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.

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

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 Stats

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<tr>
<th>Established</th>
<th>People</th>
<th>Digital Health Projects</th>
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<tbody>
<tr>
<td>2020</td>
<td>10+</td>
<td>5+</td>
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