

Prof Vaughan Macefield



Vaughan Macefield (PhD, 1987; DSc, 2017) is a Professor of Neuroscience in the School of Translational Medicine at Monash University, Melbourne. Prior to this role he was Head of the Human Autonomic Neurophysiology Lab at the Baker Heart and Diabetes Institute from 2018–2022. He specializes in recording from single nerve fibres via microelectrodes inserted into the peripheral nerves of awake human participants (microneurography), and is best known for developing the methodology for recording the firing properties of single, type-identified, sympathetic neurones supplying muscle and skin – as well as his work on the firing properties of mechanoreceptors in muscles, joints and skin – and for developing the methodology for recording muscle sympathetic nerve activity (MSNA) at the same time as performing functional magnetic resonance imaging (fMRI) of the brain (MSNA-coupled fMRI). In 2020, he made the first microelectrode recordings from the human vagus nerve, via ultrasound-guided microneurography, for which he was awarded the 2022 NHMRC Marshall & Warren Ideas Grant Award and the 2022 NHMRC Marshall & Warren Innovation Award.