

2017 ADSA® Annual Meeting

Integrating Dairy Science Globally



Sunday, June 25

Welcome to the 2017 ADSA Annual Meeting!



On behalf of the American Dairy Science Association®, we welcome you to Pittsburgh and the 2017 ADSA Annual Meeting: Integrating Dairy Science Globally. We have a week full of dairy science, and many opportunities exist for networking and socializing with old and new friends. Please take time to peruse the program and use the MyProgram app and the schedule at a glance to plan out your week. We know you can't be everywhere at once, so we are recording all symposia at this meeting to be made available to you later. This means that you can make plans to see some now and see some later. In addition to tonight's Opening Reception and Monday's Awards Program and Ice Cream Social, we have several receptions scattered throughout the program. Make sure to attend the Dale Bauman Recognition Symposium and Reception this afternoon or the Informal Milk Quality Session (new in 2017) or Informal Calf Gathering on Tuesday evening. The evening programs have been designed to help you interact with other dairy scientists.

We are grateful to the many people involved in making this meeting a success, especially our exhibitors and sponsors. Their support is essential to the quality program that makes ADSA the most comprehensive gathering of dairy scientists in the world. Please take time to thank our sponsors and exhibitors if you see them during the meeting. And please make sure to take plenty of time to peruse the exhibits in the exhibit hall.

The overall program committee, under Ignacio Ipharraguerre, has worked very hard to organize an excellent program. Our thanks to the overall program committee: Ignacio, Cathy Williams, Mike Brouk, Tom McFadden, Trish Dawson, and Stephanie Clark for their efforts in bringing forth this outstanding program. We also thank the many others who contributed to this huge undertaking, including the section chairs, the ADSA Board of Directors, the FASS staff, and Peter Studney, ADSA executive director.

Finally, thank you for attending ADSA 2017 and making it a successful meeting. As of yesterday afternoon, 1807 scientists were registered for the meeting. The quality of the meeting is absolutely dependent on people sharing their recent science. I am sure you will find the meetings both intellectually and socially stimulating. Now, let's get to it!

Lou Armentano
ADSA President

Registration Hours

Sunday: 7:00 am–7:00 pm
Monday: 6:30 am–5:15 pm
Tuesday: 7:00 am–5:15 pm
Wednesday: 7:00 am–12:00 pm

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Opening Session

7:30 pm, Ballroom A
Reception follows in the Gallery

Please join us at the opening session for a keynote address by Ethan Schutz, president of The Schutz Company, titled *Can't We Just Get Along? Keys to Working Well with People*. After the session, join us for a book signing and food and drinks at the opening reception.

Reception generously sponsored by




Late-Breaking Original Research Session
Chair: **Stephanie Clark, Iowa State University**
310/311, 3:00 to 5:00 PM
<http://m.adsa.org/2017/ses/8113>

- 3:00 PM LB1 **The commensal microbiota of bovine mammary gland: Cross-talk with host genotype and its potential role in modulating mastitis susceptibility.** Hooman Derakhshani¹, J. C. (Kees) Plaizier¹, and Ehsan Khafipour^{*1,2}, ¹University of Manitoba, Department of Animal Science, Winnipeg, MB, Canada, ²University of Manitoba, Department of Medical Microbiology, Winnipeg, MB, Canada.
- 3:15 PM LB4 **Anti-methanogenic effects of 3-nitrooxypropanol depend on supplementation dose, dietary fiber content, and type of cattle.** J Dijkstra^{*1}, A Bannink², J France³, E Kebreab⁴, and S Van Gastelen¹, ¹Animal Nutrition Group, Wageningen University and Research, Wageningen, the Netherlands, ²Wageningen Livestock Research, Wageningen University and Research, Wageningen, the Netherlands, ³Centre for Nutrition Modelling, Department of Animal Biosciences, University of Guelph, Guelph, ON, Canada, ⁴University of California, Davis, CA.
- 3:30 PM LB5 **Effects of heat stress and dietary Zn source on cell growth and apoptosis of mammary gland in lactating dairy cows.** R. M. Orellana^{*1}, T. N. Marins¹, X. Weng¹, A. P. A. Monteiro¹, J. Guo¹, G. Komori¹, J. K. Bernard¹, J. M. DeFrain², D. J. Tomlinson², and S. Tao¹, ¹University of Georgia, Tifton, GA, ²Zinpro Corporation, Eden Prairie, MN.
- 3:45 PM LB6 **Choline modulates fatty acid carbon flux within bovine primary hepatocytes.** T. L. Chandler^{*1}, S. J. Erb¹, S. J. Bertics¹, B. A. Barton², and H. M. White¹, ¹University of Wisconsin-Madison, Madison, WI, ²Balchem Corporation, New Hampton, NY.
- 4:00 PM LB7 **Candidate gene association analyses for ketosis-resistance traits in Canadian Holsteins.** V. Kroezen^{*1}, F. S. Schenkel¹, F. Miglior^{1,2}, C. B. Baes¹, T. Duffield³, A. Cánovas¹, and E. J. Squires¹, ¹Centre of Genetic Improvement of Livestock, Department of Animal Biosciences, University of Guelph, Guelph, ON, Canada, ²Canadian Dairy Network, Guelph, ON, Canada, ³Department of Population Medicine, University of Guelph, Guelph, ON, Canada.
- 4:15 PM LB8 **Periparturient disease affects macrophage infiltration in subcutaneous adipose tissue of early lactation dairy cows.** J. De Koster^{*1}, C. Strieder-Barboza¹, J. de Souza², W. James¹, A. Lock², and A. Contreras¹, ¹Department of Large Animal Clinical Sciences, Michigan State University, East Lansing, MI, ²Department of Animal Science, Michigan State University, East Lansing, MI, USA.
- 4:30 PM LB2 **Meta-transcriptomic evidence of factors regulating ruminal volatile fatty acid production, absorption, and interconversion.** R. R. White^{*1,2}, L. B. Harthan², L. Beckett², H. Schramm³, C. Wang², N. Jiang², K. M. Daniels², and M. D. Hanigan², ¹Department of Animal and Poultry Sciences, Virginia Tech, Blacksburg, VA, ²Department of Dairy Science, Virginia Tech, Blacksburg, VA, ³Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA.
- 4:45 PM LB3 **Meta-analysis of the effects of 2-hydroxy-4-methylthio-butanoic acid supplementation on ruminal fermentation, milk production, and nutrient digestibility.** X. Feng¹, R. R. White^{*2}, M. D. Hanigan¹, and H. A. Tucker³, ¹Department of Dairy Science, Virginia Tech, Blacksburg, VA, ²Department of Animal and Poultry Science, Virginia Tech, Blacksburg, VA, ³Novus International Inc., St. Charles, MO.

Dairy Quiz Bowl Final Round Tonight at 5:30 pm

Before you leave the convention center today, stop by room 325 at 5:30 pm for the Dairy Quiz Bowl final round. See which school will leave with the coveted Foundation Carved Cow Traveling Trophy.

Recorded Symposia Presentations

All symposia are being recorded and will be available to attendees shortly after the meeting for 60 days. Note that individual presentations may be excluded from a symposium recording if presenter permission was not granted. Check the Program Book or mobile MyProgram for the  icon, indicating a recorded presentation.

Sunday Highlights

- ADSA Lactation Symposium, 8:30 to 2:30 pm, **303**
- Dale Bauman Recognition Symposium and Reception, 3:00 to 5:20 pm (symposium); 5:20 to 6:30 pm (reception), **301/302**
- Late-Breaking Research Session, 3:00 to 5:00 pm, **310/311**
- NANP Nutrition Models Workshop, 9:00 to 4:00 pm, **304/305**
- ADSA Lactation Symposium, 8:30 to 2:30 pm, **303**
- Opening Session and Reception, 7:30 to 10:00 pm, **Ballroom A/Gallery**

Undergraduate/Graduate Events

- ADSA SAD Student Midday Mixer/Lunch, 12:00 – 1:00 pm, **Ballroom B**
- ADSA Graduate Student Division Symposium: Building Strong Work Relationships, 2:00–5:00 pm, **306**
- ADSA SAD Student Dairy Quiz Bowl Final Round, 5:30–6:00 pm, **325**

Meeting Essentials

Preload room (313) 7:00 am to 5:00 pm

All presentation files must be uploaded by 5:00 pm on the **day prior to** your presentation

Speaker ready room (314) 7:00 am to 5:00 pm

Once your presentation is uploaded, review your slides and run through your presentation.

Exhibit set-up (Hall B) 10:00 am to 6:00 pm

Hospitality room (332) 12:00 to 5:00 pm

The hospitality lounge offers attendees an area to relax, network, and catch up with friends.

Media room (335) 12:00 to 5:00 pm

The media room will be available throughout the meeting to provide a space for media representatives to work. Meeting press releases will also be available there.

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Can't We Just Get Along? Keys to Working Well With People



Ethan Schutz helps people navigate the human side of business in order to achieve bottom line success. He is president of The Schutz Company (www.theschutz-company.com), a consulting, training, and publishing company that helps people understand team and organizational

dynamics in order to reach their goals. He will present material from The Human Element, a unique and powerful methodology that has helped people all over the world significantly improve the way they work with others and get things done. This work has been used with companies including Chr. Hansen, Unilever, CRV, Nutreco, Hendrix Genetics, Procter & Gamble, NASA, and Boeing. Ethan holds a master's degree in organizational psychology from Teachers College at Columbia University. He has taught at the International Center for Cooperation and Conflict Resolution. A Master Human Element Practitioner, he trains and supports organizational development practitioners to use The Human Element in organizations throughout a network of practitioners and partners in over 30 countries. He has presented in the US, the UK, Sweden, France, Spain, Japan, Mexico, South Africa, Belgium, and the Netherlands.

Professional Headshots

From 2:30 to 4:30 pm on Monday, a professional photographer will be set up in Hall B, near the Job Resource Center. The cost is just \$10 per person for 6 digital photos via email.



Follow ADSA Annual Meeting (@ADSAMtg) on Twitter for late-breaking news and announcements. Post your own reports and photos of ADSA meeting events using #ADSA2017.