

PILOT PROGRAM FOR CREATION OF CENTER FOR ASSISTIVE TECHNOLOGIES



SUMMARY

This project will enhance design education at MU by continuing existing successful collaborations and adding new collaborations to create and provide assistive technologies for people with disabilities.

DESCRIPTION

The project includes needs finding, design, dissemination, commercialization, and planning activities. 1) Students will participate in needs finding activities with clients, caregivers, and therapists at meetings of a national disabilities support groups to create a list of potential senior capstone design projects. 2) Student teams will construct and test functional prototypes, and transfer them to clients at the end of the project. 3) Students from the MU Law School and MU Graduate School of Management will serve as consultants to project teams to assess commercialization potential and patentability of student design solutions. 4) Project teams will submit their design solutions to www.abledata.com, an existing online database for assistive technologies, to disseminate these technologies. 5) Plans to expand the project into a new MU Center for Assistive Technologies will be developed.

MILESTONES

This project will be considered a success if at least one AT device or technology per year developed by students is (1) transferred to a client upon completion of the project, (2) evaluated for its commercialization and intellectual property potential using resources and students from the GSM and Law School, and (3) uploaded to the abledata.com website.

ABOUT OUR TEAM

Dr. Jay Goldberg, PI/Project Manager, Capstone Design Course Instructor

Kim Zvara, Pediatric Physiatrist, MCW: Clinical Advisor to project teams

Pascal Malassigne, MIAD: Co-coordinator of MU/MIAD industrial design collaboration

Jackie Wells, MCFI: Liaison between MCFI clients with disabilities and MU student design teams

Nathan Hammons, Supervisor of Law and Entrepreneurship Clinic

John Peterson, Supervisor of assessment of commercialization potential

Dr. Barb Silver-Thorn, Faculty advisor

Dr. Brian Schmit, Faculty advisor

All members of this project team share an interest in the design of assistive technologies, commercialization, entrepreneurship, or the desire to help people with disabilities. Team members represent all needed areas of expertise, including biomedical engineering design, industrial design, new product development, rehabilitation engineering and medicine, business, entrepreneurship, patent law, and physical therapy. They all have significant experience in mentoring students. The project builds on successful past and existing collaborations between the PI and all team members.

BEYOND BOUNDARIES

This project supports several of the goals that are part of the Beyond Boundaries Strategic Theme, the 2016 Strategic Theme of research, and the mission of the University. These themes include 1) pursuit of academic excellence for human well-being, 2) research in action, and 3) social responsibility and community interaction. Students and faculty will be applying their talents toward improving the lives of people with disabilities, contributing to the body-of-knowledge, and using this knowledge to solve real world problems while working with local clients with problems that represent a market that is too small to provide the financial incentive for established companies to invest in (orphan devices).