



Menu of Broader Impacts Options for Researchers

From [CRSP Grant Development Resources](#)



Goal: to help faculty, postdocs and graduate students develop and carry out innovative and impactful Broader Impacts activities that benefit a diverse range of audiences.

Broader Impact activities benefit the public by enhancing their experiences with science, technology and research. Additionally, the researchers benefit from improved communication skills, and a broader understanding of their research. They may also expand their network to include potential collaborators and partnerships with industry. Please contact Broader Impact Specialist, Karen Krapcho (k.krapcho@utah.edu) if you have opportunities to share or need more information or assistance.

Approaches are intended designed to target:

- Participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM);
- Engaged STEM education and educator development at any level;
- Increased scientific literacy and public engagement with science and technology;
- Development of a diverse, globally competitive STEM workforce;
- Increased partnerships between academia, industry, and others;
- Enhanced infrastructure and improve connectivity for research and education.

Key for resources required:

1= 0-\$1000 and/or 1 to 3 days of work/ year

2=\$1,000- \$10,000 and/or 1 to 2 weeks /year

3= \$10,000-\$30,000 and/or 2 weeks+/year

Outreach Ideas for Communicating Science with the General Public Resources

Develop or contribute to exhibits, temporary stations, events, or ongoing public programs for local museums, such as the NHMU , Red Butte Arboretum , The Leonardo , Discovery Gateway , and the Clark Planetarium	2-3
Present a lecture about your field of research to a lay audience. U of Utah hosts many lecture series including: Gould , Park City Institute , Guy F. Atkinson (Geology/Geophysics) , Bioengineering Seminar series	1
Present a Lecture, field trip or activity to docents at a museum	1
Collaborate with graphic artists/computer scientists/ EAE to create an app, video game, lesson plan with Genetic Science Learning Center	3
Work with the Vice President for Research Office to communicate recent published work and results on social media.	1
Create a website and/or blog about your research. Check out Nalini Nadkarni (Biology), Jim Steenburgh (Atmospheric Sciences), Janet Iwasa (Biochemistry), Nitin Phadnis (Biology)	2
Publicize your own research through social media such as Facebook, Twitter, Instagram. Check out Cagan Sekercioglu (Biology), Christopher Gregg (Neuroscience)	2
Contact STEM ambassador communicating Science Project manager to inquire as to workshop availability and opportunities for public audience engagement	2
Utah is home to 5 amazing National Parks . Plan activities and/or presentations in collaboration with the National Park Service .	2-3

Outreach for K-12 students

Host a high school student in a summer internship in your lab. Sample programs at Scientific Computer Imaging Center ,	1
Create materials for use in a K-12 classroom- a lesson or series of lessons. Examples: Chemical engineering , College of engineering , and College of mines .	1-2
Serve, or invite your graduate students, as a judge for the Salt Lake Valley Science and Engineering fair, Help with Science Olympiad . Contacts in Engineering, CSME , Chemistry and Biology to help students working on science fair projects	1
Host a career day, open house, lab tour or “shadow “program for girls or students from URM groups. Find contacts in College of Science or College of Engineering and offer to host groups of students during their annual events for high school students.	1
Get involved with a Utah MESA (Math Engineering Science Achievement) club. Lead an activity, host a field trip or lab tour. Develop or sponsor a MESA day competition or project.	1
Outreach to local schools and students with fun hands-on activities through our Women in Engineering program or the summer Hi-Gear engineering camp	1-2
Arrange a video chat or virtual tour of your research site for K-12 schools. Post to your research page.	1
Teach a course, lead a field trip or activity of give a lecture to high school students attending a variety of engineering summer camp programs, REFUGES bridge program , Science summer camps.	1-2
Project Unify -Special Olympics, program for inclusion	2+

Outreach Ideas for K-12 Teachers

Share your research with local K-12 teachers or serve as an expert consultant at conferences and workshops (Math, Science teacher trainings)	1
Host a research fellowship for a STEM middle or high school teacher through multiple programs through the Center for Science and Math Education . The grant development group can help you to apply for an NSF Research Experience for Teacher Supplement for your proposed NSF grant.	2-3
Collaborate with the Genetic Science Learning center to create a teaching module	2
Volunteer to teach/and or facilitate specialized unit or activity at local science/engineering school (like AMES)	2

Training Ideas for Undergraduate Students

Mentor undergraduates in your lab during the summer or academic year. REU supplements are available to NSF grant awardees.	2
Upward Bound- TRIO programs	2-3
Host a student associated with the Graduate Preparation Institute in your laboratory	1+
Develop new course for undergraduates to explore an emerging field.	2+
Develop course based undergraduate research experiences in your discipline (CUREnet for biology)	3

Training Ideas for Graduate Students

Training in effective science communication (example)	2+
STEM diversity programs (such as SACNAS) could provide extra support and mentoring from U of U students from underrepresented groups in the sciences.	1+
Contact the U of U's Graduate School Office of Diversity to link/enhance programming	1+
Training in Ethics and social justice for scientists	2-3
Develop Leadership and/or teaching workshops for scientists	2-3
Promote/develop Interdisciplinary workshops Species in the Age of Discordance	3

Creating a more Inclusive environment

Programming and presentations for the School for the Deaf and the Blind	varies
Programming for autistic kids (Pingree School) Autism schools in Utah	
Programming and projects for autistic adults	
Helping to develop and create assistive technology for handicapped persons (Utah Center for Assistive Technology (UCAT))	
Presentation or activity at Senior center	
Life skills training for rehabilitation: Partnering with traffic lab (driving simulator), virtual outdoor activities	
Developing technology and or skills for diffusing anxiety (example)	
Partnering with Special Olympics	