



Scientific/Educational Workshop

Workshop title

A Multidisciplinary Approach to Commercializing Rehabilitation and Assistive Technologies

Workshop organizer

Cassie Brugger (Center for Translation of Rehabilitation Engineering Advances and Technology)

Speakers

- (1) Ryan Ratts, MD
- (2) Christine McDonough, PT, PhD
- (3) Greg Lange, MS

Workshop goals

Participants will: Gain an understanding of the fundamental milestones within clinical evaluation, technology development, and business development for the commercialization of rehabilitation technologies. Learn effective product development strategies designed to de-risk development and improve likelihood of success. Identify characteristics of highly effective, multidisciplinary product development teams. How to prioritize objectives in order to most effectively utilize available resources.

Abstract

Translating rehabilitation research to product and clinical practice is a primary focus of both innovators and funding agencies. Novel rehabilitation interventions and treatments can be found in research clinics and academic labs, but few have reached widescale clinical adoption in the United States. This is due in part to gaps that exist in the continuous assessment of the balance between technology development, clinical evaluation, and business development during the product development lifecycle. Additionally, there is often a lack of evidence generation to meet customer skepticism and requirements. Addressing these challenges takes a multidisciplinary approach. This workshop will include a team of speakers from the NIH-funded Center for Translation of Rehabilitation Engineering Advances and Technology (TREAT) and will teach participants the fundamental process for commercializing rehabilitation technologies. As a multidisciplinary consortium, TREAT has been assessing technologies and aiding innovators for nearly 10 years. TREAT will share a replicable Commercialization Methodology focused on prioritizing activities to maximize efficiency and weigh opportunity costs. Speakers will provide unique perspectives and tools including clinical, engineering, and business aspects of product development and commercialization. Participants will also learn appropriate timing and best practices for conducting safety, usability, and comparative effectiveness studies during the product development lifecycle to satisfy regulatory, reimbursement, and clinical stakeholders. At the conclusion of this workshop, participants will possess a greater understanding of the milestones and objectives to be achieved at each stage of the product development and commercialization process. During this highly interactive workshop the audience can utilize the principles discussed to develop their own strategy for an innovation or technology of their choosing.