NSF Broader Impacts Expo - List of Resource Representatives

**Aggie Challenge** — This Engineering Academic and Student Affairs (EASA) program is designed to engage engineering undergraduate students in multidisciplinary teams (5 - 10 students) working directly with faculty and graduate students on grand engineering challenges facing our society. All teams are multidisciplinary and vertically integrated (freshman to seniors).

Contact: Magda Lagoudas, m-lagoudas@tamu.edu; Website: https://engineering.tamu.edu/easa/areas/enrichment/aggie-challenge

**Aggie STEM** — This program provides STEM educators with tools necessary for advancements in science, technology, engineering, and mathematics. The Aggie STEM Summer Camps (ASSC) give students real world experiences in STEM education through inquiry learning and provide a world-class university experience with Texas A&M University professors in STEM fields.

Contact: Dr. Robert Capraro, aggiestem@tamu.edu; Website: http://aggiestem.tamu.edu

**Aggies Invent** — This resource of the Engineering Academic and Student Affairs (EASA) is a 48 hour intensive design experience offered at the Engineering Innovation Center (EIC), a 20,000 square foot rapid prototyping lab. The format of the experience is to engage 60 or more students in multidiscipline/multi-level teams in hands on projects that will push their innovation, creativity, and communication skills. Each event will have a specific theme and will be designed in collaboration with industry and faculty.

Contact Rodney Boehm, rodneyboehm@tamu.edu; Website: https://aggiesinvent.tamu.edu

**Center for Teaching Excellence** — Services provided by CTE include: Consultations (individual, program, department, college); Curriculum design/redesign; Graduate teaching assistant support/training; and professional development workshops on a wide range of relevant topics (effective lecturing, assessment, classroom management, diversity, course design, instructional technology, high-impact practices).

Contact: Dr. Debra Fowler, dfowler@tamu.edu; Jean Layne, jlayne@tamu.edu; Website: http://cte.tamu.edu/

**Engineering Access and Inclusion** — This program, within the Engineering Academic and Student Affairs (EASA), is dedicated to the outreach, recruitment, retention, and professional development of historically underrepresented students in engineering, i.e., African Americans, Hispanics, and Native Americans. The program seeks to promote the success of undergraduate and graduate students from underrepresented groups by creating supportive communities, providing infrastructure for student success, and designing high impact educational opportunities.

Contact: Dr. Sonia Garcia, garcia5@tamu.edu; Website: https://engineering.tamu.edu/programs/access-and-inclusion

**Engineering PK-12 Outreach** — This resource of the Engineering Academic and Student Affairs offers summer camps for middle school and high school students, as well as outreach to science, math, and career and technical education (CTE) educators throughout the state of Texas, to help attract bright young minds to engineering.

Contact: Shelly Tornquist, stornquist@tamu.edu; Website: https://engineering.tamu.edu/easa/areas/outreach

**Engineering Undergraduate Research** — This resource of the Engineering Academic and Student Affairs (EASA) provides an exciting and unique opportunity for undergraduate students to immerse themselves in research under the guidance of College of Engineering faculty, postdoctoral fellows and advanced graduate students.

Contact: Tandilyn Morrel, tmorrel@tamu.edu; Website: http://engineering.tamu.edu/easa/programs/usrg

**Halliburton Engineering Global Programs** — This resource of the Engineering Academic and Student Affairs (EASA) supports the College of Engineering in transforming the undergraduate engineering education by providing high quality global programs to prepare students to be future leaders. This includes Exchange Programs, International Internships, International Field Trips, and Faculty led programs. There are several ways for faculty members to be engaged in this program.

Contact: Dr. Maria Alves, malves@tamu.edu; Website: https://engineering.tamu.edu/global
LAUNCH - Learning Communities, Academic Excellence, Undergraduate Research, National Fellowships, Capstones, Honors – LAUNCH is a unit of Undergraduate Studies in the Division of Academic Affairs providing high-impact educational experiences and challenges motivated students in all academic disciplines to graduate from an enriched, demanding curriculum. The programs administered by the office bring together outstanding students and faculty to build a community of knowledge-producers, life-long learners, nationally-recognized scholars, and world citizens. Contact Annabelle Aymond, Annabelle.aymond@tamu.edu; Website: http://launch.tamu.edu

Louis Stokes Alliance for Minority Participation – The purpose of this NSF-funded TAMUS LSAMP alliance, composed of Texas A&M University, Prairie View A&M University, and Texas A&M University-Corpus Christi, is to increase the number of underrepresented minority (URM) students successfully completing degrees in STEM disciplines. TAMU programs include: Graduate Interest Group - to equip undergraduate students with resources and motivation to apply to graduate school; and Bridge to the Doctorate - to increase the number of URM students who complete doctoral STEM degrees. Contact: Dr. Sam Merriweather, s_merriweather@tamu.edu; Website: http://tamuslsamp.org

Office of Scholarly Communications – The TAMU Libraries Office of Scholarly Communication (OSC) offers consultations, tools, and educational services for scholars in the areas of copyright and fair use; research data management; and communicating scholarly reputation and impact. For more information about OSC, contact: Dr. Bruce Herbert, beherbert@library.tamu.edu, For data management services, contact: Anna Dabrowski, ajdabrowski@library.tamu.edu; Website: http://library.tamu.edu/services/scholarly_communication/index.html

Power Writing Support Services – POWER provides motivational and instrumental support for graduate students' and faculty's academic writing. A select group of graduate students and faculty offer several services through POWER: Individual writing consultations (the "Power Hour"), writing and practicing in Writing Studios, and graduate-level writing productivity classes. Contact: Dr. Patricia Goodson, pgoodson@tamu.edu; Website: http://power.tamu.edu

Summer Mathematics Research Training (SMaRT) High School Camp – SMaRT is a two-week summer program at Texas A&M University intended to facilitate interest in mathematics of advanced high school students. The camp provides an intensive learning environment in mathematics where students also learn how to approach mathematical problems, prove mathematical statements, and write the results. Contact: Dr. Peter Kuchment, pkuchment@gmail.com and Dr. Oksana Shatalov, shatalov@math.tamu.edu; Website: http://www.math.tamu.edu/outreach/Camp/

TAMU Math Circle and Summer Educational Enrichment in Math (SEE-Math) – TAMU Math Circle is a joint project between the Departments of Mathematics and Electrical and Computer Engineering meeting almost every week during the Fall and Spring semesters. Mathematical Circles are a form of education enrichment and outreach that bring students into direct contact with mathematical professionals in an informal setting, to work on interesting problems or topics in mathematics. SEE-Math is 2-week camp for gifted middle school students entering the 6th, 7th or 8th grade. Contact: Dr. Alex Sprinton, spalex@tamu.edu, Dr. Phillip Yasskin, yasskin@tamu.edu; Website: https://mathcircle.tamu.edu/, http://see-math.math.tamu.edu/

Texas A&M University System – Alliance for Graduate Education and the Professoriate (TAMUS AGEP) – This NSF-funded program provides support to underrepresented minority STEM graduate students in scholarly and professional skill development activities, development of community and co-mentoring networks, participation in research conferences, securing multi-institutional research mini-grants, and participation and performance-based retention bonuses. Contact: Isah Veronica D. Juranek, ijuranek@tamu.edu; Website: http://tamus-agem.tamu.edu/

Texas Sea Grant – Texas Sea Grant is a unique partnership that unites the resources of the federal government, the State of Texas and universities across the state to create knowledge, tools, products and services that benefit the economy, the environment and the citizens of Texas. Contact: Heather Wade, hwade@tamu.edu; Website: http://texasseagrant.org/

Women in Engineering (WE) – This program, within the Engineering Academic and Student Affairs (EASA), engages students in leadership, technical team projects, and professional development. Each semester, WE provides faculty and industry partners with opportunities to engage in programs and events that assist with womens’ academic/ technical development and build community. Faculty are encouraged to promote an environment in the COE and research that supports and values the contribution of women and underrepresented populations. Contact: Shawna Fletcher, fletcher.234@tamu.edu; Website: https://engineering.tamu.edu/programs/women-in-engineering
Additional Broader Impacts Resources (not at the Expo today):

**Center of Integration of Research, Teaching, and Learning (CIRTL) —** National and local organization that helps current and future STEM faculty prepare to be more efficient, effective teachers. Contact: Ra’sheedah Richardson, sheedah@tamu.edu; Website: [http://cirtl.tamu.edu](http://cirtl.tamu.edu)

**Education Research Center —** The Texas A&M University Education Research Center (ERC) studies major issues in education reform and school governance. The mission of the ERC is to investigate these issues in order to inform educational policy, facilitate decision-making, and improve student learning. In support of its mission, the ERC conducts research in three areas: a) program evaluation; b) STEM education; and c) educator preparation. Contact: Jackie Stillisano, jstillisano@tamu.edu; Website: [http://erc.cehd.tamu.edu](http://erc.cehd.tamu.edu)

**Science Outreach —** Science Outreach was established to stimulate interest and encourage careers in science, engineering and technology. It includes educational outreach programs for grades 6-12 and women's programs. Contact: Nancy Magnussen, outreach@science.tamu.edu; Website: [http://outreach.science.tamu.edu](http://outreach.science.tamu.edu)

**Aggieland Saturday —** is a university-wide open house created to help prospective students and their families learn about the opportunities available at Texas A&M University. Each academic college and many student service offices provide fun and informational sessions throughout the day. Spring each year. For HS Juniors and Seniors. Work through your college or department to engage in this event. Website: [https://engineering.tamu.edu/agsat](https://engineering.tamu.edu/agsat)

**Physics and Engineering Festival —** The Department of Physics & Astronomy at Texas A&M University invite the public to an entertaining and informative event with over 100 amazing, interactive physics demonstrations, specialized programs by age groups, and public lectures by prominent scientists and astronauts. Contact: festival@physics.tamu.edu Website: [http://physicsfestival.tamu.edu/](http://physicsfestival.tamu.edu/)

**Broader Impacts Wizard —** Walks you through all considerations for the broader impacts part of a proposal. Built for Ocean Science, but still helpful for thinking through the process of creating broader impacts activities for a project. Website: [http://coseenow.net/wizard](http://coseenow.net/wizard)

**Increase the Impact —** Work with researchers and innovators in undergraduate STEM education to learn strategies for effectively sharing their work with others. How-To Guide and videos available at: [http://www.increasetheimpact.com/resources.html](http://www.increasetheimpact.com/resources.html); Website: [http://www.increasetheimpact.com/](http://www.increasetheimpact.com/)

**Process Oriented Guided Inquiry Learning (POGIL) —** POGIL uses guided inquiry – a learning cycle of exploration, concept invention and application – as the basis for many of the carefully designed materials that students use to guide them to construct new knowledge. Website: [https://pogil.org/](https://pogil.org/)

**National Alliance for Broader Impacts (NABI) —** This NSF-funded annual summit serves to create a community of practice fostering the development of sustainable and scalable institutional capacity and engagement in broader impacts activity. They have created a helpful brochure of “Broader Impacts Guiding Principles and Questions for National Science Foundation Proposals”, [https://broaderimpacts.net/wp-content/uploads/2016/05/nabi_guiding_principles.pdf](https://broaderimpacts.net/wp-content/uploads/2016/05/nabi_guiding_principles.pdf)

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**Junior Faculty Proposal Writing Academy Contacts:**  
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Dr. Laurie Garton, [lsgarton@tamu.edu](mailto:lsgarton@tamu.edu)