Unique, multi-institutional, postdoctoral opportunity in Brain Imaging and Biomechanics

Prof. Mehmet Kurt and Dr. Samantha Holdsworth invite candidates for a unique postdoctoral scholar opportunity at Stevens Institute of Technology (Hoboken, NJ), Icahn School of Medicine at Mount Sinai (New York, NY) and University of Auckland (Auckland, New Zealand). This is a minimum of two-year appointment and will involve working on the technology called "amplified MRI", which was highlighted on NIH Director’s Blog last year.

The first phase of the project will take place at Stevens Institute of Technology and Translational and Molecular Imaging Institute (TMII) at Icahn School of Medicine at Mount Sinai. The postdoctoral scholar will work on advancing the exciting new imaging technique called amplified MRI (aMRI), which tracks the motion of the human brain during heart beats. The postdoctoral scholar will use this imaging technique to acquire data from healthy volunteers and Chiari Malformation I (CM1) patients.

The second phase of the project will take place at the Department of Anatomy and Medical Imaging & The Centre for Brain Research at The University of Auckland. This will involve analysis of the acquired patient data and further advancing and fine-tuning the imaging technique.

Please e-mail mkurt@stevens.edu and s.holdsworth@auckland.ac.nz with your most recent CV and representative publications.

Requirements: -PhD in bioengineering or related fields.

Preferred Qualifications: -Expertise in brain imaging and experience with biomechanics/mechanical modeling.
-Past experience working with clinical populations is preferred.

Stevens is a top-ranked private technological university located in Hoboken, New Jersey. The Institute’s small size eases cross-department and interdisciplinary research ties and teaching programs. The 55-acre campus is on the Hudson River across from midtown Manhattan within a few minutes from New York City via public transportation. Hoboken is an upscale small city, the residence of choice for many professionals working in NYC. Students typically live in Hoboken, Manhattan, and in suburban communities in Northern New Jersey along commuter train lines to Hoboken and NYC.

The Translational and Molecular Imaging Institute (TMII) at Icahn School of Medicine at Mount Sinai is a comprehensive, multi-disciplinary, and integrated imaging research institute, which focuses on the use of multimodality imaging for brain, heart, and cancer research, along with research in nanomedicine for precision imaging and drug delivery. TMII is composed of research groups in all aspects of imaging research, including engineering, physics, chemistry, analysis, basic science, and medicine.

The University of Auckland is New Zealand’s pre-eminent research-led University. Based in New Zealand’s largest city Auckland, the Faculty of Medical and Health Sciences is located on the Grafton Campus adjacent to Auckland City Hospital. Ranked in the top 100 world universities in the medical disciplines, the Faculty has expertise in a wide range of disciplines, and has strong links with the Auckland Bioengineering Institute and Centre for Brain Research. New Zealand’s natural environment and subtropical climate, stable political and social environment, and good medical and health services are the top three contributing factors for Auckland retaining its ranking as third best city in the world for quality of life in the Mercer Quality of Living Index.