Swallowing Neurorehabilitation: From the Research Laboratory to Routine Clinical Application

Sebastian H. Doeltgen, MSLT, PhD

22 January 2014 (Wednesday)
13:00 – 14:00
Room 802, Meng Wah Complex, HKU
(Chair: Dr Karen Chan)

Abstract:
The recent emergence of neurostimulation techniques to examine and advance the rehabilitative potential of swallowing-related neural plasticity has expanded the focus of rehabilitation research from manipulation of biomechanical swallowing function to manipulation of swallowing neural systems. Experimental interventions promoting the brain's ability to reorganise its neural connections hold a promising potential to aid the recovery of impaired swallowing function. In this seminar, S will give an introduction to common neuromodulation techniques and their mechanisms, including transcranial magnetic stimulation (TMS) and transcranial direct current stimulation (tDCS). He will also review recent advances and research findings in this field and provide a brief outlook on the potential clinical applications of these techniques in the future.

About the speaker:
Dr Sebastian Doeltgen is a Lecturer in the Discipline of Speech Pathology and Audiology, Flinders University, Adelaide and Visiting Research Fellow at the School of Paediatrics and Reproductive Health, University of Adelaide, Australia. A speech pathologist with an interest in neurophysiology and former NHMRC Postdoctoral Research Fellow, Sebastian heads a swallowing neurorehabilitation research programme investigating the effects of exercise and experimental brain stimulation on the neural and biomechanical substrates of swallowing. Sebastian was conferred his PhD in 2009 from the University of Canterbury, Christchurch, New Zealand and was awarded the New Zealand Speech Therapy Association’s (NZSTA) Doctoral Award (2007) and runner up Dysphagia Research Society (DRS) Young Investigator Award (2008). He is passionate about the development, evaluation and dissemination of evidence-based interventions for use in real world rehabilitation settings. To date, he has published 20 original research articles and contributed to several invited reviews and book chapters. Sebastian is involved in professional education through professional development courses and teaches neuroanatomy and dysphagia sciences to speech pathology students at Flinders University, Adelaide, Australia.

~ All are welcome ~

For enquiries, please contact Office of Research at 2857 8254.