

Thesis proposed

Health disorders in dairy cows: Assessment of their incidence and analysis of risk factors

University: University Nantes-Anger & Oniris, school Biology and Health

Host group: Oniris (College of Veterinary Medicine, Food science and Engineering) UMR Oniris - Inra Biologie, Epidémiologie et Analyse de Risques en santé animale (Nantes, France)

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Start: end of 2010 – **Duration :** 3 years

Applicants shall set a CV and an accompanying letter where they explain their motivations and their skills in relation to the thesis subject. Deadline for applying: 30 june 2010

Context

In order to meet social concerns for farm animal welfare, the Welfare Quality® project proposed a tool to assess the welfare of animals on farms or at slaughter. In order to improve the welfare of animal, such assessment tools must be associated with decision support tools to help farmers choosing remedial solutions to solve welfare problems, when such problems are detected on their farms. Such decision support tool are largely lacking at the moment. The present thesis will investigate the possibility to design decision tools for the welfare of dairy cows.

Description of the work

The objectives of the thesis are

- 1- to estimate the prevalence of the most common health disorders in dairy cows affecting welfare;
- 2- to identify the risk factors associated to the most common health disorders, to estimate their impact on health problems respectively in term of incidence and persistence;
- 3- more generally to link predictive models of health disorders with evaluation models of animal welfare.

The results shall be gathered to design a decision tool to help farmers to decide a strategy in case of welfare problems. The thesis will include surveys in dairy farms (using the Welfare Quality® method) to build statistical models, bibliographic studies coupled with meta-analyses, and the modeling of expert opinion (Adaptive Conjoint Analysis).

Expertise acquired during the thesis

During the thesis, the PhD student will acquire basic scientific expertise (construction of scientific hypotheses, literature reviews, scientific writing...) and specific expertise on epidemiology, animal welfare evaluation, dairy production.

Pre-requisites

Master2 (Baccalaureat + 5 years) or equivalent degree.

A background in veterinary sciences or agronomic sciences, or a solid experience in animal production will be welcome. The student will work in a team and will be in contact with practitioners. Social skills will be essential.

Languages: English + The applicant shall be able to manage French