**Interview with Dr Martin Graves**

**Why did you join the BIR MRI Special Interest Group?**

Er -because I have a special interest in MRI? The BIR SIGs are great opportunities for multi-disciplinary working. On the MR-SIG, in addition to Physicists, we also have Radiographers, Radiologists and representatives from Industry. It's the wide range of experience, expertise and ideas that the members bring that makes the SIG a dynamic, productive and sometimes even a fun group.

**What are the main aims of the group?**

The SIG advises the BIR on all matters relating to magnetic resonance imaging and spectroscopy. This includes providing comment and advice regarding safety, regulatory and research developments relating to MRI. Members of the SIG also sit on other working parties such as the BIR MR Safety group.

In addition we organize topical meetings through the year as well as the annual four-day BIR MRI Course (January 23rd-26th 2018) and of course we contribute to the highly successful series of BIR webinars.

**In your opinion, what are the burning issues in the world of MRI at the current time?**

We don't like to talk about burning in MRI - maybe hot topics? I am particularly interested in recent developments such as new approach to quantitative imaging called Magnetic Resonance Fingerprinting, a novel way of speeding up MRI acquisitions using a mathematical technique called Compressed Sensing as well as the application of machine learning to all aspects of image reconstruction and analysis. I also think that work such as the MR Value Initiative developed by the ISMRM "to increase the robustness of MR in the context of changing healthcare economics" is highly relevant, particularly in light of the current financial challenges to the NHS. Safety is always at the forefront with MRI and the SIG have developed a set of generic risk assessments that can be used as a starting point to help ensure that your facility complies with MHRA guidelines and with the introduction, last year, of the Control of Electromagnetic Fields at Work regulations.

**Why did you originally join the BIR?**

In addition to being the head of MRI physics I also have responsibility for IT within our Radiology department. I was therefore initially invited to join the Health Informatics SIG, which obviously involved, i.e. required, me to join the BIR! The annual fees are tax deductible so they represent incredible value for money (less than one latte a week - depending upon where you buy your coffee of course)

**Can you sum the BIR up in three words? (Nice ones please!)**

Multi-disciplinary, resourceful and informative (MRI!)

**Why would you encourage your team to join too?**

Membership brings a number of advantages including free access to the BJR, discounts for meetings and workshops and those all important opportunity to widen your knowledge and horizons. Ask not what the BIR can do for you but what you can do for the BIR!

**What attracted you to a career in MRI?**

Mainly the magnetism. I have always been fascinated by medical imaging, so I did an undergraduate degree in Physics with Medical Applications. During my degree I read a Scientific American article about MRI written by Ian Pykett who was part of the original MRI team in Nottingham. I was so awestruck by the whole concept that I knew that was what I wanted to after I graduated. I was extremely fortunate that soon afterwards a job came up as a Probationary Basic Grade Physicist (I just loved that title, fortunately I passed the two-year probationary period) at St. Bartholomew's Hospital working on one of the first commercial MRI systems, an 0.08T (800G in old money) air-cored electromagnet system that came out of the pioneering MRI work done in Aberdeen. That system is now in the Science Museum.

**Which three scientists would you like to spend an evening with and why?**

Having read some of the stories about Richard Feynman I think he would be great fun as well as an outstanding teacher. Dr Sheldon Cooper, so that I would appear relatively normal, and Dr Brian May for when we get bored of discussing science.

**What would be your advice to a young person starting out as a medical physicist?**

Get involved with professional bodies such as the BIR. They are an excellent way to develop those all important "soft skills"; communicating, organizing, influencing, and networking - you never know who might be on that next interview panel.

**What might we be surprised to know about you?**

I am a Cho Dan Bo (black-belt candidate) in Tang Soo Do (Korean karate)