

Ultrasound Guidelines Council Update: Systems Review Committee

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The Systems Review Committee (SRC) of the Ultrasound Guidelines Council (UGC) is comprised of the three academic members of the UGC board of directors and one at-large appointed person.

The SRC approves ultrasound systems for intramuscular fat estimation where the data will be used in genetic evaluations of U.S. beef breed associations. An ultrasound system is a combination of: ultrasound scanning machine, ultrasound machine settings, frame grabber, and interpretation software.

Systems Review Committee has established the protocol for new ultrasound system approval by the UGC. Highlights of this protocol include:

1. Notice to SRC of intention to approve a new system with development data provided.
2. Entity proposing new system will pay for all expenses of system approval.
3. Minimum of 70 animals with both ultrasound data and chemical extracted fat data.

4. Chemical extracted fat is the reference phenotype to compare ultrasound data to.
5. A currently UGC approved reference ultrasound system must also scan the same group of animals.

Statistical measures used to evaluate the accuracy of the proposed ultrasound systems include:

1. Bias
2. Correlation
3. Standard error of prediction
4. Slope of ultrasound trait on carcass trait

Recently, the following systems were approved by the Ultrasound Guidelines Council System Review Committee:

Items in bold are recently approved components and/or software algorithms.

The Ultrasound Guidelines Council is glad to see a continued investment in identifying new ultrasound hardware and supporting technologies to enhance the characterization of body composition traits in seedstock beef cattle for selection purposes.

Test participant	Ultrasound machine	Frame grabber board	Intramuscular fat prediction model
Ultrasights	New Aloka 500	Avermedia frame grabber	Ultrasights New Aloka Intramuscular Fat model
Ultrasights	E. I. Medical - EVO	Onboard digital image storage	Ultrasights EVO Intramuscular Fat model
CUP Lab	New Aloka 500	Elgato frame grabber	CUPLab New Aloka Intramuscular Fat model
CUP Lab	Aquila	Elgato frame grabber	CUP Lab Aquila Intramuscular Fat model
CUP Lab	ECM Exago 16 cm magnification	Digital Image Transfer	CUP Lab Exago 16 cm Intramuscular Fat model
CUP Lab	ECM Exago 20 cm magnification	Digital Image Transfer	CUP Lab Exago 20 cm Intramuscular Fat model
CUP Lab	E. I. Medical - EVO	Onboard digital image storage	CUP Lab EVO Intramuscular Fat model
CUP Lab	E. I. Medical - Ibex Elgato	Elgato frame grabber	CUP Lab Ibex Elgato Intramuscular Fat model