



## Wiki for Intellectual Property and Spill Over through Positive Externalities and Disseminating Information Asymmetry (WISOPEDIA)



**Project:** Wiki for Intellectual Property and Spill Over through Positive Externalities and Disseminating Information Asymmetry (WISOPEDIA)

Lead institution: Anglia Ruskin University

### IPO award: £60,200

#### **Project contact details:**

Dr Robert Willis Lord Ashcroft International Business School Anglia Ruskin University East Road Cambridge CB11PT

**T:** 07515 607601 **E:** rob.willis@anglia.ac.uk This project was based on collaboration between Anglia Ruskin University and SmartLIFE, the new Hive Education and Enterprise Park (Cambridge). The overall objective was to build a publication and knowledge transfer network to provide opportunities and create a forum for the dissemination of ideas. It has:

- Established an open access Wiki in the specific area of Clean-Tech and Social Enterprise sectors;
- Established a unique infrastructure and networks for the facilitation of emerging entrepreneurship ideas;
- Started to explore opportunities for commercial exploitation of available Intellectual Property.

The project has produced an online open access 'Wiki', which allows for the continuous exchange of knowledge and highlight emergent Intellectual Property opportunities.

"Cambridge Cleantech has been pleased to collaborate in this innovative and much needed project. It is becoming clear that IP is a critical issue in starting up and sustaining new businesses – not least in the emergent cleantech sector. The legacy of the WISOPEDIA project will be very helpful in supporting cleantech growth companies."

> Martin Garrett CEO Cambridge Cleantech

The project led to the establishment of a network to deliver this project and to support its on-going development. This has included engagement with Intellectual Property specialists and entrepreneurs in the Cambridge eco system and now forms the basis of on-going activities of Anglia Ruskin University, SmartLIFE, the Future Business Centre, Cambridge Cleantech and a professional Intellectual Property company.

Planned events with experts in this area were held, leading to practical insight into what is required to support individuals and nascent organisations. Professional advice and entrepreneur's practical insights into Intellectual Property issues were central in helping direct the project into a delivery mechanism that will be fit for purpose. The knowledge gained highlighted a gap in the area of Intellectual Property – the general lack of knowledge on this area, especially for start-ups. This meant that a precondition for wider dissemination was a focused, in-depth, approach. This has been undertaken and now provides a strong foundation on which to support the ongoing development of the Wiki as a sustainable vessel to take up and share real-time knowledge and know-how on Intellectual Property.

Knowledge gained is being disseminated – to date over 300 existing and potential entrepreneurs have been reached. Information about the project has been communicated through the Cambridge Cleantech newsletter and is part of their regular network alerts. The Social Enterprise network has also been informed through similar mechanisms revolving around the Future Business centre.

This is becoming a core activity for the partners involved and follow up projects are in the pipeline. A strategic plan has been developed to embed this project into a wider programme based on delivering "Smart Societies". The Wiki will be one of the key delivery mechanisms of this and form the basis of a cross-European research bid. The learning from the project will allow the project team to build Intellectual Property into the learning experience through the creation of learning and teaching packages, which will bring both sustainability and saleability to the initial project.







# Innovative Telehealth & Assisted Living Ideas and Application (ITALIA)



**Project:** Innovative Telehealth & Assisted Living Ideas and Application (ITALIA)

Lead institution: Buckinghamshire New University

IPO award: £69,692

### Project contact details:

Firas Sarhan Director of Centre of Excellence of Telehealth and Assisted Living Buckinghamshire New University Uxbridge Campus Uxbridge UB8 1NA

**T:** 01494 522 141 ext. 2327 **E:** firas.sarhan@bucks.ac.uk Approximately 1,800 people a year suffer a spinal injury requiring treatment by a specialist centre, with patients treated in these centres for up to 8 months before being discharged and treated in the community. 40,000 people live with a spinal cord injury, most in their own homes with support from community care teams, however the quality of care provided by family and friends is variable and the frequency of home visits is restricted by high costs. It is therefore important that care teams have 'real time' information about their patients' wellbeing to help them focus their resources and all patients have equal access to healthcare and health promotion material to help them identify and prevent complications, irrespective of their circumstances.

The ITALIA project has sought to address this by facilitating the development of a concept using Interactive Voice Response (IVR) to support people living with spinal injuries. This innovation will reduce the current 35% readmission rate by improving the support of people with spinal injuries after their discharge following stabilisation and initial "The ITALIA project has allowed us to develop the foundation for future dialogue among health and social care professionals, academia, and industry to ensure that the telehealth solutions developed are fit for purpose and have an impact on quality of life for the end users."

> Firas Sarhan Director Centre of Excellence for Telehealth and Assisted Living

rehabilitation at a specialist centre. It uses IVR to monitor patients' symptoms at low cost, providing carers with consistent measures of wellbeing and alerts in cases of need. It contributes to the effective and efficient follow up care of spinally injured individuals in the community and prevents the development of complications which are of high cost to the individual and the NHS.

While 80% of those discharged from a specialist spinal centre live in their own homes the remainder go into nursing, residential or respite care homes, hospitals or other institutions. The IVR project will help more of these people live at home by not only improving their wellbeing but also by reducing secondary complications and tertiary care costs. Of those patients being treated at home over 35% of them will develop complications that require readmission into a specialist spinal centre. This high readmission rate restricts acute spinal injury admissions to

specialist centres leading to further complications and a delay in commencing rehabilitation programmes which in turn leads to an increased length of stay in hospital. Using IVR to monitor symptoms will identify complications at an early stage and allow intervention to prevent readmission.

The ITALIA project succeeded in generating interest, awareness and understanding among 30 IT companies with capabilities to work with the project. Following an event designed to explain the project to healthcare 'problem owners' 8 IT firms were selected to work with the healthcare 'problem owners' and match them with relevant academics and supporting organisations to form multi-disciplinary new product development teams. This has resulted in securing the commitment of 8 healthcare managers with telehealth opportunities to join the programme, as well as a database of contacts to compliment the leads obtained from promotion of the project through an ITALIA project website (http://bucks. ac.uk/research/research\_institutes/cetal/project-italia/) which has led to 20 expressions of interest for future work.

Fast Forward Competition funding had been crucial to generating interest among all parties and enabling the event used to match IT firms with healthcare 'problem owners', with some of the initial findings from this event disseminated at local and national levels. Fast Forward funding has also enabled the project to develop a relationship with IT firms and gain an understanding of the issues they face developing technology within health/social care.







## Developing an Open Innovation Platform for Sourcing Solutions to Unmet Clinical Needs



**Project:** Developing an Open Innovation Platform for Sourcing Solutions to Unmet Clinical Needs

Lead institution: Cardiff University

IPO award: £65,000

### Project contact details:

Dr Corinne Squire SARTRE Cardiff University School of Medicine University Hospital of Wales Heath Park Cardiff CF14 4XN

T: 02920 744190 E: SquireCM@cardiff.ac.uk The Health Technology Challenge project was conceived while developing an open innovation platform for sourcing solutions to unmet clinical needs and addressed the need to link clinical and academic communities together to improve healthcare. The aspiration was to bring new technologies into medical practice and provide academic groups with an insight into unmet clinical needs. We wanted healthcare professionals to say what technologies and innovations they felt were needed to improve healthcare and then we could issue these as challenges using a crowd sourcing approach to source the best solutions to those challenges.

The aim was to provide a mechanism for communities to interact and as an incentive for healthcare professionals and technology providers to enter the process and put their ideas forward. We developed an interactive web based portal that allowed participants to join as members and post ideas as well as being able to view the ideas, comment and vote. The Challenge was officially launched in May 2013, with a launch event and workshop to "The Health Technology Challenge project has worked fantastically well, becoming a flagship project for the South East Wales Academic Health Science Partnership (SEWAHSP). Support from the Fast Forward Competition has been crucial in allowing us to develop this innovative programme, with the success of the pilot inspiring us to develop the scheme into an 'All Wales' Challenge."

> Prof Sue Bale OBE Director of SEWAHSP

introduce the scheme and brainstorm ideas in small groups. It was evident straight away that there was both a lot of demand for the concept and a wealth of ideas with real potential to impact on patients.

The scheme operated as a two step process – the first to collect the challenges and the second to submit the best ideas to a competition phase, with applications invited from multidisciplinary teams to solve these challenges. Over the course of the competition more than 200 participants joined the website as members, with over 20 ideas and well over 100 comments and votes posted. These comments and votes helped to inform the selection panels and refine the challenges. Some also helped the authors of the ideas to find new collaborators or explore new avenues with others interested in their ideas.

In total we funded four projects to a maximum of £25,000 each (with some match funding secured from SARTRE) :

• <u>Challenge: Point of care diagnosis of infection</u> Winning project: 'Development of a POC test for cellular markers of infection'.

- <u>Challenge: Delivery of therapeutic agents form</u> <u>polymeric materials</u>
  Winning projects: 'Improved surgical joint replacements using a liposomal delivery system' and 'Antiseptic loaded gauze for intractable wound infections'.
- <u>Challenge: Capturing Healthcare data using a standard</u> <u>smartphone or tablet & Tracking rehabilitation using a</u> <u>software based programme</u> Winning project: 'Data collection App for prostate cancer patient reported outcome measures (PROM) database'.

As the Health Technology Challenge project was specifically aimed at encouraging co-operation between universities and the NHS, all projects had to have two partners (a clinical and an academic partner) to ensure end user involvement in development. The quality of the projects received at the competition stage was extremely high and far exceeded the amount of funding we had available. However, for some of those which were not successful we are also working with the teams to further develop the ideas and apply for funding elsewhere.

Where the project really succeeded in excess of expectations was the high level of participation in the interactive web portal which, in addition to the directly funded projects, has given us some extremely valuable resources, including informed feedback on the suggested challenges, an engaged community and a pool of project ideas and unmet clinical needs for future projects.







# Start-Ed



### Project: Start-Ed

Lead institution: City University London

### **IPO award:** £12,500

#### **Project contact details:** Dr David Collins

The City Law School City University London Northampton Square London EC1V 0HB

**T:** 0207 0403215 **E:** david.collins.1@city.ac.uk Start-Ed is a legal advice clinic run by the students of the City Law School of City University London and supervised by local legal professionals. The aim of the clinic is to provide basic legal assistance to start-ups in and around London's Tech City, otherwise known as the Silicon Roundabout. The clinic serves two purposes: First, it addresses a knowledge gap in the legal advice needed by start-ups, especially in Intellectual Property, because of limited funds available in the early stages of their business. Secondly, the clinic provides law students with the commercial awareness that is vital to them obtaining employment at law firms – this is one of the only ways that students can gain these skills through their law studies.



"IPO Fast Forward funding has not only enabled us to run our Start-Ed clinics throughout the year with effective organisational support and targeted marketing, it has also given us considerable credibility as a project, earning the recognition of the broader IP community in the UK."

Dr David Collins Reader in Law, City University London and co-founder of Start-Ed

In addition to delivering these advice sessions, the Start-Ed project collected information regarding the nature of legal queries raised by start-ups, as well as their composition and demographic data of the start-up sector. This information will be used to create a suite of best-practice guides on legal issues commonly faced by start-ups, with the guides disseminated to the start-up community in London's Tech City and beyond.

Start-Ed has had an immensely successful year thanks to the funding provided by the Fast Forward Competition which allowed us to arrange support for session organisation, data collection and targeted marketing. We were able to run 20 clinic sessions during the year, serving more than 300 clients and involving the participation of more than 80 students and at least 10 solicitors. Client and student satisfaction was exceptionally positive and many more students and firms are interested in getting involved in the future.

A few of our students were able to arrange internships with the start-ups and at least one of our clients was able to attract significant funding for their start-up and is well on their way to becoming a successful commercial enterprise. The project has proved so successful that we have arranged several collaborations with other universities to help establish similar initiatives elsewhere.







### Creating Confidence in the Crowd: Copper-bottoming the Innovation Commons



**Project:** Creating Confidence in the Crowd: Copper-bottoming the Innovation Commons

Lead institution: Durham University

IPO award: £79,500

### Project contact details:

Dr Tim Hammond Director Business & Innovation Services Maple Wing Mountjoy Centre Durham University Durham DH1 3LE

**T:** 0191 334 3189 **E:** tim.hammond@durham.ac.uk We have now completed a pilot trial of the use of crowd sourcing for the recruitment of external consultants to assist with the commercialisation of university research projects using the Innovation Commons community web platform. Our aim was to develop an approach for derisking recruitment and selection, addressing specifically the issues of risk and reputational appetites of the university sector and the need for compliance with public procurement processes when advertising and recruiting research commercialisation consultancy projects from 'the crowd'. Since not all institutions have the resource and capability to manage this process, our partnership of Durham University and Northumbria University has been a useful test bed to develop good practice which is now available for sharing across the University sector.

With the assistance of Networthnet Limited we completed the development of the innovation commons platform, enabling access to the campaign from consultants already registered with the Innovation Commons and the promotion of new consultants from the network spheres "This was the first campaign on the new national portal which is now available for other HE institutions. The project has enabled us to recruit and match consultants to a number of early stage commercialisation opportunities, extending our reach and securing bids from a wider pool of consultants than we would otherwise have had access to."

> Dr Tim Hammond Director Business & Innovation Services Durham University

of Durham and Northumbria University technology transfer offices (TTOs).

The Durham & Northumbria Universities Kick-off Campaign ran live on the Innovation Commons website between January and February 2014. This was the first Innovation Commons campaign on the new national portal, with six pilot projects from Durham and Northumbria Universities made available for comments, voting and bids from registered members of the Commons. Successful bids for projects from consultants registered with the Innovation Commons community have been accepted through university legal and procurement processes, with contracts signed and commercialisation work underway.

A key achievement has been the preparation for and running of the Durham Northumbria Kick-off Campaign (the first Innovation Commons campaign on the new national portal). Having launched the platform using the funding allocated through our IPO Fast Forward award, the portal is now available for other HE institutions or consortium groups to use and to run campaigns. For the two participating institutions, the project has enabled us to recruit and match

consultants to a number of early stage commercialisation opportunities. This has extended our reach and enabled us to secure bids from a wider pool of consultants than we would otherwise have had access to.

Our biggest challenge was to develop an approach to de-risking recruitment and selection which works in a University setting – the approach has to fulfil the risk and reputational appetites of the university and be compliant with public procurement processes for recruiting research commercialisation consultants to work for the University. We were able to work closely with the procurement office at Durham University to establish an integrated procurement selection process and we are considering using the process for future consultant recruitment at Durham University TTO (we are happy to share our experience and templates with other TTOs and procurement offices).

The results from our pilot suggest that there is potential for enhancing the commercialisation of research and innovation from the university sector using an Innovation Commons approach to lower barriers that are limiting widespread adoption.







### **Angel Accelerator**



### Project: Angel Accelerator

Lead institution: Liverpool John Moores University

IPO award: £89,581

### Project contact details:

Emma Nolan IP & Commercialisation Manager Liverpool John Moores University Kingsway House Hatton Garden Liverpool L3 2AJ

**T:** 0161 904 6371 **E:** e.nolan@ljmu.ac.uk With reduced public funding for early-stage projects, much valuable intellectual property (IP) fails to achieve its true potential and impact. The angel and investor community has significant potential to support early stage IP, but is fragmented in the Liverpool City Region (LCR) and disjointed nationally from HEIs IP pipeline of opportunities.

We have developed Angel Accelerator: a programme to attract investor networks interested in early stage proof of concept, matching them with IP opportunities via an online platform and offering de-risk opportunities for investors.

Angel Accelerator will enable universities to bring the Tech City Launchpad model (matching private and public investment) to a wider market. Discussions with a user group of around 15 universities indicates that the prototyping of such a fund matching process would be of interest across the UK, however this is beyond the capability of any one university. "Fast Forward Competition funding helped us to achieve the UK's first equity crowd funded university spin-out – proving that even early stage, high-tech companies with a business-to-business model can be attractive to the crowd. Crowd funding has enormous potential to provide seed and growth funding for the HEI sector and through Angel Accelerator we have proved that model."

> Emma Nolan IP & Commercialisation Manager Liverpool John Moores University

We have targeted local and national angel networks and investor clubs to increase the flow of investment-ready opportunities. Angel Accelerator is encouraging these angels to invest by de-risking investment opportunities for them, pre-filtering ideas and helping companies to leverage further funding from public bodies such as the Technology Strategy Board (TSB).

Angel Accelerator builds on Open LivIn (a successful Jisc-funded initiative partnering Liverpool John Moores University, The University of Liverpool, TSB and LCR LEP). The project looks to syndicate angels for joint investment opportunities, providing them with corporate 'crowd wisdom' to help them identify market-worthy projects and matching these with public funding sources.

We developed two investor-ready opportunities which have been channelled through the Angel Accelerator model: Pulmorphix Limited and Microwaste Two Limited. Both of these opportunities were incorporated, with TSB SMART grant applications submitted. Both opportunities were invited to pitch to the North West Business Angel Association (NWBAA) Investor Club and both had angel investors interested in syndicating.

We were successful in securing £86,000 of TSB SMART funding for Pulmorphix. On the back of this we launched a successful equity crowd funding campaign via Crowdcube (http://www.crowdcube.com/investment/ pulmorphix-15023). The campaign was overfunded, raising a total of £125,000 against an initial target of £100,000. Pulmorphix was the first UK university spin-out to raise investment via equity crowd funding. We believe this is a model for investment in university spin-outs and for completing angel syndications via crowd funding, having secured 'anchor angels' to kick-start a funding campaign.

Crowdcube was responsible for 75% of equity crowd funded deals in 2013, completing only one fewer deal than the top funder – Scottish Enterprise. Crowdcube was the second overall top investor by deals in the first half of 2013 and, perhaps most importantly for early stage University opportunities, Crowdcube was the top investor for seed funding (Q3 2013 Beauhurst UK Equity Investment Review).

Angel Accelerator provides a national funding model, with excellent potential for sustainable, sector-wide impact. We have been offered our own 'white label' platform from Crowdcube and will continue to investigate platform integration possibilities. We are also continuing discussions about the potential of crowd funding with a number of universities.







## Accelerated commercialisation of non-patent Intellectual Property associated with healthcare apps



**Project:** Accelerated commercialisation of non-patent Intellectual Property associated with healthcare apps

Lead institution: NHS Innovations South East

### IPO award: £70,000

### **Project contact details:**

Dr Anthony Hill Senior Innovation Manager Harwell Innovation Centre Building 173 Curie Ave Didcot OX11 0QG

**T:** 07717 290176 **E:** tony.hill@nisehub.co.uk This project sought to develop one or more business models to support the accelerated commercialisation of non-patent Intellectual Property (IP) in the form of healthcare apps. An evolving healthcare system, the widespread use of mobile technology and a need to reduce healthcare costs are all contributing factors driving rapid growth in the use of apps. Medical apps account for more than 1.5% of a total app market which is currently doubling in size every year.

Not surprisingly the NHS is generating a lot of IP associated with a wide range of healthcare apps ranging from databases to patient and diagnostic tools. Whilst the innovations are derived from real clinical or patient need their commercialisation is challenged by a rapidly expanding and non-regulated market.

Intellectual Property Office is an operating name of the Patent Office

"This IPO Fast Forward award has enabled NHS Innovations South East, in partnership with Maidstone & Tunbridge Wells NHS Trust, to develop approaches to accelerate the commercialisation of software apps to enhance patient care. Our Trust is pleased to be the first organisation that will reap the benefit from this work and help us realise the potential in some of our innovations."

> Glen Douglas CEO, Maidstone & Tunbridge Wells NHS Trust

A wide variety of stakeholders have been engaged in this project to better understand the current best practice and challenges faced by healthcare organisations, academia, commercial developers, professional health bodies and the Medicines and Healthcare Products Regulatory Agency which is responsible for the regulation of software apps that function as a medical device.

According to a 2013 study by Localytics, 22% of all downloaded mobile apps are only used once. Successful exploitation of healthcare apps requires not just a monetary mechanism that values and sustains the innovation, but the way in which the app is developed and ultimately its user experience remain critical to its wider success and usage. Therefore, the accelerated commercialisation of mobile healthcare apps are equally dependent on getting the development phase right, planning ahead with regard to the commercial or business models, and making provision for appropriate digital marketing. This will assist the NHS and its technology transfer partner organisations to leverage non-patent IP in the growing global market.

As a result of the progress made since the project began, a dedicated "Healthy Apps" event was held in Maidstone on March 18th 2014. The event was well received and presented a great opportunity to discuss the challenges of successful healthcare app development and to share some of the output from the project. A separate and substantive document entitled "NHS Guide for developing Healthcare Apps" encompasses all of the learning outcomes from this project and can be downloaded via www. innovationssoutheast.nhs.uk.

The IPO Fast Forward award has allowed NHS Innovations South East to review current best practice; identify barriers and appropriate mitigations; understand the regulatory and governance environment more fully and confirm routes for commercialisation of both lifestyle apps and healthcare practitioner apps. It has also contributed to a more rapid assessment and validation of "app projects" at Maidstone & Tunbridge Wells NHS Trust, ensuring limited resources and effort are focussed on those apps that have the best chances of success and impact.







## Identifying Clinical Unmet Needs for Accelerated Innovation in Medical Technology



**Project:** Identifying clinical unmet needs for accelerated innovation in medical technology.

Lead institution: The Princess Alexandra Hospital NHS Trust

### IPO award: £73,700

### Project contact details:

Mrs Chris Cook Clinical Effectiveness Research and Innovation Manager The Princess Alexandra Hospital NHS Trust Hamstel Road Harlow CM20 1QX

**T:** 01279 827886 **E:** chris.cook@pah.nhs.uk The aims of this project were to bring together academic, industry and clinical stakeholders in order to identify and address unmet needs within key clinical pathways; to accelerate innovation in medical technology; and build sustainable collaborative knowledge transfer networks for the Princess Alexandra Hospital NHS Trust. In doing so this work succeeded in supporting the Trust in planning an innovation strategy.

Our objectives were to:

- Prioritise areas of clinical focus through a structured review and translation process;
- Provide workshops bringing together industry, academic and NHS stakeholders to disseminate needs, explore opportunities and forge collaborative relationships;
- Translate unmet needs and forge collaborative relationships through the establishment of an innovation group; and

"The NHS is undergoing significant transformation and facing a number of challenges in terms of care outcomes and increasing costs of an ageing population. In response to these challenges, the Princess Alexandra Hospital NHS Trust realised it has to identify unmet needs and innovate earlier. This IPO funded project has enabled us to do this."

> Marc Davis Director of Strategic Development The Princess Alexandra Hospital NHS Trust

 Provide themed events to inform industry and academia of NHS procedures and processes under this project.

During this project NHS leaders were identified and workshops were held to elucidate potential areas of unmet need. The departments of Pathology and Radiology were then engaged in an 'in-depth unmet needs analysis' which consisted of surveys, workshops, group and individual interviews. Key unmet needs were further investigated to deduce why those needs existed and what barriers needed to be overcome.

As part of this work a number of innovation projects were also identified including: Metasin for Breast Cancer Screening and Digital Histopathology using newly available instrumentation from Roche Diagnostics. During this project a collaboration agreement with Roche Diagnostics was concluded and the Trust is now evaluating traditional histopathology methods and comparing these against Roche's new digital instrumentation. Early results of the study have shown the new digital pathology instrumentation enables quicker and more accurate histopathology diagnosis. The approach allows faster and wider communications between pathologists within and outside the United Kingdom to obtain 2nd and 3rd opinions on tissue diagnosis. The application also has wider advantages including: remote reporting, easy accessibility and value as a research tool.

During this project the Trust pathology department developed and tested a metasin assay which is able to detect metastatic breast cancer in sentinel lymph nodes in the intra-operative setting, whilst the patient is under anaesthetic. Metasin delivers results in under 24 minutes and empowers the surgeon to carry out (if necessary) clearance of the axillary lymph nodes. This approach excludes the need for a second operation, informs the patient and clinical teams, resulting in savings to the NHS, reduced patient anxiety and enables appropriate planning of cancer treatment. This complements the Trust's current strategy of implementing Intraoperative Radiation Therapy, which was a strategic decision taken on evidence generated as part of this IPO funded project.

As a result of this project, the Princess Alexandra Hospital NHS Trust has both board level and executive level champions for innovation and has initialised an Innovation Committee. In addition, the Trust plans to provide innovation ambassador training to staff to enable innovation in their workplace to be supported and developed for staff, the NHS and society as a whole. All outcomes of this project were displayed at the NHS Health and Innovation Expo, March 2014.







## LocalisE – Promoting business growth in North Essex via the Enterprise Agency network



**Project:** LocalisE – Promoting business growth in North Essex via the Enterprise Agency network

Lead institution: University of Essex

**IPO award:** £16,200

### **Project contact details:**

Phineas Wenlock Project Manager University of Essex Wivenhoe Park Colchester CO4 3SQ

**T:** 01206 874147 **E:** pwenlock@essex.ac.uk LocalisE is a strategic alliance between the University of Essex and the Colchester, Tendring and Ignite (Braintree) Enterprise Agencies supported by the local councils for North Essex. Its aim has been to aggregate business intelligence and to pinpoint local businesses that could benefit from University support. In doing so it has created new opportunities for innovative businesses in the North Essex area, assisted the Enterprise Agencies in broadening their offer to small business, and demonstrated the relevance of University research and expertise to everyday business situations.

The projects aims and objectives were to aggregate and share databases of business contacts across the partnership; undertake analysis to identify new opportunities for University Knowledge Exchange activity; create a 'matching' process to map potential IP and related University expertise to specific businesses; and pilot an outreach programme to businesses with innovation potential. "As a small not-for-profit enterprise agency, we were delighted that the potential of our project was recognised by the IPO and funding awarded to enable us to participate. The pilot confirms that our clients have much to gain through collaboration with their local university in terms of introducing innovation."

> Seamus Clifford Chairman of Colbea

Each of the parties taking part in the project have benefitted :

• The businesses have gained the opportunity to discuss ideas and have a fresh pair of eyes examine the way they work, which is leading to new opportunities for their business.

- The University has been able to explore new applications of its skills, knowledge and IP and realise impact from its research.
- The Enterprise Agencies have been able to offer new and valuable services to their clients, supporting their aims for thriving businesses and economic growth.

2013 Fast Forward Competition funding has enabled the partners to pilot a new way of working together which has proved to be successful. The University of Essex intends to use the model to work with new partners in order to support a wider set of agencies and businesses in the region while the project partners intend to use the learning from the pilot to maintain their strategic alliance.









### **Graduate Innovation Office**



**Project:** Graduate Innovation Office

Lead institution: University of Salford

IPO award: £58,000

#### **Project contact details:**

Prof Allan Walker University of Salford Centenary Building Peru Street Salford M3 6EQ

**T:** 0161 295 6153 **E:** A.J.Walker1@salford.ac.uk The Graduate Innovation Office established an off-campus design and development office, supporting ten University of Salford graduates developing innovation within the creative and digital industries. In three application rounds, proposals were sought from University of Salford graduates with ideas for innovation to build new businesses, products, or technologies. Successful applicants received a package of cash support, training, mentorship and opportunities to pitch their ideas within professional environments. The Graduate Innovation Office was led by the School of Arts and Media and delivered with strong partnership support from Student Life Enterprise and the Technology Transfer Office at Salford.

The Graduate Innovation Office's central aim is to help promising early career professionals build their ideas and skill base for product development, business start-up and entry to market. To achieve these aims, the University of Salford project team focused on three elements of the graduate programme:

1. Supporting graduates to bridge the gap between great ideas and industry innovation via specialist training and mentoring.

"The inaugural year of the Graduate Innovation Office has been a fantastic success, extending our experience in IP commercialisation and innovation support to some of the University of Salford's most promising creative alumni. Support from the Fast Forward competition has sparked innovative thinking and new streams of cross-institutional work, creating solid foundations to enhance future graduates' innovation and entrepreneurship."

> Sarie Mairs Slee Associate Head of School, School of Arts and Media University of Salford

- 2. Support their ability to articulate their product/service in a clear and compelling way to targeted audiences (i.e. potential partners or investors).
- 3. Develop their business and collaborative skills and help make the professional connections necessary to move their ideas toward market reality.

The Graduate Innovation Office piloted two models for innovation incubation and support. Through the 8-month model, graduates' formal training, one-on-one support and peer work on innovation projects was divided by three 'pitch' events to design and innovation consultants. The 8-week model offered a more focused package of non-cash support which also culminated in a pitch. At these 'pitch points the University made decisions to offer eight further weeks of training/mentorship/support along with a small cash budget for development. Both models led to a final pitch to an audience of industry partners and business angels in March 2014. Six graduates progressed successfully to this final event, working from fashion, product and software design to bespoke translation and imaging services for the creative/digital sectors.

The Fast Forward funding has been invaluable in piloting the Graduate Innovation Office. It has secured working space at two leading centres for digital SMEs in Northwest England: The Sharp Project and The Landing, MediaCityUK. It has brought in expertise from IP lawyers, marketing firms, and enterprise development consultants, complimenting academic expertise with real-world perspectives. Overall, the Fast Forward funding has provided resource and common ground for crossinstitutional work at the University of Salford, providing industry access and longevity in support of our graduates' innovation.







### **Meet the Primes**



Project: Meet the Primes

Lead institution: University of Southampton

IPO award: £64,750

### Project contact details:

Simon Bond Innovation Director SETsquared University of Bath Innovation Centre Broad Quay Bath BA1 1UD

T: 01225 388682 E: simon.bond@setsquared.co.uk The Meet the Primes project aims to broker introductions between innovative solutions providers from the SETsquared partnership and large organisations, in doing so it creates ongoing Open Innovation (OI) relationships between SETsquared and major corporate partners.

In order to achieve these aims the project carried out a programme of activities, beginning with exploring and classifying how major corporate entities approached OI and understanding the implications of different corporate approaches to OI in respect of how SETsquared should effectively interact with different corporate partners. The project also tested the expectations of corporate entities in respect of their interactions with innovators including, for example, their approach to IP development and usage. This work was supplemented by bringing innovators into contact with Corporates through a series of up to ten "forums" and disseminating the results of the work so far to EDO, LEPS and other HEIs. "Fast Forward Competition funding has enabled SETsquared to introduce some 50 early-stage businesses to individuals with direct responsibility for open innovation in some of the world's biggest corporations – we're grateful to the IPO for investing in this project and are delighted to be taking it forward as a permanent part of the SETsquared portfolio."

> Simon Bond Innovation Director, SETsquared

Progress achieved over the 12 month period has been exceptional. Eleven national and global organisations have committed to working closely with SETsquared on OI opportunities and 50 innovation opportunities have been introduced to our Corporate Partners (the "Primes"). Broad sectoral coverage has been achieved in areas such as life sciences; healthcare products and services; mobile technologies; aerospace and defence; design engineering; business applications and systems integration; financial services; and semi-conductors. The project has also reached a global audience, with interactions with organisations from Australasia, Japan, North America, France, Netherlands, and Sweden.

As a result, innovative approaches to interactions and information exchanges with Corporate Partners have been

achieved, leveraging IT and video media. This has enabled SETsquared and SETsquared innovators to achieve global reach along with a substantial reputational uplift for SETsquared with the Corporate community.

The benefits of this project are clear, with SETsquared building a leading capability in understanding how corporate entities approach Open Innovation at a global level. This knowledge can be of major benefit to other innovators and facilitators across the UK as well as to SETsquared university research teams, SME companies and alumni businesses. We have also developed an excellent understanding of how best to approach OI from a Corporate perspective and we're now able to offer consulting advice to major businesses on how best to design and build OI environments that produce success. This has also enabled us to test and build an OI business model from an HEI perspective that is structured and resilient and enables HEIs to create sustainable OI relationships with a broad range of corporate partners.

The provision of Fast Forward funding has enabled SETsquared to engage external advisers to build an effective methodology for engaging with Corporate Partners to understand their approach to OI and their OI domain requirements. We have also built needs requirements with a substantial number of Corporate Partners and secured the longevity of the project by training and coaching SETsquared ventures in their interactions with Corporate Partners.







# Develop and Test an IP Diagnostic Tool for 'Build to Print' SMEs



**Project:** Develop and test an IP Diagnostic Tool for 'Build to Print' SMEs

Lead institution: University of the West of England

IPO award: £85,000

### Project contact details:

Dr John Bradford Senior Lecturer – Knowledge Exchange University of the West of England Frenchay Campus Bristol BS16 1QY

**T:** 0117 3286695 **E:** john.bradford@uwe.ac.uk Across the UK there are many Small to Medium sized Enterprises (SMEs) offering a Build-to-Print service to their customers. The global nature of engineering supply chains, especially in advanced engineering and aerospace, leads to a highly competitive market. SME's need to respond to this threat otherwise there is every likelihood that over the next ten to fifteen years these companies may go out of business.

Build-to-Print SME's don't have their own product and therefore have not developed an in-house capability for recognising the value of their design and process innovations. This lack of awareness of their capacity for innovation, and its potential value to the business, is a significant barrier to commercial exploitation and risk management. "Fast Forward Competition funding has provided the intellectual space and additional resource required to develop, and pilot, a novel tool to identify intellectual property. Working from the perspective of build-to-print SME, the tool is live and in continuous development by the University, supporting our mission of fostering innovation."

> Dr John Bradford Senior Lecturer – Knowledge Exchange University of the West of England

This project used the research expertise within the University of the West of England (UWE) to develop a diagnostic tool for the identification of IP within SMEs. UWE has worked extensively with the West of England Aerospace Forum (WEAF), most recently on the Aerospace & Advanced Engineering iNet innovation network. This collaboration provided UWE with an extended network of SMEs both as an experiential foundation from which to develop the toolkit, and as a pool for identifying pilot companies. This extended network represented over 700 SMEs in the South West of England alone.

The use of a process-based view of the firm resonated with the target audience (engineering, build-to-print, aerospace, SME, companies). This suggests that adopting IP audit approaches to the language and culture of the target audience, rather than the delivery route (IP attorneys & lawyers), is beneficial. Four firms were already considering new products but had not fully explored the associated IP issues. By highlighting both the registerable IP and the tacit IP embedded within those products, the companies have been able to develop more rounded business plans.

One example was C&F Millier, a firm with significant CNC Lathe expertise that had, through personal contacts, developed a consumer product. This was being marketed as a product that "...exceeds all UK Civilian & Military aerospace sector requirements..." and was proving very popular with high-end niche customers. No patents, trademarks, or designs had been filed to protect their innovations. They are now exploring these avenues both to protect future innovation and to benefit from the tax relief available from Patent Box.

Three firms were able to identify specific innovations in their manufacturing processes that might be patentable. One in particular had developed a potentially Patentable jigging fixture that allowed them to machine angled features on large diameter shafts without investing in a very expensive (and single-purpose) multi-axis machine.

Trademarks and copyright were the most familiar forms of IP with the firms visited, however, the understanding of what constituted copyright was weak. Most firms did not appreciate that technical drawings produced by the firm were their copyright. Two companies visited in particular saw an opportunity for developing their IP through Trade Marks, as it would help establish and differentiate their brand in what is a fairly rigid procurement system. It was also felt by one firm to be an opportunity to assert their leadership in what is largely a commodity market.

