About MTech’s Undergraduate Research Program (URP)

- Established in 1996
- **Purpose:** Give undergraduates the opportunity to do faculty-mentored research, enriching their college experience, reinforcing classroom learning, improving retention in the major, and exposing them to grad school opportunities
- Faculty incentives: funding for supplies; small stipend; preliminary data for proposals; broader impacts
- All students and mentors receive Responsible Research training

**URP Process**

- **Multidisciplinary Faculty URP Committee**
-Invites proposals in spring
-Reviews proposals and selects awardees: URP, SURF, PHI, RAMP
-Number determined by budget available
-Overssees projects; provides feedback
-**Program administered by Research Office**
-Also organizes training & workshops
-SURF workshops on RCR; research design, statistics & communicating science; grad school; networking; presentations & posters

- **Impact**

  - 812 students/projects since 1997
  - ~80% one project; ~20% did more
  - Many majors included
  - >13% go to grad school, vs 1% average
  - **NEW:** 11 Public Health Internships in 2014-15 made possible by MT-INBRE: many involved community partnership
  - Students most valued: challenging & fun (86%); faculty mentorship (75%); understand role of research in the field (70%)
  - In the words of an alumnus: "The URP program was very beneficial for my education. It was very challenging and prepared me for my career where you are given tasks that don't always have a clear cut answer. It also helped with my presentation and writing skills."
  - Many publications & presentations, with student and faculty coauthors
  - Mary MacLaughlin, Geological Engineering faculty member and previous URP Committee Chairperson received the 2014 GEO/CUR Undergraduate Research Mentor Award

- **Types of URP Projects**

  - **Traditional URP:** Academic-year project
    - Student(s) writes proposal.
    - Scholarship of $1,500 for year
    - Student enrolls for URP credit(s)
    - Oral presentation at Montana Academy of Sciences meeting (April)
  
  - **SURF: Summer Undergraduate Research Fellowship (2011-present)**
    - Faculty writes proposal
    - Half-time or full-time for 9-10 weeks
    - Student paid $4000 (FT); $2000 (PT)
    - Biweekly lunch/workshops for all
    - On-campus poster symposium in August

  - **Public Health Internships (PHI)**
    - New in 2014-15; MT-INBRE funded
    - Similar to URP & SURF
    - Project is an internship in public health, with faculty or community mentor
  
  - **RAMP: Research Assistantship Mentorship Program (2011-present)**
    - Designed for inexperienced students
    - Faculty writes proposal, for a project a team of freshmen/sophomores would do during academic year.
    - Student scholarships of $500

**Majors of undergraduate research students 2000-13**

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