Fully funded PhD Studentship in econometric modelling

Details

- Title: PhD Studentship in econometric modelling of natural resources and economic growth
- Supervisors: Dr Paolo Agnolucci, Senior Lecturer in Environmental and Resource Economics, UCL ISR and Professor Brett Day, University of Exeter.
- Stipend: £16,057 & UK/EU fees
- Start Date: January/February 2016
- Funding Duration: 4 years
- Eligibility please check: https://www.epsrc.ac.uk/skills/students/help/eligibility/

The UCL Institute for Sustainable Resources invites applications for a fully funded 4-year PhD studentship covering UK/EU fees plus stipend to assess historical evidence about the use of a number of natural resources on the one hand, e.g. water consumption, consumption of materials and demand for land, and economic growth. Analysis could be implemented at the sectoral level, at the local level or for the UK as a whole.

In your PhD we will expect you to adopt a number of econometric techniques. Issues you will be confronted with include reverse causality, (e.g. does economic growth cause demand for water or does water consumption causes economic growth?), structural breaks, time-varying coefficients, changes in the policies affecting consumption of natural resources and in the structure of the economy. Your analysis will be valuable in its own right as an important contribution to the deployment of advanced econometric techniques to the field of environmental economics but also support the development of a Computable General Equilibrium (CGE) model of the UK economy.

For this reason you will need to become familiar with CGE modelling – but not implementing it - in order to produce outputs required by the model, e.g. elasticities of production inputs. In addition, you might explore how small-scale econometric models, e.g. VARs with limited number of variables, could be linked with CGE models. You will be comfortable with interfacing with professionals from other disciplines and as your PhD unfolds becoming an in-house expert on the macro-econometric methods used in the environmental field.

Person specification:

- Passionate about data analysis, modelling, programming and conducting research
- A MSc degree in economics, statistics or other data analysis discipline, e.g. machine learning
- Ability to implement several econometric techniques and to describe output from econometric models to a non-scientific audience
- Knowledge of relevant statistical software or programming languages (such as R, MatLab, Python, Stata and Eviews)
- Ability to use own initiative and prioritise workload
- Good interpersonal and communication skills (oral and written)
- A high level of attention to detail in working methods

Application Procedure

Stage 1 - Pre-application documents **- (1) CV, (2) academic transcripts, and (3) 1-page personal statement** outlining motivation, interest and eligibility for the post - should be emailed directly to Mae Oroszlany: e.oroszlany@ucl.ac.uk.

Stage 2 - Following the interview, the successful candidate will be invited to make a formal application to the UCL Research Degree programme. Further guidance will be provided. http://www.ucl.ac.uk/prospective-students/graduate/research/degrees/sustainable-resources-mphil-phd

Informal enquiries on the content of the research topic should be emailed to Dr Paolo Agnolucci, p.agnolucci@ucl.ac.uk

Deadline for application: 1st November 2015
Interviews week starting: TBC