

Bioengineering Seminar

Friday December 2nd, 2011

11 AM-12 PM, Room 3507

Nguyen Engineering Building

Erik J. Wolf, PhD

*Director, Center for Performance and Clinical Research
Amputee Service, Department of Ortho and Rehab
Walter Reed National Military Medical Center*

The Rehabilitation of Service Members with Traumatic Amputations at Walter Reed National Military Medical Center

Walter Reed National Military Medical Center (WRNMMC) has the privilege of caring for America's Service Members. A subset of these patients includes those with extremity trauma. This unique population is comprised of young, otherwise healthy individuals. Their injuries range from mild tissue damage to quadrilateral amputation, with co-morbidities including PTSD, traumatic brain injury, vision impairment, and many others.

Service Members with traumatic amputation are also unique in that their desired performance following their injury is often as high as or higher than before. Activities may include running, biking, and even returning to active duty and battle. Their high level of activity combined with the longevity of living with an amputation presents an exceptional challenge for rehabilitation providers.

The Center for Performance and Clinical Research within the Department of Orthopaedics and Rehabilitation at WRNMMC is comprised by the Biomechanics Laboratory and the Virtual Environment Laboratory. Our mission is to provide clinical services through advanced gait analysis and virtual environment rehabilitation as well as to perform research to advance prosthetic technology, therapeutic interventions, and military performance.

BIOGRAPHY

Dr. Erik J. Wolf is the Director of the Center for Performance and Clinical Research (CPCR) in the Amputee Service of the Department of Orthopaedics and Rehabilitation at Walter Reed National Military Medical Center. In his current role, he is responsible for activities within the Biomechanics Laboratory and the Virtual Environment Laboratory.

The work done by the CPCR is focused directly on the rehabilitation and functional recovery of injured Service Members with limb loss, limb salvage, traumatic brain injury, and spine injury. Understanding the adaptations of Service Members with traumatic lower extremity amputations will reduce the potential for overuse injury and improve functional outcomes.

Dr. Wolf earned his BS, MS, and PhD from the University of Pittsburgh, School of Engineering in Bioengineering. He is currently employed by the Henry M. Jackson Foundation for the Advancement of Military Medicine and stationed at WRNMMC.



For any questions please contact Claudia Borke at cborke@gnu.edu, (703) 993-4190