## Tuesday, September 13, 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>7:15 AM</td>
<td>Badger Bus departs DoubleTree hotel for Meat Science &amp; Animal Biologics Discovery (MSABD)</td>
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<tr>
<td>7:30 AM</td>
<td>Continental Breakfast – MSABD</td>
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<td>8:00-8:15</td>
<td>Welcome and Introductions</td>
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<td><em>Chuck Kaspar, Director, FRI; University of Wisconsin-Madison</em></td>
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<td><em>Kent Weigel, Chair of Department of Animal &amp; Dairy Science; University of Wisconsin-Madison</em></td>
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<td><em>Jeff Sindelar, University of Wisconsin-Madison</em></td>
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<td>8:15-8:45</td>
<td>History of Food Safety in the Meat Industry</td>
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<td><em>Andy Milkowski, University of Wisconsin-Madison</em></td>
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<td>8:45-9:45</td>
<td>Understanding Microbiology in Meat Processing: Pathogens</td>
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<td><em>Peter Taormina, Etna Consulting Group</em></td>
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<td>9:45-10:15</td>
<td>BREAK &amp; Group picture</td>
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<tr>
<td>10:15-11:15</td>
<td>Understanding Microbiology in Meat Processing: Production &amp; Process</td>
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<td><em>Peter Taormina, Etna Consulting Group</em></td>
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<td>11:15-12:00</td>
<td>Rapid Methods for Microbiology</td>
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<td><em>Margaret Vieth, 3M Technical Service</em></td>
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<td>12:00-1:00</td>
<td>LUNCH - Dejope</td>
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<td>1:00-5:30</td>
<td>Laboratory Exercise #1: 1.25 hour sessions with a 15-min break between each session.</td>
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<td>1:00-5:20</td>
<td>Group A: Microbiology Methods: microbiological laboratory methods, dilution &amp; plating techniques, stomaching, enrichments, streaking</td>
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<td><em>Kathy Glass, Adam Borger, Kristin Schill, UW-Madison, Margaret Vieth, 3M Technical Service</em></td>
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<td>Group B: Meat Processing: analytical tools important for food safety, developing thermal processing profiles</td>
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<td><em>Jeff Sindelar, Andy Milkowski, Jordan Nehls University of Wisconsin-Madison</em></td>
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Group C: **Sanitation**: environmental monitoring, pre-operational inspections (visual, swabbing). ATP testing, principles of sanitary equipment design, product sampling procedures,  

**Greg Marconnet**, *Mead & Hunt*  
**Kara Mikkelson**, *Hydrite---Adam*  
**Cindy Austin**, *University of Wisconsin-Madison*

5:30 PM  
Badger Bus departs MSABD building for DoubleTree hotel

6:00  
Shuttle departs the DoubleTree Hotel for Café Hollander  
(MMC Candidates Only)

6:15  
Reception at Café Hollander

6:45  
Dinner

7:15  
Evening Program at Café Hollander  
Professional Development Activity: Plant Project Ideas Presentation  
**Jeff Sindelar**, *University of Wisconsin-Madison*  
**Jeff Swenson**, *WI Dept. of Ag, Trade, and Consumer Protection*  
**Jesse Brookstein**, *University of Wisconsin-Madison*

9:00 p.m.  
Shuttle departs Café Hollander for the DoubleTree Hotel

**Wednesday, September 14, 2022**

7:15 AM  
Badger Bus departs DoubleTree hotel for MSB

7:30 AM  
Breakfast – MSAB

8:00-9:00  
Process Integration for Hygienic Design  
**Greg Marconnet**, *Mead & Hunt*

9:00-10:00  
Pre- and Post Food Safety Considerations, Challenges & Opportunities  
**Ted Brown**, *Cargill Meat Solutions*

10:00-10:15  
BREAK

10:15-11:00  
Gram Positive Pathogens in the Meat Industry  
**Kathy Glass**, *University of Wisconsin-Madison*

11:00-11:45  
Gram Negative Pathogens in the Meat Industry  
**Chuck Kaspar**, *University of Wisconsin-Madison*
11:45-12:45 LUNCH – MSABD

12:45-1:30 Spoilage Bacteria, Yeasts, and Molds in the Meat Industry
Adam Borger, University of Wisconsin-Madison

1:30-2:15 Developing a Company Wide Food Safety Culture
Mark Ryan, Maple Leaf Foods

2:15-3:00 Foodborne Illness Outbreaks & Investigations
Lynn Roberts, Wisconsin Division of Public Health

3:00-3:30 BREAK

3:30-4:15 Developing an Effective Food Safety Recordkeeping System
John Weisgerbe, Weisgerber Consulting LLC

4:15-5:15 Thermal Processing to Control Microorganisms; Microbial Modeling / Determining Process Lethality / Stabilization
Jason Enfield, Hormel Foods

5:15 Reception at MSABD

6:00 Picnic at MSABD

8:30 PM Badger shuttles departs MSABD for DoubleTree

Thursday, September 15, 2022

7:15 AM Badger shuttle departs DoubleTree for MSABD building

7:30 AM Breakfast – MSABD

8:00-9:00 HACCP from a Microbiological Perspective
Joe Meyer, Kerry

9:00-11:45 Laboratory Exercise #2: 45 minute sessions with a 15-min break between each session.

9:00-11:30 Group A: Microbiology Methods: Microbiology results; deviation troubleshooting
Kathy Glass, Adam Borger, Kristin Schill UW-Madison, Tina Caskey, Neogen
Group B:  **Meat Processing:** Generating and interpreting thermal processing profiles
*Jeff Sindelar, Jordan Nehls, University of Wisconsin-Madison, Jason Enfield, Hormel Foods*

Group C:  **Shelflife Methods:** Finished product evaluations (off product), understanding product shelf life
*Cindy Austin, Andy Milkowski, University of Wisconsin-Madison, Kara Mikkelson, Hydrite---Adam*

11:45-12:45  LUNCH – Dejope

12:45-1:45  Ingredients with Antimicrobial Impact Commonly Used in the Meat Industry
*Garrett McCoy, Corbion*

1:45-2:30  Validation of Food Safety Systems
*Jeff Sindelar/Jordan?, University of Wisconsin-Madison*

2:30-2:45  BREAK

2:45-3:30  Environmental Sampling Programs
*Joe Meyer, Kerry*

3:30-4:30  Developing Effective Food Safety Systems (including regulations)
*John Butts, Land O’Frost / Food Safety by Design*

4:30-4:45  Concluding Comments/ Final Questions

4:45 PM  Badger shuttle departs MSAB for DoubleTree hotel
Laboratory Exercises

Tuesday, September 13, 2022
1:00-5:30 pm

**MSABD Building (1 h, 20 min sessions, 10 min transition)**

Group A: (1.25 hr) : Petri film vs. pour plates (lactic acid bacteria, coliforms), meat vs. environmental samples

Group B: (1.25 hr): Analytical tools important for food safety (30 min ppt), USDA, FSIS Appendix A (30 min ppt), Smokehouse assessment (30 min, hands-on)

Group C: (1.25 hr): Environmental monitoring, pre-operational inspections (visual, swabbing). ATP testing, principles of sanitary equipment design, product sampling procedures

1:00 – 2:20 pm
2:30 – 3:50 pm
4:00 – 5:20 pm
5:25 pm: reconvene before dismissal (picnic start immediately after)

Thursday, September 15, 2022
9:00-11:30 am

**MSABD Building (45 Min Sessions; 10 min transition)**

Group A: (45 min): Microbiological Results & Data, Rapid Methods

Group B: (45 min): Generating and interpreting thermal processing profiles (15 min ppt), Developing thermal graph (15 min), Modeling data (15 min)

Group C (45 min): Finished product evaluations (off product), understanding product shelf life

9:00 – 9:45 am
9:55 – 10:35 am
10:45 – 11:30 am