



The  
**Neurosciences**  
Foundation

## Head Injury

**The Neurosciences Foundation** aims to support early stage research that will be of potential benefit to patients. Here is an example of one of our current projects in head injury.

Helping to detect early signs of deterioration in **children** after **head injury**.

Twenty years ago the Neurosciences Foundation awarded a grant to Dr Ian Piper at what was then the Institute of Neurological Sciences at the Southern General Hospital in Glasgow. The aim was to provide support for local researchers who recognized the need to make better use of the measurements made in neurological intensive care units. A major risk for patients who have had a head injury and are being cared for in these units is that further damage caused by swelling of the brain often occurs. The Glasgow researchers set out to explore whether measurements of brain function that are made at the bedside hold clues that would help to identify patients at risk of deteriorating. To do this effectively they needed access to a large amount of data and they were keen to work with the best international researchers.

Thanks to the Neurosciences Foundation grant they gathered enough evidence to persuade the European Union Funding bodies to support the Brain Monitoring with Information Technology Group – BrainIT. This group is still going strong and their activities can be tracked on <http://www.brain-it.eu/>. The group has members from 22 cities across 11 EU countries



There is still a gap however, and a very critical one. **Children** with head injuries are normally treated in separate Children's intensive care units, but studies such as those being undertaken by the BrainIT group are just in adults. To address this, the Neurosciences Foundation has awarded Mr Roddy O'Kane and colleagues in Glasgow and Edinburgh a grant to set up a trial Children's BrainIT group consisting of 7 UK Centres. Hopefully history will repeat itself and they can go on to partner with colleagues in other countries and share knowledge and experience of the most effective ways to manage children in this critical setting.

We are grateful to the Miss MJM Smith Trust for helping to support this work.

*Any donations towards our current medical research projects enable Neurosciences Foundation funds to be used to support future projects. Contributions can be made by going to <https://mydonate.bt.com/donation/start.html?charity=148827>. If you would like your contribution to be towards this specific project please specify that when making the donation. Thank you.*