

Open Post-Doctoral Position at Case Western Reserve University

A one- to two-year NIH-funded Post-Doctoral Researcher position is available in the **Department of Biomedical Engineering at Case Western Reserve University** in Cleveland Ohio in the areas of biomechanical modeling, control, and experimental demonstration of systems to improve motor function to individuals with Spinal Cord Injuries (SCI) and other movement disorders. Work will take place at the Motion Study Laboratory of the Louis Stokes Cleveland VA Medical Center with a team that conducts federally funded research ranging from basic neural control of movement to development and testing of advanced neuroprosthetic systems that automatically ensure seated, standing and walking stability with surface or implanted stimulation systems.

Areas of focus for the post-doctoral trainee will include the simulation, optimization and application of control systems for **seated balance and/or stepping**, as well as their laboratory implementation and experimental validation with individuals with SCI. In addition to the biomechanics, motor control, and robotics experts at Case Western Reserve University, additional mentoring opportunities in rehabilitation strategies, clinical testing, human subject research, dynamic simulation, musculoskeletal modeling, assistive device design and quantitative analysis of user-device interactions are available from experts at two VA Rehabilitation R&D Centers of Excellence (the **Advanced Platform Technology (APT) Center**, and the **Cleveland FES Center**) located at the Cleveland VA Medical Center. Training will involve interacting with neuroscientists, engineers, neurologists, surgeons and physical medicine and rehabilitation specialists, as well as research volunteers, students and professional staff.

Candidates are expected to have (1) good working knowledge of dynamic systems, feedback control theory and their application; and (2) experience with collection and analysis of kinematic and kinetic data from able-bodied and volunteers with neuromusculoskeletal disabilities. *Strong interpersonal and written/oral communication skills are required.*

Please send a personal research statement, full CV, and a list of three references to:

CAREERS@APTCENTER.ORG.

Refer to this announcement and citizenship status in your reply.

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