

# Andrew Jackson



Dr Andrew Jackson's background combines physics (MPhys, Oxford University 1994-1998) and Neuroscience (PhD, UCL 1998-2002). From 2002 to 2006 at the University of Washington, US he developed 'Neurochip' technology for continuous monitoring and manipulation of neural activity, and became interested in potential applications of closed-loop interfaces as neuroprostheses and as tools for manipulating activity-dependent plasticity for neurorehabilitation. In 2006 he moved to Newcastle University where he is now a Wellcome Trust Senior Research Fellow in the Institute of Neuroscience. His laboratory conducts electrophysiological studies in non-human primates using implanted electrodes and wearable electronics, as well as human studies using non-invasive recording (EEG, EMG) and stimulation (TMS, TDCS, FES). A major interest is closed-loop cortical control of spinal cord stimulation to restore function to the upper-limb; he is currently working to improve the longevity of interface technologies as well as developing low-power implantable electronics. In addition, he uses abstract myoelectric-controlled and brain-controlled interfaces to study basic neuroscience questions about motor control, skill learning and neuroplasticity. He also leads the CANDO consortium developing a closed-loop optoelectronic device for the treatment of epilepsy.