**WIN Seed Grant Funded Projects**

**2019**

1. Title: Chemogenetic targeting of insula hyperexcitability in a rodent model of tonic nociception: an ASL FMRI pilot study

Researchers: Andy Segerdahl, Greg Weir

1. Title: The Role of Environmental Evaluation in Choices and Persistence

Researchers: Nima Khalighinejad, Neil Garrett

1. Title: Multimodal MRI approach for the characterization of neurodegeneration in a Parkinson’s α-synuclein PFF RBD mouse model.

Researchers: Teresa Delgado-Goni, Natalie Connor-Robson

1. Title: The neural mechanisms of stress tolerance and novelty seeking examined at high resolution and in the ageing population

Researchers: Miriam Klein-Flügge and Sana Suri

1. Title: How task influences the neural correlates of predictive coding: a cross-species and cross-scale examination

Researchers: Andrew Bell

1. Title: Advanced Brain Blood Flow Measurements with 7T MRI

Researchers: Tom Okell and Mark Chiew

**2020**

1. Title: Spinal cord imaging to study intramedullary spinal cord tumours

Researchers: Joe Yazhuo Kong, Natalie Voets, Saad Jbabdi, Murtuza Sikander, Silvia Tene, Stana Bojanic

1. Title: Building inhibitory engrams via hippocampal replay

Researchers: Helen Barron, Jill O’Reilly

1. Title: The cognitive and neural signature of Rapid Eye movement Sleep behavioural Disorder (RBD)

Researchers: Nahid Zokaei, Ludovica Griffanti, Andrew Quinn

1. Title: Multimodal mapping of premotor cortex between mice and humans

Researchers: Alberto Lazari, Mohamed Tachrount, Daniel Papp, Rogier Mars, Valerio Zerbi, Jason Lerch

1. Title: The neural dynamics of learning reward trends and prospective decision making

Researchers: Nils Kolling, Jacqueline Scholl

1. Title: Promoting and Monitoring Brain Recovery After Stroke in Mice

Researchers: Kamila Szulc-Lerch, Yvonne Couch

1. Title: Monitoring Purkinje Cell Structure During Development

Researchers: Clemence Ligneul

1. Title: Unravelling the ‘split-hand’ in ALS: a structural and functional investigation of the hand motor cortex at high-resolution (7T) investigating the basis of this early clinical feature of disease

Researchers: Thanuja Dharmadasa

**2021**

1. Title: Neuroimaging of cognitive fingerprints in Dementia with Lewy Bodies

Researchers: Sofia Toniolo

1. Title: Decoding parallel neuromodulation of serotonin receptor networks

Researchers: Piergiorgio Salvan and Madalena Fonseca

1. Title: Diffusion-weighted MR spectroscopy as a novel marker of myelination

Researchers: Michiel Cottaar, William Clarke, Clemence Ligneul, Saad Jbabdi

1. Title: Development and validation of topup for fMRI pre-processing

Researchers: Jesper Andersson

1. Title: Towards an optimized protocol toassess energy phosphate dynamicsusing 13P-MRS in human hippocampus

Researchers: Antoine Cherix, William Clarke, Ladislav Valkovic

1. Title: Longitudinal MRS study investigating post-stroke changes in neurochemicalsin rats

Researchers: Julia Sala-Bayo, Ioana Grigoras, Yvonne Couch, Kamila Szulc-Lerch, Antoine Cherix, Mohamed Tachrount, Clemence Ligneul

1. Title: Exploring the role of gut microbiota in early brain development in mice Researchers: Malte Kaller

**2022**

1. Title: Dimensions of Predictability: How identity space and time combine to guide behaviour and change neural activity

Researchers: Sage Boettcher

1. Title: Identifying the signature of glia with multi-dimensional MRI

Researchers: Amy Howard

1. Title: When sounds stop: Neural signatures of auditory offset responses in the aging human brain

Researchers: Anna-Katharina Matke-Bauer, Mats van Es, Kate Watkins

1. Title: The nine-month stress test: impact of pregnancy on maternal cerebrovascular dynamics post-partum

Researchers: Joana Pinto, Sana Suri

1. Title: Longitudinal Follow-up of the Brain Organisation in Language Development (BOLD) Study

Researchers: Kate Watkins, Salomi Asaridou, Nilgoun Bahar

1. Title: Using transcranial magnetic stimulation (TMS), electroencephalography (EEG) and MRI to develop biomarkers of residual visual function and capacity for recovery in stroke

Researchers: Hanna Willis, Rebecca Truby

1. Title: Skill transfer across domains and the lifespan

Researchers: Catharina Zich, Betina Ip, MaryAnn Noonan