



PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

Open PhD position at FUB for CSC scholarship candidates 2017

Please note: the PhD position is only offered to Chinese PhD candidates for application in the framework of the FUB-CSC PhD Program.

Department/Institute:

Department of Veterinary Medicine/ Institute of Animal Hygiene and Environmental Health (FUB) and Department Engineering for Livestock Management/ Leibniz Institute for Agricultural Engineering Potsdam-Bornim (ATB)

Subject area:

Livestock – Environment – Interactions

Name of Supervisor:

Prof. Dr. Thomas AMON (Mr.)

Number of open PhD positions:

1

Type of the PhD Study:

Both types are possible, but full-time is preferred.

Project title:

Stress load of dairy cows under different climatic conditions

PhD Project description:

This project monitors animal-individual stress responses of dairy cows to different climatic conditions in naturally ventilated barns. The aim is to assess heat stress in dairy cows using a range of parameters to assess the animal comfortable zone and animal comfortable state. Parameters shall be combined to an innovative heat stress indicator system. Monitoring is performed by a) measurements of body temperature, heart rate, respiration rate in dairy cows with physiology sensors, b) measurement of activity, lying, rumination with behavioural sensors, and c) monitoring of production level and health status (on-line real-time milk yield and milk composition). As parameters of stress load measurements of heart rate variability and cortisol in milk will be conducted. All methods are established in our research team, but could be improved further (e.g., improvement of analysis steps during laboratory testing for cortisol in milk). In a Latin square experimental design, we will use always the same cows but under different conditions (comparing hot, normal, cold days or days with and without artificial cooling). In addition, climatic parameters will be measured (temperature, humidity, wind speed) and evaluated in regard to their influence on the physiology and behaviour. Animal monitoring will be performed in order to quantify the influence of the different climatic conditions on the animal-individual welfare.

Language requirements:

IELTS 6.5 or TOEFL 95 ibt.

Academic requirements:

Veterinary medicine, Agricultural science (master degree)

Information of the professor or research group leader:

We offer involvement in an interdisciplinary team in an attractive working environment, application-oriented basic research and development with high practical relevance and very good conditions for your professional development.

<http://www.vetmed.fu-berlin.de/en/einrichtungen/institute/we10/index.html>

<http://www.atb-potsdam.de/en/institute/departments/engineering-for-livestock-management.html>

<http://www.atb-potsdam.de/en/research-programs/precision-farming-and-precision-livestock-production/anwendungsfelder/livestock-farming.html>

<http://www.atb-potsdam.de/institut/ueber-uns/mitarbeiterinnen/portrait/portrait/thomas-amon.html>

Please note:

In a first step the complete application should be submitted to the Beijing Office for evaluation by January 4th, 2017. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.