Integrating heat stress metabolome with tissue function in swine, implication for growth and carcass quality

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**Expected Data Type**

- Data on animal performance, metabolomics analysis and tissue functional assays will be generated.
- Data type to be captured will reflect the effects of treatments on growth performance and feed efficiency. Data will be captured physiological parameters of animals under test. Some of these data include skin and rectal temperature, breathing rate, serum metabolite profile including hormones (insulin, IGF-1, blood urea nitrogen, free fatty acids, glucose). Functional response of tissue in the various functional assays proposed will be captured.
- Data will be subjected to statistical analysis and results will be summarized by treatment.
- Results will be presented in figures and tables.
- A p value of 0.05 will be sued to determine significance of tests. P value between 0.05 and 0.01 will be considered as showing strong tendency.

**Data Format**

Raw metabolomics data will be stored as Excel files. Metabolomics data will be summarized, and presented graphically as well. Each figure generated will have clear footnotes describing the context of the experiment.

**Data Storage and Preservation**

Data will be shared directly in response to requests

**Data Sharing and Public Access**

Data will be shared only after the materials have been published in peer-reviewed publications

**Roles and Responsibilities**

Question not answered.

**Monitoring and Reporting**

Project and DMP will be monitored by NIFA. Dr. Ajuwon will be responsible for reviewing and revising the DMP