BRAIN IMAGING WORKING GROUPS SUPPORTED BY JPND



BioFIND

Biomagnetic Framework for Identifying Network

Dysfunction in dementia

Magnetoencephalography (MEG) measures dynamic changes in brain activity with millisecond precision and is an ideal method for examining the network of connections between different regions of the brain. Specific networks are thought to be vulnerable to the neurodegeneration that occurs in Alzheimer's disease and frontotemporal dementia. If vulnerable brain networks can be reliably identified as a biomarker of disease, it may be possible to predict who will develop a dementia, and to provide an index of disease progression or benefit from treatment.

BioFIND brings together leading international centres for dementia research and MEG brain imaging to establish optimal acquisition and methodological protocols for identifying biomarkers of dementia. This pivotal work will provide protocols that are transferable and scalable across multi-centre sites, not only to distinguish dementia type and stage, but also to facilitate standardised data sharing. The consensus outputs will be presented at international conferences on dementia and MEG, and published in a leading clinical neuroscience journal detailing the recommended framework for MEG in dementia research.

Coordinator: Laura Hughes

E: laura.hughes@mrc-cbu.cam.ac.uk

T: 01223 355 294 x 222 / 07963 568 476



Working Group Members:



COORDINATOR | LAURA HUGHES

Jyrki Mäkelä, University of Helsinki, Finland



Fernando Maestu, Complutense University of Madrid & Technical University of Madrid, Spain

Rik Henson, MRC Cognition and Brain Sciences Unit, Cambridge, UK Laura Hughes, University of Cambridge & MRC Cognition and Brain Sciences Unit, UK

Kia Nobre, University of Oxford, UK

James Rowe, University of Cambridge & MRC Cognition and Brain Sciences Unit, UK.