

Wednesday 17th May '17

Sir Peter MacCallum room, Level 4 West, Medical Building 181

A light lunch is provided at 12.45pm



Urinary p75 neurotrophin receptor extracellular domain, a biomarker for MND that has relevance for future clinical trials

Dr Mary-Louise Rogers

**Senior Research Fellow
Lab Head**

**Flinders University
School of Medicine**

**Motor Neurone Disease
and Neurotrophic
Research Laboratory**

**Department of Human
Physiology
Centre for Neuroscience**

Dr Mary-Louise Rogers obtained her PhD in 2003 (from Adelaide University) where she investigated strategies to purify bioactive growth factors from whey. She then moved to Flinders University (from 2004, part and full-time) under the supervision of Prof Robert Rush, where she researched growth factors and their receptors in the nervous system. Dr Rogers developed a passion for investigating neurotrophin receptor action and using this knowledge to develop strategies for treatment and monitoring of Motor Neuron Disease. Since 2011 she has led the Motor Neurone Disease and Neurotrophic Research (MNDNR) laboratory at Flinders University, South Australia. At present, Dr Rogers' laboratory consists of herself (Senior Research Fellow), 1 postdoctoral scientist, a PhD student and 2 research assistants. She is located in the School of Medicine, Centre for Neuroscience, Department of Human Physiology. Dr Rogers is a basic neuroscientist and since 2011 and she has obtained funding to continue independent research from Australian funding agencies (National Health and Medical Research Council and Motor Neuron Disease Research Institute of Australia) and from sources in the USA – the Amyotrophic Lateral Sclerosis Association and the National Institute of Health (through a Consortium project with Miami University, under the NIH Rare Diseases Clinical Research Network (RDCRN)).

Her laboratory is focused on developing strategies for treatment and monitoring of motor neurone disease (MND). Dr Rogers has led the team investigating a urinary biomarker for MND/ALS, and this work was recently published (March 22, 2017) in Neurology and it is the first potential biological-fluid-based biomarker of MND progression. She is also developing targeted treatments for MND using antibodies as targeting agents. This involves using novel conjugation strategies and in-vivo delivery. Hence her research focus is on both biomarker and treatment strategies for MND.