Center for Reliable Sensor Technology-Based Outcomes for Rehabilitation (Restore Center)

Description

The Center for Reliable Sensor Technology-Based Outcomes for Rehabilitation (RESTORE) will establish vital research infrastructure to enable rehabilitation scientists to use mobile sensors to monitor a diverse set of real-world outcomes. The RESTORE Center integrates expertise from statistics, computer science, bioengineering, mobile health, and clinical rehabilitation. It will provide a suite of software tools and validated easy-to-use, standardized workflows for extracting meaningful metrics from mobile sensors and for analyzing large datasets within rehabilitation research. It will also provide resources, such as a pilot project program, to establish a vibrant research community.

Funding

~$4M

OVER THE NEXT 5 YEARS

Sources: Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the National Institute of Neurological Disorders and Stroke (NINDS), NIH

Key Personnel

Scott Delp, PhD, Trevor Hastie, PhD, Matthew Smuck, MD, Maarten Lansberg, MD, PhD, Joy Ku, PhD, Jennifer Hicks, PhD

Key Projects

Easy-to-use software workflows for rehabilitation researchers to estimate common real-world outcome measures; Machine learning and biomechanics model-based tools to (i) monitor and provide feedback on home-based rehabilitation and (ii) quantify rehabilitation outcomes

Grants, Courses, and Programs

- A pilot project program will provide funds to promising investigators
- A fellows program will create hubs of expertise around the country and world
- Scientific challenges will foster collaboration between rehabilitation researchers and experts from other domains, such as machine learning and robotics

Key Stats

Established	People	Digital Health Projects
2020	10+	5+