



UCD CASL
Complex & Adaptive Systems
Laboratory

UCD CASL
Saotharlann Córas Coimpléascach agus
Oiriúnaitheach

Innovation Research Unit

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The University College Dublin, ranked within Times Higher Education – QS World University Rankings Top 100 for 2009 and Ireland’s largest university with five colleges consisting of 34 Schools.

Project entitled “Management of Emerging Technologies for Economic Impact” (ManETEI), applications prior to May 10th, 2010.

1 Marie Curie PhD Fellowship

The fellowship includes funding for 3 years commencing September 1st, 2010. The living and mobility allowance is between around 36,000 € and 40,900 € per year.

University College Dublin is partner of the Marie Curie Initial Training Network ManETEI Management of Emerging Technologies for Economic Impact, which is funded by the European Union in the 7th Framework Programme. ManETEI is an interdisciplinary research network seeking to develop knowledge on the multifaceted phenomenon of managing emergent technologies, and integrate this with an additional focus on advanced capacity building and career development that will benefit early-career researchers.

European academic and industrial partner institutions in the project are University of Leeds (UK) Co-ordinator, Erasmus University Rotterdam (NL), Helsingin Kauppakorkeakoulu (FI), Univerza v Ljubljani (SI), Chambre de Commerce et d’Industrie de Grenoble / Grenoble Ecole de Management (FR), Fundacion Instituto de Empresa (ES), Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung E.V (DE), Bayer Technology Services GMBH (DE).

Responsibilities:

The selected graduate will take part in the ManETEI training programme and do a PhD in the research field of Management of Emerging Technologies for Economic

Impact. This concerns research on the emergence and re-configuration of industry architectures using agent-based simulation based on empirical research.

The dissertation consists of:

- an empirical case study of a chosen emerging technology and the accompanying emergent industry structures plus their supporting policies (e.g. on ICTs, biotechnology-based pharmaceutical industries etc.)
- using agent-based simulations for modelling the emergent industrial architectures

The dissertation will benefit from integrating different variables into the experimental simulations. Experimental simulations will enable to study how new value networks and industrial architectures emerge; how do industrial architectures become redefined and value redistributed as the consequence of emergent technology.

The ManETEI-funded PhD candidate has to apply successfully for Stage II admission to UCD's Structured Thematic PhD Programme "Complex Systems and Computational Social Science" (CSCS; <http://geary.ucd.ie/cscs/>). The programme is an innovative collaboration of research groups at Geary Institute and CASL and the Schools of Business, Computer Science and Informatics, and Electrical, Electronic and Mechanical Engineering. For an entry of 1st of September 2010, the CSCS deadline for applications is the 4th of June 2010.

We are looking for excellent candidates with an interest in combining empirical socio-economic research and modelling activities for complex systems, in our case innovation systems. A sound background in research methods using both, quantitative (prominently social network analysis and agent-based simulation) and qualitative methods is mandatory.

Requirements:

- Since the funding is for three years, the successful candidate must be able to enter Stage II of the PhD process, which requires a relevant Masters degree and sufficient methods training (see UCD PhD regulations at http://www.ucd.ie/registry/academicpolicy/pol_reg.htm)
- Good Masters degree in the Social Sciences, Economics, Science and Technology Studies, or related areas
- Experience with empirical research
- Experience with formal, mathematical approaches in the social sciences
- Computer literacy
- High motivation in performing interdisciplinary research
- Fluent English
- Mobility (the willingness to live and work in a foreign country)

Important: The graduate will be hosted at the UCD Innovation Research Unit (IRU), Dublin, Ireland. At the time of selection researchers should not have resided or received education or employment in the state of this hosting partner institution (Ireland) for a period exceeding 12 months in the 3 years immediately prior to this recruitment. For information about the Marie Curie mobility rules please consult:

http://cordis.europa.eu/fp7/people/home_en.html

For more detailed information about the ManETEI Programme please visit our homepage: <http://casl.ucd.ie/iru/index.php/research/eu-funded-projects/22>

Please send your application (including a formal letter of application with contact details, outline of research interests, declaration of motivation, Curriculum Vitae, graduation certificates and an outline (3 pages) of your proposal PhD project) and a complete application for the CSCS <http://geary.ucd.ie/cscs/> before **May 10th, 2010** to Prof. Dr. Petra Ahrweiler, Principal Investigator ManETEI, UCD Innovation Research Unit (IRU), UCD CASL, University College Dublin, 8 Belfield Office Park, Clonskeagh, Dublin 4, Ireland or via email: petra.ahrweiler@ucd.ie