

COMMERCIALISATION

Taking academic innovation from idea to marketplace

Enterprise and innovation have always been fundamental aspects of The University of Manchester's culture, and a key factor in our ongoing success. Our academics generate new knowledge every day, creating a wealth of intellectual property (IP) that has real world applications and the potential to enhance society. Much of this work can be commercially exploited through IP sales, licensing to third parties or the creation of spin-out companies.

THE UNIVERSITY OF MANCHESTER INNOVATION GROUP (UMI³ LTD)

UMI³ has two operational divisions: its Innovation Centre (UMIC), and its intellectual property commercialisation services (UMIP).

To encourage engagement between business and research communities, UMI³ hosts a successful Enterprise Forum, which offers a programme of entrepreneurship and innovation activities through workshops, seminars and Open Innovation events. www.umi3.com

THE UNIVERSITY OF MANCHESTER INNOVATION CENTRE (UMIC)

As well as providing high quality premises for emerging biotech and technology companies over three sites, UMIC also offers bespoke conferencing and events facilities for professionals and academics. Its state-of-the-art lab and office space has nurtured 87 tenant businesses since 2004. A recent arrival is 2-DTech Ltd, supplier of graphene and advanced 2D materials, which builds on the University's Nobel Prize-winning discovery. www.umic.co.uk



THE UNIVERSITY OF MANCHESTER INTELLECTUAL PROPERTY (UMIP)

UMIP is the University's agent for intellectual property commercialisation. UMIP identifies, protects and evaluates the commercial potential of research from all Faculties and commercialises IP via the most appropriate route: sale, licence or spin-out. www.umip.com



As one of the most experienced and successful IP commercialisation offices in the UK, UMIP is able to offer expert advice and support to our academic community on:

- * Licensing
- * Patents, trademarks and copyright
- * Proof-of-Principle funding
- * IP agreements
- * Venture opportunities
- * Spin-out companies
- * Business planning
- * Marketing, legal and financial issues.

BENEFITS TO EXTERNAL ORGANISATIONS

- * Access to pioneering new technologies
- * Access to a range of technology/IP investment opportunities across many sectors
- * Enhanced reputation through working with a world-class university
- * Opportunity to participate in Open Innovation.

BENEFITS TO THE UNIVERSITY

- * Rapid transfer of knowledge to the marketplace
- * Improved relationships with industry
- * Enhanced national and international reputation for innovation
- * Increased income for investment in teaching and research.

COMMERCIALISATION CASE STUDIES



INNOVATION IN THE PIPELINE

PRODUCT: Acoustek
APPLICATION: Gas industry
LICENSED TO: Pipeline Engineering

WHAT IS IT?

Acoustek uses acoustic technology to accurately detect blockages and leaks in gas pipelines at distances of up to 10km. Invented by Professor Barry Lennox from the School of Electronic and Electrical Engineering, Acoustek reduces the need for radiographic detection and diver interventions which, as well as being extremely costly, can have a negative impact on production and the environment.

HOW WAS UMIP INVOLVED?

Professor Lennox and his research team were initially focusing on detecting leaks in water distribution pipelines using acoustics. As there were obvious commercial applications for this technology, the team contacted UMIP. Through UMIP's extensive contacts BP became aware of the project and its potential for use in the oil and gas industry. With BP's input, and later investment, the emphasis of the research shifted to detecting blockages in natural gas pipelines. UMIP acted as first point of contact between the University and industry partners and was instrumental in securing funding from BP and negotiating contracts.

Following a successful trial on a live gas installation, Acoustek was licensed to Pipeline Engineering for commercial use across the oil and gas industry.

WHAT'S NEXT?

The team is currently developing an acoustic tool with Phoenix Inspection Systems for monitoring heat exchanger tubes and exploring possible applications of the technology in the distribution of natural gas to residential houses.

Since UMIP & UMIC's inception in 2004:

2,300 invention disclosures received

£225m invested by venture funders in spin-outs

£55m generated from IP enterprise through the sale of shares in spin-outs, licensing income and through IP grants and contracts activity.

30 spin-out companies established

310 licences and assignments brokered

87 emerging businesses nurtured by UMIC

1,200 jobs directly or indirectly created

35 awards or shortlisted places won by spin-out companies/UMIP technology projects.

UMIP is wholly owned by The University of Manchester, which has over 20 years' experience of IP commercialisation. UMIP and The University of Manchester Innovation Centre (UMIC) are divisions of The University of Manchester I³ Ltd (www.umi3.com)

THE IMAGE OF A HEALTHY FUTURE

COMPANY: Bioxydyn Ltd
PRODUCT: New MRI technology
APPLICATION: Medical imaging

WHAT IS IT?

Bioxydyn Ltd is a spin-out company specialising in the development and application of new diagnostic imaging tools and imaging services. Its technology centres on a unique and powerful non-invasive magnetic resonance imaging (MRI) tool that exposes the patient to zero radiation and has the potential to considerably improve the diagnosis and monitoring of chronic lung conditions. It also has potential for use in cancer, inflammatory conditions and neuroscience.

HOW WAS UMIP INVOLVED?

Bioxydyn Ltd founder, Professor Geoff Parker, recognised the commercial potential of his team's work on lung imaging and approached UMIP for advice on how best to exploit the research. UMIP was able to offer guidance on protecting the associated intellectual property as well as practical and financial support for setting up a spin-out company.

WHAT'S NEXT?

Bioxydyn Ltd is continuing to work with the pharmaceutical industry to provide imaging biomarkers in clinical trials across a range of disease areas, and is developing diagnostic imaging technologies for clinical use.

