



2020-111: Enhancing diagnostic methods for rapid and accurate detection of macrolide resistance in *Mannheimia haemolytica*

Researcher: Janelt Hill

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Antimicrobial resistance is already an issue for beef cattle, and there is evidence of new mechanisms in the *Mannheimia* bacteria indicating creating additional new resistance. As *Mannheimia haemolytica* is resistant to the most commonly used antibiotics within the Bovine Respiratory Disease Complex, more analysis to curtail this problem is essential. Dr. Janet Hill and her team will sample 800 calves on arrival into the LFCE feedlot for two years, so that they can sequence the bacteria shown to have resistance.

While the application of this research is long-term, understanding antimicrobial resistance in a large scale will generate a much more comprehensive understanding of this problem.