

Post-doctoral position: Evolutionary economics/Agent-based Computational economics: forecasting the effects of policies in the French pig sector

Project duration

12 to 24 months

The project

The candidate will contribute to an ambitious research project (ECOANTIBIO) aiming at evaluating the impacts of public policies in animal agriculture, targeting the reduction of antibiotic use in the French swine sector. The candidate will participate to data mining and treatment, and will develop an agent-based economic modelling approach derived from environmental economics.

Two phases are envisioned: creation of a market model for the pork sector, and assessment of the economic impact of the Ecoantibio plan on the pig sector

A multi-agent economic model, representative of the pork value chain, will be created. It will be constructed through the representation of the various players in the sector, from phase 1, with a representation of the behaviors of each category of actors, including the specific sub-sectors (market segmentation). The model constructed will be used to assess dynamically the effects of the Ecoantibio 1 plan on the one hand on players in the pork sector, and on the other hand on players in the substitution markets. Particular attention will be paid to identifying spontaneous developments in the sector (moratorium), key measures of the EcoAntibio plan, and international market trends. Then, the model will be used to simulate the effects of potential public policies (*ex ante* evaluation).

Your profile

Applicants should have recently earned a Ph.D. in Economics (or should be near completion of the dissertation) and should have shown interest in the topics of the group. The preferred candidate has demonstrated her or his potential to conduct high-quality research, ideally by having some papers under revision or even accepted for publication in refereed international journals. The successful applicant is expected to independently conduct academic and policy-relevant research and also to contribute to ongoing research projects of the group. The candidate should perform innovative research at the forefront of Evolutionary economics, Data Science and Machine Learning.

Your benefits

The Postdoctoral research will benefit from our agile management system, and will have the opportunity to participate in many research activities (seminar series, conferences) and attend executive education sessions. Salary will be commensurate to experience, and benefits (health and vacations) follow French regulations.

Our group

We are an enthusiastic group of researchers dedicated to the improvement of livestock and farmers well-being. We use innovative analytical tools to address modern challenges of economics of animal health:

- Assessing human decision-making with empirical and data-driven work
- Evaluating the effects of public policies in the animal health sector, at micro and macroeconomic scales
- Working transdisciplinary by combining computer science, systems approaches, epidemiology and economics.
- Understanding epidemic dynamics, using modelling and computer simulation of complex animal and human interactions

We are based on the gorgeous campus of the National Veterinary School of Toulouse. Our research team is integrated to The French National Research Institute for Agriculture, Food, and the Environment (INRAE), which is a public research establishment under the dual authority of the Ministry of Agriculture and the Ministry of Research. The institute is among the world leaders in agricultural and food sciences, in plant and animal sciences, INRAE's main goal is to be a key player in the transitions necessary to address major global challenges.



Find more:

<http://www.envt.fr/>

<https://epidec.weebly.com/>

<https://medpopbov.envt.fr/>

Interested?

We look forward to receiving your online application in a single pdf with the following documents: a letter of motivation, your CV, university transcripts, two academic references.

Please send the documents to:

guillaume.lhermie@envt.fr didier.raboisson@envt.fr

Application close: 31 June 2020. *Due to Covid-19 situation, the selection process will start before dead line. We consequently invite candidates not to wait for application closure for at least first contacts.*

The position is ideally planned to start in September 2020. This is subject to changes, due to the international Covid-19 situations, and we will be comprehensive with constraints that apply to international candidates.