

# Outstanding Contributions Over the Last 50 Years

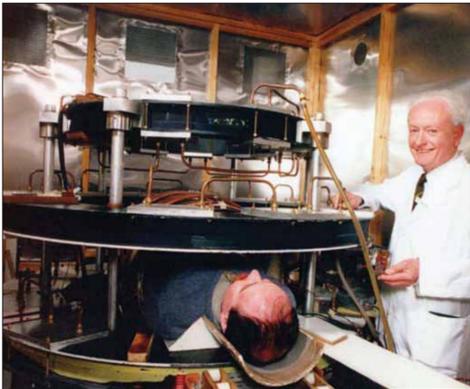
50 Years  
of IOMP



1963-2013

## John Mallard

John Mallard OBE FRSE was Professor of Medical Physics at the University of Aberdeen from 1965 until his retirement in 1992. He is known for his pioneering work in the field of medical imaging as well as for his many contributions to the profession.



*Professor Mallard with Aberdeen's first whole-body magnetic resonance imager.*

In the early 1970's he built the first British tomographic imager, for the 3D imaging of radionuclide distributions in the body.

This preceded the development of Hounsfield's X-ray CT scanner by several years.

He was a firm believer that positron emission tomography (PET) would prove to be a major clinical diagnostic technique and set up a PET facility in Aberdeen in 1976.

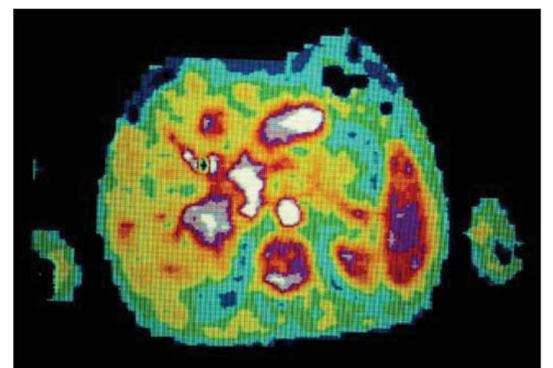
His major contribution to medical imaging was in Magnetic Resonance Imaging. His group was responsible for some of the discoveries which led to this technique becoming a clinically viable technique, including the concept of spin warp imaging which allowed truly 3D MR images of the whole body to be produced for the first time. The production of the first clinically valuable magnetic resonance images from patients in 1980 was a major scientific event.

John's final idea before retirement was for a new medical imaging technique, known as proton electron double resonance, which aims to image free radicals in vivo. His idea originated from a paper he first wrote for Nature in 1963 but worked based on this is now being carried out around the world.

He also made major contributions to the development of the profession of Medical Physics. He was a founder Secretary General of the International Organisation for Medical Physics and later its President. He was Founder President of the International Union of Physical and Engineering Sciences in Medicine. He was also President of both the Hospital Physicists Association and the Biological Engineering Society.

He has received many honours and prizes during his career including the Landauer Memorial Plaque of the American Association of Physicists in Medicine, the Academic Enterprise Competition Prize of the British Technology Group, the Royal Society Welcome Prize and Gold Medal, the George Van Hevesey Memorial Lecture medal, The Royal Society Mullard award and the Royal Medal of the Royal Society of Edinburgh.

He was made an Officer of the Order of the British Empire in the Queen's Birthday Honours List in 1992.



*The first clinically useful magnetic resonance image of the trunk taken using the spin-warp technique on August 26th 1980. This section taken through the liver shows multiple hepatic metastases, and a previously unknown metastasis in the spine.*