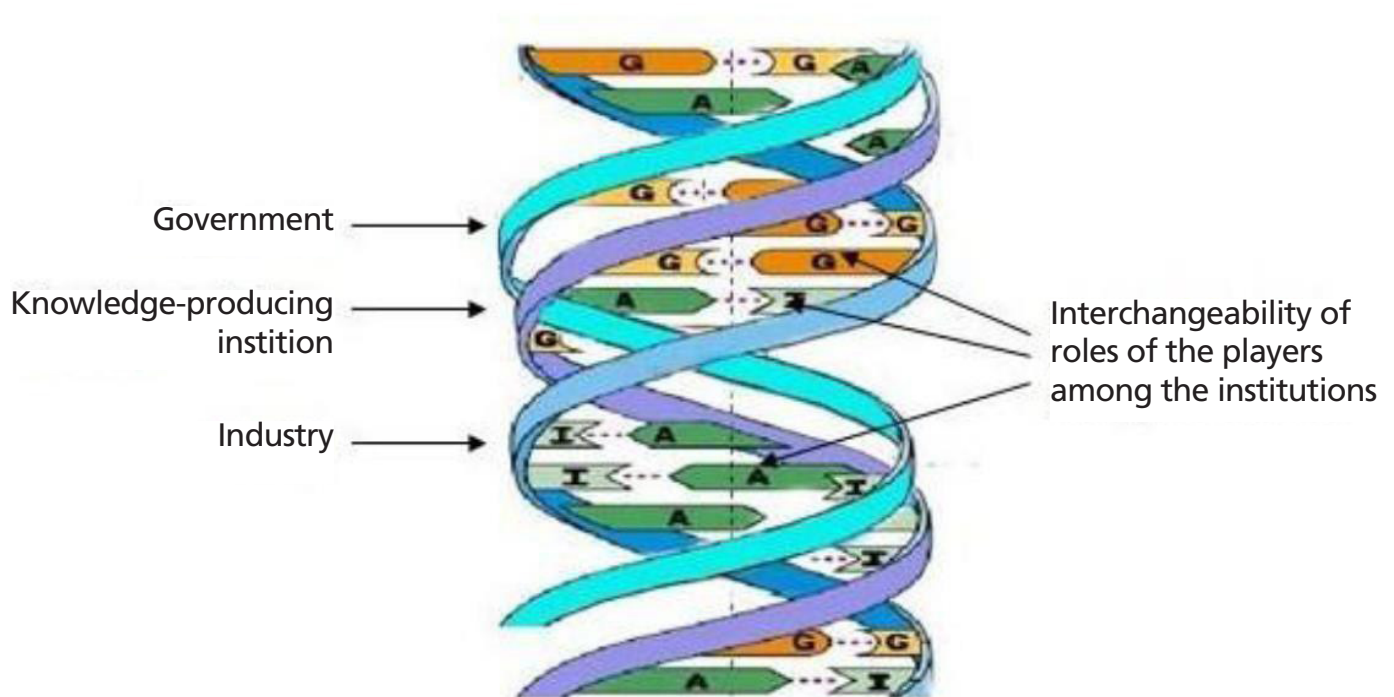


A Collaborative Interdisciplinary Workshop

Entrepreneurial University, Engaged Industry & Active Government: Triple Helix Opportunities

29 - 30 May 2014
University of Surrey
Programme



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Our call for contributions on Entrepreneurial University, Engaged Industry & Active Government: Triple Helix Opportunities has attracted participants with interdisciplinary academic backgrounds and a variety of sectorial experiences. The participants and presenters in the workshop have interests not only in the Triple Helix model, but have experience in Triple Helix practices at regional, national and international level and have a vision for the further development and implementation of this model in the context of bio-pharma, health care, or business services.

We have received contributions from academics and practitioners discussing different aspects of the Triple Helix, Quadruple Helix, or the intermediation, governance and orchestration of bi-lateral and multilateral relationships within the public space of innovation, the creative commons and the commercial realities of R&D in bio-pharma and the automotive industry.

Presentations will relate to very broad conceptualisations of Triple Helix and Institutional Intermediation and will address the issues of governance, facilitation, intervention, intermediation or orchestration of industry-university-government interactions; optimisation in multi-lateral collaborations between industry and university; collaborative leadership of the innovation process, and the transferability of knowledge and technology across public and private organisations and institutions. The discussion in panels will focus on Triple Helix Intermediation in a Territorial Context, the Practice of Engagement and the Governance of Innovation in Multi-lateral and Participative Networks; Knowledge Transfer in Technology Ecosystems; Patterns and Frictions in Public and the Private Sector Interactions; the Role of Institutions and the Impact on Regional and National Competitiveness; International Dimensions of Triple Helix, the Challenges for Business Led Triple Helix and New Frontiers for Triple Helix Research.

Presentations and contributions will open the discussion space for questions such as:

- Who governs in Triple Helix interactions
- Does the innovation process require intermediation and what intermediaries are needed
- Who are the actors mediating in regional development projects and between infrastructures, nature, urban spaces, regulators, providers and consumers
- How intermediaries govern in sociotechnical networks
- What intermediations take place in urban development, in technology transfer and in socio-economic space
- What is the role of institutional intermediation in stakeholder engagement
- Assessment of the 'positive and negative externalities' from collaboration and intervention in the innovation process
- From diplomacy to business intermediation, or what are the trade-offs in intermediation, orchestration and brokerage
- How intermediaries deal with 'conflict of interests', and deliver 'good value-for-money'
- Governing the activities of brokers and third parties - relational, network, and platform governance
- Collaboration, Competitiveness, and Universal Values – the Triple Helix Pallet of Values
- Creative commons and governing citizens science
- Alliance management in Triple Helix formations

Selected contributions and papers will be included for publication in one of the two special issues commissioned for the workshop:

- ***Industry and Higher Education (IP Publishing)***
- ***Triple Helix: A Journal of University-Industry-Government Innovation & Entrepreneurship (Springer).***

Workshop Programme

Venue: Surrey Business School, Rik Medlik Building

Webinar, Presentations and Panel Discussions – room 32 MS 01

Conference Lunch, Thursday, 29 May – room 75 MS 02

Conference Dinner, Thursday, 29 May, 19.00 pm - Radisson Blu Edwardian Guildford Hotel, 3 Alexandra Terrace, High Street, Guildford, Surrey, GU1 3DA

Conference Lunch, Friday, 30 May – room 14 MS 01

Coffee will be served in the conference room – 32 MS 01

Thursday, 29 May 2014

- 08.45 Registration Opens, Welcome Coffee
- 09:30 – 11:00 Webinar - Triple Helix for Newbies and How Institutions Can Enhance The Effectiveness of TH Relationships
- 09:30 – 9:40 Introduction
Dr. Emanuela Todeva, University of Surrey
- 09:40 – 10:00 Innovation in Innovation: The Entrepreneurial University in a Triple Helix
Professor Henry Etzkowitz, International Triple Helix Institute
- 10:00 – 10:20 The Triple Helix: A View from Institutional Economics
Professor Mark Casson, University of Reading
- 10:20 – 10:40 Questions and Answers
- 10:40 – 10:45 Reflections from Professor Henry Etzkowitz
- 10:45 – 10:50 Reflections from Professor Mark Casson
- 10:50 – 11:00 Closing of the Webinar and Announcements
- 11:00 – 11:20 Coffee
- 11:20 – 11:45 Welcome and Workshop Opening
Dr. Emanuela Todeva, Director of the Business Clusters, Networks and Economic Development Research Centre
Professor David Goss, Head of Surrey Business School, University of Surrey
Professor Henry Etzkowitz, President of the Triple Helix Association
- 11:45 – 12:30 Keynote Presentation: Triple Helix and Clusters: Institutions and Local Voices
Professor Mike Danson
- 12:30 – 13:30 Buffet Lunch
- 13:30 – 15:00 Panel 1: Triple Helix in a Territorial Context
Facilitator: Professor Mike Danson
Academic Institutions as Change Agents for Territorial Development – Dr. James Wilson, Mari Jose Aranguren, José María Guibert, Jesús M. Valdaliso
University Industry Interaction in Greece: Evidence and Strategies Based on the First Roundtable Discussion on Triple Helix Interactions - Professor Panayiotis Ketikidis & Adrian Solomon
Quadruple Helix in the Context of Smart Specialisation - Dr. Ruslan Rakhmatullin
- 15:00 – 15:30 Coffee
- 15:30 – 17:00 Panel 2: Knowledge Transfer, Technology Ecosystems and Triple Helix Opportunities
Facilitator: Dr. David Knoke

- The Key Role of Knowledge Intermediaries in the Co-Managed Innovation – **Dr. Chiara Cantu**
- Triple Helix-Boosting the Innovation Potential in the Metropolitan Area of Thessaloniki – **Ms. Tatjana Taneva & Professor Panayiotis Ketikidis**
- The Law and Economics of High-Tech Ecosystems - **Professor Erik Vermeulen**
- SME Innovation in the Advanced Manufacturing Ecosystem of Massachusetts - **Dr. Christiane Gebhardt**
- 17:00 – 17:30 **Discussion: Entrepreneurship, Knowledge Transfer, Technology Ecosystems and Institutions** – Reflections and Questions from Professor Mark Casson
- 19:00 – 22:00 **Workshop Drinks and Dinner**

Friday, 30 May 2014

- 09:00 **Morning Coffee**
- 09:30 – 10:50 **Panel 3: International Dimensions of Triple Helix**
Facilitator: **Dr. Ruslan Rakhmatullin**
Exploring Innovative Cross-Border Opportunities, The Role of Government and Triple Helix Opportunities - **Professor Jay Mitra**
International Alliance Management in Triple Helix Formation - **Ms. Tatiana Schofield**
Wine Clusters in Chile And Brazil - **Professor Eduardo Armando, Dr. João Maurício Gama Boaventura, Greici Sarturi, Cristina Espinheira Costa**
- 10:50 – 11:10 **Coffee**
- 11:10 – 12:30 **Panel 4: Universities and Business in a Triple Helix Context – Myths and Reality**
Facilitator: **Professor Henry Etzkowitz**
The Myth of the Ivory Tower - **Mr. Michael Kitson**
Triple Helix - a Benefit or a Hindrance to Business? - **Nick Rodgers**
Intermediation in the Triple Helix: Who is Running the Show? – **Dr. Emanuela Todeva**
- 12:30 – 13:30 **Buffet Lunch**
- 13:30 – 15:00 **Panel 5: Business Led Triple Helix**
Facilitator: **Dr. Emanuela Todeva**
Can a Triple Helix Approach Change Pharmaceutical Innovation - **Mr. Chris Shilling**
Biologics – Biosimilars: Science and Market Co-development by Triple Helix Actors - **Dr. Virginia Acha**
New Partnerships and Approaches to Health in the UK: The Case of ELAROS - **Paul O'Brien**
The Role of Intermediaries in Triple Helix Interactions: the Case of a Consultancy Specialised in Market, Economic and Regulatory Advice - **Dr. Pierre Hausemer**
- 15:00 – 15:30 **Coffee**
- 15:30 – 16:30 **Panel 6: New Horizons for Triple Helix Research**
Facilitator: **Nick Rodgers**
Institutionalizability as Recursion - **Mr. Kai Kaufmann**
Investigating the Triple Helix with Multi-Mode Network Analysis - **Dr. David Knoke**
- 16:30 – 17:00 **Closing Remarks**

Intellectual Inputs

Abstracts, Presentation Outlines and Bio-notes

Webinar - Triple Helix for Newbies and How Institutions Can Enhance The Effectiveness of TH Relationships

In this webinar, the Director of the research centre on Business Clusters, Networks and Economic Development (BCNED), **Dr. Emanuela Todeva** will moderate a panel discussion examining the fundamental concepts of Triple Helix, or Government-Industry-University interactions, the essence of innovation and knowledge and technology transfer, the entrepreneurial behaviour that emerges within the Triple Helix model, and the critical role of institutions.

This webinar brings together leading academics, practitioners and knowledge transfer experts to share experiences and insights into the most effective use of institutions as a gateway to effective multi-lateral relationships.

The webinar is designed both for academics and practitioners that are, or would like to get familiar with the Triple Helix model in a theoretical and practical context. Attendees and Triple Helix practitioners will be able to discuss the scale of orchestration of relationships in Triple Helix interactions.

By taking this webinar attendees will be able to:

- Learn about the origin and the most recent developments of the Triple Helix (TH) model
- Understand the TH model and how it can be applied for managing Academia-Business-Government (ABG) interactions
- Learn about institutional practices associated with innovation systems and how to engage with institutions to ignite innovation processes
- Explore the role of institutions as intermediaries and moderating agents for Triple Helix interactions
- Understand the role and expectations of different innovation stakeholders in the public and the private sector
- Reflect upon current government innovation policies and the strategic response by industry and universities
- Learn from successful cases which critical actions across the Industry-University-Government interface can boost innovation at a micro and macro scale.

Professor Henry Etzkowitz - President of the Triple Helix Association (THA), Editor-in-Chief of the Triple Helix Journal

Innovation in Innovation: The Entrepreneurial University in a Triple Helix

A triple helix regime typically begins as university, industry and government enter into a reciprocal relationship with each other in which each attempts to enhance the performance of the other. Most such initiatives take place at the regional level where gaps in industrial clusters, problems in technology transfer and lack of governmental capacity may lead to the introduction of organizational innovations to address these issues. A process of creative reconstruction is instituted in which a person respected by all parties or an intermediary organization plays the role of "Innovation organizer" in bringing everyone together to create a project or process that fills a gap.

Professor Mark Casson - Professor of Economics at Reading University, UK, Director of the Centre for Institutional Performance (CIP)

The Triple Helix: A View from Institutional Economics

Triple Helix is a practical approach to maximising the benefits of technology transfer. This presentation examines some of the implicit assumptions underlying Triple Helix, and questions them in a spirit of constructive criticism designed to stimulate debate. Three main questions are raised:

- Why do we need three-way collaboration between government, industry and universities? Is it cost-effective?
- What exactly is the role of government? Is it to provide subsidies, to broker technology transfers, or to do both?
- What are the intended impacts and what are the actual impacts? Does Triple Helix align objectives or does it distort behaviour too?

These questions are addressed using economic analysis, institutional theory, and evidence from impact studies of government support for business in the UK, 1998-2010.

Bio-notes:

Henry Etzkowitz is President of the Triple Helix Association (THA), Editor-in-Chief of the Triple Helix Journal, Senior Fellow at Stanford University, the Clayman Institute for Gender Research, the H-STAR Institute and the Center for Design Research, and Director of the International Triple Helix Institute. Professor Henry Etzkowitz is a scholar of international reputation in innovation studies as the originator of the 'Entrepreneurial University' and 'Triple Helix' concepts that link university with industry and government at national and regional levels. As President of the Triple Helix Association (THA), he is at the centre of a unique international network of several hundred scholars and practitioners of university-industry-government relations. Henry is Editor-in-Chief of the Triple Helix Journal

www.springer.com/economics/r+%26+d/journal/40604

From 2009-Henry is affiliated with Stanford University, and with Birkbeck College, University of London. Prior to coming to Stanford, he held the Chair in Management of Innovation, Creativity and Enterprise at Newcastle University Business School, UK. He received a BA in History from the University of Chicago, PhD in Sociology from the New School for Social Research and PhD Hon. in Engineering from Linköping University.

Mark Casson is Professor of Economics at Reading University, UK, Director of the Centre for Institutional Performance (CIP), Member of John H Dunning Centre for International Business, Centre for Economic History, Centre for Entrepreneurship and Centre for International Business History. Mark has published widely on entrepreneurship and international business. He was advisor and consultant to BIS and UKTI on government support for business, 1998-2010. Areas of Interest: Entrepreneurship, business culture, the economics of the multinational enterprise, business history and transport studies.

Dr. Emanuela Todeva (PhD Sociology) is Director of Business Clusters, Networks and Economic Development Research Centre at the University of Surrey, UK. She has published research on the governance of innovation in clusters, strategic management of international business networks, analysis and mapping of the health technology sector and the global information sector, institutional analysis, cooperative business strategies, alliances, network governance and co-evolution, the restructuring of supply chains and business networks in transition economies. Her book on 'Business Networks: Strategy and Structure' has received a wide popularity among academics and business practitioners. In addition to her work on business networks and cluster development, Emanuela's consulting practice and intellectual contributions are in the field of Triple Helix Governance and Intermediation; Triple Helix Policy Implementation through Stakeholder Practices; Cluster Management; Triple Helix Solutions for the Triple Crisis Challenges (environment, banking and poverty alleviation); Business Models for open innovation and industry/ market development; Triple Helix Engagement, Co-alignment and Co-creation; Orchestration and eco-systems design.

Keynote Presentation

Professor Mike Danson - *Triple Helix and Clusters: Institutions and Local Voices*

This paper aims to assess the contrasting roles of institutions and agents in different environments within the modern theoretical and policy contexts of clusters, smart specialisation and ideas of the Triple Helix. In particular it compares and contrasts the experiences of SMEs and other local actors in the rural and peripheral regions of Northern Europe with those in core and capital regions.

The paper draws on standard texts on clusters and cluster policies (Porter, as assessed and summarised by Benneworth et al, 2003), and the Triple Helix to create the basis for more detailed research. In particular, the paper builds on previous work on peripheral and marginal regions in northern Europe (Danson and de Souza, 2012) to contrast the experiences of these economies with those of capital and core regions.

Questioning how appropriate the theories and policies of the core are to shadow towns and places, but noting their dominance in the discourse of the EC and national authorities, the analysis applies concepts of institutional capacity and thickness (e.g. Morgan on Wales and the WDA), endogenous growth (e.g. Krugman; Martin; etc.) and agglomeration economies (e.g. Parr; McCann) to offer a better understanding of the proposed underpinnings of the competitive advantages of metropolitan areas.

Bio-note:

Professor Mike Danson is Professor of Enterprise Policy and Director of Doctoral Programmes at Heriot Watt University, Scotland. He is Honorary Treasurer of the Academy of Social Sciences, The National Academy of Academics, learned societies and practitioners in the social sciences. He has been conducting applied and policy research and evaluations for over 35 years, with over 200 publications and 13 edited books. He has undertaken impact assessments for many local and central governments, international organisations and agencies, including the OECD, WHO, Scottish Enterprise, European Commission, Scotland's Futures Forum, and the STUC. He has been on Government advisory groups on 'employability', 'ageing', regional development, and 'talent management'. Mike is currently the academic advisor to HIE and partners on 'Gaelic as an economic and social asset', and is collaborating on projects on 'early onset dementia' (Alzheimer's Society) and 'older people and energy use' (EPSRC). Mike has previously been Chair of the Regional Studies Association and is co-organiser of the Scottish Centre for Island Studies and the international Peripheral, Marginal and Border Regions network.

Panel 1: Triple Helix in a Territorial Context

Facilitator: Professor Mike Danson

Dr. James Wilson, Mari Jose Aranguren, José María Guibert, Jesús M. Valdaliso - *Academic Institutions As Change Agents For Territorial Development*

There is increasing interest around the role that academic institutions can play as catalysts of change within the territories where they are located, contributing proactively to shaping socioeconomic development processes. This role for universities takes us beyond the more typical focus knowledge transfer activities or broad economic impacts. It highlights in particular the contributions of 'softer' disciplines such as management, economics, the humanities and public policy. This paper explores this proactive strategic role for academia in regional development through analysis of a particular case of institutional entrepreneurship in the Basque Country region of Spain. The telling of such stories is critical if we are to reach a better understanding of the impact that universities can have in their regions beyond a quantitative, market-focused analysis.

Bio-note:

James R. Wilson (PhD) is Senior Researcher at Orkestra-Basque Institute for Competitiveness and Lecturer at Deusto Business School, University of Deusto, Spain. His research interests are in policy-relevant analysis of territorial competitiveness and socio-economic development processes, with a specific focus on issues related to: governance processes; networks and clusters; policy evaluation and policy learning; and the roles of academic research and universities in society. He recently co-edited (with Roger Sugden and Marcela Valania) *Leadership and Cooperation in Academia: Reflecting on the Roles and Responsibilities of University Faculty and Management* (Edward Elgar, 2013) and is currently co-editing (with Jesús M. Valdaliso) *Strategies for Shaping Territorial Competitiveness* (Routledge, 2014).

Professor Panayiotis Ketikidis & Adrian Solomon - *University Industry Interaction In Greece: Evidence and Strategies Based On The First Roundtable Discussion On Triple Helix Interactions*

The Triple Helix interactions (university, industry, government) are perceived to be the key to assisting in the development of nowadays fast pacing knowledge based society. This is not the case in Greece. Harsh economic environment, low communication among the Triple Helix actors, rigid structures of academic institutions, obsolete regulatory framework, lack of business oriented culture, limited support for entrepreneurial activities, low innovation score, and severe brain drain, point towards the fact that Triple Helix interactions are not being performed in this area. To this extent, initiating the Triple Helix interactions in Greece can potentially assist this region by enabling proper long term sustainable regional development.

The main outcome of the roundtable discussion, organised by the Triple Helix Association Chapter of Greece is the fact that the entire Triple Helix ecosystem (university, industry, government) has to evolve and adapt together in order to properly achieve the co-creation stage with the desired outcomes.

Bio-note:

Professor Panayiotis Ketikidis is the Vice Principal for Research, Innovation & External Relations of CITY College - An International Faculty of the University of Sheffield, and the Chairman of the Management Committee & Academic Director of the Doctoral Programme at the South East European Research Centre (SEERC) as well as the President of the Triple Helix Association Chapter of Greece. He has over 25 years of experience in management, education, research, and competitive research funding with various networks established as a result of this experience. Professor Ketikidis' research interests cross supply chain, health informatics, innovation and regional development, and science disciplines in an effort to understand today's and future complex supply chain problems. He has over seventy publications in the forms of journal papers, books, edited books, edited proceedings, edited special issues, book chapters, conference papers, technical papers and reports. Chief Editor of the International Journal of Innovation & Regional Development (IJIRD), Associate Editor of the International Journal of Logistics Economics and Globalisation (IJLEG), Editorial Board

Panel 1: Triple Helix in a Territorial Context

Member of the International Journal of Operational Research (IJOR), European Editor of the International Journal of Enterprise Network Management (IJENM), and a member of organizing and scientific committees in various national / international conferences and workshops.

Dr. Ruslan Rakhmatullin - *Triple Helix within the EU Smart Specialisation Context*

From 2014, regional and national authorities across the European Union are required to prepare their research and innovation strategies for smart specialisation (RIS3), so that the Structural Funds are applied more efficiently with the aim of increasing synergies between different EU, national and regional policies, as well as public and private investments.

The European Commission advocates the importance of engaging fully relevant local and regional stakeholders, social partners, and civil society in both policy dialogue and implementation of public policies. With this in mind, the European Commission called policymakers across the Union to maintain the dialogue between public and private entities (including socio-economic partners and non-governmental organisations), and other involved actors. Engaging a wide range of actors has long been fundamental to Cohesion Policy since these different actors have skills and knowledge that is potentially able to support both planning and implementation.

This presentation examines the increased importance of the Helix concept within the Smart Specialisation context. The author attempts to explore the linkages between theory, policy and practice related to such growth based on regional innovation smart specialisation strategies and viewed via the 'focal lens' of the multi-stakeholder engagement perspective.

Bio-note:

Dr. Ruslan Rakhmatullin is a scientific policy researcher working for the European Commission's Smart Specialisation Platform which is based at the Institute for Prospective Technological Studies (IPTS, DG JRC) in Seville, Spain. The S3 Platform was established by the European Commission to provide professional advice to EU Member States and regions for the design of their innovation strategies for smart specialisation. Prior to joining the European Commission, Ruslan spent a number of years working for the COST Office (European Cooperation in the field of Science and Technology) of the European Science Foundation in Brussels. Ruslan's academic background is in the field of evaluation and assessment studies. He has obtained a Ph.D. in science and research management from the School of Business, Trinity College, University of Dublin.

Panel 2: Knowledge Transfer, Technology Ecosystems and Triple Helix Opportunities

Facilitator: Dr David Knoke

Dr. Chiara Cantu - *The Key Role of Knowledge Intermediaries in the Co-Managed Innovation*

This paper discusses the co-management of innovation that requires the selection of key stakeholders and a significant role for knowledge intermediaries, depicted as Technological Hubs and Incubators.

The Incubator is one of the triple helix hybrids (Leydesdorff, 2000) that works in the knowledge-based systems and in the Triple Helix network of university–industry–government relations (Leydesdorff, 2006). Traditionally, incubation represents a systematic method of providing business assistance to firms in the early stages of their development. The “basic ingredients” of incubation can be summarized as infrastructure provision, shared services, and management support.

The paper looks at the role of internal relationships between the incubator and tenants; what kind of approach firms can adopt in order to better manage the openness of an innovation orientation; and in particular, how might firms select parties for knowledge transfer processes and how firms transform these into partners to co-produce effective innovation. The paper develops the notion of actor–network coordinators to support a common vision that unites the actors participating in local or international projects.

Bio-note:

Dr Chiara Cantu (PhD in Management, University of Urbino, Italy) is Assistant Professor at Cattolica University, Milan (Italy). Her main research topics are focused on Innovation and Interorganizational Relationships, Industrial Network, Network Dynamics, Spatial Relationships. The main investigation areas are: Technology Transfer, Telemedicine-Telehealth, Teledomotics, Business Services, Technological districts, and Italian SMEs. Her teaching is on Marketing, and the most recent publications are in the field of IMP studies: *A bridge between tradition and innovation* (co-authors Corsaro D., Fiocca R., Tunisini A.) (2013), *Industrial Marketing Management*, 42 (7), 1007–1016; *Actors' heterogeneity in innovation networks* (co-authors Corsaro D., Tunisini A.) (2012), *Industrial Marketing Management* (10): 780-789; and *Roles of actors in combining resources into complex solutions* (co-authors Corsaro D., Snehota I.) (2012), *Journal of Business Research* (12): 139-150.

Ms. Tatjana Taneva & Professor Panayiotis Ketikidis - *Triple Helix-Boosting the Innovation Potential in the Metropolitan Area of Thessaloniki*

New knowledge has become increasingly important for the development of innovative and entrepreneurial business as well as boosting sustainable socio-economic growth at regional level. Overcoming the gap between the new trend of knowledgeable society and the out-of-date systems which are followed by a centric organization is becoming quite a challenge for justifiable and successful regional innovation. Thus, the purpose of this article is to depict how the new innovation model of Triple Helix can assist the metropolitan area of Thessaloniki in its regional development.

The paper discusses the impact of the “Digital Research Center” at the Aristotle University of Thessaloniki as an intermediary actor between businesses and academia; the role of motivation for research, institutional bureaucracy, forms of sharing government expenditure; the impact from developing techno-parks such as C.E.R.T.H., Thessaloniki Technology Park and Technopolis Thessaloniki ICT Business Park.

Bio-note:

Ms. Tatjana Taneva is a young and ambitious researcher with aspirations towards building an academic career in the field of Innovation and Enterprise. Using her excellent interpersonal, writing and researching skills, Tatjana is pursuing persistently her goal in obtaining a PhD degree. The passion for new knowledge and continuous improvement helped her in graduating with honours in her Bachelor and Masters class in the field of Marketing at the University of Sheffield.

Panel 2: Knowledge Transfer, Technology Ecosystems and Triple Helix Opportunities

Moreover, the practical experience in different industries and projects contributed to the overall development of her personality and expertise.

Professor Erik Vermeulen - *The Law and Economics of High-Tech Ecosystems*

Research on entrepreneurship and innovation has examined governments' attempts to replicate the success of Silicon Valley in an effort to stimulate economic growth. The main conclusion is not surprising to anyone interested in and familiar with the emergence and development of high-tech ecosystems.

As a result of the financial crunch and the subsequent economic downturn governments are set to play a new role in encouraging innovation and entrepreneurship. In this paper, we analyze the structure and dynamics of three 'successful' high-tech ecosystems in the Netherlands, England and Germany. This paper critically assesses the development of these tech clusters using data from 2005 to 2013.

Bio-note:

Erik P.M. Vermeulen is Professor of Business and Financial Law at Tilburg University and Tilburg Law and Economics Center (TILEC). He is also Senior Counsel Corporate of Philips (a technology company) in the Netherlands. Much of his current research focuses on the life cycle of a company - from idea to fully mature company, the sources of capital available at each stage of a company's development, and the importance of collaborations and partnerships with other firms and institutions to ensure innovation, growth and value creation. The law and economics of start-up companies (and other non-listed companies) is discussed in the book *Corporate Governance of Non-Listed Companies* (Oxford University Press). In the context of the corporate life cycle, he also examines international trends in corporate governance and the development of company law and securities regulations. This research is collected in the book *The Evolution of Legal Business Forms in Europe and the United States: Venture Capital, Joint Ventures and Partnership Structures* (Kluwer Law International). Furthermore, his research focuses on financial markets and innovation policies and ecosystems. His work has been widely published in top journals and books. Besides his academic work, he serves as a Vice President at the legal department of Philips where he advises on corporate governance issues, including the global structure of the Philips group of companies, corporate law, corporate venturing, international joint ventures and mergers and acquisitions. In addition, he has worked on national and international projects with organizations, such as the European Commission, the OECD, the Dutch Development Finance Institution, UNCITRAL and local governments in the Netherlands, concerning financial and venture capital markets, innovation and knowledge transfer, corporate law, and corporate governance of listed and non-listed companies. Professor Vermeulen is also one of the founders of the International Venture Club.

Dr. Christiane Gebhardt - *SME Innovation in the Advanced Manufacturing Ecosystem of Massachusetts*

The German High Performance Cluster Medical Valley in North-East Bavaria can be regarded as a successful vehicle to transform local competences in regard to skills and sciences into a globally competitive innovation cluster in the medical devices industry that also addresses a reinvention of the Health system. The cluster illustrates the successful revival of a structurally endangered region after the disintegration of Siemens' value chains in the Medical Health Business. Moreover, the federal policy that formed Medical Valley as one out of 15 German clusters exemplifies the convergence of concepts that range from the Triple Helix approach of a purposeful interaction of university – industry – government relations and entrepreneurial universities to Porter's Competitive Clusters, and Ecosystems. There is empirical evidence that strains and ideas from different concepts amalgamate in the policies that strove to boost the economy with a programme that relied on networking structures and a distinct set of funding criteria. In our presentation we discuss the benefits and disadvantages of this policy approach in the light of transferability, conditionality and transformation (i.e. new industry creation). The analysis of the Medical Valley Clusters sets a focus on interaction modes and system rules to identify system behaviour, failures and design of scenarios. Data input comes from focus groups as well as from interviews of policy experts and cluster members.

Panel 2: Knowledge Transfer, Technology Ecosystems and Triple Helix Opportunities

Bio-note:

Dr. Christiane Gebhardt has been a Partner at the Malik Management St. Gallen AG Switzerland for 15 years and is a member of the High Performance Cluster Commission for the German Government. Her research is on regional innovation systems linked to strategy, organisation and management. She has evaluated Chinese, European and US programs addressing innovation. In 2013/14 Christiane stayed at the International Performance Centre/ MIT to carry out research on the implementation of the US policy to enhance innovative capacity of SME in Advanced Manufacturing. Christiane teaches International Management at Heidelberg University.

Panel 3: International Dimensions of Triple Helix

Facilitator: Dr. Ruslan Rakhmatullin

Professor Jay Mitra - *The Triple Helix Approach to International Entrepreneurship*

Populist notions of entrepreneurship have gained international currency. Governments, universities and entrepreneurial organisations, all seek economic valorisation of initiatives designed to compensate for stagnant economic development or job less growth. But there appears to be limited understanding of how the connected, global market place can accommodate innovation and new firm creation for multiple cross-border players working together through the mediation and use of linked, triple helix institutional partners. Three case studies provide the data and insights for the prospects, possibilities, realities and problems associated with a triple helix approach to opportunity development and new business creation activity involving the United Kingdom, China, India and Nigeria.

Bio-note:

Professor Jay Mitra is Professor of Business Enterprise and Innovation and the Director of the International Centre for Entrepreneurship Research at Essex Business School, University of Essex. Professor Mitra has acted as a Scientific Adviser to the OECD (Organisation for Economic Co-operation and Development) as the Head of the Scientific Committee on Entrepreneurship for the OECD's Centre for Entrepreneurship and the LEED (Local Economic and Employment) Programme at its Trento Centre and in Paris. He is a Visiting Professor at the Institute of Management Technology in India and has held similar positions at the School of Management, Fudan University, and the School of Public Policy at Jilin University, both in China. He is a Fellow of the Royal Society of Arts in the UK. Professor Jay Mitra also leads the International Entrepreneurship Forum, a unique network and forum for researchers, policy makers and business practitioners working on entrepreneurship, innovation and regional development issues. He was a Board member of the International Council of Small Business from 2011-12 and, previously, a Board member of the International Association of Science Parks

Professor Jay Mitra has worked with UNIDO, UNCTAD, the OECD, the European Commission, and a range of universities, industry players and government agencies in numerous countries in Europe, Asia, the US and Latin America. His particular interests are in the areas of: (1) New Venture Creation, (2) Entrepreneurship and Regional Development, (3) Innovation Management; (4) Internationalisation and Entrepreneurship; and (5) Cross-Cultural Networks and Business Dynamics. His work covers the interest of corporates, SMEs, social enterprises, governments and public sector agencies across Europe, Asia, Africa and Latin America.

Ms. Tatiana Schofield - *International Alliance Management in Triple Helix Formation*

Our research explores multi-level factors affecting international research collaborations between universities and industry. In such collaborations national government institutions play essential role as facilitators, funding sources and governance support. Therefore it is critical to understand all levels of interactions, linkages, driving factors within international partnership based on triple helix models.

Bio-note:

Ms. Tatiana Schofield (MSc, MBA, MCIM, Chartered Marketer) is Founder and Director of Synergy lab, an innovation management consultancy working with universities and industry to support research commercialisation, develop enterprise infrastructures within universities and promote open innovation and creative thinking. Tatiana has an MBA from Warwick Business School, UK where she focused her research on innovation strategy and entrepreneurship. She is a member of the Chartered Institute of Marketing (CIM) with a Chartered Marketer status. Tatiana holds a position of Chair of the Greater London Regional Board, CIM. Over the last 15 years Tatiana was holding senior management roles in leading universities and professional institutions including Imperial College London, London Business School, Kaplan Professional and the Chartered Institute of Management Accountants.

Panel 3: International Dimensions of Triple Helix

Professor Eduardo Armando, Dr João Maurício Gama Boaventura, Greici Sarturi, Cristina Espinheira Costa - *Wine Clusters In Chile And Brazil*

This study compares the level of competitiveness of the Brazilian wine cluster, located in Serra Gaúcha, with the competitiveness of the Chilean cluster in Valle del Maule, adopting as the theoretical framework the model of Zaccarelli, Telles (Siqueira, Boaventura and Donaire, 2008).

The clusters surveyed represent great economic importance for their regions. Currently, Serra Gaúcha is recognized as the most traditional winemaking region of Brazil, concentrating more than 90% of the national production of wine (Ministry of Agriculture, 2012). Chile, in turn, is among the ten largest producers and exporters of wine, and the region of Valle del Maule is Chile's largest wine region, producing 47% of the country's wine (Servicio Agrícola y Granadeiro [SAG], 2012). The empirical investigation sought to identify which elements of the model contributed to explain the increased competitiveness of the Chilean cluster in relation to the Brazilian counterpart.

Bio-notes:

Professor Eduardo Armando is a Professor at Fundação Instituto de Administração (FIA, Sao Paulo, SP, Brazil), where teaches on General Management, Strategy and Internationalization courses. Also at FIA, he works at ProCED (SME Development Center). He is also a professor at FECAP University, Sao Paulo, and special lecturer at Illinois Institute of Technology, IIT, Chicago, IL, USA. Dr. Armando received a Bachelor of Science in Economics from the University of Sao Paulo, and an International Executive MBA from Fundacao Instituto de Administração. He has broad international experience coordinating courses for Brazilian students in top US universities and, most notably, been as visiting scholar at: (1) Institute of Development Studies at Sussex University, UK and (2) At the Center on Globalization, Governance and Competitiveness at Duke University, NC, USA. In the 90s, when occupying executive positions in leading retail and telecom companies he also travelled over 30 times to Asia (Hong Kong, China and Taiwan); to Europe and US.

Dr. João Maurício Gama Boaventura is an Associate Professor of Business Strategy, School of Business, Economics and Accountancy, University of São Paulo (FEA/ USP). He holds a Phd and MSc in Business Administration (FEA/ USP), Post-Doctoral in Business Administration (EAESP/ FGV) and Lecturer at (FEA/ USP), Bachelor in Business Administration and in Accountancy (FEA/ USP). Prof. Boaventura is Research project coordinator of official research agencies (FAPESP and CNPq) in the field of stakeholder theory. He is an active participant in various strategic planning projects in different kinds of organizations. He is the author of several books and articles published in scientific journals, covering the areas of business strategy, business clusters and networks, stakeholder management and corporate social performance.

Panel 4: Universities and Business in a Triple Helix Context

— Myths and Reality

Facilitator: Professor Henry Etzkowitz

Mr. Michael Kitson - *The Myth of the Ivory Tower*

In the era of austerity there has been an increased focus on the strategic role of universities in stimulating innovation and economic growth, primarily through the transfer of technology. This paper interrogates some of the key aspects of much of the conventional wisdom concerning the transfer of technology and the knowledge exchange process in general. It analyses the results from two unique surveys: a survey of the UK academic community that generated more than 22,000 responses; and a stratified survey of businesses that generated more than 2,500 responses.

The results suggest that much of the conventional wisdom concerning knowledge exchange involving academia is too narrowly confined or is misinformed. First, there is an excessive focus in much of the academic and policy discourse on commercialisation and technology transfer—there are many knowledge exchange mechanisms used by academics—these include commercialisation processes but also many other ‘hidden’ connections. Second, the focus on the science base ignores that knowledge exchange involves academics from all disciplines. Third, the preoccupation with improving innovation and business performance tends to ignore that knowledge exchange involves partners from the public and third (not for profit) sectors as well as private sector businesses. Fourth, the main constraints that hinder or limit the knowledge exchange process include a lack of time, insufficient internal capability to manage relationships and insufficient information to identify partners. Problems concerning cultural differences between academics and business, and disputes concerning intellectual property are not prominent. Overall, the paper suggests that the notion of an academic ‘ivory tower’ is a myth.

Bio-note:

Mr. Michael Kitson is University Senior Lecturer in International Macroeconomics at the Judge Business School, University of Cambridge; Fellow of St Catharine’s College, Cambridge; and Knowledge Hub Director of the UK Innovation Research Centre.

Mr. Nick Rodgers - *Triple Helix - a Benefit or a Hindrance to Business?*

This presentation looks at how businesses see Government and academia and whether business has respect for either sector of the Triple Helix. In many ways business often sees Government putting bureaucracy in its way - creating rules and regulations in the way of profit. Business would also appear to misunderstand the value of academia as the two sides talk different languages and have differing objectives.

Bio-note:

Mr. Nick Rodgers is an experienced non-executive director and chairman with a background as a successful corporate financier. He has considerable experience of businesses in the healthcare, medical, biotechnology, environmental and technology sectors. He is a director and founder of Productiv Limited which specialises in the industrialisation of low carbon automotive technologies. Nick is also chairman of Oxford BioMedica plc, a leading gene based biopharmaceutical company. Until March 2013 Nick was the chief executive of Ipsos Ventures plc, a creator and investor in early stage technology and healthcare businesses. As such he created eight businesses around university technology. Prior to founding IPSO in 2005 Nick was an investment banker and joint head of corporate finance with Evolution Securities (formerly Beeson Gregory). Has advised on over 100 acquisitions or disposals, some 40 IPOs and in excess of 20 takeovers. Nick is also chairman of SEHTA, one of the largest health technology membership and networking organisations in the UK.

Panel 4: Universities and Business in a Triple Helix Context – Myths and Reality

Dr. Emanuela Todeva - *Intermediation in the Triple Helix: Who is Running the Show?*

In the same way as cross-cultural interactions require translators, engagement between the public and the private sector, between government, universities, and firms require intermediaries, ambassadors, and facilitators that carry across messages, ideas, requests and replies. Communication theory demonstrates clearly how a message can get distorted through translation. What can we learn from intermediation theory? A broker becomes an agent of change when s/he gains power in bridging across impossible scenarios, conversations and actions, in far-reach translations, revealing a simple commonality of direction and purpose.

Bio-note:

Dr. Emanuela Todeva (PhD Sociology) is Director of Business Clusters, Networks and Economic Development Research Centre at the University of Surrey, UK. She has published research on the governance of innovation in clusters, strategic management of international business networks, analysis and mapping of the health technology sector and the global information sector, institutional analysis, cooperative business strategies, alliances, network governance and co-evolution, the restructuring of supply chains and business networks in transition economies. Her book on 'Business Networks: Strategy and Structure' has received a wide popularity among academics and business practitioners. In addition to her work on business networks and cluster development, Emanuela's consulting practice and intellectual contributions are in the field of Triple Helix Governance and Intermediation; Triple Helix Policy Implementation through Stakeholder Practices; Cluster Management; Triple Helix Solutions for the Triple Crisis Challenges (environment, banking and poverty alleviation); Business Models for open innovation and industry/ market development; Triple Helix Engagement, Co-alignment and Co-creation; Orchestration and eco-systems design.

Panel 5: Business Led Triple Helix

Facilitator: Dr. Emanuela Todeva

Mr. Chris Shilling - *Can a Triple Helix Approach Change Pharmaceutical Innovation?*

Despite an exponential increase in spending on R&D, the pharmaceutical industry has not achieved any notable increase in productivity in the last 50 years. During the same period, the overall industry R&D costs per successful drug have risen to approximately \$2 billion; a massive investment for industry to make.

The need to balance societal benefit with shareholder profit has forced pharmaceutical companies to focus on diseases where there is a big enough patient population to create a sustainable market for new medicines. Diabetes care, pain management, and Alzheimers disease are examples of this kind of approach. However, this leaves many diseases with low incidence – so-called Orphan Diseases – that do not make financial sense for big companies to conduct research into.

The combination of reduced budgets, changing approaches to healthcare provision, and the social imperative of addressing neglected diseases presents a challenge that academia, industry and government cannot solve independently. What models could enable a major improvement in solving this challenge?

Bio-note:

Mr. Chris Shilling is the programme committee chair for EIRMA, teaches the KM module of Cranfield University's Quality Management in Scientific R&D course, and is an industry subject matter expert for EU Research grant proposals. He qualified as a lawyer from Brunel University. Chris has over 15 years' experience as an innovation project manager and leader in the pharmaceutical & medical device industry. He works part time managing operations and innovation process for Pharma Diagnostics NV, and as an independent consultant providing project planning and management services for life sciences companies including the Drugs for Neglected Diseases institute. He has worked in the past for Pfizer R&D and Novartis' Global Pricing & Market Access group.

Dr. Virginia Acha - *Biologics and Biosimilars: Science and Market Co-development by Triple Helix Actors*

Triple Helix exhibits the role of regulatory shaping of markets for medicines. Regulation plays a critical role in determining which medicines come into use, and how they get there; but increasingly, regulation and the supporting academic research are signalling to business areas for innovation and new categories of medicines. We consider these issues with particular reference to the development of biosimilars.

Bio-note:

Dr Virginia Acha has worked in private sector and academia throughout her career, combining her interests in science policy research and performance within and across organizations. She joined Amgen last year to support the company in R&D policy development and regulatory affairs on a number of issues, including specifically biosimilars and pharmacovigilance for biologics for Europe, the Middle East and Africa. Previously, Virginia spent nearly 5 years at Pfizer working on policy development and engagement in a number of domains, including science, innovation and access and choice in healthcare. In this role, she undertook analysis and policy development in key areas of the business including biosimilars, the value of innovation, personalised medicine and healthcare markets and procurement methods. Virginia joined Pfizer in early 2008, after a decade in academia where she held posts on innovation strategy at Imperial College London Business School, the Science Policy Research Unit (SPRU) at the University of Sussex, the Centre for Research in Innovation Management (CENTRIM) at the University of Brighton, as well as a post-doctoral fellowship at London Business School. She has a Dphil in Science and Technology Policy Studies from SPRU.

Panel 5: Business Led Triple Helix

Professor Paul O'Brien - *New Partnerships and Approaches to Health in the UK: The Case of ELAROS*

This paper presents a case study that details how three NHS organisations and a private medical devices company pooled their resources, expertise and intellectual property to develop a pioneering new service to address an unmet clinical need. The paper sets out the organisational/cultural challenges of creating a university 'spin out' company (ELAROS 24/7 Ltd) as the vehicle to deliver the new service. The case study provides important lessons on the governance arrangements necessary to underpin the facilitation of the different actors, explores the interaction of the actors, the process of achieving co-production and the role of intermediation and intermediaries in bringing about the solution.

Bio-note:

Professor Paul O' Brien is CEO of Elaros 24/7 - the world's first virtual lower urinary tract symptoms (LUTS) assessment clinic. He has held senior posts in the private sector (Chief Executive), local government (Chief Officer), health (Director in community health organisation) and education (Head of Department), Paul has previous venture start-up experience having established the Essex Development and Regeneration Agency employing 60 planners, economists, surveyors, bid writers and fund managers. He has extensive experience of public sector transformation having externalised a local government service and more recently the externalisation of a £33 Million NHS Service. Paul also has broad non-executive board experience gained over a 15 year period and has completed the Institute of Directors Diploma in Company Direction. Paul is a visiting lecturer Cardiff University on its Leadership Programme in London.

Dr. Pierre Hausemer - *The Role of Intermediaries in Triple Helix Interactions: the Case of a Consultancy Specialised in Market, Economic and Regulatory Advice*

There are a wide variety of service organisations with intermediary roles in interactions between government, academia and business. In particular, regulatory consultancies, such as VVA-Europe, add value to Triple Helix interactions by: 1) translating needs and potential solutions into formats that can be understood across the different Triple Helix nodes; 2) acting as a 'gatekeeper' by structuring access to information/knowledge; 3) overcoming structural differences between different actors in the Triple Helix (e.g. time horizons, budget, "business" models); 4) overcoming bottlenecks imposed by organizational boundaries in knowledge transfer; and 5) brokering innovative solutions through the creation of novel Triple Helix constellations. The paper will develop a model of the role and value added of service intermediaries in the Triple Helix. This model can be used as a framework for better understanding the potential role and measuring the impact of entrepreneurial universities/entrepreneurial government.

Bio-note:

Dr. Pierre Hausemer (PhD) is the Managing Director of VVA-Europe, a consultancy specialised in providing market, economic and regulatory advice to private and public sector clients, especially at EU level including studies across the European Commission, the European Parliament, decentralised agencies, national governments and business trade associations. He is currently leading a study on open innovation and knowledge transfer for the European Commission. Before moving to London, Pierre worked as an economic consultant in Washington, DC on issues surrounding the liberalisation of telecoms markets, copyright and international trade. At the London School of Economics, he has taught quantitative research methods for postgraduate students and he has lectured on European Politics and Policy. Pierre holds a PhD from the London School of Economics, a BSc in Economics from Miami University in the United States and a Master of Science in Comparative Politics (distinction) from the London School of Economics.

Panel 6: New Horizons for Triple Helix Research

Facilitator: Mr. Nick Rodgers

Mr. Kai Kaufmann – *The relationship Between Government, the Market and Academia, Exemplified via a Social Thought Experiment (what do I think that person2 thinks that person3 thinks ... that person N thinks, cf. Fagin et al. 1995).*

The paper illustrates the relationship between government, the market and academia with the “Panopticon puzzle”. That all three stakeholders are not only interconnected but also “commensurable” (in the sense of Kuhn 1970) is proven with a mathematical theorem that institutionalizability is recursion based on four lemmas. From a common sense perspective, at the background of this result stands the information revolution due to the universal applicability of Turing (1936) scripts. From an economic perspective, the result solves the “coordinated action problem” (Olson 2009) & the “prisoners dilemma” (cf. Tucker 1950, Flood 1958) and reduces Arrow’s (1950, 1951) “impossibility theorem” to a corollary.

Bio-note:

Mr. Kai Kaufmann graduated with a M.A. in Philosophy, Mathematics and Roman languages from the University of Bonn in 2006, then gained experience on the interface between the market and government by working as a consultant for Roland Berger. Between 2007 and 2009, Kai was a fellow at IESE Business School, receiving a Master of Research in Management and leading the running team. He is currently in the closing stage of his dissertation on “Institutionalizability as recursion” that connects institutional theory with the formally exact mathematical notion of “recursion” based on Turing; Kai has taught half a dozen classes and supervised fifteen Master’s student at the University of Liverpool.

Dr. David Knoke - *Investigating the Triple Helix with Multi-Mode Network Analysis*

Researchers on the Triple Helix extensively discuss “network,” but use it only in a metaphorical sense. Almost no empirical research examines Triple Helix activity with rigorous social network analytic theories and methods (with some exceptions). This presentation urges going beyond network metaphors to investigate the Triple Helix as actual social structures. For the field to advance, researchers should collect and analyse multi-mode relational data on diverse resource & information exchanges, collaborations, other interactions among people, organizations & artefacts in academic, business, and governmental sectors.

Bio-note:

Dr. David Knoke (PhD) is Professor of Sociology, University of Minnesota where he teaches courses in statistics, networks, and organizations. He received his Ph.D. in 1972 from the University of Michigan and was professor of sociology at Indiana University from 1972 to 1985. He was a Fulbright research scholar at Kiel University (1989) and a fellow at the Center for Advanced Study in the Behavioral Sciences (1992). In 2008, he received the University of Minnesota College of Liberal Arts’ Arthur “Red” Motley Exemplary Teaching Award. With various colleagues, he received several National Science Foundation research grant and published the results in research monographs on political, organizational, and social network behaviour. Some of these books are *The Organizational State*, *Organizing for Collective Action*, *Political Networks*, *Organizations in America*, *Comparing Policy Networks*, *Changing Organizations*, *Social Network Analysis*, and *Economic Networks*. His current research investigates diverse social networks, including intra- and interorganizational, political, economic, health care, financial, terrorist and counterterror networks.

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The research centre on the **Business Clusters, Networks and Economic Development (BCNED)** is an outreach group of scholars that focus their investigation on the underlying linkages and interdependencies at regional and global level and the impact of regional agglomerations of firms on global industries and value-chains.

The BCNED centre is leading in the design and the use of novel multistage methodologies, for cluster analysis and cluster mapping, for network analysis and evaluation of network management and governance. The interdisciplinary research and analytical products completed at the Centre are based on large data sets of firms, universities and centres of excellence in innovation and research, as well as innovation outputs such as patents, publications, and academic journals.

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The Triple Helix Association (THA) is a non-for profit, non-governmental association with scientific purpose and a global reach. It was founded in 2009 by leading scholars in innovation and entrepreneurship as an international platform to bridge theoretical and practical aspects underpinning university-industry-government relations and their practical achievements, thus enhancing networking and collaboration as well as knowledge generation, development and spillover.

THA activities range from the development and debate around top class scientific studies, by means of conferences, symposia, and awards; the networking among both leading education & research institutions and stakeholders to foster a wide dissemination and uptake of the scientific findings by means of publications, academic journals and co-operation projects; the support in translating academic models into practical achievements by enhancing international exchange of scholars and the education of students, researchers and practitioners.

The Triple Helix Association is open to both individual and organizational members.

www.triplehelixassociation.org



The Institute of Advanced Studies at the University of Surrey hosts small-scale, scientific and scholarly meetings of leading academics from all over the world to discuss specialist topics away from the pressure of everyday work. The events are multidisciplinary, bringing together scholars from different disciplines to share alternative perspectives on common problems.

www.ias.surrey.ac.uk



Industry and Higher Education is the leading international journal on the relationships between business and industry and higher education institutions. Published since 1987, IHE covers organizational, economic, political, cultural and social issues relating to education–industry collaboration. Knowledge transfer, research commercialisation, academic enterprise, entrepreneurship education and graduate employability are its key themes.

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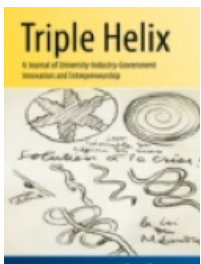
John Edmondson – Chief Editor for the Journal Industry and Higher Education

Call for Papers

The speakers at the workshop address a variety of questions that justify a call for more specialised a focused publications. The organisers have negotiated invited papers from the workshop to be published in two special issues of the following journals; *Industry and Higher Education* (IP Publishing) and the *Triple Helix: A Journal of University-Industry-Government Innovation & Entrepreneurship* (Springer). The special issues will include also an open call for papers in order to attract high quality contributions and a wider participation from the academia.

All practitioners are invited to publish their reflections from the workshop and from their experience in the Official Magazine of the Triple Helix Association - *Hélice*.

Participants are encouraged to use the *video/audio recordings from the workshop* for their future publication and collaboration projects. Video/audio recordings will be made accessible via the Triple Helix website and a link will be circulated after the workshop.



Triple Helix: A Journal of University-Industry-Government Innovation & Entrepreneurship (Springer).

Institutions, Intermediation and Triple Helix Relationships - (A special issue)

Guest Editors: Dr. Emanuela Todeva, Dr. Henry Etzkowitz, Professor Mark Casson

From in-between agents to brokers that bring together seekers and providers of goods, information, money, etc., the role of intermediaries has evolved around matching facilitators that shape, frame and provide identity to all parties in the market place. Some economists argue the need for intermediation occurs due to the imperfect nature of markets and everyday situations where the complete ('perfect') knowledge about providers and seekers (and about what they seek) is not available to everyone.

Intermediation transcends narrow economic issues to also address the social and cultural processes through which traditional intermediaries such as venture capital firms, angel groups, technology transfer offices and incubators expand and hybridise their functions, moving beyond simple revenue generation to encompass such goals as job creation and regional development. The Triple Helix framework also accounts for the emergence of new intermediary formats from interactions among the helices such as the classic case of the venture capital firm, the contemporary accelerator and the design school. A "more the more" dynamic is hypothesized as Triple Helix interactions are stimulated by an open Civil Society.

The relationships within the *Triple Helix* involve the institutionalisation of decision making, resource allocation, and regulated boundary spaces of information and knowledge ownership, transfer, and sharing. This call for papers solicits contributions that *address the challenges of governance, innovation and intermediation in the Triple Helix model* of entangled government – industry – university. We would like to receive contributions that address the role of institutions in the governance of innovation and the role of intermediary institutional actors that shape the industry-university landscape and facilitate interactions, such as funding bodies, regulatory agencies, or legal and management consultants. In particular, we welcome papers that review the challenges faced by the entrepreneurial universities and entrepreneurial governments and the alignment and misalignment of interests that occur throughout the process of innovation, knowledge transfer, and knowledge commercialisation, or how institutional actors engage in shaping preferences and co-alignment of interests.

This special issue of the Triple Helix Journal will focus on the following issues:

- **intermediation, governance and orchestration of relationships in the context of:**
 - civil society,
 - innovation systems,
 - knowledge transfer practices,
 - public-private partnerships,
 - stakeholder platforms,
 - institutional intermediation,
 - multi-level and network governance,
 - technology mediated relationships, or
 - other modalities of government-university and industry interactions
- **brokerage, bridging and third party activities in the context of:**
 - university-industry engagement,
 - government-industry lobbying, information exchange and policy implementation,
 - self-regulation and normative activities by industry,
 - stakeholder activism, representation and mediated dialogue,
 - research funding,
 - R&D collaboration, or
 - skills and capabilities development

Participants are invited to address the intermediation theory and practice from a particular disciplinary perspective and/or a specific case of facilitation, intervention intermediation or orchestration of university-industry-government interactions. Contributions may focus especially, but not exclusively, on the following questions:

- Does the innovation process require intermediation and what intermediaries are ready to step-in
- Who are the actors mediating in regional development projects and how do these actors mediate between infrastructures, nature, urban spaces, regulators, providers and consumers
- How intermediaries govern in sociotechnical networks
- What intermediations take place in urban development
- What is the role of institutional intermediation in stakeholder engagement
- What are the trade-offs in intermediation
- Can transparency be achieved in intermediation, orchestration and brokerage
- How diplomacy and orchestration are practiced within the Triple Helix model
- How intermediaries deal with 'conflict of interests', and deliver 'good value-for-money'

Call for Papers

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Full papers (or approximately 6000-8000 words) must be submitted for publication through the Springer system (<https://www.editorialmanager.com/trhe/>) for *The Triple Helix Journal*, selecting the special issue on *Institutions, Intermediation and Triple Helix Relationships* . All papers will be double-blind reviewed in that system.

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Industry and Higher Education (IP Publishing)
Regional Dimensions of Triple Helix and
Ecosystem Boundaries - a special issue

Guest Editors: Dr. Emanuela Todeva and Professor Mike Danson

The Triple Helix as a concept is recognised to have a transformative effect on industry performance, generating accelerated knowledge and technology transfer between the public and the private sectors and systemic change at regional, national and global levels. In recent years we have observed a radical shift in the approach of governments – as active orchestrators of Triple Helix relationships, pursuing economic development through innovation, institutional changes through community and participative practices, and industry transformations through collaborative public-private funding, co-location of the supply chain within specific regional boundaries and university – industry interactions.

The European Commission Cohesion Policy for regional development and 'smart specialisation' encourages regional public authorities to lead in a Triple Helix mode developing regional research and innovation strategies that focus on key enabling technologies through active engagement with universities and industry. Governments are to engage with business leaders in technology and innovation, encouraging industry to

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pursue collaborative advantage and strategic co-alignment with regional and national socio-economic goals, and encouraging universities to act as innovation entrepreneurs.

Building active and transparent Triple Helix relationships is a critical element of the implementation of innovation policies at regional level. This is supported by a variety of institutional arrangements, technology platforms, and communication practices and instruments that aim to bridge the Triple Helix domains and develop trust in mutual engagement.

We welcome contributions addressing different aspects of the Triple Helix, Quadruple Helix, or the creative commons that link private R&D with local public sector innovation providers and universities, or the commercial realities of mixed R&D funding by the public and the private sectors and mixed appropriation of value added at a regional level.

Contributors are invited to address governance, control, facilitation and optimisation in multi-lateral collaborations at a regional level and to look at the practice of engagement in the transfer of knowledge and technology across the industry-university-government interface. Other issues that may be addressed are:

- Innovation in multi-lateral and participative networks
- Collaborative governance
- Collaborative capacity and business models for cooperation in regions
- Relational governance, network governance, platform governance, and alliance management in Triple Helix formations
- Knowledge sharing and the boundaries of good will
- How stakeholders engage in decisions and sustainable solutions
- Who governs in Triple Helix interactions at the regional level
- Internationalisation of university education and the impact on regions
- The contribution of the entrepreneurial university to the success of Triple Helix partnerships
- Is an ecosystem region-specific or can it be replicated elsewhere?

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Hélice – The Official Magazine of the Triple Helix Association

Hélice is the quarterly Magazine of the Triple Helix Association. It has been distributed to scholars, practitioners, and policy-makers, and is reaching organizations, including universities, public research organizations, as well as public administrators. Our records indicate an audience of about 1500 readers, including members and non-members of THA.

Since the inaugural issue of Hélice, The Editorial Board has been emphasizing an open dialogue philosophy, where they welcome feedback, comments, critiques, additions, or alternative opinions, as well as reflections on any published article.

The editorial Board encourages scholars, researchers and practitioners to share their work, experience and latest observations and papers in order to contribute to the dialogue on innovation and Triple Helix interactions, and to contribute towards strengthening of the professional community that has embraced the triple Helix model for reflection and practice.

You can browse through previous issues at:

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and submit your own contribution (approx. 3000 words) to:
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