34th ADSA Discover Conference Mini Symposium

**Mini-symposium on Discover 34—Re-examining amino acid and energy interactions in the dairy cow.** G. A. Broderick*1, J. A. Metcalf*2, J. L. Firkins3, and L. R. Miller4, 1Broderick Nutrition & Research LLC, Madison, WI, 2Trouw Nutrition Agresearch, Guelph, ON, Canada, 3The Ohio State University, Columbus, OH, 4ADSA Discover Conference Series, Centreville, MD.

The 34th ADSA Discover Conference (DC34), “Reexamining Amino Acid and Energy Interactions in the Dairy Cow,” was held May 29 to June 1, 2018. The meeting addressed the following themes: (1) pre-absorptive interactions: where protein and energy first interact; (2) post-absorptive interactions: where cows get stuff to make milk; (3) changes in energy and AA interactions over the lactation cycle; (4) translating dynamic elements of nutrient metabolism into feeding systems; and (5) research gaps and urgent needs for the dairy industry. At the meeting wrap-up, conference organizers summarized the challenges and recommendations from the 3-d conference to help focus ongoing and future research to improve the efficiency of amino acid utilization in lactating dairy cows. This mini-symposium summarizes the findings presented at DC34 and discusses strategies to implement future research related to amino acid and energy interactions. All members, whether or not they attended DC34, are encouraged to participate. The ADSA Discover conferences address important contemporary issues in food animal agriculture and are organized to provide unique opportunities for professional interactions that facilitate development and use of frontier science for the benefit of the global food industries and society. The conferences offer an environment that fosters creativity, emphasizes interaction and open discussion, and focuses on thrusts that will synergize the development and application of science. This mini-symposium is an example of conference follow-up by the Discover program to further enhance conference discussions, recommendations, and networking.

**Key Words:** amino acid nutrition, energy nutrition, nutrient interactions