UGC Field Certification and Continuing Education Program
September 14-17, 2014 – Ames, Iowa
Hosted by The CUP Lab and Iowa State University

INFORMATION FOR TECHNICIANS

Introduction
This document provides information regarding the UGC Field Certification (sometimes called “proficiency testing”) and the UGC Continuing Education Program scheduled for September 14-17, 2014 at Ames, Iowa. For additional information on the UGC organization please visit the UGC website (http://www.ultrasoundbeef.com/). Questions may be directed to Dr. Mike Tess, the UGC Executive Director, at: mwtess@ultrasoundbeef.com or 406-581-9071.

Who Should Participate
All ultrasound technicians wishing to become UGC-certified for the first time may do so only through participation in a UGC Field Certification. All UGC Field Technicians whose certification expires in 2014 and who do not qualify for re-certification via absentia must re-certify in a UGC Field Certification. This Field Certification will be the ONLY opportunity for technicians to certify (or re-certify) in 2014.

Location
The field certification will be conducted at Iowa State University in Ames, Iowa. Directions to the scanning facility may be downloaded from the UGC website. The classroom education component will be held at the Best Western Inn-University Park Inn & Suites, 2500 University Boulevard in Ames.

Travel
Ames is in central Iowa about 35 miles north of Des Moines on Interstate 35. For those choosing to fly, the closest major airport is Des Moines (code = DSM).

Motels
A block of rooms has been held at the Best Western Inn – University Park Inn & Suites (2500 University Boulevard) in Ames. Please make your own reservations by calling 515-296-2500. The block is listed under “The CUP Lab/Walter and Associates”. The rate should be $80.00.

Meals
Lunch will be provided for technicians on the day that they go through the certification process. Snacks and beverages will also be provided at breaks.
**Education Program**
UGC policy requires all technicians going through the certification process to also participate in the education program. UGC Technicians who have certified via absentia are welcome to participate in the education program and may earn 2 points towards their education requirements. See the UGC website for more details on UGC Continuing Education.

**Cost**
UGC Field Certification and Education Program = $550  
UGC Education Program alone (applies only to UGC Absentia Technicians who are not re-certifying) = $50

**Schedule**
In order to save time for technicians, the education program has been integrated with the certification process. Technicians may go through certification on Monday, Tuesday, or Wednesday. The facilities will permit 9 technicians per day.

The education program will include a chute-side workshop and classroom presentations. The workshops are designed to improve scanning techniques and will be conducted in the evening prior to proficiency testing.

Technicians should plan to arrive at the ISU Beef Center by 6:45 PM the evening prior to their scheduled scanning day. Technicians should be finished and ready to start home by 5:30 PM the next day. The schedule is summarized below.

<table>
<thead>
<tr>
<th>Sunday September 14</th>
<th>Monday September 15</th>
<th>Tuesday September 16</th>
<th>Wednesday September 17</th>
</tr>
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<tbody>
<tr>
<td>7:00 – 9:00 PM</td>
<td>Chute-side workshop for Monday techs</td>
<td>Chute-side workshop for Tuesday techs</td>
<td>Chute-side workshop for Wednesday techs</td>
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<tr>
<td>6:30 AM – Chute-side setup</td>
<td>7:00 AM - Scanning begins</td>
<td>6:30 AM – Chute-side setup</td>
<td>6:30 AM – Chute-side setup</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>Lunch</td>
<td>7:00 AM - Scanning begins</td>
<td>7:00 AM - Scanning begins</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Lunch</td>
<td>12:00 PM - Lunch</td>
<td>12:00 PM - Lunch</td>
</tr>
<tr>
<td>1:00 PM - Classroom education program and written exam</td>
<td>1:00 PM - Classroom education program and written exam</td>
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<td>1:00 PM - Classroom education program and written exam</td>
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<tr>
<td>5:30 PM – Monday techs should be finished</td>
<td>5:30 PM – Tuesday techs should be finished</td>
<td>5:30 PM – Tuesday techs should be finished</td>
<td>5:30 PM – Wednesday techs should be finished</td>
</tr>
</tbody>
</table>
Registration
Certification times will be filled on a first-registration first-scheduled basis. Technicians may request the day to certify; however, final scheduling will be decided by UGC. To register, technicians must fill out the registration form which may be downloaded from the UGC website. Complete registrations must include payment and be received no later than September 8, 2014. Technicians will be notified of their scheduled certification dates via email. UGC Absentia Technicians who wish to participate in the education program should register using the same form.

Equipment and Supplies
Technicians attempting certification must bring and use their own equipment – i.e., ultrasound machine with transducer, standoff pad, frame grabber, image capturing system, and extension cords. Technicians are not required to own the equipment they use; however, UGC certification is specific to the equipment (brand and model) used during proficiency testing. The host institution will provide oil, paper towels, electrical service, and a work table next to the chute.

The Certification Process (Proficiency Testing)
To become UGC Field Certified, ultrasound technicians must pass proficiency testing (often referred to as UGC Field Certification). Proficiency testing includes a written exam, and the collection of ultrasound images of the rump, rib, and intramuscular fat. Twenty animals, varying in age, gender, and condition are scanned representing breeding cattle as well as harvest cattle. Each technician collects images on every animal twice (i.e., in two sessions). Animals are renumbered between sessions. Technicians should be prepared to spend no more than 3 minutes collecting images from a single animal. All animals will be clipped in advance by the host institution.

UGC Reference Field Technicians collect images on the same animals. The images collected are interpreted by UGC Reference Lab Technicians to yield estimates of ribeye area, rib fat, rump fat, and intramuscular fat. The Reference Lab Technicians also score every image for image quality. Measurements from images collected by the Reference Field Technicians are used as the standards for each trait. Technicians are evaluated based on several statistics including image quality, correlation, bias, standard error of prediction, repeatability, and standard error of repeatability. The UGC website contains study materials and explanations of the statistics used to evaluate technician proficiency.

Statistics for all technicians are evaluated by members of the UGC Board of Directors which makes all pass/fail decisions. Technicians will be notified of the results within about 6 weeks after the certification program.
Ultrasound Training
UGC Central Ultrasound Processing Labs offer training in beef cattle ultrasound. Training may be obtained prior to the field certification described in this document. For more information contact the labs directly:

International Livestock Image Analysis
4594 Union Road
Harrison, Arkansas 72601
870-743-3440
http://www.designergenesusa.com/

Walter & Associates (CUP)
2610 Northridge Parkway Suite #105
Ames, Iowa 50010
515-232-9442
http://www.cuplab.com/en/training

UltraInsights
27577 State Highway CC
Maryville, MO 64468
660-562-2074
http://www.uicuplab.com

revised 7/18/14
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