

Consultant Medical Physicist Matthew Memmott, a Brief biography

*Matthew Memmott
Consultant Medical Physicist*

Despite always having an interest in medicine and science, it wasn't until my third year of university, studying for a degree in Physics, that I first heard of Medical Physics as a profession. After completing a project involving creating an image of a plant stem from a rudimentary MRI machine, created by cobbling together some rather large electromagnets, and undertaking several modules in physics related to medicine and biology, I decided in the final 4th year that this was the career I wanted to follow.



After eventually getting a place on the training scheme for clinical scientists in medical physics, gaining a MSc in Medical Physics and training for a further 3 years in areas such as Radiotherapy, Nuclear Medicine and Physiological Measurement, I got my first post-registration post as a Clinical Scientist at Lincoln County Hospital. After several enjoyable years there working in Nuclear Medicine and Physiological Measurement, I moved across the Pennines to Manchester to continue my career in Nuclear Medicine, where I have spent the last 9 years.



The role of a Medical Physicist is not widely known, or generally understood, and a typical day certainly isn't predictable or routine! You can find us generally wherever there is imaging or radiation in the hospital. Our work is to ensure that its use is optimised for both staff and patients, that is that we try to ensure that our clinical colleagues get to see the best images using the smallest amount of radiation possible to ensure the doses to patients and staff are as low as possible.

We provide advice on the risks of radiation to patients, train staff who may not be familiar with its use, and often have a large role in the practicalities and calculations for therapies involving radiation. We also play a large role in ensuring that a hospital complies with all relevant legislation and often take a leading role in initiating and delivering research projects involving radiation. We are also involved in the continued quality assurance of the equipment used to image patients, performing tests and calibration to ensure images are as accurate as possible, along with the procurement of new equipment and its subsequent acceptance in to use.

Working as a Medical Physicist is a fantastic and varied career. It constantly challenges your knowledge and problem solving skills, gives you opportunities to expand current practice through research whilst allowing you to transfer all your experience to the purpose of providing the best possible outcome for patients.