

£5 million grant to help create new MRI scanners

By Danny McKay

A CITY university team is set to lead research into the next generation of MRI scanners after landing a multi-million pound grant.

Researchers at the University of Aberdeen will head a project which has just received significant financial backing through a European Union Horizon 2020 research grant.

The grant is worth 6.6 million euros, which is more than £5 million.

The first MRI scanner was built and used at the university 35 years ago.

It is hoped that new Fast Field Cycling (FFC) MRI scanners will provide much more information

Professor David Lurie, a biomedical imaging expert at the University of Aberdeen, and project

leader said: "Current MRI scanners put the patient in a strong magnetic field to measure something called the T1 relaxation time.

"Different tissues have different T1 relaxation times, so by measuring this difference, we can build up

images of different tissues in the body and therefore identify where disease is occurring.

"This works very well, but because each current hospital MRI scanner operates at only one magnetic field strength, they miss the extra

diagnostic information contained in the variation of the T1 value with the strength of the magnetic field.

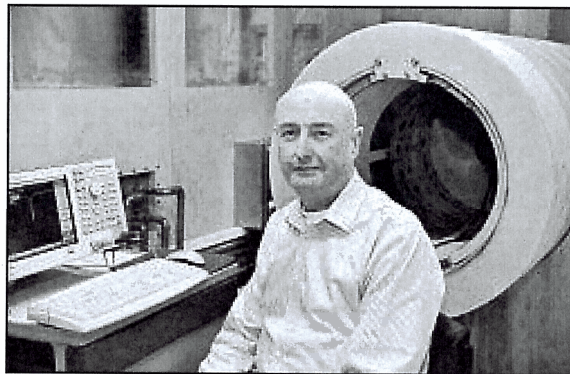
"Over the last 10 years we've been building very special scanners that can be set to thousands of values of magnetic field strengths while the patient is in the scanner and that's what is completely novel about them.

"These FFC-MRI scanners allow us to draw a graph of the T1 relaxation time as a function of the strength of the magnetic field.

"That gives us a fingerprint, the shape of which changes from disease to disease.

"In basic terms, these new scanners will give us extra information which can help with identification and treatment."

The University of Aberdeen is overseeing the four-year project, involving nine teams from six countries.



DEVELOPMENT: Professor David Lurie said the new scanner will give extra information which could help identify diseases.

Small advertisement for Robert Burns, featuring a photo of a woman and text: "ARE YOU OR ANY OF YOUR FRIENDS CALLED ROBERT BURNS? CALL THIS NUMBER NOW 07710 708633".