IMMEDIATE OPENING

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, OH in the areas of *neurorehabilitation, biomechanical modeling, and control system development to improve or restore motor function to individuals with spinal cord injuries (SCI)*.

Work will take place at the Motion Study Laboratory of the Louis Stokes Cleveland VA Medical Center under the direction of rehabilitation biomechanics and motor control experts **Drs. Musa L. Audu** and **Ronald J. Triolo**.

Their team conducts federally funded research in areas ranging from basic neural control of movement, development of advanced prosthetic and orthotic systems, and wheelchair propulsion mechanics to the design and testing of neuroprostheses for stable standing and walking with surface or implanted neural stimulation systems.

Areas of focus:

- Development, optimization, and application of musculoskeletal models for **CONTROL OF GAIT STABILITY AND STANDING BALANCE**
- Laboratory implementation and experimental validation of the resulting control systems with individuals with SCI.

Additional mentoring opportunities in rehabilitation strategies, clinical testing and human subject research, dynamic simulation of movement, musculoskeletal modeling, assistive device design, and quantitative analysis of user-device interactions are available from experts at the **Advanced Platform Technology (APT) Center**, a VA Rehabilitation R&D 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.

Qualifications:

- Expertise in inertial measurement, state estimation and advanced control, dynamic systems and simulation, quantitative gait and balance analysis, human biomechanics, exoskeletal gait assist devices, and motor system neural prostheses is preferred
- Strong interpersonal and written/oral communication skills are required
- Experience in human subject research is highly desired
- US Citizenship or Permanent Residency **strongly** preferred

Please send a personal research statement, full CV, and a list of 3 references to:

CAREERS@APTCENTER.ORG

Refer to this announcement and citizenship status in your reply.

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