



— MONTANA —
NSF EPSCoR

SMART FIRES TRIBAL COLLEGE SEED AWARD PROGRAM

AY2024-25 Proposal Deadline: November 8, 2024

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

SMART FIRES' Seed Award program is designed to support research, capacity building, and STEM education across Montana's Tribal Colleges. This program will run from 2024 through 2027, and proposals will be considered for funding throughout this timeframe with priority given to proposals submitted by the annual deadline.

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 initial 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 scientific 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>.

OBJECTIVES

SMART FIRES' Seed Award program is designed to support research, capacity building, and STEM education across Montana's Tribal Colleges. The awards can be used to support personnel costs for faculty, instructors, and students, research supplies, field data collection and analysis, and travel. The intent of these awards is twofold: 1) to connect tribal colleges to the NSF EPSCoR network and 2) to provide opportunities for tribal colleges to conduct research, build science capacity, or enhance STEM education that is important to their school, students, and communities.

Projects do NOT have to directly align with the SMART FIRES research topics above. Support can be used for any STEM related work. However, connection with SMART FIRES research and researchers is encouraged.

AWARD INFORMATION

Funding Per Award: up to **\$20,000**, including any allowable indirect costs (F&A).

Anticipated AY2024-25 Award Period: **January 1, 2025 – August 31, 2025** (flexible end-date; proposals can request a later end date to accommodate project activities)

ELIGIBILITY

Any faculty, staff or instructor at a Montana Tribal college may submit a proposal. Developing a partnership proposal with one of the existing SMART FIRES research teams and activities is encouraged but not required. All supported investigators and students must be from Montana institutions.

FORMAT OF PROPOSAL

Proposals must be submitted in digital format in MS Word and Excel (for budget), using a standard font in 11 point or larger, with one-inch margins. Proposals need to include a cover page, project description, budget, CV or resume, and references cited if applicable. Proposals should be submitted as a single complete document (except for the excel budget template) with any graphics embedded in the document. Please submit the excel budget template as a separate document along with the proposal.

The Excel budget template can be downloaded at the following url:
https://www.mtnsfepscor.org/sites/default/files/opportunity/2024-08/Budget%20template_seed%20programs_ct.xlsx.

Proposal Cover Page

- Proposal Title
- Lead Investigator, Co-Investigator(s), primary affiliation, and all contact information
- Summary statement appropriate for general audiences (maximum 200 words)

Project Description (recommended 2-3 pages)

- Objectives: Summarize the objectives of the proposed work. Include how these align with SMART FIRES project priorities if applicable (this is not required).
- Work Plan: Describe the activities and include a timetable for their completion. If relevant, explain the purpose of any specialized supplies or materials requested to carry out the work.
- Outcomes and benefits: State anticipated outcomes and benefits (e.g., knowledge created, anticipated publications or proposals, number and type of undergraduate research opportunities created, number of students impacted).

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 at this link:
https://www.mtnsfepscor.org/sites/default/files/opportunity/2024-08/Budget%20template_seed%20programs_ct.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 all investigators (maximum 2 pages per person, not needed for students).
- References cited (if applicable).

REPORTING REQUIREMENTS

Grantees are required to provide other information to the Montana NSF EPSCoR State Office when requested, including annual project reporting updates and supported participant information. Grantees are also required to submit a **final report** within 2 months after the end date. The final 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.

All supported participants will additionally be required to complete the About You section in the NSF EDOCS reporting system (<https://edocs.epscor.nsf.gov>).

PROPOSAL REVIEW

Proposals will be reviewed by Dr. Aaron Thomas (UM IRSE) and members of the Montana NSF EPSCoR office for STEM goals, relevance to SMART FIRES project goals and objectives (if applicable), justification of budget, and potential for increasing students' access to research or STEM experiences, especially for undergraduates, women, and underrepresented minority students.

PROPOSAL SUBMISSION

The priority deadline for the 2024-25 Academic Year is **November 8, 2024**. Proposals should be submitted as a single complete document (except for the excel budget template) with any graphics embedded in the document. Please

submit the excel budget template as a separate document along with the proposal. Submit the proposal documents by email to: Aaron Thomas (aaron.thomas@mso.umt.edu). Proposers are encouraged to contact Dr. Thomas (406-243-2052) to discuss deadlines, award period, and with questions or assistance in putting together the proposal and package.