Tuesday May 29, 2018
4:00 pm Program Committee/Moderators meeting
4:00 - 6:00 Registration – Red Oak Foyer
5:00 Reception & Dinner – Red Oak Ballroom
Opening Session: Conference Kickoff
6:50 Welcome Larry Miller, DISCOVER Conference Series and DC34 Co-chairs Glen Broderick, Broderick Nutrition & Research and Jeffrey Firkins, The Ohio State University
7:00 Keynote Speaker - Protein & Energy: Dynamically Interacting Nutrients John Metcalf, Trouw Nutrition Agresearch
8:00 Adjourn

Wednesday May 30, 2018
7:00 am Continental breakfast – Black Break Area, Red Oak Foyer
8:00 am Welcome and Announcements Larry Miller, ADSA Discover Conference Series and DC34 Co-chairs Glen Broderick, Broderick Nutrition & Research and Jeffrey Firkins, The Ohio State University
Session 1: Pre-Absorptive Interactions: Where Protein and Energy First Interact Moderator: Hélène Lapierre, Agriculture & Agri-Food Canada
8:10 Energy and Carbon Sources for Efficient Microbial Protein Synthesis Jeffrey Firkins, The Ohio State University
8:40 How to Complement Rumen Microbial Protein: Histidine Deficiency ChanHee Lee, The Ohio State University
9:00 Discussion
9:30 Break
10:00 Methanogenesis and the Rumen Ecosystem Alex Hristov, The Pennsylvania State University
10:30 How Energy Influences Urea Recycling to the Gut Evan Titgemeyer, Kansas State University
11:00 Discussion
11:30 Lunch - Burnham’s Restaurant
Session 2: Post-Absorptive Interactions: Where Cows Get the Stuff to Make Milk Moderator: John Metcalf, Trouw Nutrition Agresearch
12:45 pm What Controls Partitioning Between Anabolism and Catabolism in GIT Epithelium Jamie Matthews, University of Kentucky
1:15 Interaction of Milk Protein Synthesis with Energy John Cant, University of Guelph
1:45 Discussion
2:30 Break
3:00 How Mammary Glucose Metabolism is Altered by Energy and Protein Supply Sophie Lemosquet, INRA (National Institute for Agricultural Research)
3:30 Factors Affecting Efficiency of AA and Energy Use in Lactating Dairy Cows Hélène Lapierre, Agriculture & Agri-Food Canada
4:00 Discussion
4:45 Adjourn

Thursday May 31, 2018
7:00 am Continental breakfast - Black Break Area, Red Oak Foyer
Session 3: Changes in Energy and AA Interactions Over the Lactation Cycle Moderator: Jeffrey Firkins, The Ohio State University
8:00 am Transition Cow Issues Tom Overton, Cornell University
8:30 Energy-AA Disproportion in Early Lactation Geoff Zanton, USDA-ARS
9:00 Discussion
9:30 Break
10:00 Feeding Minimum MP Thru Multiple Lactations Chris Reynolds, The University of Reading
10:30 AA and Glucose Metabolism in the Transition Period Mogens Larsen, Aarhus University
11:00 Discussion
11:30 Lunch - Burnham’s Restaurant
Session 4: Translating Dynamic Elements of Nutrient Metabolism into Feeding Systems Moderator: Paul Kononoff, University of Nebraska
12:45 pm Are our Nutritional Models Robust? Normand St-Pierre, Perdue Agribusiness
1:15 Feed Sampling Frequency and Lab Assays for Use in Models Luis Moraes, The Ohio State University
1:45 Discussion
2:30 Break
3:00 Measuring Carbohydrate Digestion; Translation to Application Mike Allen, Michigan State University
3:30 Measuring Rumen and Intestinal Protein Digestion; Translation to Application Paul Kononoff, University of Nebraska
4:00 Discussion
4:45 Adjourn
Friday June 1, 2018

Session 5: Research Gaps and Urgent Needs for the Dairy Industry  
Moderator: Glen Broderick, Broderick Nutrition & Research

8:00 am  Energy: How Can We Measure it and How Does it Relate to Metabolizable AA?  
Bill Weiss, The Ohio State University

8:30  What is Needed to Apply our Current Knowledge on AA-Energy Interactions  
Bob Patton, Nittany Dairy Nutrition

9:00  Discussion

9:45  Break

10:00  Industry Panel: Limitations of Current Knowledge on AA-Energy Interactions

10:30  Discussion

11:15  Wrap Up  Glen Broderick, Broderick Nutrition & Research

11:30  Adjourn