



EASTERN MICHIGAN UNIVERSITY ORTHOTICS & PROSTHETICS

January 2017

Volume 2 Issue 3

BREAKING BOUNDARIES WITH BEBIONIC



On January 17th, the MSOP students were treated to an educational talk and demonstration from Bebionic. The students were introduced to the Bebionic hand and were given the opportunity to explore the 14 selectable grip patterns and hand positions the hand provides. The life-like hand can be programmed to mimic normal hand motion, allowing everyday use and functionality much easier for an upper limb amputee. This was an awesome opportunity that allowed students to experience the leading-edge technology of upper extremity prosthetics. Thank you to JCascade, oshua Clark, and Bebionic for volunteering their time and resources.

PROGRESS THROUGH PATIENT MODELS

An integral part of our students' O&P education is the practice and learning that is achieved through interactions with patient models. Each semester we have several courses that require patient model interactions in both orthotics & prosthetics. We are fortunate enough to have a new facility that can accommodate 5 patient models per session. Students are able to evaluate, cast, fabricate, and fit devices to their patients. This interaction provides hands-on knowledge and experience, which is invaluable preparation for students as they enter the O&P profession. If you are interested in participating as a patient model, or know of anyone who may be interested, contact Wendy Beattie @ 734-487-2814

FIRST-YEAR ROBOT PROJECT

At the end of the fall semester, first year students were given the opportunity to present the finished products of their semester-long Biomechanics robot assignment. Working together in five groups, students constructed a robot from prosthetic components and a foam molded torso. Powered by a handheld drill, the robot was required to sit in a chair, and then return to a standing posture.

To complete this project, the students applied concepts learned in their Biomechanics class. The main focus was balancing the moments acting on the robot's joints to produce desirable motion. With unique variations, each group designed a pulley system to successfully create these motions.

Overall, this robot project aimed to enhance student communication and problem solving, and gave students opportunities to work with prosthetic componentry and tools. First-year student, Kameron Mitchell, shared his thoughts on this experience: "how amazing the human body is at producing forces."

