**University of Utah National Science Foundation (NSF)**

**Broadening Participation Plan Guide**

The Directorate for Engineering (ENG) promotes diversity in all aspects of its programs. In keeping with ENG's priority to broaden the participation of underrepresented groups in Engineering (see detailed definition below), the Office of Emerging Frontiers and Multidisciplinary Activities is addressing the need to enhance diversity in all fields of Engineering by **requiring all EFRI projects to include a "Broadening Participation Plan"**as part of the Emerging Frontiers in Research and Innovation (EFRI) 2022/23 Solicitation.

One goal is to increase the participation of members of underrepresented groups in the field of engineering and in engineering research, such as women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM).

This requirement will not only promote diversity in the human resources engaged in these EFRI projects but will also expand diversity of thought, ideas, and approaches brought together by EFRI in defining and solving important research questions.

**What is a Broadening Participation Plan?**
**The Broadening Participation Plan**must be described as part of Broader Impacts of the proposal both in the Project Summary and in the Project Description.

Proposers should include a preliminary version of the Broadening Participation Plan in their preliminary proposal and a detailed version in their full proposal (if invited to submit).

The Plan may include, but is not limited to, any of the following menu of activities as appropriate for your project and the circumstances of your organization(s):

* PI, Co-PI, or other SENIOR PERSONNEL - Inclusion of persons from underrepresented groups as PI, co-PI, and/or other senior personnel, as appropriate for the project;
* STUDENTS AND POST-DOCTORAL RESEARCHERS - Inclusion of persons from underrepresented groups as undergraduate student(s), graduate student(s), and post-doctoral researcher(s);
* RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU) - A plan to apply for supplement(s) to engage undergraduate researchers, using [REU](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund) supplement(s);
* RESEARCH EXPERIENCE AND MENTORING (EFRI-REM) - A plan to apply for post-award supplement(s) to enhance research goals through diversification of the EFRI research teams;
* MINORITY-SERVING INSTITUTIONS - Inclusion of faculty at minority-serving institutions (MSIs) as PI, co-PI, or senior personnel, and/or student researchers from MSIs in the research project;
* COMMUNITY COLLEGES - Engaging faculty and/or student researchers at community colleges in the research project;
* RESEARCH EXPERIENCES FOR TEACHERS (RET) - A plan to apply for post-award supplement(s) to engage teachers and/or Community College Faculty through the [RET](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20584&org=NSF) program;
* RESEARCH EXPERIENCES FOR HIGH SCHOOL STUDENTS - Provide research opportunities for members of underrepresented groups at the high school level;
* RESEARCH EXPERIENCES FOR VETERANS - A plan to apply for post-award supplement(s) to engage veterans through the [Research Experience and Mentoring](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20117) (REM) or [Veterans Research Supplement](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20111) (VRS) programs;
* EXISTING INSTITUTIONAL PROGRAMS - Enhance/collaborate with existing diversity programs at your home organization and/or nearby organizations;
* MENTORING - Senior Personnel serve as role models and mentors for an underrepresented student population;
* TUTORING OPPORTUNITIES - Provide tutoring opportunities for underrepresented middle school, high school, and undergraduate students;
* K-12 OUTREACH - Outreach activities that will interest and attract underrepresented K-12 students to engineering undergraduate programs.

NSF encourages proposers to be creative in the planning of activities to attract and retain members of underrepresented groups to the fields of engineering and engineering research when developing their Broadening Participation Plans.

##### ****National Science Foundation DEI Resources:****

* [Broader Impacts](https://beta.nsf.gov/funding/learn/broader-impacts#:~:text=%E2%97%8F%20Additional%20resources-,What%20are%20broader%20impacts%3F,of%20specific%2C%20desired%20societal%20outcomes.)
	+ [NSF 101: Five tips for your Broader Impacts statement](https://beta.nsf.gov/science-matters/nsf-101-five-tips-your-broader-impacts-statement)
* [Broadening Participation in STEM](https://beta.nsf.gov/funding/initiatives/broadening-participation)
	+ [Broadening Participation in Computing](https://www.nsf.gov/cise/bpc/)
	+ [BPCnet Resource Portal](https://bpcnet.org/)
	+ [Diversity, Equity, and Inclusion in Engineering](https://www.nsf.gov/eng/diversity.jsp)
	+ [Broadening Participation in Mathematical and Physical Sciences](https://www.nsf.gov/mps/broadening_participation/index.jsp)