



Select Publications

A.H. Vette, N. Wu, K. Masani, and M.R. Popovic, "Low-intensity functional electrical stimulation can increase multidirectional trunk stiffness in able-bodied individuals during sitting," *Medical Engineering & Physics*, vol. 37, pp. 777-782, 2015.

J.F. Tan, K. Masani, A.H. Vette, J. Zariffa, M.F. Robinson, C. Lynch, and M.R. Popovic, "Inverted pendulum standing apparatus for investigating closed-loop control of ankle joint muscle contractions during functional electrical stimulation," *International Scholarly Research Notices*, vol. 2014, article ID 192097 (8 pages), 2014.

J.S. Hebert, J. Lewicke, T.R. Williams, and A.H. Vette, "Normative data for a modified Box and Blocks test measuring upper limb function via motion capture," *Journal of Rehabilitation Research and Development*, vol. 51, pp. 919-932, 2014.

Albert Vette, PhD, MSc, MEng

- Research Scientist/Joint Appointment Researcher, Glenrose Rehabilitation Hospital
- Assistant Professor, Faculty of Engineering, Department of Mechanical Engineering, University of Alberta
- Research Affiliate, Glenrose Rehabilitation Hospital

Dr. Albert Vette is currently an Assistant Professor in the Department of Mechanical Engineering, University of Alberta, and a Research Scientist at the Glenrose Rehabilitation Hospital. He received his undergraduate degree in Medical Engineering from Furtwangen University in Germany and a PhD in Biomedical Engineering from the University of Toronto. Dr. Vette's research interests include the control of human balance, sensory-motor integration during gait and posture, the dynamics of biomechanical systems and assistive technologies for individuals with neuromuscular disorders.

At the Glenrose Rehabilitation Hospital, Dr. Vette is currently collaborating on a number of research studies including:

- The development of novel technologies for training assessment of trunk stability following neuromuscular impairment;
 - The use of the Computer-Assisted Rehabilitation ENvironment (CAREN) for improving postural balance and mobility in individuals with musculoskeletal injuries (collaboration with Dr. Jacqueline Hebert); and
 - Innovative tools for quantifying and treating gait disorders in children with cerebral palsy (as part of the Pediatric Orthopaedic Rehabilitation Research Team of Alberta).
- The beneficial effect of sensory noise (so-called stochastic resonance) on reaction times in healthy individuals and post-stroke;

