

School of Clinical Sciences, Division of Radiological and Imaging Sciences

Project Title: Molecular magnetic resonance imaging of neuroinflammation in the brain

Supervisor: Dr. Henryk Faas

Neuroinflammation is a normal response to pathological insult in the brain and indicative of a range of acute and chronic brain disorders. Therefore, neuroinflammation is a good indicator of disease progression and offers an ideal target for the development of surrogate markers of neurological disorders. We are developing MRI methods together with 'smart' contrast agents in order to visualize brain function noninvasively by magnetic resonance imaging. We then apply these techniques to study early signs of neurological disease. This research will give the successful candidate the opportunity to develop a wide range of skills and expertise (e.g. MRI physics, new imaging techniques and analysis, but also an understanding of the application in neurophysiology and neurologic disorders). Comprehensive Training in these areas will be provided.

Theme: Neuroimaging

Keywords: MRI, neuroinflammation

Fee Band: High cost lab-based research