

Title: Sensory Feedback in Prosthetics**Speaker: Meike A. Schweisfurth, University Medical Center Göttingen****Abstract:**

Prosthetic fitting after upper-limb loss allows for the restoration of motor functions but currently does not restore tactile sensations that are essential for the control of grasping. Therefore, it is commonly assumed that providing force feedback improves the control of grasping with a prosthesis. Nonetheless, there is no consensus on the functional benefits of feedback in prosthesis control. In the current talk, we locate several reasons for these differences in literature and present a clinically useful feedback system.

Short Bio:

Meike A. Schweisfurth studied mathematics and physics at the University of Göttingen, Germany, and at the University of Cambridge, England, where she completed her mathematical MSc in 2008. She then entered an integrated MSc/PhD program in Neuroscience at the University of Göttingen, from which she obtained her PhD in 2013, focusing on exploration of the tactile modality through functional imaging. Until 2014, she continued working as a post-doctoral researcher at the BiomedNMR at Max Planck Institute for Biophysical Chemistry and at the German Primate Center in Göttingen. Since then, she is working as a researcher at the Research Group for Neurorehabilitation Systems, which is part of the Clinics for Trauma Surgery, Orthopedic Surgery and Plastic Surgery at the University Medical Center Göttingen. Her current research focuses on closed-loop-control of upper-limb prostheses, exploring both the improvement of forward control as well as the potential benefits of different feedback types.