Tuesday, May 28, 2019
4:30 – 5:30 pm Program Committee/Moderator Meeting - Waterleaf
5:00 - 7:00 pm Registration (Dinner on your own) – Red Oak Foyer

Opening Session - Moderator: Kevin Harvatine, The Pennsylvania State University
7:00 Welcome Larry Miller, DISCOVER Conference Series and DC36 Co-chairs Kevin Harvatine, The Pennsylvania State University and Tom Jenkins, Clemson University
7:10 Conference Keynote Speaker: Changes in the World Fats and Oils Supply that Affect Sources for Dairy Production Trevor Tomkins, Venture Dairy
8:00 Welcome Reception – Prairie River (lower level)

Wednesday, May 29, 2019
7:00 - 8:00 AM Continental breakfast – Black Break Area, Red Oak Foyer
8:00 Welcome and Announcements Larry Miller, DISCOVER Conference Series
8:10 Kickoff Speaker: Lipid Functions in Dairy Cattle – From Energy to Metabolic Modifiers Kevin Harvatine, The Pennsylvania State University

Session 1: Feed Lipid Supply – Moderator: Tom Jenkins, Clemson University
8:40 The Basic Language of Lipids Jim Drackley, University of Illinois
9:10 Discussion
9:40 Break
10:10 Analysis of Fats – Present and Future Ralph Ward, Cumberland Valley Analytics Services, Inc.
10:40 Discussion
11:30 Lunch - Burnham's Restaurant

Session 2: Managing Fatty Acid in the Rumen – Moderator: Maurice Eastridge, The Ohio State University
12:30 Factors that Modify Differences in Rumen Fatty Acid Outflow Versus Feed Input Tom Jenkins, Clemson University
1:10 The Five Fatty Acids We Feed Cows: Their Positive and Negative Effects on Secretion of Different Milk Fatty Acids Lou Armentano, University of Wisconsin
1:50 Discussion
2:30 Break
3:00 Fatty Acid Variation in Feeds: Embracing Variation and Recognizing the Potential Impact on Dairy Cattle Health & Performance John Goeser, Rock River Laboratory, Inc.
3:30 Important Considerations for Lipid Models Joanne Knapp, Provimi NA
4:00 Discussion
5:00 Adjourn

Thursday May 30, 2019
7:00 - 8:00 AM Continental breakfast – Black Break Area, Red Oak Foyer

Session 3: Fatty Acid Digestibility – Moderator: Al Kertz, ANDHIL LLC
8:00 Review of Meta-analysis of Fatty Acid Digestibility Jackie Boerman, Purdue University
8:30 Opportunities to Improve Fatty Acid Digestibility Adam Lock, Crystal Prom and Jonas de Souza, Michigan State University
9:00 Discussion
9:45  Break
10:15 Economics of Fat Supplementation  *Bill Weiss and Maurice Eastridge, The Ohio State University*
11:00 Discussion
11:30 Lunch - Burnham's Restaurant

**Session 4: Biological Effects of Fatty Acids – Moderator: Jim Drackley, University of Illinois**
12:30 Essential Fatty Acids: Evidence of Deficiencies  *Rachel Gervais, Laval University*
1:00  How is Milk Fat Made in the Mammary Gland?  *Kevin Harvatine, The Pennsylvania State University*
1:30 Effects of Fatty Acids on Liver and Adipose Metabolism  *Johan Osorio, South Dakota State University, Massimo Bionaz, Oregon State University and Juan Loor, University of Illinois*
2:00 Discussion
2:45 Break
3:15 Reproduction and Fetal Programming  *Jose Santos, University of Florida*
3:45 Nutrient Partitioning and the Role of Fatty Acids in the Dairy Cow  *Joe McFadden, Cornell University*
4:15 Discussion
5:00 Adjourn

**Friday May 31, 2019**
7:00 - 8:00 AM Continental breakfast – Black Break Area, Red Oak Foyer

**Session 5: Milk Fat: Processing and Product Quality – Moderator: Kevin Harvatine, The Pennsylvania State University**
8:00 Important Aspects of Milk Fat Relating to Processing and Product Quality  *Lloyd Metzger, South Dakota State University*
9:00 Mid-infrared (MIR) Analysis of Milk Fatty Acid Concentration and FA Profile for Dairy Cattle Management  *Dave Barbano, Cornell University*
9:45 Discussion
10:15 Break
10:30 Panel Presentations - Ideal Fatty Acid Blend: Reality or Fantasy?  
*Don Palmquist, The Ohio State University; Jim Aldrich, CSA Animal Nutrition; Ian Shivas, Renaissance Nutrition*
11:00 Discussion
11:30 Wrap-up and next steps
11:45 Adjourn