



EUPIDE 2008 Enterprise-University Partnership in Doctoral Education

12-13 June, Université Pierre et Marie Curie, Paris

European Colloquium organized by University Pierre and Marie Curie & UNICA with
the support of the City of Paris

Abstracts and Speakers' CVs

GENERAL INTRODUCCION

The point of view of university by Mary Ritter, Imperial College London

Doctoral education must not only provide excellence in research training, but must also prepare doctoral candidates with the skills and experience to choose and succeed in their future careers. A key aspect of this is the link between University and Enterprise. The presentation will discuss a range of collaborative ways in which this liaison might be achieved.

Mary RITTER

Mary Ritter was appointed Pro-Rector for Postgraduate Affairs at Imperial College London in October 2004, and added the International portfolio in October 2005. She was Head of the Department of Immunology from 2004-2006, and from 1999 to February 2006 was Director of the Graduate School of Life Sciences and Medicine (GSLSM) at Imperial.

After a BA in Zoology and DPhil in Immunology from the University of Oxford, and Research Fellowships at the University of Connecticut, USA and Imperial Cancer Research Fund, London UK, she took up an academic post at the Royal Postgraduate Medical School – now the Hammersmith Campus of Imperial College London, following the 1997 merger. Her research programme centres on the development of the immune system, and she has published more than 100 peer-reviewed articles on her research. She has supervised more than 20 PhD students, all of whom have successfully gained their degree.

She was the founding Director of the GSLSM at Imperial College, steering the Graduate School through from inception in 1999 to its current overarching role providing interdisciplinary research activities, an extensive skills training programme and quality assurance for all the postgraduate students in the Faculty of Natural Sciences (Life Sciences Divisions) and Faculty of Medicine. She subsequently helped to establish Imperial's second Graduate School, of Engineering and Physical Sciences, launched in 2002. She initiated and oversees both the design and delivery of Imperial College's postgraduate and postdoctoral transferable skills training programme. In addition, she has established new academic taught courses at both bachelor's and master's level and regularly teaches undergraduate and postgraduate students in her specialist area of immunology as well as running workshops in transferable skills. She is Chair of Imperial's 'Bologna Task Force'.

She sits on a number of national and international committees including the UK Medical Research Council's Non-Clinical Careers Training and Development Panel, the UK Prime Minister's Initiative (PMI) 2 for Higher Education, The Academy of Medical Sciences' Academic Careers Committee (non-clinical), the European Universities Association (EUA) Institutional Evaluation Programme Panel of Experts, the German Excellence Initiative (Institutional Strategies) Evaluation Group, and the Programme Review Committee for the Cambridge-MIT Institute. She chairs the UK Research Councils' "UK GRAD" National Advisory Board and the UKIERI Evaluation Panel, is Vice Chair of the Steering Committee of the EUA Council on Doctoral Education, and has been a member of external evaluation and review panels for universities in Finland, Germany, France and Portugal.

PARALLEL SESSION 1

Session A: How to develop generic skills: Developing awareness of skills

Case study 1: Knowledge Economy Skills Scholarships (KESS) by Bryn Jones, Bangor University

Bangor University has been successful in harnessing European Structural funds to develop an innovative collaborative doctoral programme with business. Partnering with Aberystwyth and Swansea Universities, this programme has resulted in 120+ business focused PhD projects with companies based in the Objective 1 area of Wales (West Wales and the Valleys).

Participating businesses have included Micro, SME and Large Companies with projects covering a broad range of disciplines from Computer Science through to Theology. The project provides an attractive package for participating companies and students and take up has been high. Due to the ESF funding element there is a strong focus on the acquisition and accreditation of transferable skills. Evaluation of the programme has demonstrated the underlying importance of higher skills development to both students and company partners.

This presentation will focus on these experiences and the lessons dawn from Phases I and II and how these have shaped proposals to further extend the programme with Convergence funding. Phase III will further develop the transferable skill element to include bespoke business training and business networking components to better address the needs of individuals wishing to develop R&D careers with SMEs.

Bryn JONES

Bryn is a knowledge transfer specialist based in University Innovation Bangor. He works to establish collaborative projects between businesses and the University. He has extensive experience of implementing the UK Government's Knowledge Transfer Partnerships scheme (KTP). Bryn has been involved in 40+ partnerships including ground breaking and award winning programmes.

Before joining University Innovation Bangor, Bryn was key in establishing Bangor University's graduate placement scheme and student employment bureaux. Bryn has wide experience of working with companies seeking to access University expertise and facilities and the critical role 'higher skills' can have in the success of collaborative projects.

Bryn's recent move to the University's' European Structural Funds team will see him concentrating on developing the University's higher skills projects, supported by ESF Convergence funding - a portfolio of Research Masters and PhDs undertaken in collaboration with local businesses.

Case study 2 : Vrije Universiteit Brussel *by Gunter Lauwers and Mark Runacres, Vrije Universiteit Brussel*

We describe the efforts undertaken at the Vrije Universiteit Brussel to increase the awareness of skills among early-stage researchers and senior academic staff.

We start by asking a few questions:

- what are skills?
- why the emphasis on skills?
- how revolutionary is the skills-based approach to doctoral training?
- what we are training early-stage researchers for?

We discuss the role of tools such as portfolios and personal development planners in raising awareness of skills. We present the case of the Vrije Universiteit Brussel, and discuss some of the successes, as well as the problems we encountered.

Gunter LAUWERS

Gunter Lauwers obtained a Master's degree ("Licentiaat") in Political Science (1995) and a Master's in International and European Law (1996) at the Vrije Universiteit Brussel. From 1998 until 2006 he worked as a teaching assistant in the Department of Political Science of the Vrije Universiteit Brussel, where he taught seminars on political science, nationalism, comparative politics, and political violence. From February 2007 till present, he holds the position of Coordinator of the Central PhD Office of the Vrije Universiteit Brussel.

Mark RUNACRES

Mark Runacres teaches physics and applied mathematics to students in industrial engineering at Erasmus University College (Brussels), where he is also research coordinator of the Department of Industrial Sciences and Technology. His research is in astrophysics and computational physics. Previously coordinator of the central PhD office at the Vrije Universiteit Brussel, he maintains a keen interest in doctoral training.

Session B: How to develop enterprise-university partnership: Doctorate in enterprise

Case study 1: Experience and Future of Industrial Placement of Doctoral Students *by John Murphy, UCD Computer Science and Informatics*

The Performance Engineering Laboratory is a research group that spans two universities in Dublin, Ireland: University College Dublin and Dublin City University. The group has been in existence for about 10 years and there is a strong emphasis on applied research with commercial potential. There are four full-time academics that run the group along with four post-docs, a number of developers and consultants, and over twenty post-graduate students mainly a doctoral level. The research funding has mainly come from Enterprise Ireland, EU, IRCSET and relevant companies. There are industrial linkages with IBM, Vodafone, Sun, Iona, Rococo, Eircom, Clearwire, Shenick, S3, Intune, Seimens, France Telecom, Microsoft Research UK, Sun USA and INRIA. A number of Doctoral students have been placed outside the universities and about half of these have been placed in companies or industrial research laboratories. As UCD has moved to a structured PhD since 2006, consideration has been focussed on how to streamline (if possible and useful) these placements in that structure. The current UCD structure includes for each student a “Research and Professional Development Plan” and a Supervisor, Moderator and Doctoral Committee. With nearly 2,000 research students (150+ Ph.D. in CSI) there are significant issues that arise, i.e. the direction of the research, the duration of the time out from college, the likelihood that they will return, the funding (IRCSET, SFI, EI, EU, other) that they have and of course the Intellectual Property Rights (IPR) issue.

John MURPHY

Dr. John Murphy is a highly successful researcher in the area of performance engineering of networks and distributed systems, with almost 100 peer-reviewed journal articles or international conference full papers published since 1992. His publications have had a significant impact: Dr. Murphy’s H-Index (Google Scholar) is 11 and his G-Index is 21, i.e. his top 21 publications have received on average 21 citations each. Dr. Murphy has been awarded 17 competitive research grants since 2001, 11 as Principal Investigator, with total funding in excess of €3 million. He has supervised 10 Ph.D. students to completion since 2003, as well as 4 Research Masters and 1 Diploma student. He is currently a Senior Lecturer in UCD Computer Science and Informatics.

Case study 2: Elements for successful partnership between enterprise and university – Ericsson in Croatia case *by Darko Huljenic, Ericsson Nikola Tesla (ETK)*

Ericsson in Croatia has a long history in cooperation between enterprise and university communities. More than 35 years of fruitful cooperation are passed. It was different stages and modality of common work. The current stage of cooperation are fully organized through a common projects where are involved researchers like students, assistants, professors and employees from both sides. Such way of work puts both sides in win-win position and most powerful asset are achieved common results and increased knowledge. The case study should focus on organization of common projects from different aspects (money vice, resource vice, time vice, result vice) and study should extract the most critical points for success. The main emphasize should be on supporting doctoral study from the point of enterprise.

Darko HULJENIĆ

Darko Huljenić works in company Ericsson Nikola Tesla for more than 20 years. He goes through different positions in R&D community in the company and currently he is on position of Head of e-health Unit in Zagreb, Croatia.

He finished BSc, MSc and PhD study at Faculty of Electrical Engineering and Computing at University of Zagreb, respectively years 1982, 1989 and 2000. From year 2005 he is elected in the position of Assistant professor.

He has more than 40 scientific and technical publications on international and national conferences and in magazines from the area of communications.

In parallel he is teaching at Faculty of Electrical Engineering and Computing at University of Zagreb, at postgraduate and undergraduate study.

His main scientific interests are: communication systems and open system architectures.

PARALLEL SESSION 2

Session A: How to develop generic skills: Developing knowledge of enterprise

Case study 2: Swansea University – Industrial PhDs *by Ceri Jones, Swansea University*

This session will review Swansea University's innovative approach to industrial PhD programmes. The talk will cover key aspects such as:

- Sectoral Focus
- Programme Management
- Programme Structure
- Assessment
- Completion Rates
- Intellectual Property

The presentation will also explore Swansea University's approach to the development of the skills agenda, and the importance of industrially sponsored PhD programmes to nurturing highly employable postgraduates. Furthermore there will be a specific review of the University's approach to the protection and management of intellectual property rights that are created by industrial PhD programmes.

Ceri JONES

Ceri joined Swansea University in 2001. He has devolved responsibility for the management of three key strategic operations of the University: Research Support, European Funding (Structural and Framework) and Third Mission (Links with the economy and society).

In addition to his role as Deputy Head of Research & Innovation, Ceri is Swansea's nominated Industrial Liaison Officer and Technology Transfer Officer; and as such has a wealth experience of developing undergraduate and postgraduate entrepreneurship programmes, commercialisation of intellectual property and knowledge transfer.

In 2007, Ceri visit some US Universities to learn best practice in the area of industry-academia links, and also to build collaborations between Swansea and the US. As a result, Swansea is now seeking to build strategic links via the Global Connect programme.

Recently, Ceri also visited Scandinavia with a view to developing international collaborations. Swansea University is pursuing positive links with HEIs in Demark, Sweden and Finland with solid proposals for collaborative projects in the areas of research, knowledge transfer and student exchange.

Session B: How to develop enterprise-university partnership: Partnership in doctoral programs

Case study 2: Interdisciplinary Research Teams: Praxeology study *by Zuzanna Kasprzyk, University of Warsaw*

One of the most deep-rooted stereotypes about various fields of scientific exploration is that humanities and social sciences are domains which yield a poor profit for economical area. Their results don't support achievements of technology and therefore have small worth for medicine or computer industry and other heavy-business branches. In light of this stereotype if something is practically useless, and cannot be quickly changed for money, then it is worthless. For that reason humane disciplines are developed with less strength than pure sciences. Adherents of that superstition say that humane dissertation dies when it comes out from printing-machine, for it is read only by three persons – author, tutor and proof-reader. These are cruel words, but to some a degree they are apt. In Humanities professors, research staff and postgraduates form a confined environment which is specialized and closed. In contrast pure-science surroundings are open and sensitive for demands of society and industry. Humanists grow round with book-dust and enjoy themselves with brilliant talking, whereas pure scientists compete in race for most profitable outcome. It looks like humanities are something like arts where research is *l'art pour l'art* which cannot be interpreted in terms of capital gains.

This is plausible outlook, but it is delusive – one can find very strong and rigid links between “soft” and “hard” sciences, and between “soft” sciences and common profit. For example one can find chain of dependence between philosophy and computer science or between ethics and economics. Truth is that those sciences can gain more together than separately. My aim in this presentation is two-fold – firstly I want to prove that there is possibility for creating interdisciplinary research teams, where scientists from different domains look forward in the same direction, and have the same advantageous and profitable aim. Secondly I want to describe conditions of good research team in the light of contemporary praxeology – i.e. «science of good work».

Zuzanna KASPRZYK

After finished her M.A. in philosophy at the Catholic University of Lublin in 2005, Zuzanna Kasprzyk is PhD student at the Philosophy Department of University of Warsaw. Zuzanna Kasprzyk has participated as speaker in several conferences. Last year she made a presentation on *Genesis and Structure of Moral Dilemmas. Explanation in Light of the concept of linguistic conventions*, at the 9th World Congress of Semiotics. Helsinki, Finland.

Zuzanna Kasprzyk is the author of 13 biographical entries in *General Encyclopedia of Philosophy* of Polish Society of Thomas Aquinas.

In 2005 she received the Minister of Education Scholarship for outstanding achievements in studies.

ROLE OF LOCAL AUTHORITIES IN STRENGTHENING DOCTORAL TRAINING IN UNIVERSITIES

Case study 1: PhD's, universities and funding strategies by *Klaus Zinoecker*, Vienna Science and Technology Fund

Do local authorities play a role in strengthening doctoral training at universities? Given the legal framework conditions in many countries, the answer is 'No' or 'a limited one.' For the city of Vienna, this response is a rather unsatisfying option. Within the last few years, not only has the policy field of RTDI become more important in Europe, but also on a national and even regional level. In Vienna, science, research and education play a vital role on the political agenda. So the city has developed a variety of instruments to stimulate Viennese based scientists and companies with a special emphasis on younger researchers.

Within my presentation, I will (i) give an overview of the political rationale behind this strategy (ii) present different instruments and (iii) present challenges, pitfalls and success stories after having developed and having adopted these instruments for the first time.

Klaus ZINOECKER

Before economist Klaus Zinoecker joined WWTF office on 1 May 2005 he was responsible for evaluation in the field of R&D policy at the Institute of Technology and Regional Policy of the Austrian research institution "Joanneum Research". His area of expertise is the design of funding programmes and systems and methods of evaluation. He took part in evaluations of programmes of all relevant Austrian ministries as well as European programmes. He also coordinates the Austrian Platform for Research and Technology Evaluation www.fteval.at. He is deputy director of WWTF (www.wwtf.at) the Vienna Science and Technology Fund, which is a non-profit organisation funding science and research in Vienna.

DEVELOPPING EMPLOYABILITY OF DOCTORS

Case study 1: Future jobs are created where knowledge is created *by Göte Nyman, University of Helsinki*

Sustainable knowledge building is crucial in maintaining the competitive power of companies and universities. New knowledge creation forums are being built and they are typically cross-functional, distributed, networked, and strongly economically and technologically driven. Research centers, university/company networks, open knowledge communities, new in-company innovation structures and processes, and other new knowledge forums are examples of this development. The high strategic value of these forums offers direct opportunities to universities and companies to build partnerships that attract both parties. When such partnership structures and forums are built, university students and researchers become integrated in company activities and processes. New jobs can be created in these contexts. However, companies and universities face the challenge of opening up to collaboration.

In this presentation I describe my own experiences from numerous company/university collaboration forums I have worked with in and outside of Finland, and will outline a general framework to describe these experiences and show the implications to facilitating PhD recruitment to companies.

Göte NYMAN

Göte Nyman, born 1947, is a professor of psychology at the University of Helsinki (UH), Finland. He has worked and consulted with numerous national and international large-scale companies since 1970's in e.g. human interface research & development, computer instrumentation, knowledge management, organizational development and change, brand development and management, recruitment, and education of company management. He has successfully built collaboration and funding channels and recruitment of students for companies in numerous business areas. He has published appr. 170 scientific publications and writings, ranging from brain research to organizational issues, including three books. He has acted as the Head of the Department for nearly 15 years, and the Dean of the Faculty of Humanities at UH. He is a long-term member in both Finnish Pattern Recognition Society and Management Consulting Association in Finland. In 2007 he received two major national prizes, one from Finnish magazine publishers' association and the other from Advertisers' association for his contributions in media research and development.

Case study 2: The concept of employability once again. How to make employers and students meet *by Johan Falk, University of Stockholm*

Employability is a versatile concept that has been a constant in the debate on Higher Education in Europe in recent years. Perhaps it is misused and overused sometimes because of its positive connotations. Employability is commonly defined as “fit for purpose”, that means fit to be employed outside the university. The approaches to this “fit for purpose” are of course manifold and may focus on a) the appropriation of the university training for the jobs it is aimed for, b) the appropriateness of the curricula that are taught (what subjects and what matters?), c) the appropriateness of the teaching methods (realistic?), d) opportunities offered to practice during the studies, e) existence of canals between the employers and the students, f) the student’s knowledge and abilities (learning outcomes?), g) the student’s generic competence, h) the conditions and other aspects of the job/work place (is the job employable?).

Recent surveys in Sweden have proved that graduated students having practiced during the studies have better chances to get jobs after the final exam. This is what is expected and the reasons why it is so are evident. It is important to get acquainted to the labour market, because it gives contacts and it gives you comparative advantages. What statistics of this kind also show is that the lapse between the time of graduation and getting a job varies quite a lot, partly due to the state of the market. But it may also be due to the employability or lack of employability of the graduates.

What is being done, what could be done and what should be done to raise employability? And The question of what should not be done is also justified. Universities become more and more aware that the output is an aspect that deserves as much attention as the input. Introductory courses for beginners are nowadays mirrored by measures for recent graduates, such as career centres, work pools, recruiting firms at the campus, visits of employers to the university, conferences on employability and new study programmes. Still there may be a feeling among employers that universities are not accessible enough. Career centres fulfil an important mission as a link between the academic world and the labour world and in the best of cases it makes these worlds overlap and interfere to a certain degree.

Johan FALK

Johan Falk is professor of Spanish at the Department of Spanish, Portuguese and Latin American Studies, Stockholm University. After some years in the publishing business in the seventies he has been working at Stockholm University since 1980. Besides teaching and research he has been commissioned to several administrative functions such as director of studies (1982-1995), head of department (1997-2003) and Bologna coordinator at the university since 2004.

The on-going university reform in Sweden and various international engagements on behalf of the university have been important tasks during the last years. His publications fall with the domain of linguistic research concerning Spanish with an emphasis on the relation between language structure on one hand and semantics and pragmatics on the other. He has also published some didactic books for Spanish teaching, e.g. a grammar for secondary school and university.

