Project Title	Tracking neuronal activity in the human brain
Supervisor	Prof Martyn Boutelle
Themes	Neurotechnology and robotics
Project Description	This project custom designed project comes from a long term collaboration with Prof Anthony Strong and his team at King's College Hospital NHS Trust. In the past we have demonstrated the importance of Spreading depolarisations (SDs) in the development of secondary brain injury in patients who have had a severe traumatic brain injury. This project involves working with the field potential data streams we obtain from our patients. We are looking to examine the role of electrical events in our clinical data sets. In particular we would like to know how such events change the stage of the brain tissue. The project will involve visits to the Hospital to see the clinical team together with working with project members in MGB group and Prof Strongs team. In particular Sharon Jewel, a PhD student from the mgb group and expert in neurophysiology. The aim will be to work with Sharon and a state of the art human neurophysiological instrument, and to program this instrument to monitor electrophysiological events and see how these parameters are changed by interaction with the events. The work will be supported by Boutelle group PhD student Sharon Jewel