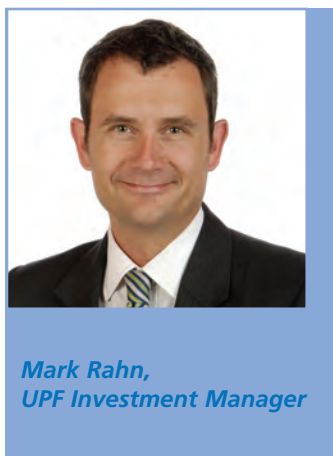


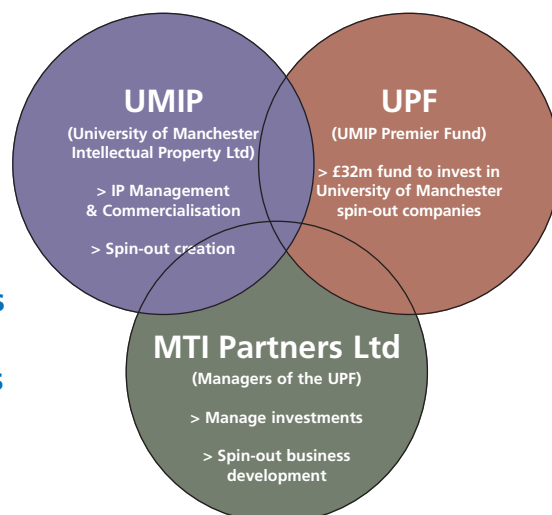
UMIP NEWS

Issue 1, April 2009

THE UMIP PREMIER FUND A YEAR OF INVESTMENT



It has been just over 12 months since the exciting launch of the £32M UMIP Premier Fund (UPF) in March 2008. Since then, three University spin-out companies have received substantial investments and expert advice from fund managers MTI Partners to accelerate their successful business development. The UPF is designed to invest in spin-out companies founded by UMIP.



Myconostica, a medical diagnostics company from The School of Medicine, has gone from strength to strength following the initial UPF £1m investment. The company specialises in highly specific tests that rapidly enable diagnosis of life-threatening fungal infections. New CEO John Garland has driven growth in the product portfolio.

Martin Keighley has been recruited as CEO of UPF's second investment: Arvia Technology Ltd, spun out of The School of Chemical Engineering. Arvia developed an innovative low-cost, low-maintenance green technology to remove then eliminate pollutants

from water used by industrial and municipal facilities. Co-investment arrangements from Alliance Fund Managers (AFM) - invested through the Liverpool Seed Fund - and private individuals gave Arvia £800,000 to bring to market its groundbreaking water purification products.

Nanoelectronics company, Nano ePrint, UPF's third investment, was spun out of The University's School of Electrical & Electronic Engineering. Founded by Professor Aimin Song, the company was awarded a substantial undisclosed sum. Nano ePrint's uniquely flexible device platform enables the low-cost

development of myriad printed electronics products for displays, sensors, smart cards and others.

UPF has supported four 'Proof of Principle' (POP) investments that range from £25k - £100k. These are designed for quick and simple technical or commercial investigations to validate a business proposition. They are managed by UMIP, funded from UPF and advised by MTI Partners.

The Fund's initial £32m comes from UK and European institutional investors.

Commenting on UPF's success, fund manager Dr

Mark Rahn, said: "We are pleased to support these exciting companies in their early stages. UPF is designed to make initial late-seed stage investments of £250k - £750k for 15 - 20 companies and then provide or secure follow-on investment of up to £3m or more if required."

To learn more, please see your UMIP venture manager or visit: www.theupf.com





Clive Rowland, CEO, UMIP

Welcome... to the first issue of UMIP's bi-annual newsletter.

Through our newsletter, we will keep you informed of our most recent activities in intellectual property (IP) commercialisation.

We have selected a number of interesting stories ranging from The UMIP Premier Fund's first investments to new licence deals and the formation of exciting spin-out companies.

We are also focussing on increasing the awareness of IP throughout the University. For example, we have produced an intranet resource and planned a series of 'Knowledge Transfer' sessions. These will give you a valuable insight into the types of IP which can be used to protect novel ideas/inventions and how UMIP can help you.

ABOUT UMIP

The University of Manchester Intellectual Property Ltd (UMIP) is the University's intellectual property (IP) commercialisation company. UMIP commercialises the results of research carried out by employees and research students and is a wholly-owned subsidiary of the University.

UMIP's team is made up of people from a wide range of technical and industry backgrounds, equipping it well to identify, evaluate, protect and commercialise IP. Research staff engaged in commercial activity usually find it a rewarding and interesting way of adding to the impact their work has on society or the economy, giving them a new perspective on their knowledge area.

IP is commercialised by the most appropriate route, either by sale, licence or via the creation of a spin-out company. Spin-outs and licensing arrangements are not just limited to the technology sector but span all Faculties.

Clive Rowland has seen the company evolve over the last 20 years into the



organisation it is today. He comments: "Since UMIP's formation in 2004, we have worked with our extensive network of industry experts and professional advisors to license over 80 inventions and to establish over 16 spin-outs; helping companies such as Renovo and Transitive to achieve global recognition and success."

UMIP is one of the most successful IP commercialisation companies in the UK and its current portfolio of spin-out companies employs over 500 people. It has a 'Proof of Principle' fund to develop embryonic inventions to a stage where they become investible propositions. It also has access to secured investment funds, via The UMIP Premier Fund, which develop fledgling companies, alongside the skills and contacts required to bring in the larger sums of external venture capital which are critical to their success.

If you would like to learn more about how UMIP can help to protect and commercialise your research, please visit: www.umip.com or contact one of our commercialisation executives named below.

MEET YOUR UMIP CONTACTS

UMIP's Commercialisation Executives are your first point of call for any questions you may have should you have an idea or observation and are wondering if it has potential value.

Our Commercialisation Executives are faculty specific:

For Engineering and Physical Sciences, please contact:

Dr Pushkar Wadke
Tel: 0161 306 8832
pushkar.wadke@umip.com

Dr Cecilia Waters
Tel: 0161 306 8813
cecilia.waters@umip.com

For Humanities, please contact:

Daniel Syder
Tel: 0161 306 8512
daniel.syder@umip.com

For Medical and Human Sciences, please contact:

Dr Elizabeth Crawford
Tel: 0161 603 7766
elizabeth.crawford@umip.com

For Life Sciences, please contact:

Dr Emma Woods
Tel: 0161 606 7236
emma.woods@umip.com

If you are working on research that you think has commercial potential, we would be pleased to hear from you.

LICENSING NEWS

ACOUSTEK® - BLOCKAGE AND LEAK DETECTION IN GAS PIPELINES

UMIP has assisted Professor Barry Lennox from the School of Electronic and Electrical Engineering license his Acoustek® technology to Pipeline Engineering. Acoustek® uses acoustic technology to detect partial and complete blockages as well as leaks in gas pipelines. The technology is set to revolutionise the market as it can quickly and accurately locate features at distances of up to 10km.

The technology has secured more than £500k of funding from sources including BP, The Engineering and Physical Sciences Research Council (EPSRC), BP (via the Oil Industry Technology Facilitator, ITF), Knowledge Transfer Partnerships (KTP) and Pipeline Engineering. This will enable the team and industrial partners to develop the technology into a commercial offering. BP's support of, and investment in, the project has already enabled

the development team to trial Acoustek® on a live gas installation with excellent early results giving further confidence to the technology. Commenting on the success of the trials, UMIP Venture Manager Dr Frank Allison said: "It is so difficult to trial new technologies such as this in a live environment. However, with BP's investment in the technology and the support of Pipeline Engineering's field service team, it was possible to undertake



Professor Barry Lennox

testing on a working live gas subsea pipeline."

Gordon Short, Director of Technical Development at Pipeline Engineering said: "Radiographic detection and diver interventions can cost multiples of £100,000s. Add to this the loss of production and the cost, and environmental implications should the use of chemicals be involved, then the benefits of early detection using Acoustek® become obvious."

NOVEL VEGETABLE EXTRACTS - TREATMENT AND PREVENTION OF PEPTIC ULCERS

UMIP has signed an option agreement with Proxavis plc to develop a ground-breaking medical product based on a natural extract from the potato.

The technology, which inhibits the Helicobacter pylori the bacterium responsible for the development of stomach ulcers, was developed by Professor Ian Roberts and his research scientist Dr Hayley Bennett from the Faculty of Life Sciences. Laboratory work initially carried out by Hayley discovered that a crude potato juice extract both

stops the attachment of H.pylori to the lining of the gut as well as selectively killing these 'bad' bacteria.

UMIP filed a patent for the technology. A 'Proof of Principle' investment of £155k enabled the laboratory of Professor Roberts to demonstrate the commercial application of the technology and an option agreement has now been signed with Proxavis. Proxavis, an AIM listed company which develops and licenses ingredients for the functional food, medical food

and dietary supplement markets, will now undertake further tests to determine the stability and format of the product which would then trigger a full licence agreement.

Stephen Moon, CEO of Proxavis plc said: "Proxavis has built a strong reputation in the \$40bn global functional food sector by partnering with high quality research institutes to develop patented, scientifically-proven technologies. We are proud to be involved with UMIP and look forward to developing and

commercialising this exciting intellectual property, which we believe will be attractive to global consumer healthcare partners."



From left to right: Professor Ian Roberts and Dr Hayley Bennett

SPIN-OUT NEWS

CURAPEL - INNOVATIVE SKIN TREATMENT

Curapel looks set to become a world-leader in dermatology following the development of a therapy to treat chronic inflammatory skin conditions such as eczema and psoriasis.

Dr Neil Gibbs and Professor Christopher Griffiths from The Research School of Translational Medicine secured commercial funding for the project. They negotiated and managed the development and manufacture of both oral and topical product formulations. Results of current clinical trials are expected mid 2009.

UMIP supported a 'Proof of Principle' investment for the project and Curapel also received BBSRC Follow On and Industrial Partnership funding. The team is now looking for financial

partners to take the 'Proof of Principle' studies forward to development of a market trial.

Dr Neil Gibbs said: "Chronic inflammatory skin diseases such as eczema affect the lives of over 45m individuals worldwide and the treatment market is worth over \$5bn per year. Curapel has developed a natural targeted therapy which can be applied topically to diseased skin or taken orally in more severe cases. It is extremely safe which has enabled its fast development and we would anticipate bringing forward a commercial product by 2011."



CABLE SENSE - NETWORK INTELLIGENCE

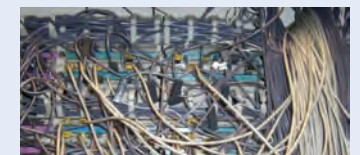
Cable Sense looks set to revolutionise the network cable industry. Cable Sense is developing a non-invasive scanner which can easily identify where a system fault lies or the location of unmapped network connections. With over 100m unshielded twisted pair (UTP) cables in the UK and a further 10m added every year there is significant commercial potential for the system.

The project is the brainchild of Professor Tony Peyton in the School of Electrical and Electronic Engineering and John Kelly of development partner DKR (Electrical) in Morecambe. They began a feasibility study whilst Tony was at Lancaster University and, when he moved to The University of Manchester, they then developed the technology under a government funded project led by John.

Commenting on the development of Cable Sense, Tony Peyton said: "Networks are

often incredibly complicated and may need to be manually audited and mapped, which can be a very time consuming task. Cable Sense is developing scanner devices which can be retro-fitted onto even fairly outdated systems. The technology then maps the entire system and from that point onwards any unauthorised cable changes or broken connections can easily be located and resolved."

Cable Sense has received approximately £100,000 of development funding through the UMIP Premier Fund to build a pre-commercial prototype for demonstration on a live network and a commercial management team.

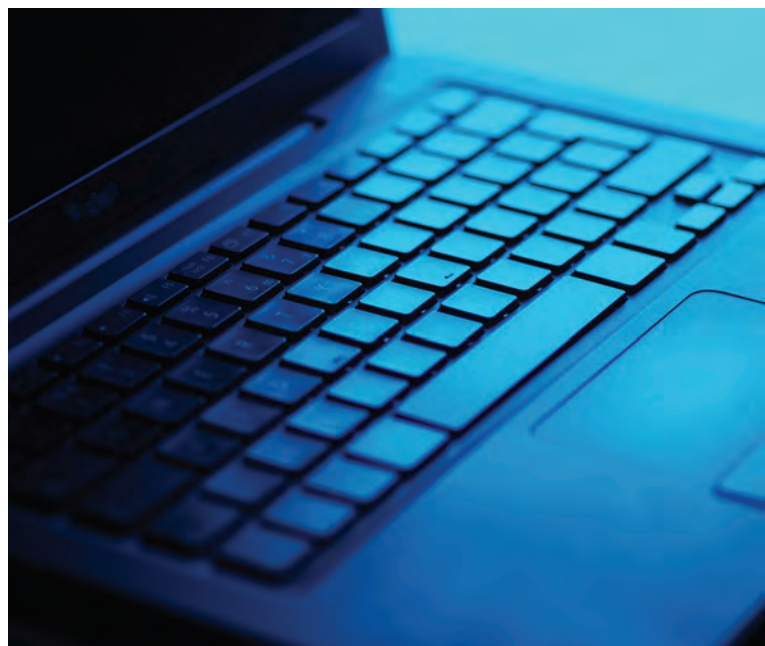


Typical network cabling

IBM BUYS TRANSITIVE CORPORATION

In November last year, IBM announced its acquisition of Transitive, a University of Manchester spin-out company. Transitive was established in 2000 by Alasdair Rawsthorne and today is a pioneer and leader in providing solutions that allow the transportability of software applications across multiple hardware platforms with little or no modification. The technology was developed by Alasdair

Rawsthorne and his research team in the University's Department of Computer Science and in 1998, the researchers filed patents on key components of the technology. They then started to explore the options for commercialisation and over the last 8 years raised over \$30m in various funding rounds. Today Transitive's products are installed on over 18m computers world-wide.



UMIP WELCOMES ITS NEW DIRECTOR OF ENTREPRENEURSHIP - IMRAN HAKIM



UMIP is delighted to welcome to the team Imran Hakim who took up the role of Director of Entrepreneurship in January. Imran – The Institute of Directors 'Young Director of the Year, 2008' - will be working with us to enhance our spin-out and licensing activities and to encourage intellectual property entrepreneurship at the University.

A graduate of the University and an optometrist by profession, he runs a successful group of independent practices in the North West. He became

nationally known as one of the most successful winners of investment on BBC2's Dragons' Den working with Peter Jones and Theo Paphitis. His innovative iTeddy product – which has already generated millions is now available in over 40 countries world-wide.

Commenting on his new role Imran said:

"The University already has an excellent track record for innovation and commercialising world-class science and technology, so I'm proud to be associated with

my old University in this way and excited by the challenge. There are already some fantastic, groundbreaking innovations on the horizon at a time when our economy needs it more than ever, so I'm very positive about the contribution I can bring."

Clive Rowland, UMIP's CEO, added: "Imran typifies all that is admirable about entrepreneurship - he has energy in abundance, great persistence and commitment and the knack of getting things done in a way that others don't spot or think is possible."



In November 2008, UMIP launched its IP Resource (co-developed with Eversheds LLP) at: www.manchester.ac.uk/IPresource

The resource features a video introduction by Professor Rod Coombs, Vice President of Innovation and Economic Development, on the importance of IP to the University and a series of video clips by professionals and academic colleagues on various aspects of IP and its commercialisation. It gives a valuable insight into the types of IP which can be used to protect novel ideas/inventions and how, for example, IP can

be commercialised via spin-out or licence with the help of UMIP.

Also featured is information on IP and Academic Materials and IP within a research contract and consulting environment with links to various forms, process guides and booklets which you may find useful.

Complementary pdf downloads are available from the UMIP website: www.umip.com/researchers.htm These include Guides on: IP and Confidentiality, Consulting, Research Contracts, Academic Materials & Publishing and an IP Workbook. A Guide to UMIP and various case study booklets are also available.

www.manchester.ac.uk/IPresource

NEW UMIP WEBSITE



We have recently redesigned and restructured our website:

www.umip.com

to make it easier for you to navigate and find all the information you need regarding commercialising your idea or invention.

You will find information on how we work with researchers, how your peers have commercialised their inventions, the funding sources available to you and a list of your UMIP contacts specific to your faculty. We also explain how we work with other University

functions such as the Research Office, business development managers, the Manchester Enterprise Centre and The University of Manchester Incubator Company Ltd (UMIC).

In addition, you will find an Educational Resource section where you can download a powerpoint presentation on 'How to assess the commercial potential of research work' along with a series of our guides and case study booklets.

Just click on:

www.umip.com/researchers.htm

TECHNOLOGY COMMERCIALISATION AWARDS

UMIP would like to acknowledge the dedication of researchers involved in technology commercialisation activities through the introduction of awards and prizes for commercial success.

In November 2008, UMIP's EPS technology commercialisation award was won by Professor Krishna Persaud, from the School of Chemical Engineering and Analytical Sciences. Prof Persaud established MultiSensor Systems Limited (MSS) in 2007 to commercialise technology capable of sensing volatile organic compounds (VOCs). The MSS monitoring system is designed for use in industrial and environmental situations.

The technology was successfully commercialised with assistance from UMIP, which provided MSS with £30,000 of investment from its 'Proof of Principle' fund to build several monitors for field trials.

During the same month, UMIP sponsored the Best Commercialisation Project Award at the Faculty of Life Sciences Research Symposium. Dr Rich Ferrie, head of UMIP's Biomedica group, presented the prize of a laptop PC to Professor Ian Roberts for his technology (co-developed with his research scientist Dr Hayley Bennett) which inhibits the *Helicobacter pylori*, the bacterium responsible for the development of stomach ulcers. A 'Proof of Principle' investment of £155k enabled the team to demonstrate the commercial application of the technology and an option agreement has now been signed with Provoxis plc – a company which develops and licenses ingredients for the functional food, medical food and dietary supplement markets.



From right to left: Professor Persaud, Heather White, Head of Technology and Humanities Group (UMIP) and David Eales, Venture Manager (UMIP)



From left to right: Professor Ian Roberts and Dr Rich Ferrie, Head of Biomedica Group (UMIP)

SCIENCE PARK AND ACADEMIC SEARCH ENGINES

UMIP has launched two simple new search engines, as powerful tools aimed at helping university researchers and industry connect more easily. They are as simple as Google to use, but just focus on searching specific groups of websites:

Academia Search

This searches the research web pages of all UK universities, and allows

researchers to find expertise or knowledge holders amongst their peer group. www.academiasearch.info

Innovation Park Search

This searches the websites of 1000 companies located in UK Science Parks and Incubators, as a way of finding research partners, technical capabilities or expertise. www.innovationparksearch.info



KNOWLEDGE TRANSFER FORA

The University places great emphasis on creating economic, social and environmental benefit by realising the commercial potential of its researchers' discoveries and inventions.

To help researchers gain a greater understanding of the commercialisation process, UMIP has organised a series of informal, hour-long sessions. Each will consist of a short

presentation followed by an open discussion.

For details of the next three sessions, please see the table opposite.

Whatever your research project, the possibility of commercialisation is something you should explore. Find out more by attending – yours could be an idea with real potential!

To register your interest, please contact Sarah Harris by email: sarah.harris@umip.com or telephone: 0161 306 8515

FORUM DATES

How to Assess the Market Potential of Research
12.15 – 1.15pm,
Friday 1st May 2009,
Seminar Room, Michael Smith Building

Copyright in Teaching Materials – two dates and locations
9.00 – 10.00am
Thursday 28th May 2009
Room G13, Sackville Building

9.00 – 10.00am
Thursday 18th June 2009
Seminar Room, Michael Smith Building

Refreshments will be available

BEHIND THE SCENES

In this column, we will be taking a look behind the scenes to meet some of our UMIP support staff. In this issue, we focus on Paul Dandy, our Information Scientist, based in our Marketing and Licensing team. Paul, a Chemistry graduate of UMIST, has been an Information Specialist for over 30 years and has been involved as part of the team for nearly 11 years. He specialises in the provision of a comprehensive range of

patent information services which support UMIP's business activities.

Paul explains further.....

"It is a highly interesting and varied job investigating a wide range of cutting edge technologies such as nanotechnology, speech synthesis or biotechnology. My job is to carry out searching of a range of commercial patent and scientific databases to

determine if a newly proposed idea or product is indeed new and inventive. Finding relevant patents and other disclosures (known as 'prior art') can render some patent proposals invalid and can therefore save an appreciable amount of time and money as patent protection is expensive.

High quality patent protection is crucial to UMIP because it ensures that the University has a robust

monopoly position which can then be exploited commercially, for example through a licensing deal or via a spin-out company."



UMIP®

The University of Manchester's Intellectual Property Commercialisation Company



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