

Randomized clinical trials (RCTs) continue to be the gold standard for assessing the efficacy and effectiveness of rehabilitation science interventions. Unfortunately, relatively few researchers have completed large-scale trials of rehabilitation interventions, and there are no centralized training programs that impart the wide array of skills necessary to conduct such studies. The NCMRR Research Plan specifies that postdoctoral training programs be established to produce researchers capable of performing clinical trials. The proposed training program at the University of Southern California will enable doctoral level scholars from rehabilitation-related fields to gain the expertise necessary to perform sophisticated clinical trials, including comparative effectiveness studies. Over a five year period, 10 Ph.D. level researchers will be recruited to undergo an intensive two-year training sequence which involves exposure to all phases of clinical trials research. Reflecting a strong interdisciplinary emphasis, faculty members from three program branches (occupational therapy, physical therapy, and advanced technology) will oversee a coordinated training experience that includes individualized mentorship plans, core coursework, participation in training seminars, immersion in externally funded projects, and writing of grant proposals and research publications. The training will be organized around four core themes: (1) the identification of effective interventions for children (pediatric rehabilitation); (2) protective and risk factors in adults with disabilities; (3) the rehabilitation and subsequent reintegration of people with disabilities into the community (acute and community-based rehabilitation); and (4) applications of innovative technology. Anticipated trainee outcomes include an increased capacity to independently conduct RCTs and an increase in the quantity and rigor of rehabilitation science publications. In the long term, the ability to train a cohort of young career scientists in RCT methodology will lead to an improved research base that will promote the development and testing of interventions that increase the effectiveness of rehabilitation services.