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The first magazine solely dedicated to university-industry innovation is published. An exciting moment!

While the importance of university-industry relationships is rising sharply, there is no means to widely and periodically disseminate the latest developments directly reported from both academics and practitioners. As a leading network in this area, and driven by the passion and the enthusiasm of our members and team, we are committed to change the status quo.

Therefore, we are delighted to present the first issue of the University-Industry Innovation Magazine (UIIM), which aims to gather and broadly disseminate the most relevant insights in the field directly, reported by those playing a leading role. With a mix of highly renowned authors from academia, industry and the public sector and offering everyone the possibility of submitting a piece, the magazine will be distributed among thousands of experts worldwide and freely available on our website.

With news, interviews, case studies, opinion articles, research articles and event / book outlooks and reviews being the main article formats, the magazine targets all stakeholders involved in university-industry interaction, including higher education institutions, research organisations, businesses, intermediaries (such as TTOs, Science Parks, Incubators), governmental bodies as well as networks & associations.

The main topics addressed in the magazine include but are not limited to university-industry relationships, entrepreneurial universities and collaborative innovation. It is important for us to clarify that the term innovation in the name of the magazine refers to both innovation as a result of university-industry interactions and also innovating within the interaction process itself. Therefore, we highly value contributions targeting any channel of university-industry interaction.

Also the magazine does not only intent to share insights (one-way communication), but also to create discussions through readers’ comments. Therefore, we welcome comments to any content published in the previous issue of UIIM, which can range from constructive critics to additional information or opinions. These comments will be published in a specific section in the next issue of UIIM.

We would like to express our appreciation to all authors of the articles in this issue. It is their generous contributions of time and effort that made this very first issue of UIIM possible. At the same time, we would like to encourage all our readers to consider sharing their knowledge and experience in university-industry innovation with the community by submitting an article. An overview of desired content and format can be found on our website (www.magazine.uiin.org).

Last but not least we would like to thank all those who have supported us in turning the initial idea of a magazine solely dedicated to university-industry relationships into reality.

We hope you enjoy reading UIIM and are looking forward to receiving your feedback!
University-Business Cooperation (UBC) is increasingly being named as a key activity to address increasing global competition being faced by governments, businesses, higher education institutions (HEIs) and students. However, many of those involved in developing policy at a national, regional or local level seem to focus heavily (too heavily at times) on a limited form of ‘knowledge transfer’, specifically on research cooperation and commercialisation of research outcomes as well as on student start-ups. This ‘limited’ view is driven by the nature of these types of cooperation, which provide direct and measurable outcomes and more specifically contribute revenue to stakeholders. Despite this, it is becoming increasingly clear that there are many types of cooperation that provide increasingly-recognised value for stakeholders through more formalised student and staff mobility, curriculum development and delivery, governance and lifelong learning cooperation and indirectly through ‘spill-over effects’. Furthermore, these types of cooperation are often developed and managed separately e.g. TTOs manage commercialisation efforts while the careers offices manage students placements, despite increasing evidence that they are related and potentially would benefit from a more holistic approach to cooperation with business. These are some of many challenges that face the modern knowledge transfer professional that will be addressed in this article.

There are many forces behind university and business cooperation

I am going to make a leap of faith by assuming that the UIIM readers do no need to be sold on the concept of why UBC is important. Nevertheless, we have seen countless times in our experience working with practitioners that it is important for both practitioners and academics to be clear about the forces that are driving the push UBC and where they are coming from, so I will provide a quick background. Central to Horizon 2020, the European Union’s (EU) economic growth strategy for the coming decade, is the higher education modernisation agenda with a focus on encouraging more connected and efficient
relationships between the triple helix actors: government, business and research institutions, specifically HEIs. With UBC being seen as an essential driver of knowledge-based economies and societies, the extraction of value from cooperation between HEIs and business has been found to assist (i) HEIs to cope with decreasing public funds, (ii) business to cope with ever greter global competition (iv) governments to underpin regional growth and (iv) students to handle increasingly competitive and changing job market. These direct outcomes are said to then benefit society indirectly by creating economic growth, employment and an increase in living standards. But what does this mean for HEIs, businesses and their cooperation? In essence it could be summarised as follows: HEIs are increasingly moving beyond traditional roles of education and research to include the ‘third mission’ of knowledge exchange whilst business are seeking innovative products and services, new knowledge and thinking as well as superior human resources.

There is a need for a bigger picture

One of the crucial perspectives that seems to be lacking in the management science of UBC is an understanding of a complete ‘ecosystem’, embracing the various elements involved in its management (or study). Without trying to promote our own work, the State of European UBC Report published by the Science-to-Business Marketing Research Centre in Germany in 2011 provides the most complete overview that we have yet seen of the elements that interact within the ‘UBC ecosystem’. The UBC Ecosystem Model documents the different elements involved in any type of UBC and describes how the act of UBC is created, affected, or supported by other elements. The model also captures the complex interrelationships and co-reliance among these elements and provides a basis of understanding of how value is created through UBC in the following five key areas:

1. **Indirect outcomes** – the indirect impact of UBC on society through economic and social development.
2. **Direct outcomes** – the direct outcomes of cooperation including the contribution to HEIs through research, education and knowledge transfer as well as the benefits to business and students.
3. **UBC** – the different types of UBC that can be undertaken.
4. **Influencing factors** – the factors that influence the extent of UBC undertaken and include situational factors (such as type of HEI, faculty, country, years of experience in business, etc.), barriers, drivers and perceived benefits of UBC. These influencing factors need to be considered in any attempts to undertake UBC.
5. **Supporting mechanisms** – the actions that can be undertaken to stimulate UBC, including strategies, structures and approaches, operational activities and framework conditions.
6. **Key stakeholders** – those stakeholders who are supporting or participating in UBC

The UBC Ecosystem diagram below can be used as a template for governments, business or HEIs to understand and analyse their own UBC environment; however, the remainder of this article will focus on the perspective of HEIs in discussing these different elements.

---

### UBC Ecosystem Model

**Indirect outcomes**

| Economic and social contribution to society generally |

**Direct outcomes**

| Contribution to students, academics, HEIs and business |

**University-Business Cooperation types**

- Collaboration in R&D
- Academic mobility
- Student mobility
- Commercialization of R&D results
- Curriculum development & delivery
- Lifelong learning
- Entrepreneurial
- Government

**Influencing factors**

- Benefits
- Drivers & Barriers
- Situational Factors

**Supporting mechanisms**

- Strategies
- Structures & approaches
- Activities
- Framework Conditions

**Key stakeholders**

- HEIs
- Business
- Government

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"THE UBC ECO-SYSTEM MODEL (...) DESCRIBES HOW THE ACT OF UBC IS CREATED, AFFECTED, OR SUPPORT-ED BY OTHER ELEMENTS"
Recognition of a wider understanding of UBC is essential

A number of papers and reports exist that look at interaction or cooperation between HEIs and business, however, most focusing on a narrow subset of more tangible modes of cooperation or recognise ‘softer’ forms of interaction between HEIs and business, such as networking and acquaintance. The State of European UBC Report (2011) named eight types or modes of UBC recognising both formal and informal collaboration. These eight different types could be classified into three themes based upon the degree to which they are correlated. In the table below, the classification of the types of UBC and their explanations can be found.

<table>
<thead>
<tr>
<th>Area of cooperation</th>
<th>Type of cooperation</th>
<th>Examples of cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D-related cooperation</td>
<td>Collaboration in research and development</td>
<td>Cooperation including joint R&amp;D activities, contract research, R&amp;D consulting, cooperation in innovation, joint publications with firm scientists/researchers, joint supervision of theses with firm scientists/researchers (Bachelor, Master, PhD) in cooperation with business and student projects in cooperation with business.</td>
</tr>
<tr>
<td>R&amp;D-related cooperation</td>
<td>Commercialisation of research and development results</td>
<td>Commercialisation of scientific R&amp;D results with business through disclosures of inventions, patenting and licenses.</td>
</tr>
<tr>
<td>Cooperation through mobility</td>
<td>Mobility of staff</td>
<td>Temporary or permanent movement of teaching staff or researchers from HEIs to business; and employees, managers and researchers from business to HEIs.</td>
</tr>
<tr>
<td>Cooperation through mobility</td>
<td>Mobility of students</td>
<td>Temporary or permanent movement of students from HEIs to business</td>
</tr>
<tr>
<td>Non-contract cooperation</td>
<td>Curriculum development and delivery</td>
<td>Cooperation in the development of a fixed programme of courses, modules, majors or minors, planned experiences as well as guest lectures by firms within undergraduate, graduate, PhD programmes or through further professional education.</td>
</tr>
<tr>
<td>Non-contract cooperation</td>
<td>Lifelong learning</td>
<td>The provision of adult education, permanent education and/or continuing education to business employees by HEIs involving the acquisition of skills, knowledge, attitudes and behaviours at all stages of life.</td>
</tr>
<tr>
<td>Non-contract cooperation</td>
<td>Entrepreneurship</td>
<td>Actions involving HEIs towards the creation of new ventures or developing entrepreneurial mind-sets in cooperation with business.</td>
</tr>
<tr>
<td>Non-contract cooperation</td>
<td>Governance</td>
<td>Cooperation between HEI and business at a management level. This includes having business leaders involved in HEI decision-making or sitting on the boards of HEIs, as well as being involved at a faculty management level. Conversely, governance also includes academics involved in firm decision-making or sitting on the boards of firms.</td>
</tr>
</tbody>
</table>

Table: Types of University-Business Cooperation (UBC)
Source: Davey, Baaken, Galan Muros, Meerman (2011)

Cooperation between HEIs and business in Europe

In terms of understanding how the UBC ecosystem and its elements relate, an application of the concept in an empirical study might prove the most useful explanation tool. The State of European University-Business Cooperation study we undertook in 2011, where 6,280 responses from European academics and HEI representatives in 33 countries were received, provides the right canvas for our illustration, with nine major findings. The study measured the perceived extent of development of UBC, identified the greatest barriers and drivers confronting UBC as well as recording the development of mechanisms supporting cooperation.

1. **European UBC is at an early stage of development** – with approximately 3 of every 5 academics and 1 of every 3 HEIs at a low extent of UBC.

2. **There are eight types of UBC which are all inter-related.** Furthermore, those types of UBC offering: (i) more direct, (ii) measurable, and (iii) promotable benefits being the most developed ones. The most developed types of cooperation are collaboration in R&D, mobility of students, commercialisation of R&D results. The least developed type of cooperation is academic mobility.

3. **All situational factors** (such as type of HEI, faculty, country, years of experience in business, etc.) **have a significant contribution in explaining the extent of UBC, though only a few of them have practical implications.** One result with practical implications includes the finding that those academics with some experience working in business undertake a significantly higher extent of UBC.

4. **Funding barriers and bureaucracy are the highest barriers to UBC, but the removal of barriers does not create UBC** – For HEI representatives ‘funding barriers’ were the largest barriers to UBC. For academics, ‘funding barriers’ indeed were significant barriers; however, they named ‘bureaucracy within or external to the
HEI as clearly the most important one. It must be noted thought that simply removing barriers will not automatically create UBC, for that we need the presence of drivers and perceived benefits.

5. **Personal relationships drive cooperation** – In Europe, relationships drivers such as ‘existence of mutual trust’, ‘existence of mutual commitment’ and ‘having a shared goal’ were nominated as the most important drivers of UBC. This suggests that greater effort to bring academics together with business could be a focus for further improvement of cooperation.

6. **Academics perceive lesser personal benefit from UBC** – Academics perceive the primary winners from UBC to be: students, then businesses, in third place HEI, and as the lowest their personal benefits. These results imply that academics need to receive greater personal benefits from their HEI in terms of chances of promotion in order to increase UBC activity. Similarly, HEI representatives state that mostly student and business get the major benefits from UBC, with HEIs in the third place and society receive the lowest benefit from UBC.

7. **The creation and development of supporting mechanisms are critical for UBC with substantial room for improvement in Europe** – European HEIs are moderately committed to UBC in a formal sense, with highly developed documentation strategies, although the real dedication of resources (implementation strategies) is still low. Longer-term commitment to UBC is required, as structures require a high financial commitment and long-term perspective, and are mostly moderately developed. Lastly, whilst UBC activities designed to engage students with business are moderately developed, those activities aimed at academics such collaboration activities facilitating academics interaction with business and ‘Entrepreneurship education offered to academics’ still have significantly more room for improvement.

8. **Everyone has a role to play** – There are substantial roles for governments to provide support in order to overcome barriers and implement supporting mechanisms, for HEIs and intermediaries to facilitate, support, fund and motivate academics to interact with business, for businesses to reach out academia and seek to build and fund relationships, as well as for academics to recognise the benefits than can come from UBC. Ideally these UBC actors should work in a coordinated and integrated manner since if only one of those actors does not perform actively, it can be enough to inhibit the whole momentum.

9. **Greater experience and good practice exchange is necessary** – In order to address some of these issues named above in the various areas of the UBC ecosystem, there is a need for greater exchange of experience and good practice, including the development of more usefully packaged ‘solutions’ that have already been successfully implemented. This implies a need for greater exchange of good practice, relevant case studies and ‘bite-sized’ elements that can help to problem solve issues faced by academics, HEIs, business and government. Networks such as UIIN should play a vital role in facilitating the collection and exchange of experiences.

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Todd Davey

Todd Davey was the Project Manager for the largest European study into University-Business Collaboration (UBC) completed for the European Commission conducted in 2011 and is a passionate speaker on the topic of UBC. He is Manager International Projects at the Science-to-Business Marketing Research Centre, the author of the University-Business Cooperation Information Portal (www.ub-cooperation.eu), Non-Executive Director at UIIN and Director and the start-up apprimo, an innovation consulting firm.

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Coventry University is a forward-looking and modern university with a proud tradition of providing high quality learning and applied research, and an established presence regionally, nationally and internationally with over 17,000 students in faculties of Business, Environment and Society; Engineering and Computing; and Health and Life Sciences and School of Art and Design operating alongside a Campus in London and the new Coventry University College. In November 2011, Coventry was named as ‘Entrepreneurial University of the Year’ in the United Kingdom and it has been identified as one of the top 25 universities in England for working with business; supporting on an annual basis over 9,000 small-and-medium enterprises and almost 500 large companies.

Business and community engagement at Coventry is driven by a strong applied research strategy and realised through delivery activities related to innovation, entrepreneurship and knowledge and technology transfer both within the faculties of the university and its subsidiary companies. This article provides an overview of the structures and activities adopted by Coventry to support University-Business Cooperation and to meet its mission of being ‘a dynamic, creative and enterprising university’.

University-Business cooperation activity is led by the Business Development Group of the University which includes Coventry University Enterprises Ltd, ACUA Ltd, and the campus located Business Development Support Office, the Business Development Manager/Officer Team, Corporate Partnership Unit, Strategic Development Team, Institute of Applied Entrepreneurship and Health Design Technology Institute. The Business Development Group is led by a University Deputy Vice Chancellor.

The Strategic Development Team has responsibility for developing new applied research initiatives; increasing international applied research activities; and linking into, translating and applying national and international policy. As a result they ensure that the University takes full advantage of strategic opportunities on a National European and Global basis. A key driver in recent years has been the development and mobilisation of cross-university applied research. This has been driven predominantly through the ‘grand challenge’ initiatives, which focus on seven key global issues (Ageing Society, Digital Media, Human Security, Integrated Transport, and Logistics, Low Carbon Vehicles, Low Impact Buildings and Sustainable Agriculture and Food), where excellence in research and business development can make a significant contribution to global challenges.

The University values the partnerships it develops and believes in investing time and effort to strengthen these relationships, turning them into long-term strategic alliances. Just as these alliances influence teaching, so business solutions are supported by the latest thinking and research from industry-leading names at the University. The Corporate Partnership Unit has responsibility for coordination and management of the Corporate Partnership Strategy, market research and communication and coordinating applied research events and developing
publicity materials. The University has a number of strategic alliances across different sectors of industry. These partnerships enable the University to develop opportunities and raise its profile, leading to better quality of services delivered to students. The partnerships take many different forms ranging from long-term strategic alliances with larger companies to smaller project-based collaborations with SMEs. These are not only with commercial organisations but also with public sector bodies and government organisations.

Promoting academic engagement in applied research is a team of 25 Business Development Managers and Business Development Officers. Predominantly faculty and applied research institute aligned, this team has responsibility for partnership and project development and for facilitating income generating activities from both the private and public sector. Supporting income generation and contract management is a Business Development Support Office that has a staff of over 50 people engaged in pre-award activities including; opportunity scanning and communication, bid writing and costing and contract negotiation and a post award team engaged in activities including; project start-up support, research financial and administration support and project close-down.

In addition to its faculty and applied research institutes the University group incorporates a number of wholly owned subsidiary companies including Coventry University Enterprises Ltd and ACUA Ltd. Coventry University Enterprises Ltd. (CUE Ltd.) is the organisation through which the University runs much of its commercial, income-generating and business-partnership work. CUE is one of the largest university enterprise organisations in Europe, within the field of business support and technology transfer. It delivers an activity portfolio covering a broad spectrum from pre-incubation and incubation support on Coventry University Technology Park through to spin-out company formation and development, with internationalisation business advice. Having provided incubation support for the past 15 years, CUE is seen, and works hard to be the market leader in much of its delivery activity, including its renowned mentoring, advice and specialist support programmes for young entrepreneurs, SME’s and large enterprises on a regional, national and international basis.

The activities of CUE Ltd also incorporate the work of two University applied research institutes; the Institute of Applied Entrepreneurship (IAE) and the Health Design and Technology institute (HDTI). The IAE is home to all enterprise and entrepreneurship activities at Coventry University. The IAE offers the region and its students, graduates and staff a broad range of entrepreneurial support and services for every level and stage of business start-up and growth. The HDTI focuses on three integrated activities: (i) assisting SMEs and larger businesses to design, test and market products, techniques and services required for improved healthcare in the community and for self-management of health and well-being by the patient (ii) researching into all aspects of the assisted living and the ageing populations market; user led design, standards, product design, evaluation, etc. and (iii) educating and training students, community based healthcare professionals, carers, and self-managing patients themselves to make full use of assistive technology, therapeutic techniques, products and services.

Established in 2008, ACUA Ltd is a second subsidiary that has grown from a pioneering University Employer Engagement Project into a limited company providing a range of business development and capability improvement programmes. ACUA Ltd works with organisations to embed higher level skills and qualifications into development programmes currently running or planned. Programmes are accredited by Coventry University. Starting at Certificate level, the qualification route can build through Foundation Degree to full degree and potentially beyond.

The Coventry University approach identifies a holistic approach which incorporates R&D collaboration, R&D commercialisation, lifelong learning, entrepreneurship and governance. It is this holistic approach and a vision of what cooperation can achieve that has led Coventry to being a ‘thought leader’ in University-Business Co-operation.

**Clive Winters**

Clive Winters is Assistant Director of Coventry University Enterprises Ltd. He has over 13 years experience working within the private and public sectors on the design, development and delivery of business development, innovation, entrepreneurship programmes and consultancy assignments linked to Knowledge and Technology Transfer, Business Incubation and Science and Technology Park development in the United Kingdom and Europe.

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In addition to the key objectives of excelling in research and education, universities worldwide are increasingly tasked with fulfilling and enhancing their third mission of service with a concerted effort to help stimulate and to sustain economic development. These activities coincide with recent deep economic recessions and as regional and national governments are challenged to initiate and sustain successful growth policy. While, more than ever, entrepreneurship and innovation are called upon to stimulate economic growth, it is clear that governments, businesses, and societies differ in how they expect universities to contribute to innovation and knowledge-based growth as do regional challenges and assets for stimulating and sustaining such growth.

Recognizing these important global challenges, The Norwegian Science Council is funding a collaboration among researchers from Norway, Finland, Sweden, United Kingdom and the US who are working together to develop case studies of entrepreneurial universities embedded in different regional contexts and to compare how selected universities cope with accepting and fulfilling their third mission with regards to contributing to or participating in regional and national innovation ecosystems. The researchers are looking for an understanding of the uniqueness of the history of a university’s development and operation in relation to its institutional and regional context. The objective is to learn from an enhanced understanding of the interrelationship and interdependence between institutional context, culture, and the viability of different innovation ecosystems rather than searching for one ideal model.

Our research is based on scientific literature and what different authors have already concluded about the role of universities in regional innovation ecosystems. Of key importance is effective collaboration across business, academia, and government sectors at the regional level as emphasized in ‘The Triple Helix’ (Viale and Etzkowitz, 2010). But, as Vorley and Nelles (2008) concede, universities do not exist in a vacuum as they stress the important impact of public policies to encourage an integrated approach. In short, while universities are important institutional actors in order to understand their broader significance it is necessary to see their role as players in larger networks and systems (Butler and Gibson, 2011).
As a related concept, we have considered the importance of better understanding the key role of industry clusters or organization fields can be traced to Alfred Marshall, who noted that industries tend to cluster in distinct geographic districts that tend to specialize in the production of narrowly related goods and being knowledge spillovers the cause (or result) of this clustering. Schumpeter (1934) and Porter (1990) continued down this theoretical path when these scholars noted that innovative breakthroughs tend to distribute themselves irregularly over time in specialized clusters of activity. Kozmetsky (1993), Gibson and Rogers (1994), and Christian et al., (2012) reinforced the concept of the region or community in the cluster discussion by taking the firm as one unit of analysis embedded in a regional ecosystem that includes key public and private sectors. In short, the concept of organizational field fulfills the vital role in connecting organization studies to wider macrostructures – sectorial, societal, and transnational (Scott, 2008). As DiMaggio (1986:337) asserts, “the organization field has emerged as a critical unit bridging the organizational and the societal levels in the study of social community and change”. Manuel Castells (1996, 2000) in The Rise of the Network Society describes how economies throughout the world have become globally interdependent, introducing a new form of relationship between economy, state, and society in a system of variable geometry.

The book Universities and Innovation Ecosystems: Case studies and policy implications (Foss, Gibson, and Hodgson, forthcoming) is based on cases studies of different national and regional contexts as Independent Variables impacting universities as the Intervening Variable and regional innovation ecosystem development as the Dependent Variable (see Figure below).

"THE ENTREPRENEURIAL UNIVERSITY HAS A DIRECT IMPACT ON REGIONAL INNOVATION ECOSYSTEM DEVELOPMENT"
As depicted, the entrepreneurial university has a direct impact on regional innovation ecosystem development and is also impacted by feedback loops from the regional innovation ecosystem. We draw upon the work of Vorley and Nelles (2008) that suggests with positive feedback loops, the Third Mission can reinforce a university’s historically prominent missions of teaching and research. Another important issue is the degree to which triangulating teaching, research, and third stream activities may reinforce the respective dynamics of each through recursive and reciprocal development. As stated by Vorley and Nelles (2008:131):

“...the Third Mission presents an opportunity for institutional development beyond third stream activities, allowing universities to (re)define themselves as well as consolidate the (core) missions of teaching and research. Indeed, engineering a recursive and reciprocal dynamic between the three missions poses a greater challenge to the contemporary university than privileging or excelling in any one mission.”

By focusing on selected cases from developed regions in Scandinavia, the UK, and the US we are able to focus discussion on targeted issues of importance leading to important policy recommendations that have produced significant results to the benefit of nations and regions. We use the case study approach in order to better elaborate and demonstrate the interrelatedness among factors at different levels of analysis and thus the interdependency between institutions, actors, and relations. We draw lessons learned and generalizable conclusions from our case studies and literature review. These conclusions lead to policy implications for fostering and sustaining successful technology- and knowledge-based economic development in emerging, developed, and developing regions worldwide.

David V. Gibson
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The complicated interaction between industries and universities is the subject of several debates in the technology transfer literature and is the main focus of this book.

The global economic crisis of the years 2008–2010, the consequent funds reductions for universities and the financial difficulties faced by small and medium-sized enterprises (SMEs) have forced both parties to a strong rethinking of the business development model. This leads to a less conceited behavior for academia and to a more strategic accepted wisdom for industry, rather than the usual short-term, product-oriented approach.

In order to enhance interactions between industry and universities, three tools are seen as the most favourable:

› Collaborative research (Chapter 2)
› Technology licensing (Chapter 3)
› Spin-out creations (Chapter 4)

All these tools are described in the first part of this book (Chapters 1 to 4). In the second part a more political discussion is presented from the perspectives of governments, SMEs and universities (Chapters 5 and 6). In the last chapter, a possible way to move forward from the present difficulties faced with academic-industry interactions is presented as a conclusion and stimulus for further thinking.

The added value of this book in comparison to most of the technology transfer literature is the large number of examples of model university–industry interactions presented here. There are also helpful examples of financial/governmental policies in many developed and developing countries, with special attention to how SMEs establish collaborations with universities or try to access public funding through project proposals (Chapter 5). Best practices from North America and Europe and a deep insight into the situation in Switzerland are the key elements of Chapter 6.

Having read the book from the point of view of a practitioner of university technology transfer programmes, I have found it very useful as a general overview of the tools of collaborative research, licensing and spin-out creations, not only as a technical description but also to summarize strengths and weaknesses of each model. Many useful suggestions and practical tools to overcome difficulties in the interaction between industry and academia are presented, including for example staff exchange between parties or management training initiatives. An interesting summary of the international situation in the area of technology transfer is also described, thus allowing practitioners, academics and industrial staff to gain a good appreciation of current developments and potential scenarios of university–industry interactions at a global level. For students and researchers, the best practice descriptions may be very useful, and the analysis on the technology transfer assessment can be the basis for further studies.

In summary, I consider this book an excellent synthesis on the tools to make academia interact with industries in order to bring frontier technologies to the market and to innovate in the business model of the companies, with a view on the international practices and conclusions on policy and strategic processes to go from science to business.
University-industry partnership is playing an ever increasing role in developing knowledge-based economies. Creation of knowledge and the ability to translate research into economic wealth, health and social equality is becoming a competitive factor of national economies. In 2004, The Global Bank launched the Knowledge Economy Index which included the innovation system as one of its key components.

An international research landscape is quickly transforming shifting towards multidisciplinary activities, increased mobility of researchers, and appearance of new players who help bridge research outcomes with end users. These new players include boundary spanners linking different disciplines and generating new ideas and technology and knowledge transfer brokers, who facilitate links between universities and industry.

Industry is quickly adapting to an open innovation paradigm using both internal and external ideas and pathways to develop new products, services and technologies. There are a number of leading companies developing university partnerships and investing into joint research programmes at a global scale. To remain competitive, companies are keen to source new ideas, cut their research time and resources and accelerate the rate of new developments. Despite inherent differences between their organisational cultures, university-industry partnerships are continuing to grow with both partners engaging into mutually beneficial collaborations.

The most successful entrepreneurial universities understand the benefits of such partnership and develop industry-focused programmes to diversify their funding sources and produce research outcomes relevant to national economies. For example, Massachusetts Institute of Technology has been running the Industry Liaison Programme (ILP) since 1948 and in 2011 the ILP generated over a half of MIT’s industrial income.

Emerging trends show a clear need to develop interactions with industry at as early stages as possible. Large-scale collaborative projects take time to develop. More importantly, time is required to develop trust and rapport which are critical factors for future success and long-term strategic partnership. In order to test relationships, prospective research partners engage in a number of short-term consultancy projects which play an important role in developing partnership. This approach is supported by research which indicates that academics perceive academic consultancy as one of the most important channels for knowledge transfer.

These changes and trends require new skills from researchers to support their interaction with industry. It is critical to understand what drives successful university-industry partnership, mitigate potential risks and reduce barriers caused by different organisational mindsets and cultures. Apart from developing technical knowledge and skills, researchers are required to become active ambassadors of their research, its application and its impact. They are required to understand a multi-dimensional landscape of knowledge transfer that involves industrial partners, funding bodies, university managers and policymakers.

**SKILLS FOR COOPERATION**

**PROMOTING ACADEMIC EXPERTISE TO INDUSTRY: BUSINESS DEVELOPMENT SKILLS FOR RESEARCHERS**

Tatiana Schofield

Tatiana Schofield is Business Development Manager of Imperial College Consultants, a knowledge transfer arm of Imperial College London. Tatiana has extensive expertise in developing large-scale collaborations between academia and industry both in the UK and internationally. Started as a researcher, Tatiana later moved towards research management and development.

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In such challenging and fast moving economic environment, researchers need to refine their business development skills in order to promote results of their research, secure further funding and accelerate translational impact. There are a number of ways in which researchers can engage with industry to develop relationship. They can use their research skills for conducting literature reviews, researching technology trends, undertaking feasibility studies and testing. There is a growing area for expert witness services, which require an impartial advice from independent experts who are often drawn from academia. Talent development and retention is another area that is estimated to grow. This offer more opportunities to universities to engage with industry and help companies develop their workforce through training, professional development and placement programmes.

In conclusion, university-industry partnership opens new doors for researchers, provides access to real life experimental data, offer real life challenges while placing additional requirements on researchers’ business-focused skills.

"RESEARCHERS NEED TO REFINE THEIR BUSINESS DEVELOPMENT SKILLS TO PROMOTE RESULTS OF THEIR RESEARCH (...) AND ACCELERATE IMPACT"
A PLAN FOR AUSTRALIAN JOBS

Remedies to Australia’s flagging national productivity has mostly centred in improved use of capital and ‘built’ infrastructure; education and skills driving labour force participation; higher quality management in the workplace; and removing government ‘red and green’ tape regulation. The recently released industry and innovation statement “A Plan for Australian Jobs” (PAJ) brings to higher profile the performance of Australia’s technology-intensive and innovation competitiveness, and underlying this, the effectiveness of linkages between industry and research institutions.

The 2012 OECD technology and industry shows Australia outside the top 5 OECD nations. As both a contributor and fast adopter of global knowledge and technology Australia more than ever needs policies and funding to more effectively collaborate with the world’s leading research and industry centres. That’s how the globally-raced knowledge and productivity ‘peloton’ now rides, and recent evidence shows Australia’s trading rivals, especially those in Asia, are pedalling ever harder and faster. With both US and EU influence in innovation policies, the health of Australian Science report confirms components of our national ‘innovation system’ are healthy, though somewhat thin in truly internationally excellent output; however, our national innovation system’ and its ‘internationalisation’ is underperforming.

PAJ has two major parts and the second part is the most relevant, being the bulk of the proposed $1bn package. In summary the PAJ package comprises the following elements:

› Establishment of 10 ‘industry innovation precincts’, led by industry, collaborating with research institutions and technology providers. Creation of a national ‘Precincts Board’ led by industry to oversee the establishment of all precincts.
› Option to companies, research institutes and universities to be precinct members or provide contract research.
› Funding directed into precincts is expected to include a mix of existing industry R&D effort; existing Australian public sector funding plus institutional and university resources.
› Support the establishment of the ten precincts around Australia to help seed the desired increased university-industry collaboration, with both Industrial Transformation Research funds and operational and industry collaboration funds.

NEW IMPETUS TO AUSTRALIA’S UNIVERSITY-INDUSTRY COOPERATION
Public comment suggests PAJ is welcome and directionally sound but this critique argues it needs bolder reinforcing policy to support the objective of increasing national productivity through innovation and international competitiveness, particularly in regards to best practices in university-industry collaboration, perhaps the weakest link in Australia’s national innovation system. So what else needs to be done? These are ten suggestions to make PAJ more effective and sustainable.

Innovation Investment
PAJ seeks to re-run the Innovation Investment Fund (IIF) programme. PAJ proposals have though disappointed the industry since very early stage risk capital has in recent times been near unattainable. The PAJ has opening further review but avoided any debate such as legislation to have a very small fraction of national superannuation funds invested in specified ‘national interest’ asset classes to help build new companies in technology intensive ventures. Nevertheless, a national policy debate regarding how best to mobilise venture funds is urgent to examine how to better support start-up ventures more effectively than at present.

Start-ups
Start-up companies ‘birth’ into Australian corporations and tax law environments that has ‘built up/fossilised’ over decades and has evolved in complexity to deal (comparatively) with corporate giants. For a new venture, it can be a big task to run both technology development and enterprise establishment strategies simultaneously in such a complex environment. A start-up company must have the disciplines of a ‘for profit’ world but be relieved of unnecessary complexity or burden. A practical start point is to hasten announced changes and re-design, the Venture Capital Limited Partnership model and its tax benefits for investors and give consideration to what other nations are doing in giving new companies a constructive ‘leg up’.

R&D Tax Reductions
PAJ is part funded by funding re-direction. This has a yet to be tested in legislative amendment to cease the R&D Tax Incentive for large corporates, which apparently impacts on about 15 companies and creates a precedent for further future lowering of the $20bn threshold, setting off corporate uncertainty. There is perhaps reason do this if a central PAJ objective is driving ‘for profit’ and ‘for knowledge’ sectors closer in best practice innovation precincts / clusters. Sharper definition of claimable R&D expenditure under the R&D Tax incentive is possible. A narrowed claim on R&D expenditure could mean all companies could only get a tax incentive for specified activities designed to drive large company relations with unrelated SMEs and start-ups; drive institutional capability by industry funding of professorial positions, employing new graduates, researchers in business, industry supervision of students, or linkage grants. This would drive inter-firm and inter-firm-university relationships.

Industry Innovation Precincts
The PAJ plans to establish 10 Industry Innovation Precincts, but building and running them will need more resources than presently committed under PAJ. It will require exploring new financing models of built infrastructure in potentially revised strategies in innovation precincts. Any newly built infrastructure must be creatively designed specifically for industry and research engagement. These investments stimulate collaborative partnerships and efficient joint-use time-share facilities and create the ‘meeting ground’ to help build ‘cultural change’ elements to national innovation performance. However, national precincts must be widely marketed; to inbound investors as well as to schools and vocational training.

Culture Differences
Precinct and clusters are organic and their success depends massively on partnering trust and sharing cultures. Many researchers in Australian universities have practical working relations with industry; there are excellent teams and fully engage with industry; but it is against a forceful institutional tide and culture that, with all the responsibilities of teaching and supervision and the risk of lost academic track record when taking an industry sabbatical, it’s all too hard. Measures of impact of research need to provide dual incentives, rewards and recognition for university researchers in both basic and applied research as well as recognition of R&D with impact on a ‘path to market’, while supporting the cultural change. The PAJ is silent on this essential cultural element to success.

Customised Programmes
With some rich exceptions, the knowledge and culture gap between the ‘for profit’ and ‘for knowledge’ world in Australia remains wide. Both sides don’t know ‘how, who and where to go’ to engage; and ‘don’t know what they don’t know’. Early career researchers are especially challenged and need ‘emeritus industry CEOs’ as mentors; not ‘emeritus research Professors’. Governments need to look at ways to engender far closer cooperation, directed at local customised delivery of programmes. Politically it’s left to expert committees, lobby groups and the nation’s chief scientists to be advocates and information sharing is modest across national systems the blame being ‘commercial in confidence’ and ‘public sector restrictions’. Finally, open innovation and data need deliberate policy encouragement to allow public data sources to be used for commercial and community benefit and the PAJ policy barely recognises any of this.
Internationalisation
Whilst national reforms have made much rhetoric on the need for greater ‘internationalisation’ there is little funded follow through. There are recent some improvements; however this is an inadequate response to the ‘98% of the world’s knowledge is overseas’, so why so little internationally-dedicated policy or resources? Precincts will be measured against international competitors, not locals; therefore, there is a need to test aggressively Australian innovation public policy and funding to strip out unreasonable barriers to ‘internationalisation’. Re-direction and far more resources need to be spent on international collaboration and PAJ is near silent on this, other than to say it is anchored on the Asian Century White paper.

National Challenges
Policies like PAJ will need to be constructively linked with the National Research Investment Plan (NRIP). The national Chief Scientist is leading work to align national strategic research priority settings to national challenges Living in a Changing Environment; Promoting Population Health and Wellbeing; Managing our Food and Water Assets; Securing Australia’s place in a Changing World; and Lifting Productivity and Economic Growth. This may well mean part of the nation’s science, research and engineering resources are strategically ‘locked in’ beneath these Challenges to align directly with national need.

STEM Professionals
From an economic capability and national security perspective the lack of Science, Technology Engineering and Mathematics professionals in Australia is a root cause of sagging productivity. This is a global issue of profound significance that links future competitive technology superiority with global geopolitical world leadership. Analysis of national performance and workplace relevance and state policy needs follow through of greater dedicated STEM-specific funding across the national education system.

Impact Measurement
Precinct performance needs to be measured. Currently, the spread of data accountability across commonwealth, state, institutional and agency areas is such that the Australia presently finds it increasing difficult to afford measuring the impact of its innovation policies and investments. The PAJ precincts will need exacting KPIs and long term measurement to assess their impact. So there is a need to establish an independent National Office of Innovation Statistics that will report to Parliament annually on the state of Australia’s science/research/innovation performance.

In conclusion, the PAJ is sound direction to an improved national system in driving better relations and co-investment between the ‘for knowledge’ and ‘for profit’ sectors, both domestic and international. However, the PAJ needs to be reinforced with further changes if a healthier innovation ecosystem is to be established. For improving national productivity, it must be aligned with important and related areas of policy such as: better executive management, smarter business models or imaginative risk managed regulatory regimes. Australia also needs greater investment and above all continuity of policy, as well as national unity of purpose, from all its governments.

The present risk is that cuts to university funding including research, deteriorating national debt to GDP, prospect of Australian Government deficits over the short to mid-term and uncertainty of PAJ itself post the forthcoming national election, leaves lingering future uncertainty in the policy and the funding prominence of university-industry collaboration. Given these factors, the aspiration expressed in the “Australia in the Asian Century” White Paper to have a national innovation system ranked in the top 10 globally by 2025 looks decidedly challenging.

Craig Fowler
Craig Fowler is currently the Deputy Chief Executive, Department of Further Education, Employment, Science and Technology. He is presently a company Director of the National Centre for Vocational Education Research (NCVER). Prior to this, he was a Principal in Tax with Ernst and Young, working with both large corporates and start up companies in areas of innovation and R&D incentives.

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The content of this article does not reflect the official opinion of the Department of Further Education, Employment, Science and Technology in South Australia. Responsibility for the information and views expressed in the article lies entirely with the author.
Business incubation, the process of supporting entrepreneurs in turning their ideas into sustainable businesses, has been around for over 50 years; the first incubator being setup in New York state in the 1950s. Enthusiasm for the concept has changed over the years with new models and trends constantly being developed: acceleration and coworking being the latest. So at The Business Incubator magazine, when we talk about “incubation” we take a very broad view and include any organisation whose role it is to support new business creation and development. And we include publicly funded, privately funded and PPP type structures, universities and research centres, and investment-driven organisations.

The benefit of business incubation has been proven time and again with data collected by networks such as the European Business and Innovation Centre Network (EBN) in the EU, and the National Business Incubation Association (NBIA) in the US. Their data suggests that strong filtering of entrepreneurs and ideas, the right mix of support during the early years, and good guidance on how and when to move on from the incubator leads to significantly higher sustainability rates for companies and better prospects for high quality jobs and wealth creation.

Indeed, the EBN data shows that fully 88% of start-ups supported by its members are still in business 3 years after starting. This compares to around 62% for non-incubated businesses. Critics point out that the strict filtering policy conducted by incubators skew the data in favour of those companies who are more likely to succeed. But surely that is the point. Incubation is meant to support the likely winners because they will be the businesses to create jobs and wealth. This is the outcome everyone wants.

In recent years “business incubators” have received some negative press and been labelled as simple “real estate” businesses with space rental being the business model of choice. Indeed, some incubators will run this model. But the more successful ones (in terms of companies created and jobs created) are those that devote more resources to entrepreneur and start-up support. Indeed, there is a strong correlation between the number of staff employed within the incubator who are directly involved in supporting entrepreneurs, and the number of start-ups created, and jobs created by those start-ups.

The Business Incubator magazine, and its sister website www.incubationGateway.com, provide the industry with news, shared good practice, reviews of resources and tools, interviews with key industry figures, a showcase of successfully incubated businesses and a spotlight on a country or region where incubation is playing a role in economic development.

A key area of focus in coming issues of the magazine is the role of university incubation in support of spin-off companies built around research-driven intellectual property. Many incubators exist within universities and other research organisations. And many models exist for supporting spin-off creation. There are clear differences between university incubators and non-research driven incubation: the types of businesses created; the investment required to commercialise the research; the roles of academic staff and how they relate to the business to name a few. Some organisations, like Imperial College in London, UK, have developed a complete ecosystem around the commercialisation of their own research including a publicly traded company, an incubator, entrepreneurs-in-residence etc. This is a significant investment, but it does help guarantee that research with commercial potential has the best chance of that potential being realising. We hope to be able to promote other great examples from around the world and share this knowledge with our readers.

The Business Incubator magazine is proud to be a partner with UIIN and we hope that in the coming months we can build stronger links between our publications and share best practice from the worlds of incubation and university-industry innovation.

David Tee
David Tee is a serial entrepreneur, consultant and innovator with over 25 years professional experience in a variety of environments from Cambridge-based IT start-ups to Silicon Valley-based innovation consultancy to EU-funded project management. He has founded three companies, incubated new businesses, commercialised technology and consulted to both the public and private sectors.

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Connecting Academia and Industry
Creating value by mediating between research based knowledge and needs in the industry. This is the common goal of Centre for Entrepreneurship and Innovation (CEI) at Aarhus University (AU) in Denmark. The goal is approached from two different angles: entrepreneurship education and venture creation for students on the one hand and facilitating collaboration between researchers and companies on the other. Both angles are developed and refined at the centre into our own methods and approaches based on national and international research and best practices.

Shortcut to New Knowledge
Even though knowledge creation is a strenuous task, the picture used to describe how the CEI approaches collaboration between researchers and companies is a shortcut. By facilitating the meeting between companies wanting to achieve a specific goal, enter a specific market or developing a specific technology and relevant researchers with the right scientific background and the demanded knowledge, CEI is the shortcut. Understanding both worlds the consultants at CEI help to combine and make use of the resources of both company and researchers.

The knowledge collaboration process is facilitated in three coherent phases:

- **Phase 0:** Recruitment of SME’s, initial brainstorming and disclosure of needs, potentials and ideas
- **Phase 1:** Matchmaking with relevant Danish or foreign researcher, addressing the partner’s different objectives and assisting into a joint project
- **Phase 2:** Monitoring, facilitating and evaluating the development of a value-creating product or concept.

The aim of all the actions made by the consultants is value creation and development of innovative products, solutions and concepts.

“It is fundamentally inspiring to work with non-researchers and feel that your knowledge is requested and transferable. I now know more about the whole circle of businesses, consultancy firms and knowledge institutions and this has increased my respect for their qualities and competencies”, says Mads Daugbjerg, Associate Professor, AU

Means Driven Entrepreneurship Education
All students at AU are encouraged to become acquainted with precisely the type of entrepreneurship relevant to their field of study. This is the vision of the education department of the CEI. Throughout the last two years, research and application has led to a Model for Entrepreneurship Education, ME2.

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**An successful example of Danish ...**

**STUDENT & ACADEMIC ENTREPRENEURSHIP**

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The ME2 model is developed by an interdisciplinary group of educators and researchers at AU as a result of inspiration from various and divergent research within the field of Entrepreneurship.

ME2 takes a means driven approach to entrepreneurship pervasive in both academic courses in entrepreneurship and in the student incubator. As opposed to a goal driven process, the focus is on the means; who I am, what I know and whom I know as presented by professor Sarasvathy in her effectuation theory. The ontology of the processes taught is thus that opportunities are created, not found and that the future is created, not entered. This holds a mindset alien to most students but nevertheless an approach to entrepreneurship as a method. From the means, the students venture into disclosing disharmonies, qualifying opportunities and realizing value.

Throughout the entrepreneurial process, the students use their academic and disciplinary knowledge, methods and tools. Creating value by use of knowledge, network and opportunity creation is the main aim of both the incubator and the academic courses. The real difference between the two is that students in the incubator create new ventures and startups whereas the aim of the courses is the ability to reflect upon the integration of theory and experience from the process.

The ME2 model is also central to the student incubator at CEI. Here the focus is on “developing the person who creates the company”. This takes place in a number of steps and on different levels as shown in the graphic below. The lower level introduces entrepreneurship and help to qualify the decision on going into entrepreneurship and venture creation. On the upper level, it is both possible to go into a entrepreneurship thinking by joining the Start-up Experience or by starting up a company inside an existing company (Corporate Take off). If the student wants to start a new venture either after being part of one of the other programmes, having finished a course in entrepreneurship or contacting the student incubator directly this takes place in three steps: Take off Explore, Take off Incubator and Take off Growth.

Key figures about CEI 2012 from annual rapport 2012, CEI statistics:
› 39 fulltime and 5 students assistant at CEI
› Courses at all faculties from 5-20 ECTS
› 70 % is external financed
› Facilitating collaboration between university and industry
› Total amount of companies in student incubator 2009-2012: 102
- Collaboration between researchers and SME’s:
  Phase 0: 160, phase 1: 52, phase 2: 33
UIIN AWARD WINNERS
UIIN and S2BMRC announced the two winners of the 2012 University-Industry Innovation Award. The Office of Technology Licensing at University of California, Berkeley, US, (Michael Cohen) was awarded for the development of the 4M Framework. The Department of Management, Economics and Industrial Engineering at Politecnico di Milano, Italy (Luca Gastaldi & Mariano Corso) was awarded for its Initiative “ICT in Healthcare Observatory (IHO)”. We congratulate both winners!

MAY 15-16, 2013
UIIN CHAIRMAN PRESENTS IN RUSSIA
Invited as keynote speaker, UIIN Chairman & S2BMRC expert for Science-to-Business, Thorsten Kliewe, presented at the Forum From Science to Business (FS2B) in St. Petersburg, Russia on future directions for advancing science-business relationships. In addition he served as an expert in a Panel on “Processes of innovation decision making”. As it is more and more questioned if IP commercialisation alone can secure growth & competitiveness, partnering approaches were more central than in past FS2B events.

MAY 6-7, 2013
UIIN CEO REPORTED ON EPO EVENT
On the 6th and 7th of May 2013 the ‘Creating Marketing from Research Results’ conference took place at the European Patent Office in Munich. The conference brought together more than 150 stakeholders from both university and industry. This resulted in interesting discussions on the future role of patents in university-industry interaction and the way forward for e.g. transfer agencies at universities. UIIN CEO Arno Meerman was invited by the EPO to report on these future-shaping discussion results.

APRIL 17, 2013
UIIN CASE STUDY SERIES
Aiming to contribute to university-industry interaction practice, UIIN started its new initiative: the UIIN Good Practice Case Study Series. Over the next months we will collect case studies from around the world to enable our members to get new impetus for their daily work. The first case study report with around 20 cases is expected to be published at the end of the year. Selected cases will be published in this magazine.

MAY/JUNE 2013
UIIN ANALYTICS ON ENTREPRENEURIAL UNIVERSITIES
In order to support the promotion and further testing of the Guiding Framework for Entrepreneurial Universities, developed by Technopolis for the European Commission’s DG Education and Culture and the OECD LEED forum, UIIN developed a prototype...
enabling users to evaluate their own institution and compare the results against the entire data set. The prototype was presented at the 2013 UIIN Conference in Amsterdam, The Netherlands, and used as an example at the 5th UB Forum in Brussels, Belgium.

MORE INFORMATION: www.uiin.org/news/103

JULY 22, 2013
FUTURE COOPERATION WITH IP PUBLISHING

On July 22, UIIN and IP Publishing, the publisher of journals such as Industry & Higher Education and International Journal of Entrepreneurship and Innovation, signed a memorandum of understanding for future cooperation. “We are looking forward to working with IP Publishing as we will not only cooperate in terms of scientific publications, e.g. for our annual conference, but we will also be able to provide a discount for subscriptions for our members”, says Arno Meerman, CEO of UIIN.

MORE INFORMATION: www.uiin.org/news/104

MAY 27-29, ROYAL TROPICAL INSTITUTE, AMSTERDAM, THE NETHERLANDS
338 PARTICIPANTS FROM 48 COUNTRIES MADE THE UIIN CONFERENCE 2013 A GREAT SUCCESS

From the 27th till 29th of May, the UIIN, in cooperation with S2BMRC and the VU University Amsterdam, organised the University-Industry Interaction Conference in Amsterdam, the Netherlands. During this three day event, 338 participants representing a wide variety of Higher Education Institutions and business came together to discuss and share information on the current challenges in University-Industry Interaction. The results of the event (incl. presentations, papers, videos, reports) are available to UIIN members and the event participants at www.uiin.org

MORE INFORMATION: www.university-industry.com/2013
S2B CENTRE NEWS

JANUARY 7-8, 2013
OPEN FORUM ON ENTREPRENEURSHIP
At the start of the year 2013, the S2BMRC organised and hosted an open forum on the topics of “Entrepreneurship” and “Developments in University-Business Cooperation”. Vice-President of Partnerships and Knowledge Transfer Carsten Schröder opened the forum as part of the ‘Year of Internationalisation’ at Münster University of Applied Sciences. The S2BMRC invited international experts from Australia and the UK as guest speakers which shared their experience and made the event a big success.

MORE INFORMATION: www.science-marketing.com/news/101

APRIL 17, 2013
FELLOWSHIP AT VU AMSTERDAM
On March 4 Professor Thomas Baaken has been appointed “Senior International Fellow” at the VU University Amsterdam. The fellowship is a result of many successful joint activities of the S2BMRC and the VU, including three cooperative PhD projects as well as joint research projects and publications.

MORE INFORMATION: www.science-marketing.com/news/102

OCTOBER 12, 2013
MUAS & S2B AS BEST PRACTICE
For the fourth time in a few years, Münster University of Applied Sciences and its S2BMRC have been recognised as best practice case study. This time the case has been included in Gabriele Gorzka’s book “Knowledge Transfer - The New Core Responsibility of Higher Education Institutions. Practice and Perspectives in Russia and Germany”. The case study describes the “Triangle for Innovation in Knowledge Transfer and Partnering at Münster University of Applied Sciences”.

MORE INFORMATION: www.science-marketing.com/news/103

APRIL 2013, MÜNSTER, GERMANY
SCIENCE MARKETING FOR LATIN AMERICA
The first two weeks of the visit of 20 international scientists from Mexico consisted of international presentations, workshops and company visits, with the main topics being science marketing, and technology transfer and innovations in University-Business Cooperation. Other upcoming seminars will take place in Costa Rica and Mexico. The project ends in September 2014 with a large international conference in the capital of Costa Rica, San José.

MORE INFORMATION: www.science-marketing.com/news/106

OCTOBER 12, 2013
S2B CENTRE AT WISSENSBAR
As part of the Wissensbar event series in Münster (Germany) Thomas Baaken, Todd Davey and Victoria Galan Muros presented new ideas and concepts on entrepreneurial thinking and acting.

MORE INFORMATION: www.science-marketing.com/news/104

MAY/JUNE 2013
CONNECTING HANSE CITIES
More than 40 people participated in the event which aimed to attract attention to innovative research fields.

MORE INFORMATION: www.science-marketing.com/news/105

S2B workshop

MAY/JUNE 2013
CONNECTING HANSE CITIES
More than 48 cooperations were established as a result of the Hanse Business Reloaded project, a project lead by Münster University of Applied Sciences and the S2BMRC. With speed-dating matching events, social media and other communication tools and events, partners from a wide variety of Hanse cities were brought together to network and cooperate.

www.science-marketing.com/news/105
A new cross-discipline partnering event to promote university-industry-investor collaboration, technology transfer and start-ups.

Expert speakers • Case studies • Panel sessions • Interactive discussion • Networking space

Coverage will include:
Bringing research to the market • Best practices in technology transfer • Industry-academic collaboration • Intellectual property strategies • License vs. start-up • Investment strategies • Key Performance Indicators

Plenary speakers include:

• Anthony Boccanfuso  
  Executive Director UIDP, National Academies, USA

• Peter Dobson  
  Academic Director, Oxford University, UK

• Sean Flanigan  
  President, AUTM, USA

• Martin Heinlein  
  Managing Director – Knowledge Transfer, University of Bremen, Germany

• Andreas Jenne  
  CEO, BLACKFIELD AG, Germany

• Claude Kaplan  
  Managing Director, IP Pragmatics, UK

• Tim Lafferty  
  Managing Director, Global University Venturing, UK

• Stephan Lensky  
  Corporate Vice President, Boehringer Ingelheim GmbH, Germany

• Greg Simon  
  CEO, Poliwogg Inc, USA

• Malcom Skingle  
  Director, Academic Liaison, GlaxoSmithKline, UK

• Scott J Steele  
  Director of Research Alliances, University of Rochester, USA

• Roman Thomas  
  Chief Scientific Officer, BLACKFIELD AG, Germany

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Innovation and Commercialisation Officers • Senior Scientists • Investors
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