The Biomedical Engineering Society (BMES) is an RSO dedicated to exploring biomedical engineering and its intersections with other fields, often through interdisciplinary technical projects. With EOH and design projects that operate throughout the school year, BMES projects provide excellent technical experience for teams of students in and out of BIOE.

This year, BMES has 24 different projects spanning BME subdisciplines, including:

- **Biomechanics**—smart prostheses, Parkinson’s tremors reducing toothbrush
- **Imaging and Sensing**—vibrotactile sensory feedback gloves, audio processing & hearing, a heart phantom design team
- **Therapeutics Engineering**—hydrogel drug delivery, Bio-bots
- **Cell & Tissue Engineering**—engineered organs, shape and color patterning in cell culture
- **Computational Bioengineering**—using DNA for data storage, modelling an epidemic

Left: Heart Phantom Design Team prototype setup. Below: CAD model for silicone mold used to fabricate the silicone phantom. Right: A BMES member in the EEG vs. EMG team at EOH 2015 tests out the EMG functionality.

Above: An optogenetics project involving a light-responsive motorized car from EOH 2016. Shining a laser at different parts of the “brain” controlled the direction of the car’s motion.

Left: BMES’s EOH and Design teams after EOH 2016.

Contact Information

Please contact Kate Love (kmlove2@illinois.edu), BMES’s Technical Director, or Dr. Jenny Amos (jamos@illinois.edu), BMES’s faculty advisor, with any questions.