Services for science faculty:

1. Help faculty develop competitive proposals, with systematized emphasis on Broader Impacts

2. Recruit K-12 and community college students to enroll in undergraduate sciences, emphasizing students from underrepresented groups

3. Organize and expand outreach efforts to all audiences

4. Support evidence-based teaching approaches and science communication skills by faculty, GTFs, and learning assistants

5. Collaborate in developing the undergraduate teaching track serving majors interested in teaching secondary science

stemcore.uoregon.edu  brebar@cas.uoregon.edu
We work to leverage K-12/outreach connections and education expertise…

Example Projects and Opportunities

• Partner with our Teacher Programs
  • Teacher Workshops (virtual and face-to-face)
  • GTF roles – supporting teachers (GK-12 model)

• Contribute to our library of teaching materials
  • E.g., table top scanning electron microscope
  • Offer remote access to scientific equipment

• Offer research internships for teachers, or future teachers
  • Teachers can join the community supported by STEM CORE

stemcore.uoregon.edu  brebar@cas.uoregon.edu
We work to leverage K-12/outreach connections and education expertise…

Example Projects Continued

• Involve the Lane County STEM Hub
  • To recruit, expand connections, and sustain activities

• Citizen science projects – involve students
  • Recruit and involve underrepresented groups

• Develop courses blending science and pedagogy content

• Partner with after school programs, museums, & local education providers and involve UO students via coursework or paid roles

stemcore.uoregon.edu  brebar@cas.uoregon.edu
• “Broader impact is very strong, including mentoring in lab, undergraduates in lab, high school advisory board and inclusion of high school students in research, and STEM CORE participation for training high school teachers. No weaknesses were noted by the panel.”

• “The broader impacts of the proposal are generally quite strong…. We appreciate the partnership with the university's STEM CORE program to facilitate effective outreach. The involvement of several undergraduates is commendable.”

• “As a CAREER proposal, the broader impacts of the project, particularly those associated with education, should be extensive and excellent. Those proposed met these expectations. Contacts have been made with a STEM Laboratory middle school that serves an under-represented group. The project would develop a summer teacher workshop, followed by regular interactions during the year to develop curricula materials. Students would have access to the data being generated by the project and maintain blogs to develop their language skills. The curriculum would be based on state and national standards.”

stemcore.uoregon.edu  
brebar@cas.uoregon.edu
Bryan Rebar, Ph.D.
Associate Director, STEM CORE
Email: brebar@cas.uoregon.edu
Phone: 541-346-4773
Office: 148 Willamette Hall

If you are considering a proposal, we encourage you to involve STEM CORE early in the process. Just as great research plans take time to develop, so too do great broader impacts plans!

stemcore.uoregon.edu