

CALL FOR PROPOSALS

RESEARCH ASSISTANT MENTORSHIP PROGRAM (RAMP)

A Montana Tech Undergraduate Research Program Initiative

PROGRAM GOALS. The primary purposes of the Research Assistant Mentorship Program (RAMP) are to provide undergraduates with opportunities to participate in research for their first time during the Spring Semester of 2020, and encourage them to participate in Tech's traditional Undergraduate Research Program (URP) in the future. Another goal is to stimulate research and scholarly activity among the Montana Tech faculty by providing funds to support these activities. In particular, we would like to strengthen Tech's research base by encouraging participation of faculty who have not recently been engaged in research. We also intend to facilitate team efforts by providing a mechanism for funding collaborative projects. Lastly, we anticipate that RAMP will help increase the number of research proposals submitted by enabling faculty, who need funding to explore new research topics, generate preliminary results, and thereby form the basis of larger proposals for extramural funding. Each project will begin and end in the Spring 2020 Semester.

PROGRAM PARTICIPATION AND ELIGIBILITY.

TEAMS. RAMP is designed to fund small research teams. The ideal team would consist of one faculty Principal Investigator (PI) / "team leader" and three undergraduates. Projects with a minimum of two students or a maximum of four students will be considered. Additional faculty members may serve as mentors, if all mentors agree to the equitable distribution of the mentor allowance. No additional mentor allowance funding will be provided for multiple mentors. Regular research team meetings should be held with all members present.

FACULTY. Any full-time faculty member of Montana Tech is eligible to participate in the RAMP program. At any given time, a faculty member can be part of only one RAMP-funded research project.

STUDENTS. Any full-time degree-seeking Montana Tech undergraduate student with less than 90 earned credits on their transcript is eligible to participate in the RAMP program. While the primary focus is on freshmen and sophomores, juniors are also eligible. At any given time, a student can be part of only one RAMP-funded research project. RAMP funding is intended for students who have not had previous research experience, so undergraduates who have participated in the traditional URP or SURF projects are ineligible. Students with 90 or more credits are ineligible for RAMP funding, but RAMP mentors are encouraged to involve these students by securing other funding (traditional URP, department funds, etc.). Students must be registered for the Spring 2020 semester with 12 credits (full time) or more to be eligible. Students will be required to register for an additional 1 credit of undergraduate research within the mentor's department. For **Highlands Students**, two scholarship options are available. The program provides a \$300 scholarship for Highlands students registered full-time for at least 12 credits, plus 1 research credit. The program provides a \$200 scholarship for Highlands students taking 9 credits of coursework, plus 1 research credit.

PROJECTS. RAMP is NOT intended to fund senior design projects or senior theses. It is not intended to supplement existing extramural funding, although a case may be made for applying for funds to support a RAMP undergraduate team to work with a graduate student and faculty member on a low-budget project (no faculty allowance permitted in this case). Tech's traditional URP program is not considered extramural funding; RAMP projects that may lead to future URP projects are allowed and encouraged. RAMP *is* intended to fund research collaborations, which have the potential to generate initial data leading to proposals for extramural funding, contributions to the field that would warrant publication or presentation, and/or become self-sustaining through the collaborative research experience.

PROPOSAL GUIDELINES. Proposals should be generated by the Faculty PI. Faculty PIs should submit proposals electronically to URP@mtech.edu. Files should be in .pdf, .doc, or .docx format. The proposal deadline is 12 p.m. (noon) on Friday, November 22, 2019.

Cover Sheet: Must be included and should list potential team members. If project is approved and team members have not been identified, the mentor will have one week to provide team member information to the Research Office.

Proposal: 3-page maximum, single-spaced, 1" margins, and minimum 11-point font. Include sections describing:

- the background, introduction, objectives, etc.
- the background, qualifications, and expected roles/contributions of participants, including the Mentor's prior research experience with undergraduates.
- the proposed research of the project (including specific description of the undergraduate student activities),
- longer-term plans if applicable, and plans for submitting proposals for extramural funding, if appropriate.

Appendices: Mandatory materials include budget with justification (see below) and NSF bio sketch for each participating faculty member (see attached template if necessary). A letter of endorsement from department head(s) may be included.

- **ALLOWABLE COSTS AND BUDGET ITEMS:** Undergraduate Researchers will be given \$300 each for the Spring 2020 Semester as a scholarship. Each project will also be granted up to \$300 to support travel related to conducting and presenting research as well as purchasing supplies and materials. Faculty can also request a \$300 mentor allowance. Mentor allowances can be deposited into campus IDC accounts or used for additional travel or supplies associated with the research project.

Questions about preparing the budget should be directed to URP@mtech.edu. Proposals for less than the maximum are welcome, and the budgets may be renegotiated by the URP committee based on funding availability.

TERM OF AWARD. Funding will be awarded once a project is approved. Student scholarships will be awarded as an unrestricted scholarship at the start of the spring semester. **Student budgets must be spent by April 30, 2020. Faculty allowance balances will be distributed into IDC accounts by June 30, 2019.**

DELIVERABLES.

- Completed pre- and post- survey forms from the students providing information about their research experiences. (The survey forms will be distributed by the Research Office.)
- All participants will be required to complete Responsible Conduct of Research Training in order to participate in the RAMP project.
- Each project must result in a Poster, presented at Techxpo. Student participation at the Techxpo poster will be a required part of project participation.

EXPECTED NUMBER OF AWARDS. The URP committee anticipates being able to fund at least two INBRE-related RAMP projects and two non-INBRE projects for the 2020 Spring Semester. INBRE can support bio-medical and bio-behavioral research.