**Monday, October 29, 2018**

4:30 pm Program Committee/Moderators meeting

5:00 - 7:00 pm Registration (Dinner on your own)

**Opening Session Moderator: Lance Baumgard, Iowa State University**

7:00 Welcome & Recognitions - Larry Miller, DISCOVER Conference Series and DC35 Co-chairs Lance Baumgard, Iowa State University and Marcus Kehrli, USDA-ARS

7:10 Conference Keynote Speaker – Immunological Distress Effects on Health and Productivity of Dairy Cows Marcus Kehrli, USDA-ARS

8:00 Welcome Reception

**Tuesday, October 30, 2018**

7:00 - 8:00 AM Continental breakfast

**Session 1: Being a Mom is Hard: Inflammatory and Metabolic Stressors During the Transition Period**

**Moderator: Jessica McArt, Cornell University**

8:00 Welcome and Announcements -- Larry Miller, DISCOVER Conference Series and DC35 Co-chairs Lance Baumgard, Iowa State University and Marcus Kehrli, USDA-ARS

8:10 Inflammation in the Transition Period – Adaptive Tool or Another Stressor? Barry Bradford, Kansas State University

8:40 Periparturient Energy Homeorrhesis – Excessive Lipolysis and Immune Function Andres Contreras, Michigan State University

9:20 Discussion by all participants (roving microphones to involve as many participants as possible during discussion periods)

10:00 Break

10:30 The Stress of Making Milk – Calcium Dynamics in Early Lactation Jessica McArt, Cornell University

11:00 Metabolic Dysregulation and Immune Function – Disease Prediction and Prevention Through Immunomodulation Ricardo Chebel, University of Florida

11:30 Discussion by all participants

12:30 Lunch

**Session 2: Neonatal Challenges and Disease**

**Moderator: Geof Smith, NC State**

1:30 How Stress Impacts Gut Health in Neonates Adam Moeser, Michigan State University

2:00 Impact of Innate Immunity of Calf Health and Respiratory Disease Jodi McGill, Iowa State University

2:30 Discussion by all participants

3:00 Break

3:30 Factors That Affect Adaptive Immune Development in Calves Amelia Woolums, Mississippi State University

4:00 Impact of Stress on Health and Disease in Calves Geof Smith, North Carolina State University

4:30 Discussion by all participants

5:15 Adjourn

**Poster Reception**

**Wednesday, October 31, 2018**

7:00 - 8:00 AM Continental breakfast

**Session 3: GI Stress and Immunometabolism/Inflammation**

**Moderator: Barry Bradford, Kansas State University**

8:00 Intestinal Immunity and Impact of High Grain Feeding Tanya Gressley, University of Delaware

8:30 High-Grain Feeding Spectrum Health Disorders: Impact on the Gut and Beyond – the Microbiome Perspective Ehsan Khafipour, University of Manitoba

9:00 Discussion by all participants

9:30 Break

10:00 Situations that Create Leaky Gut and the Resulting Energetic Cost of Immune Activation Lance Baumgard, Iowa State University

11:00 Early Life Gastrointestinal Function and Health of the Dairy Calf Mike Steele, University of Alberta

11:30 Discussion by all participants

12:30 Lunch
Session 4: Immune System and Reproduction Moderator: Marcus Kehrli, USDA-ARS
1:30 Host-pathogen Interactions Shape the Development of Postpartum Uterine Disease Martin Sheldon, Swansea University UK
2:00 Impacts of Uterine Infection on the Ovary: An Enduring Mark on the Female Germ Line John Bromfield, University of Florida
2:30 Discussion by all participants
3:00 Break
3:30 The impact of Uterine Health and Systemic Inflammation on Ovarian Function Rob Gilbert, Ross University
4:00 Impact of early lactation disease on early embryonic loss. Eduardo Ribeiro, University of Guelph
4:30 Discussion by all participants
5:15 Adjourn

Thursday, November 1, 2018
7:00 - 8:00 AM Continental breakfast
Session 5: Integrating Immunity and Nutrition Moderator: Mike Ballou (TX Tech)
8:00 Stress Effects on Dairy Cattle Health and Production in the Developing World Tom Graham, Veterinarians Without Borders
8:30 A Systematic Approach is Needed to Improve Immunity and Transition Success on Farms Mike Ballou, Texas Tech University
9:00 Discussion
9:30 Break
10:00 Panel: Practical Applications
10:45 Discussion
11:15 Wrap-up
11:45 Adjourn