The University of Manchester
UMIP®

A bi-annual update on the activities of UMIP, the University's intellectual property management and commercialisation company

MANCHESTER 1824

UMIPNEWS

Issue 3, April 2010

UMIP WINS TOP UK TECH TRANSFER AWARD

UMIP was voted Technology Transfer Office of the Year at the Genesis biotechnology conference in London in December.

The judges at the Gala dinner, held at the Queen Elizabeth II Conference Centre, awarded UMIP the top prize, despite strong competition from the other two shortlisted companies; Cancer Research Technology Ltd and UCL Business plc.

Commenting on the award Clive Rowland, CEO of UMIP, said: "It is an honour to receive this award and it is testament to all the dedication and hard work of UMIP staff. It has been a strong year for us with many new technologies having been either licensed or spun out, leading to ground breaking new technologies in the marketplace."

In financial terms, over the last 5 years, The University of Manchester's IP activities have generated over £35M for the University through the sale of shares in spin-outs, licensing income and through IP grants and contracts activity. In addition, UMIP has won a number of high profile regional and national awards.

Allan Prits, UMIP Marketing Manager, receives the award from Baroness Jo Valentine, CEO, London First.

Dr Sharon O' Kane, Entrepreneur in Residence at UMIP

UMIP APPOINTS DR SHARON O' KANE AS ITS ENTREPRENEUR IN RESIDENCE

Sharon, who was recently named as Bionow / NWDA Biomedical Personality of the Year 2009, Crains Manchester Businesswoman of the Year 2008/9, and Entrepreneur of the Year at the inaugural Northwest Women in Business Awards 2008, was the Co-Founder and Chief Scientific Officer of University of Manchester spin-out company Renovo until February this year. Renovo Group plc is a biopharmaceutical company developing drugs for the reduction of scarring and has been listed on the London Stock Exchange since 2006.

Sharon said that she is looking forward to using the business skills and networks that she has developed from her involvement in the commercialisation of University-based research which led to the creation of Renovo and to raising the profile of entrepreneurship at the University.

Sharon commented: "I am very pleased to have been asked to advise the University in this capacity. The University already has an excellent track record in innovation and entrepreneurship, with many successful spin-out companies. When I announced in September 2009 that I will move on from Renovo in February this year, I said I wanted to use my experience to help start and build companies, and this advisory role with UMIP is one in which I can immediately contribute and help UMIP continue to be successful in meeting its goals of creating spin-out companies, licensing IP and making an important contribution to the economy."

Clive Rowland, UMIP's CEO, said that he was delighted that Sharon had agreed to accept the appointment. "We are very much looking forward to working with Sharon. We have some specific ambitious funding initiatives in mind with which Sharon is ideally suited to help us. We are also asking Sharon to assist in improving our effectiveness and our success rate in drug discovery licensing."

INTELLECTUAL PROPERTY RESOURCE

An intranet resource for:

> Understanding IP

> IP Commercialisation

> IP in Research and Consultancy

> IP & Academic Materials

www.manchester.ac.uk/ipresource

UMIP PREMIER FUND UPDATE...

The UMIP Premier Fund (UPF) has had a busy few months completing on a further four substantial investments bringing the portfolio to seven in total. The new additions are:-

Cable Sense, School of EEE, is developing hardware products and software services in intelligent infrastructure monitoring and mapping (IIMS) for IT networks and datacentres. IIMS maps the cabling within an IT infrastructure and monitors it's health and integrity. This information is useful to providers of managed port services, both in-house and external.

Lein Diagnostics, a collaboration with Eye and Vision Sciences, within FLS, has led to techniques for measuring optical parameters of the eye that correlate well with blood glucose levels. This is a potentially ground-breaking technology in the management of diabetes.

Ai2, FLS, is committed to the development of innovative technology to prevent infection on a wide range of commonly used medical devices like urinary catheters, stents and wound dressings.

Exosect is the first non-UoM investment the fund has made. This has been done to balance the portfolio. Exosect Limited is agrochemicals business actively focused on the development and sales of Intelligent Pest Management solutions and is at a later stage in its business development than most of our investments with products already in the field.

Within the existing portfolio too, there have been some substantial steps forward with Arvia Technology, Nano ePrint and Myconostica all achieving some significant milestones.

A portfolio of seven investments since the inception of the fund two years ago represents a very solid start. There will inevitably be some downs as well as ups over the next few years (though we hope not too many) as these companies start their journeys towards substantial economic success. Early-stage technology business is risky, as is investing in them, but we at MTI work with the companies closely to help them navigate through the challenges they face and maximise the opportunities they have.

This is just a start and the UPF is actively looking for more investment opportunities throughout The University of Manchester.

If you have an idea or a technology that you feel could have commercial potential, then please contact UMIP (contacts below) to see how it can be developed into an investment opportunity for the fund.

UMIP PREMIER FUND

www.theupf.com

Mark Rahn
Investment Manager
MTI Partners (Managers of the UMIP Premier Fund)

MEET YOUR UMIP FRONTLINE 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 Technology and Humanities:

Dr Pushkar Wadke, EPS
Telephone: 0161 306 8832
Email: pushkar.wadke@umip.com

Dr Lorna Farnsworth, EPS
Telephone: 0161 306 8813
Email: lorna.farnsworth@umip.com

Dr Mugdha Joshi, EPS
Telephone: 0161 306 8513
Email: mugdha.joshi@umip.com

Daniel Syder, Humanities
Telephone: 0161 306 8512
Email: daniel.syder@umip.com

For Life Sciences and Medical & Human Sciences:

Dr Emma Woods, FLS
Telephone: 0161 606 7236
Email: emma.woods@umip.com

Dr Edward Maughfling, MHS
Telephone: 0161 606 7213
Email: edward.maughfling@umip.com

Dr Gill Shuttleworth, FLS/MHS
Telephone: 0161 603 7738
Email: gillian.shuttleworth@umip.com

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

LATEST LICENSING & SPIN-OUT NEWS

EXCIPLEX - NOVEL DIAGNOSTIC PROBES

UMIP has assisted Honorary Professor Ken Douglas and Dr Elena Bichenkova from the School of Pharmacy, to licence their Exciplex technology, on an exclusive basis, to specialist oligonucleotide reagent manufacturer, Link Technologies Limited.

Exciplex diagnostic probes offer ultra-biospecificity and significantly increased detection sensitivity over conventional systems due to negligible background signal. The probes are based on labelling oligonucleotides with exciplex partners that form excited-state complexes in close spatial proximity. Application of these modified oligonucleotides in diagnostic systems has been shown to discriminate DNA mutations at the level of PCR products and plasmid DNA.

Professor Douglas commented: "This is a very exciting opportunity to bring together a University discovery base and this excellent company to work together. The Exciplex is a significant new area of science and we are pleased to have the expertise of Link Technologies to take this forward to a commercial entity for clinical benefit."

Dr John Bremner, Business Development Director at Link Technologies, concurred: "We are delighted with this deal, although we firmly believe this is simply the start of something truly exciting. Our ongoing collaboration with the University over the coming months will optimise the technology, allowing us to launch a new range of innovative products targeted at diagnostic companies worldwide."

The University and Link are also commencing a forward collaboration to further develop the existing technology. Under the terms of the licence agreement, Link will manufacture and sell Exciplex-based reagents worldwide.

Dr Elena Bichenkova

Professor Ken Douglas

KETSO - A HANDS-ON KIT FOR CREATIVE GROUP WORK

Ketso, a hands-on kit for creative group work, is the latest success story to emerge from research within the Faculty of Humanities. The idea behind Ketso originated some 15 years ago, when Dr Joanne Tippett was working in Lesotho helping villagers plan a better future, and a portable, tactile system was needed to encourage group collaboration and learning.

Using felt sheets and re-usable, coloured shapes placed on the felt, Joanne developed a system for shaping ideas and group problem solving. She has continued to use and develop the system in her community development and sustainability research work. Ketso has now been trialled and tested on 5 continents and over 11 countries, including Bangladesh, Germany, Australia, USA and Afghanistan.

Joanne joined The University of Manchester in 2000, becoming a member of staff in the School of Environment and Development in 2004. By this time she had been encouraged by many people and organisations to develop Ketso into a commercially viable product.

Joanne takes up the story: "As part of my PhD I worked with community groups, stakeholder partnerships, including the Mersey Basin Company and public sector organisations. Ketso was achieving really great results in problem solving, idea sharing and stakeholder engagement, so I approached UMIP for advice on how to commercialise the product.

UMIP initially helped with the design registration and general business advice. Several further years of development followed. !n 2008, Ketso received funding support from UMIP which Ketso allocated to trademark registration and accountancy services. In April 2009 we created the company and in November 2009 we recruited our first employee. We are now launching Ketso as a social enterprise with a global reach, aiming to achieve a turnover of around £6m in the next five years."

As well as achieving its social mission (transforming the way we learn, collaborate and communicate) through use of the product, the manufacture of Ketso helps disadvantaged people: the jute carrying bags are made in an Ethical Trade Initiative certified workshop in Kolkata, and the kits are assembled at a local sheltered workshop.

Joanne adds: "What started as a simple idea has now become a highly regarded system that has been used by organisations as diverse as The Environment Agency, Manchester City Council and Tesco. It has also been used to engage with groups such as young people and people with disabilities. It is lightweight, user-friendly, re-usable, and attractive to organisations that want to purchase from a social enterprise."

Dr. Tippett's ideas were short listed for the Sustainable Development Commission's Breakthrough Ideas for the 21st Century in 2009. Ketso won a Research Council UK Business Planning Competition commendation for the best plan in the Humanities and Social Sciences in 2008.

ketso
www.ketso.com

Remember to discuss possible IP protection before you publish.
Contact your UMIP Commercialisation Executive first.

STORM® - A SOCIAL ENTERPRISE

STORM® (Skills-based Training on Risk Management) is a skills-based model of suicide prevention training, for use in the health, social and criminal justice services. It was conceived as a research project in the mid to late 1990s by Professor Linda Gask and Professor Richard Morriss from the School of Psychiatry and is based on their research in the area of suicide prevention and medical education.

Linda and Richard noticed at the time that, despite a glut of information about suicide, there was little skills training for workers who deal with patients or clients on a daily basis.

Gill Green was soon brought in as project manager to manage the development of STORM after three peer reviewed studies proved successful. STORM's training packages help frontline health and social care staff spot the signs of suicidal tendencies and self-injury. The training packages are used across a range of adult and children's services including primary care, A&E departments, third sector services and schools.

Gill comments: "We realised that we had a very good product. Since 2002, packages have been sold to NHS trusts, prisons and other organisations dealing with people who may be at risk of suicide. Additionally, a version of STORM was commissioned by HM Prison Service in 2004 which was adapted specifically for its needs."

The Care Services Improvement Partnership (NIMHE, a forerunner of NMHDU) assisted with the launch of STORM in the North West in 2003, through a programme of seminars and advertising, targeting various Primary Care and Mental Health NHS Trusts. Involvement in Scotland's 'Choose Life' suicide prevention campaign was a pivotal moment, leading to significant uptake of the training scheme based on formal evaluation and word of mouth.

Outside of the UK, the training packages have been used in Ireland, Australia, Bangladesh and Pakistan. Dr Safi Afghan, a consultant psychiatrist, who has helped deliver training to 500 health service staff in the UK and Pakistan, said: "It's so powerful and it saves lives. Our workers say the training has both improved their skills and confidence, plus it demystifies and destigmatises suicide."

UMIP are currently assisting Gill with spinning out STORM as a social enterprise. Dr Sonia Nikolovski, UMIP venture manager, said: "We are looking at a different business model for STORM because we want to be able to reinvest a high percentage of the profits back into the company for research and development into new packages and to be able to reach new markets. The focus of the business will be to achieve its social aims."

www.medicine.manchester.ac.uk/storm

PLASMA CLEAN TECHNOLOGY IS PURE GENIUS

Plasma Clean Limited, a hi-tech spin-out, has been awarded a £112,829 Grant for Research and Development from the Northwest Regional Development Agency (NWDA)

Based in the Stockport Business Incubator, Plasma Clean specialises in odour control and air purification solutions utilising non-thermal plasma technology.

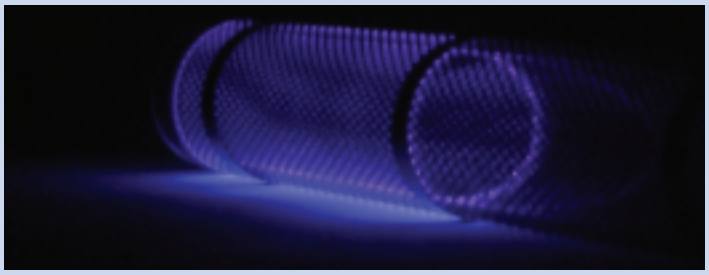
The Grant will allow Plasma Clean to complete the development of its non-thermal plasma system. The technology, aimed at Ultra Pure Gas applications in the manufacture of semi-conductors, flat-panel displays and solar cells, and any other ultra high purity gas application, has already generated significant interest from the UK and abroad.

The work will build on the NWDA research project completed in October 2008, which helped the business to deliver a unique power supply system capable of producing a highly active plasma discharge using lower power.

The Plasma Clean system, known as Plasma UPG, will eventually be licensed to commercial partners across the world, seeking low power solutions to meet the ever demanding need to enhance process gas purity.

David Glover, Managing Director of Plasma Clean said: "Receiving this award is a great boost for Plasma Clean and will help to deliver a unique product offering which will present significant benefits to our customers worldwide.

We have already had significant interest from some of the major players in the air purification industry, seeking a product which will offer competitive advantage in terms of performance and running costs."



Doug Stellman, NWBIS, YFM Private Equity commented: "We have been working with Plasma Clean for over 3 years through the North West Business Investment Scheme. I am delighted their hard work and innovation has been recognised, enabling them to take their developments of the UPG plasma technology to the next level on an international scale. There is a huge market for Plasma Clean's technology and this grant will help them further establish themselves as pioneers in the air purification field.

www.plasma-clean.com

Download the following guides and booklets from www.umip.com

A Guide to UMIP

Case Studies of Licensing

Case Studies of Spin-outs

5 Years of UMIP

IP & Confidentiality

Spin-out Companies

Licensing

Consulting

IP Workbook

Academic Materials and Publishing

Research Contracts

Hard copies available from:
sarah.harris@umip.com

RETIRING UMIP CHAIRMAN RECEIVES UNIVERSITY MEDAL OF HONOUR

Peter Sanderson has been awarded the medal in recognition of his outstanding and loyal service to UMIP and to the University.

Peter, who will retire from UMIP at the end of April, having served the maximum of two full terms of three years for a non executive Chairman, co-founded the company with CEO Clive Rowland during the summer of 2004. UMIP quickly established itself as one of the country's leaders in university technology transfer. In 2008, UMIP received wide recognition in Europe following a comprehensive review of technology transfer practice and performance by the European Investment Fund and has since begun to establish itself on the world stage.

Peter, who was a Director of Adam & Co – a private bank headquartered in Edinburgh – at the time that he was appointed as part-time UMIP chairman, continued to be active in the banking and commercial fields during his appointment at UMIP and these contacts have been very helpful to UMIP in developing its business.

Peter said " I have enjoyed my time at UMIP tremendously and it was very satisfying to bring my commercial experience from my career to the University to help it develop its many and diverse interests. In a lot of ways, the post of UMIP Chairman is ideal for someone who has spent a full life in business and commerce because not only is it a varied challenge in itself, it also allows you at the same time to put something back into society. I know that I am envied by business colleagues for having secured the appointment. Naturally I am sorry that I will no longer be seeing the excellent and exciting projects which go on every day at UMIP but it is pleasing to know that UMIP is well poised for its next stage, leading up to 2015. Whilst I will continue to be active with some other non-executive appointments, I am particularly looking forward to spending more time on the golf course."

UMIP PROOF-OF-PRINCIPLE (PoP) AWARDS

One of the significant added value aspects in technology transfer which attracts seed funders and licensees is Proof-of-Principle funding.

To add value, UMIP manages, for the University, a 'Proof-of-Principle' account for projects with good potential. We encourage you to find out more and make an application. Applications are reviewed throughout the year.

To find out more, please contact your UMIP commercialisation executive listed on the second page of this newsletter.

To illustrate the diversity of projects awarded since August 2009, please see below:

Prof Ian Roberts - Faculty of Life Sciences
Using plants to produce conjugate vaccines and glyco-peptides
> Spin-out PoP awarded on October 2009
> Project currently scheduled to run from Jan 2010 to Dec 2010

Dr Mark Ashe - Faculty of Life Sciences
Biobutanol production using novel modified yeasts
> Licensing PoP awarded in December 2009
> Project due to start in March/April 2010

Prof David Garrod & Prof Lin Li - Faculty of Life Sciences
Laser texturing of metal surfaces for improved surgical implants
> Licensing PoP awarded Feb 2010
> Project due to start June 2010

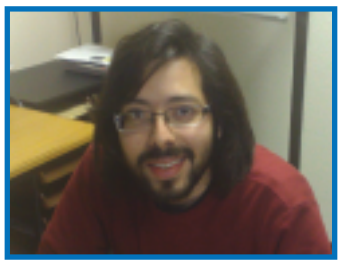
Prof. Aimin Song - School of Electrical & Electronic Engineering, Faculty of Engineering and Physical Sciences
Tera Hertz (THz) nanodevices for energy harvesting
> Spin-out PoP
> Project started November 09

Dr. Ian Cotton - School of Electrical & Electronic Engineering, Faculty of Engineering and Physical Sciences
Developing an insulating composite cross arm to replace both the existing steel cross arm and insulator on transmission towers
> Spin-out PoP awarded December 2009
> Project currently scheduled to run from March 2010 to March 2011

Prof Sandra Downes – School of Materials (EPS), Prof Giorgio Terenghi - Clinical and Laboratory Sciences (MHS)
A Novel Biodegradable Conduit for Peripheral Nerve Repair
> Spin-out/Licensing PoP awarded October 2008
> Extended and scheduled to run from December 2008 to December 2010

Prof Sandra Downes – School of Materials, Faculty of Engineering and Physical Sciences
A Novel Biodegradable Construct for Tendon Regeneration
> Spin-out/Licensing PoP awarded December 2008
> Project currently scheduled to run from January 2009 to January 2010

MANCHESTER SCIENTIST SHINES IN BIONOW 2009 AWARDS



Dr Christian Zakian from the School of Dentistry has been awarded a prestigious accolade for his pioneering work in the biomedical field.

Christian claimed the 'Promising Northwest Biomedical Technologist of the Year' at the Northwest Biomedical Awards in November 2009 for his work on an invention that allows mapping of carious lesions in teeth. The Awards, which are organised by BioNow, examine the best emerging talent in the region and reward excellence in the sector.

The novel approach uses defined wavelengths of light to build an image of each tooth allowing dentists to not only determine that decay is present but how deep that decay extends. To date, available techniques are either not sensitive enough to early stages of the disease, such as x-rays, or are limited by the presence of stain in teeth. This method is non-invasive and can assist dentists to monitor the disease progression, resulting in a more informed approach to treatment. In contrast to other optical techniques this innovation provides a picture of the whole tooth and not just a single point; this is useful to reveal the precise location of the decay and helping to decide whether drilling is required and where. The images produced are clear and bright and offer an opportunity for patient involvement in the treatment decision making processes.

Led by Christian, his research team applied for Proof-of-Principle funding from UMIP to bring the project forward, which was subsequently granted. Christian is part of a multi-disciplinary research group (Dental Health Unit) led by Prof Roger Ellwood and Dr Iain Pretty and formed by scientists and dentists who focus on co-ordinating clinical trials and developing next generation dental diagnostic instruments.

UMIP licensing manager, Dr Lizzie Crawford, commented on the awards: "The investment from UMIP allowed Christian to go from strength to strength, transcending his daily role as a research assistant to head up a team that includes, a technician and a research assistant. Christian's ability to commercialise and drive his product forward at such an early stage in his career is testament to his tenacity and confidence in his invention and this was a view that was clearly shared by the judging panel."

UMIP & FLS BUSINESS RELATIONS TEAM LUNCH

A group of academics from the Life Sciences Disease Systems section were amongst the first to be invited to join members of the UMIP team and FLS Business Relations Team for lunch at the Red Chilli Restaurant on Grafton Street in February.

Over lunch, Dr Rich Ferrie, Head of UMIP's Biomedica Team, and Dr Emma Woods, UMIP Commercialisation Executive for FLS, discussed their roles in identifying and protecting novel research, evaluating its commercial potential and supporting the technology transfer process via spin-out and licensing routes.

Dr Sharon O'Kane, UMIP's new Entrepreneur in Residence, also attended and offered first-hand advice from her successful roles in both academia and the University spin-out company, Renovo.

Representing the FLS Business Relations Team was Prof Ian Kimber; Associate Dean for Business Development and Research Business Manager, Dr Victoria Hand who discussed their plans to identify funding through industrial partners and to support research alongside companies. The newly-appointed FLS IP Exploitation Manager, Dr Curtis Dobson, offered further advice from his personal experience with UMIP in establishing spin-out company Ai2 and also discussed his plans to support future commercialisation and IP development in FLS.

A good time was had by all as Faculty members were able to discuss and ask questions about IP development, commercialisation and industrial liaison in a more informal atmosphere. Together, UMIP and the Faculty Business Relation Team plan to host further events to connect with members of FLS and promote the benefits and rewards of IP development and commercial activity including the in-house Proof-of-Principle fund and the University's generous IP policy.

Dr Rich Ferrie and Dr Emma Woods

BEHIND THE SCENES

In this column, we will be taking a look behind the scenes to meet some of our UMIP support staff. Carol Feely is UMIP's Financial Controller and leads a team of three who report in to the Commercial Director, Jane Shelton. Carol explains what a typical day might entail…

"As well as managing all financial aspects of the running of UMIP's business, the team also undertake the financial management of several of the spin-out companies, including payroll services for 134 employees.

In any given day we might be setting up the financial systems for a spin-out company, preparing VAT returns and registrations, undertaking credit controls, balance sheet reconciliations and preparing financial and management accounts. It is a varied job which requires specific experience and expertise. The financial side of the commercialisation process can be difficult for non financial people, and we can ensure that the financial delivery is in place from the earliest stage in the process."

And, as Carol adds, getting the finance and account systems right from the start is one of the most important elements for any start-up. She continues: "We know from looking at some of UMIP's spin-out case studies (www.umip.com/UMIP_guide.htm) that if they had the chance to do anything over again, many of them have said that they would get the paperwork and finance side straight right from the very start as it saves a lot of time and trouble further down the line. That is where we can really add value to the commercialisation process, showing people how important early-stage finance structuring is."

UMIP®

The University of Manchester's Intellectual Property Commercialisation Company

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