire Science (SMART FIRES)* NSF EPSCoR RII Track-1 project is developing and deploying new technologies and research designed to better understand the behavior of prescribed fire and its impacts on Montanans, particularly in rural and tribal communities. The statewide project team includes faculty, staff, and students at Montana State University, University of Montana, Montana Technological University, Salish Kootenai College, Little Big Horn College, and Flathead Valley Community College. The research approach integrates four science focus areas: 1) **Fire and Smoke Science (FSS)**; 2) **Smart Optical Sensors (SOS)**; 3) **Social Psychology, Economics, and Ethics (SPEE)**; and 4) **Artificial Intelligence and Machine Learning (AIML)**. The project additionally includes partnership programs in research and data cyberinfrastructure, STEM education, workforce development, and science outreach. More information about the SMART FIRES project can be found here: <https://www.mtnsfepscor.org/projects/smart-fires> or by reaching out to the Montana NSF EPSCoR office (info@mtnsfepscor.org).

OBJECTIVES

SMART FIRES' Seed Award program for Montana's two and four-year campuses is designed to support new ideas and enhance existing opportunities for undergraduate student education and workforce development in prescribed fire science and STEM areas across Montana's academic institutions. The awards can be used to support student education programs responsive to Montana's STEM workforce needs, particularly related to prescribed fire. Proposals for faculty development in these areas will also be considered. For example, this funding opportunity could support a new course in fire science, funding for students or faculty to conduct independent projects on technology or social aspects of fire science, professional development for faculty, or other innovative ideas through which SMART FIRES could promote prescribed fire-related education capacity and workforce development goals at two to four-year institutions in Montana. Faculty and instructors from these higher education campuses are encouraged to submit applications. Priority will be given to projects that link clearly to the goals of the SMART FIRES project.

AWARD INFORMATION

- **Anticipated Funding Range Per Award: \$4,000 - \$10,000**, which must include any allowable indirect costs (F&A). Funding for each seed project will be provided through new or updated subawards from MSU.
- **Estimated Number of Awards:** We anticipate **funding 2-3 projects**, depending upon available funding and the number of proposal submissions.
- **Anticipated Award Period: January 1, 2025 to August 31, 2025.** Funds must be spent by **August 31, 2025**.

- **Reporting requirements:** Each awardee must provide a **final report**, and each supported participant must complete the About You section in the **NSF EDOCS reporting system** (<https://edocs.epscor.nsf.gov>).

ELIGIBILITY

Any instructor/faculty member at a two or four-year Montana University System campus (UM and MSU are excluded from this RFP), Montana Tribal College, or Montana private college may submit a proposal. Current participation in a Montana EPSCoR-funded project is not required. Funded participants on the SMART FIRES project are not eligible to apply. Developing a partnership proposal with members from one of the existing SMART FIRES research and education teams is encouraged but not required. All supported investigators and students must be from Montana institutions.

Please note the Montana NSF EPSCoR has additional seed funding opportunities for Montana Tribal Colleges and MSU and UM faculty:

- <https://www.mtnsfepscor.org/opportunity/smart-fires-tribal-college-seed-award-program>
- <https://www.mtnsfepscor.org/opportunity/smart-fires-research-seed-funding-opportunity>

FORMAT OF PROPOSAL

Proposals must be submitted in digital format in MS Word and Excel formats, using a standard font in 11 point or larger, with one-inch margins. PDF files are discouraged. A *maximum* of 3 pages for the Cover Page and Project Description, not including budget, CV, and appendices, is allowed and must include the information below. Proposals that exceed the page limit will not be reviewed. The Excel budget template document referenced below can be found here: <https://www.mtnsfepscor.org/sites/default/files/opportunity/2024-07/Budget-template-seed-programs.xlsx>

Proposal Cover Page (1 page)

- Proposal Title
- Project Lead, Co-lead(s), primary affiliation, and all contact information
- Half-page summary statement appropriate for general audiences (maximum 250 words)

Project Description (maximum 2 pages)

- Objectives of proposed work and how they relate to SMART FIRES' priorities and goals and/or Montana STEM workforce development.
- Describe the proposed activities and include a timetable for their completion. If relevant, include how any specialized supplies or materials will be used to carry out the work.
- Outcomes and benefits: State anticipated outcomes and benefits (e.g., knowledge created, program or course developed, number and type of undergraduate research opportunities created, number of students impacted, etc.).

Additional Required Information (not included in the 3-page limit)

- Budget and 1-page Justification. Budgets are to be submitted using the Excel budget template provided (<https://www.mtnsfepscor.org/sites/default/files/opportunity/2024-07/Budget-template-seed-programs.xlsx>) Budgets may include: salaries and wages, supplies, contracted services, travel, and tuition (no fees). Budgets must include appropriate fringe benefits on all personnel salary and institutional F&A (Facility & Administration/Indirect Costs). Proposers should use the approved F&A rate for their institution; F&A cannot be waived.

- Curriculum vitae or resume of project lead (maximum 2 pages per person).
- References cited (if applicable).

REPORTING REQUIREMENTS

Grantees are required to provide information to the Montana EPSCoR State Office when requested, including project updates and supported participant information. Grantees are also required to submit a final report (1–3 pages) within 2 months of the end of the award period. The report should detail the activities, supplies purchased, publications, new courses developed, extramural grant application(s), and/or extramural grant awards arising from support. Include names, degrees, and demographic information for any students supported by the award.

Each supported participant must additionally complete the About You section in the NSF EDOCS reporting system (<https://edocs.epscor.nsf.gov>). An account will be created for each participant, and an email will be sent with information on how to log in and complete the About You section.

PROPOSAL REVIEW

Members of Montana NSF EPSCoR office and SMART FIRES Leadership Team will review proposals. Proposals will be reviewed for potential impact on faculty and students; relevance to SMART FIRES project goals and objectives; justification of budget; institutional diversity; and potential for increasing students' access to research and education experiences, especially for undergraduates, women, and underrepresented minority students.

PROPOSAL SUBMISSION

Proposals should be submitted in word or PDF format with any graphics embedded in the document; budgets must use the excel template. Submit the proposal document(s) by email to: info@mtnsfepscor.org.

Proposals must be submitted electronically by **5:00 pm MDT September 20, 2024**.

Proposers are encouraged to submit questions to info@mtnsfepscor.org or contact SMART FIRES team members directly. <https://www.mtnsfepscor.org/projects/smart-fires>