



The  
**Neurosciences**  
Foundation

## Medical Imaging Techniques

**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 the development of new medical imaging techniques.

Imaging is becoming ever more important in medical diagnosis. Scotland has a proud history in the development of imaging techniques. Medical ultrasound was first developed in Glasgow in the 1950s and, in the 1980s, researchers in Aberdeen devised techniques used in magnetic resonance imaging -MRI.

The University of Glasgow has taken the bold step of investing in a new MRI device that is more powerful than those used currently in hospitals. It has the potential to greatly improve the quality of images and also to enable totally new types of measurement to be made. It will be housed in the new £16M Medical Imaging Centre on the site of the Glasgow's Queen Elizabeth Hospital.



The University also has small scanners of the same power that enable techniques to be developed and tried out. One of these scanners will be used by a research team developing a way of using MRI to study connecting tissue within the brain. The aim is to study how signaling within the brain adapts to **injury to nerves** in other parts of the body. If these natural recovery processes can be clarified then therapies could be devised to boost the recovery processes.

This research is being undertaken by Dr Jozien Goense and colleagues. Dr Goense is an expert in high definition MRI. The Neurosciences Foundation awarded £10,107 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.*