

## **Angus Foundation Research Project**

**Project Name:** Uterine and vaginal microbiome associations with fertility in Angus beef cattle.

**Status:** In progress

**Timeline:** January 1-December 31, 2016.

**Angus Foundation Funding:** \$29,000

**Objective:** Characterize the uterine and vaginal microbiome in Angus beef cows during the postpartum period and undergoing fixed-time AI (FTAI); determine whether the uterine and/or vaginal microbiome has an effect on pregnancy establishment and maintenance in Angus beef cattle submitted to FTAI; and determine whether the reproductive tract microbiome is heritable, such as in the rumen.

**Results, if any:** Insights into the association of the uterine and vaginal microbiome with fertility in Angus cattle. Foundation for future areas of investigation focusing on specific mechanisms of fertility and management strategies to overcome poor fertility. Fundamental information pertinent to understanding microbiome heritability between animals. Filling a knowledge gap and allowing for better understanding of cattle fertility.

**Application:** Generating a larger dataset that could be incorporated into genomic-enhanced EPDs such as heifer pregnancy.