

Milestones for UQ's magnetic resonance imaging research

With almost two thirds of the world's high-field MRI machines currently incorporating UQ intellectual property, royalties and recognition from these product licences are now funding further research and innovation.

A \$1 million Queensland Government Research Industry Partnership Program (RIPP) grant has encouraged UQ MRI start-up, Magnetica Limited, to seek grant-matching investment.

The new capital raising venture marks another milestone in the successful translation of intellectual property originating from UQ's Centre for Magnetic Resonance (CMR, now the Centre for Advanced Imaging) and the Biomedical Engineering Group within the School of IT and Electrical Engineering.

UniQuest has played a key role in helping the researchers' transfer their original ideas from the lab to the latest in superconducting magnets, other subsystems and software for the worldwide human magnetic resonance imaging market, worth more than \$4.5 billion annually.

"Most importantly, commercialising UQ MRI inventions has led to improved patient outcomes all round the world"

"The UQ MRI story has involved a full gambit of commercialisation options, including licences, start-ups, exits, buy-outs and industry partnerships," Mr Henderson said.

"But most importantly, commercialising UQ MRI inventions has led to improved patient outcomes all round the world."

Initially, UniQuest facilitated licences with Siemens and GE Healthcare. Two start-up companies followed: SpinSystems in 1995 and Magnetica in 2004.

In 2006, US firm Supertron Technologies acquired SpinSystems and named the merged entity m2m Imaging Corporation. Its headquarters are in the US, with manufacturing and R&D facilities in both Brisbane and Ohio.

Magnetica has raised over \$10 million from investors and \$2 million in government grants to date. Its designs are now manufactured by Japan Superconductor Technology, Inc. (Jastec), a subsidiary of multinational Kobe Steel, and include a prototype large, very high-field,

whole-body magnet and a smaller 1.5T extremity magnet, which is being sold by GE globally.

A Queensland Government National and International Research Alliances Program (NIRAP) grant supported a collaboration with Jastec to develop the extremity magnet. The magnet is now used in systems across the world, with the super efficiency, advanced imaging capability and patient comfort features expected to increase demand significantly.

The Queensland Cyber Infrastructure Foundation's support (QCIF) and advanced computational analysis have also factored significantly in Magnetica's product development capability.

"Magnetica's continued development highlights the range of benefits commercialisation

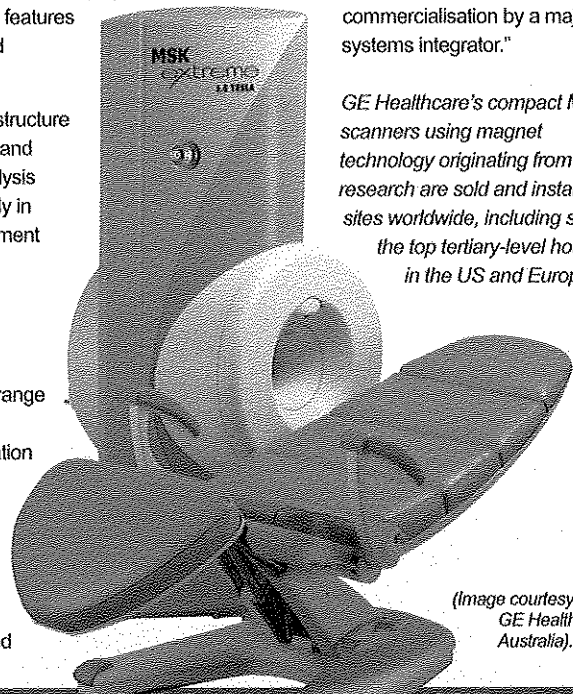
can bring to the University," said Mr Henderson.

"As well as the product revenue returns and reputational recognition for innovation, UQ has contracted

its human and technical resources to Magnetica, which brings in an additional source of research funding.

"With the Smart Futures Fund RIPP grant, the matched investor funds and the revenues of its current product, Magnetica can focus on developing its next generation extremity magnet, which is intended for commercialisation by a major systems integrator."

GE Healthcare's compact MRI scanners using magnet technology originating from UQ research are sold and installed at sites worldwide, including some of the top tertiary-level hospitals in the US and Europe.



(Image courtesy GE Healthcare Australia.)

Fast facts

- Licences to GE and Siemens generate significant research funds to support MRI research
- UQ MRI technology now used in 2/3 of all high field MRI magnets
- SpinSystems established in 1995, to manufacture and export MRI components
- Magnetica Limited established in 2004, raising \$4 million
- Magnetica named 2006 'Rising Star' in the Queensland Premier's Smart Awards
- Supertron Technologies purchased SpinSystems in 2006: merged entity renamed m2m Imaging Corporation
- Magnetica extremity MRI magnets in full production in Japan under supply contract to GE Healthcare
- Magnetica total funds raised and grants exceeds \$12 million since December 2004

If you are interested in learning more about commercialising your research or engaging with UQ researchers to benefit from their expertise and resources, contact UniQuest on +61 7 3365 4037. www.uniquest.com.au

UniQuest