

Innovation: University at the heart of groundbreaking advances

Aberdeen University has played a significant role in changing the face of the NHS and continues to innovate in medical research and in training doctors and health professionals.

MRI (magnetic resonance imaging) scans are now a routine part of medicine and hundreds are carried out every day in NHS hospitals – and those around the world – but this vital piece of equipment owes its origins to a team of visionary medical physicists led by the university's Professor John Mallard.

He and his colleagues developed and tested the MRI body scanning machine which they used to scan the very first patient in August 1980, and subsequently brought its widespread use to the medical profession.



Pioneering work: Professor David Lurie

The university continues to lead the world in this area, and in November a team of Aberdeen scientists scanned the first patients using a 'fast field cycling' MRI scanner, likened to "100 MRIs in one".

Professor David Lurie said the technology "greatly expands the diagnostic potential of the machines", and conducting the first scan was "a major step towards

our technology being adopted by hospitals to benefit patients".

A decade before the NHS came into existence another medical pioneer, Dugald Baird, was appointed Regius Professor of Midwifery at Aberdeen – a post he would hold for almost 30 years and use to transform the care of mothers and babies.

Baird was the first to show the huge effect of

social factors on obstetric outcome and was a strong supporter of fertility control and reproductive rights for women.

Under his leadership Aberdeen became a mecca for obstetric practice and research and, for a time, the city had the best birth outcomes in the UK, and among the best in Europe.

His work underpinned the roll-out of formal family planning services across the NHS in Scotland in 1974 and his name will continue to provide the benchmark when the Baird Family Hospital opens in 2020.

It will offer maternity, gynaecology, breast screening and breast surgery, neonatal, and reproductive medicine services, and will sit alongside a research centre allowing university teams to continue their pioneering work.