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Transcriptome Data Supporting Early Prediction of Carcass Merit in Young Beef Cattle

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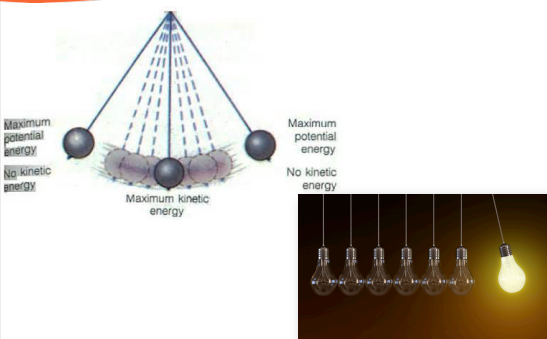
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Shift the paradigm back

- Collection and reporting of phenotypic production data
- How do we facilitate this collection and analysis of data
- We have to fill a void, but make sure to not get run over



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Benchmarking Database

- Utilize Cow Sense software to aid in the collection and dissemination of data
- Facilitate the collection of phenotypic data from commercial producers
- Establish benchmark's for production traits within the state of South Carolina (southeast)
- What does this look like?

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Data Management

Phenotypic data provided from producer (excel, piece of paper, napkin ☺)

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graph TD
    A[Phenotypic data provided from producer (excel, piece of paper, napkin ☺)] --> B[Excel data directly imported to Cow Sense]
    A --> C[Producers get electronic data and ranking within SC]
    A --> D[Hand copy data will be entered into Cow Sense]
    B --> E[Cow Sense: Each producers will have a separate herd file in Cow Sense]
    C --> E
    D --> E
    
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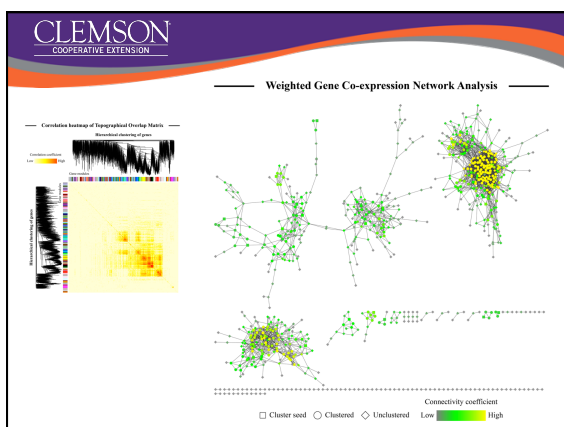
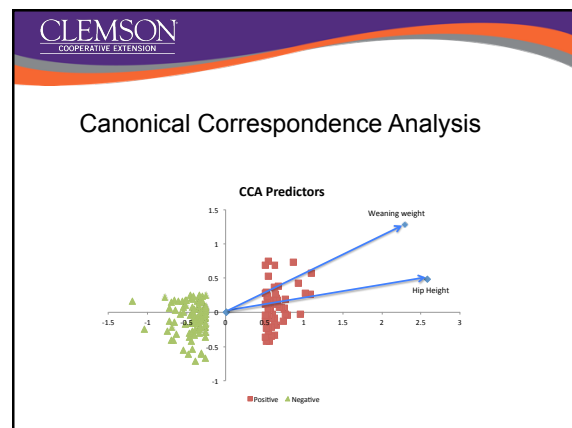
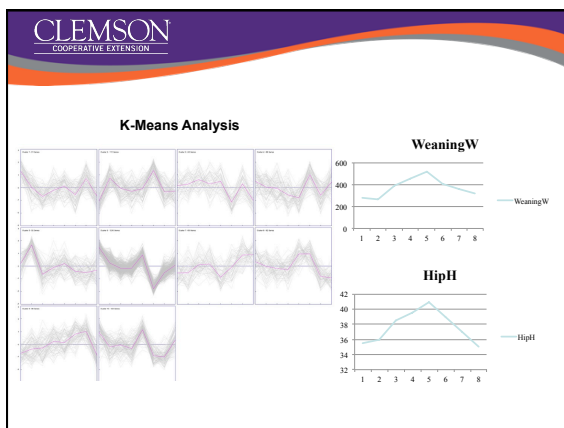
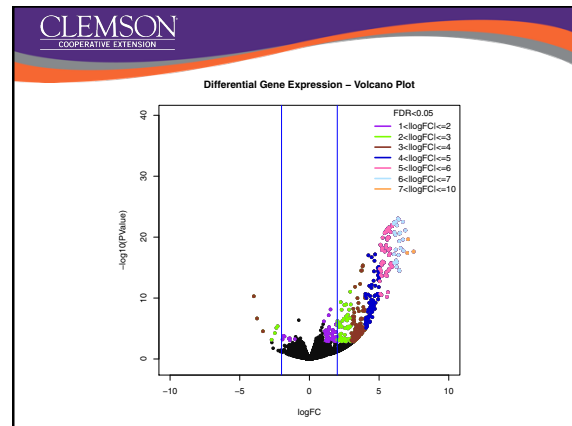
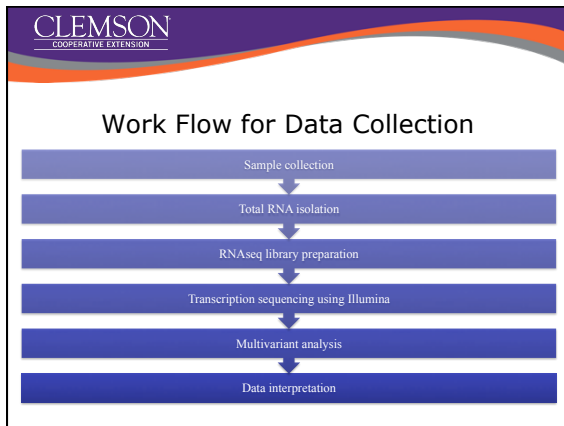
Genome vs. Transcriptome

Genome

- Bovine genome is one of largest sequenced
- All **DNA** in the species
- Data is the same regardless of tissue source
- Not all genes are expressed

Transcriptome

- All **RNA** in the species
- Data varies based on the tissue samples
- All of these genes are expressed
- \$\$\$



Master BEEF PRODUCER

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Systems approach to beef production education

The Master Beef Producer curriculum is designed to provide Extension education in a systematic format to beef meat producers as a producer.

I. Introductory Level
This level is geared toward those producers looking to gain a basic understanding of the beef industry and the role of the beef producer. This level will be the most basic and is designed to give the participants a solid foundation in the beef industry and the role of the beef producer.

II. Certified Level
This level requires a certain level of knowledge and experience in the beef industry. Participants will learn about the various aspects of the beef industry and the role of the beef producer. This level will be the most challenging and is designed to give the participants a solid foundation in the beef industry and the role of the beef producer.

III. Master Level
This level is for those producers who are looking to gain a deep understanding of the beef industry and the role of the beef producer. This level will be the most challenging and is designed to give the participants a solid foundation in the beef industry and the role of the beef producer.

IV. Distinguished Level
This level is for those producers who are looking to gain a deep understanding of the beef industry and the role of the beef producer. This level will be the most challenging and is designed to give the participants a solid foundation in the beef industry and the role of the beef producer.

The certificate/level structure will allow for targeted program development based on education level, increased program effectiveness, increased adoption of new practices, and increased ability to track impact over a long duration. Each level consists of instruction hours, a farm progress self-assessment, and written exam.

LIVESTOCK & FORAGES

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