Faculty of Veterinary Medicine, University of Calgary, is seeking two graduate students (preferred PhD) with interest in the beef cattle industry for a project on beef calf health around weaning.

Project description:

- The feedlot industry deals with a high level of antimicrobial use for treatment and control of BRD (30% of the animals gets sick) and is now facing a high level of antimicrobial resistances in respiratory bacterial pathogens.
- BRD is often diagnosed in the first weeks after arrival at the feedlots as cattle are exposed to viral and bacterial pathogens at a time when their immune system is comprised because of weaning, transportation and co-mingling.
- BRD can be significantly reduced by avoiding exposures to multiple stressors at once. This is called preconditioning; preconditioned calves are typically weaned and adapted to eat from a bunk, drink from a waterer, and are fully vaccinated against viral and bacterial BRD pathogens before being transported to a feedlot.
- Our objective is to study the impact of co-mingling preconditioned calves with “conventional” cattle on morbidity, productivity, and detailed evaluation of the microbiome as part of calves respiratory health.

What are we looking for:

Student 1: Calf health and welfare: Applicants with a DVM degree or degree in animal science or a related field will be considered. Ability to work independently is required, as active involvement in project development is expected. Experience with cattle handling and basic knowledge on beef industry is essential or the ability and interest to learn. This graduate student position will provide the candidate of choice with strong skills in epidemiology, welfare, and production animal health.

Student 2: Microbiome of the beef calf. Applicants with a degree in animal sciences, veterinary medicine (DVM), microbiology or related field will be considered. The preferred candidate has solid laboratory skills, with experience in DNA extraction, PCR and other routine techniques. Skills or the willingness to obtain the skills related to bio-informatics and interpretation of sequence data is required as the interpretation of next-generation sequencing data will be a critical component of the study. The candidate is expected to participate in the field collection of samples and be an active member of the research team. This graduate student position will provide the candidate of choice with strong skills in microbiology, bio-informatics and respiratory health.

The preferred candidates need to be good team players with excellent communication skills, both within the academic as well as the non-academic setting. Good communication (oral and written) skills in English is also needed. The salary will be commensurate with the level of education and experience. The graduate student will be part of a vibrant graduate student environment of several principle investigators collaborating to ensure the best learning opportunities.

UCVM is a new and dynamic veterinary faculty in Western Canada that is committed to strengthen the connections between animal health, public health, and the environment. UCVM faculty works across disciplines and Departments, fostering collaborative research, teaching and service. Descriptions of the Faculty and its departments can be found on the UCVM website (www.vet.ucalgary.ca). The University of Calgary is a research-intensive, comprehensive university that supports innovation in research, education and service to the community. Calgary is a vibrant, multicultural city with a population of 1,300,000. It is located near the Rocky Mountains, Banff National Park and Lake Louise and offers an enormous opportunity for outdoor activities both in winter and summer.
For additional information for position 1, please contact Dr. Karin Orsel (Karin.orsel@ucalgary.ca), and for position 2 Dr Frank van der Meer (frank.vandermeer@ucalgary.ca). Review of applications will start asap. Interested individuals should submit a current curriculum vitae and an outline of research interests and relevant experiences along with the names of three referees to:

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