Plan Overview

A Data Management Plan created using DMPTool

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

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Copyright information:

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

Expected Data Type

Describe the type of data (e.g. digital, non-digital) and how they will be generated (lab work, field work, surveys, etc.). Are these primary or metadata?

- 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 cpatured 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 sin teh various functional assays proposed will be captured.
- Data will be subjected to statistical analysis an dresults will be summarized by treatment.
- Results will be presneted 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

For scientific data to be readily accessible and usable it is critical to use an appropriate community-recognized standard and machine readable formats when they exist. The data should preferentially be stored in recognized public databases appropriate for the type of research conducted. Regardless of the format used (notebook, samples, images, spreadsheet, etc.), that data set should contain enough information to allow independent investigators to understand, validate, and use the data.

Raw metabolomics data will be stored as Excel files. Metaboloimics data will be summarized, and prsented graphically as well. Each figure genberated will have clear footnotes describing the context of teh experiment.

Data Storage and Preservation

Scientific data should be stored in a safe environment with adequate measures taken for its

long-term preservation. Applicants should describe plans for storing and preserving their data during and after the project and specify the data repositories, if they exist. They should outline strategies, tools, and contingency plans that will be used to avoid data loss, degradation, or damage.

Data will be shared directly in response to requests

Data Sharing and Public Access

Describe your data access and sharing procedures during and after the grant. Provide any restrictions such as copyright, confidentiality, patent, appropriate credit, disclaimers, or conditions for use of the data by other parties.

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

Roles and Responsibilities

Who will ensure DMP implementation? This is particularly important for multi-investigator and multi- institutional projects. Provide a contingency plan in case key personnel leave the project. Also, what resources will be needed for the DMP? If funds are needed, have they been added to the budget request and budget narrative? Projects must budget sufficient resources to develop and implement the proposed DMP.

Question not answered.

Monitoring and Reporting

Successful projects should monitor the implementation of the DMP throughout the life of the project and after, as appropriate. Implementation of the DMP should be a component of annual and final reports to NIFA (REEport) and include progress in data sharing (publications, database, software, etc.). The final report should also describe the data that was produced during the award period and the components that will be stored and preserved (including the expected duration) after the award ends.

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