



2021-088: Clinical investigation of treatment options for joint infections in western Canadian feedlot cattle.

Researcher: Murray Jelinski

Funding: \$23,350

Lameness is a major cause of feedlot morbidity, of which 16.1% is attributable to septic arthritis. This disease has a higher fatality rate than other types of lameness. However, its treatment is frustrating, unrewarding, and costly. Currently, there are no antimicrobials with a label claim for septic arthritis.

This project will use Shotgun metagenomics to characterize the relative abundance and diversity of the bacterial communities within the joint. This will help better understand the bacteria present in septic arthritis joints and the complexity of the microbiota in infected joints to potentially lead to better management strategies, such as a short-acting and more affordable NSAIDs. Murray Jelinski's research team will work with three commercial feedlots in Western Canada to study 225 head of