

SPIDER'S APPEAL, supporting brain tumour research

Dr Franklyn Howe

Dr Franklyn Howe's research focuses on improving treatment for a type of brain tumour called glioma. Gliomas are the most common brain tumour in adults, and Dr Howe is using imaging technology to find better ways to diagnose and monitor these tumours so that each patient can receive the treatment that's best for them.

More than 9000 people are diagnosed with brain tumours each year in the UK, and sadly around 4,800 adults and 100 children lose their lives – showing the urgent need for better ways to tackle these diseases.

Dr Howe is focusing on 'low-grade' gliomas – slow-growing tumours that are usually treated with surgery and radiotherapy. Being able to 'see' the cancer using scans is especially crucial for brain tumours, because treatment needs to be very precisely targeted to avoid damaging healthy brain tissue.

Dr Howe is using MRI (magnetic resonance imaging) and other scanning techniques to develop new tests to find out how far tumours have grown, and to predict how quickly they might develop. These techniques allow doctors to monitor tumours without operating or taking biopsies, and enable them to identify faster-growing tumours so they can be treated quickly. Scans also help to reveal the exact size and shape of each tumour so that surgery or radiotherapy treatment is as accurate as possible.

Dr Howe hopes his research could benefit brain tumour patients in the future by giving them a more accurate diagnosis, and helping to ensure they receive the most effective treatment – giving them the best chance of a good outcome.

Barry's visit to Dr Howe

Dr Howe invited Barry to St George's hospital at the University of London, to give him an update on progress and a look at where his team are carrying out this essential research. This was an opportunity to show him some of the different methods the team are using to pin-point and track gliomas using MRI (Magnetic Resonance Imaging).

Barry was shown examples of the detailed images produced by the different scan methods and saw the pattern-recognition software used to analyse some of the data from the scans. He learned that the researchers are now using a combination of these different scan methods, to effectively seek out markers which might predict when a low-grade glioma is about to transform into a more malignant, and therefore dangerous tumour.

Dr Howe then took Barry to visit the MRI scanner used in Dr Howe's research at the hospital and actually saw a patient being scanned by the machine (with the patient's permission of course!) and the different images being collected and analysed.

The visit was a resounding success, with Barry being able to see in person what an important difference Spider's Appeal makes to funding research but also gave Dr Howe and the team a chance to get to meet such an inspiring fundraiser...and learn all about the origins and vision of Spider's Appeal.

