

1 PhD student in the research education subject: Animal science or Technology or Biology

Modelling and evaluation of future resource-efficient production of meat and milk

As part of two EU projects, we are looking for a PhD student to work with modelling and evaluation of future sustainable pig and cattle production systems. In the first part, models to assess resource efficiency and environmental impact from pig, milk and beef production will be further developed. These models will be used to evaluate today's conventional animal production systems, and alternative production systems that aim to be more sustainable. Both existing alternative systems in Europe and future, theoretical systems developed in the project will be evaluated. The animals in these systems have been genetically selected for feed efficiency and robustness. Adapting to climate change and the use of feed resources based on biomass that is not wanted by humans as food is important in the project. The second part of the project concerns the evaluation of social sustainability and includes methodological developing in the field of life cycle assessment of animal production systems. Weighting of social and environmental aspects in a comprehensive sustainability assessment is also part of the project.

In this project, you will work with a multidisciplinary team in a creative research environment at the Swedish University of Agricultural Sciences. The project is linked to SLU's research platform for future aspects of food, Future Food, and to two EU projects: "Sustainability of pig production through improved feed efficiency" and "Genomic management tools to optimize resilience and efficiency". You will collaborate with many different actors in Europe and establish a wide network with stakeholders in different countries. You will spend a few months at another European university as part of the PhD project.

Qualifications

We are looking for someone with good knowledge and interest in modelling and quantitative methods, and a will to learn about animal production systems. You have a degree of MSc (or equivalent) in animal science or engineering or biology or equivalent. Interest for sustainable development, environmental and climate change issues, and social challenges is a requirement. Knowledge in modelling, computational engineering, statistics, system analysis (e.g. LCA) agriculture and animal production is meriting. You are eligible to apply even if you do not yet have your degree but are expected to receive your degree during the first half of 2018. You shall be able to work independently and focus on your project and be solution-oriented. At the same time, you shall be flexible and have good ability to collaborate. As you will be interacting with many researchers and industry organizations from different countries, we will pay particular attention to personal qualities. You will work in an international network and therefore good knowledge in English is a requirement.

Starting date: March 2018 (or as agreed).

Your application shall be written in English and contain CV, references and a letter explaining why you are interested in this position and what makes you a good resource in this project. Explain in the letter the way in which you meet the qualifications described above.

Forms for funding or employment

Employment as PhD student

SLU is an Equal Opportunity Employer.

A person has basic eligibility for third cycle education if he or she has taken a second cycle qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second cycle education. Upper secondary school grades equivalent to English B/English 6 are a basic requirement.

Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant's qualifications, certified knowledge of the English language and an interview.

Read about the PhD education at SLU at www.slu.se/en/phd

Use this [APPLICATION FORM](#)

Further information:

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Applications, marked with **ref no SLU ua 2018.2.5.1-237**, must have arrived at the Registrar of SLU, P.O. Box 7070, SE-750 07 Uppsala or registrator@slu.se no later than **2018-02-12**.