2020
Florida Ruminant Nutrition Symposium

February 3 – 5, 2020
Best Western Gateway Grand Hotel
Gainesville, Florida

31st Annual Meeting

UNIVERSITY of
FLORIDA
IFAS
Department of Animal Sciences

Visit the Symposium website today!
http://dairy.ifas.ufl.edu/rns/info.shtml
Symposium Registration
31st Annual
Florida Ruminant Nutrition Symposium
February 3 - 5, 2020 • Best Western Gateway Grand
Gainesville, FL

Registration Information
The registration fee includes continental breakfasts, Monday’s reception, Tuesday’s buffet hot and cold luncheon, refreshment breaks, Tuesday night’s reception, and one copy of the symposium proceedings.

**Early Reduced Registration Fee**
*(On or before January 17, 2020)* ................................................................. $180.00

**Late & On-site Registration Fee**
*(After January 17, 2020)* ........................................................................ $220.00

REGISTER ONLINE: Individual registration and sponsorship opportunities are available in the website below paying by credit card (VISA, MasterCard, or American Express).

http://dairy.ifas.ufl.edu/rns/info.shtml

or


If mailing a check (payable to University of Florida/Ruminant Nutrition Symposium, U.S. dollars and drawn on U.S. banks), then contact Rachel Garland rachelgarland@ufl.edu with check and this registration form mailed to Department of Animal Sciences, 2250 Shealy Drive, University of Florida, Gainesville, FL 32611-0910

Visit and Bookmark the Symposium Website for Details
- Registration – *Early Registration Fee Deadline is January 17, 2020*
- Program Speakers, Updates & Announcements
- Accommodations & Meeting Site
- Sponsors & Supporters
- http://dairy.ifas.ufl.edu/rns/info.shtml
- **ARPAS CE credits**: 12 CE credits are approved by ARPAS.

Questions?

**Conference Information**
Dr. José E. P. Santos, Symposium Organizer
Department of Animal Sciences
University of Florida/IFAS
PO Box 110910
Gainesville, FL 32611-0910
TEL: (352) 294-6998 • FAX: (352) 392-1931
E-MAIL: jepsantos@ufl.edu

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University of Florida/IFAS
PO Box 110910
Gainesville, FL 32611-0910
TEL: (352) 294-6998 • FAX: (352) 392-1931
E-MAIL: rachelgarland@ufl.edu
### Symposium Program

**Monday, February 3, 2020** - Mini-Symposium sponsored by Balchem Corporation “Methyl Donors and 1-C Metabolism in Dairy Cows”

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 PM</td>
<td>Dr. Clay Zimmerman</td>
<td>Balchem Corporation</td>
<td>Welcome and introductions</td>
</tr>
<tr>
<td>2:05 PM</td>
<td>Dr. Joe McFadden</td>
<td>Cornell University</td>
<td>“Methyl donor nutrition in the transition dairy cow: contemporary health perspectives”</td>
</tr>
<tr>
<td>2:50 PM</td>
<td>Dr. Christiane Girard</td>
<td>Agriculture and Agrifood Canada</td>
<td>“Folic acid and vitamin B&lt;sub&gt;12&lt;/sub&gt; nutrition of dairy cow”</td>
</tr>
<tr>
<td>3:35 PM</td>
<td>Refreshment Break</td>
<td></td>
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</tr>
<tr>
<td>4:00 PM</td>
<td>Dr. Peter Hansen</td>
<td>University of Florida</td>
<td>“Methyl donors and epigenetic regulation of the early embryo”</td>
</tr>
<tr>
<td>4:45 PM</td>
<td>Dr. Tom Overton</td>
<td>Cornell University</td>
<td>“Methyl donor nutrition in the transition dairy cow: impacts on performance”</td>
</tr>
<tr>
<td>5:30 PM</td>
<td>Dr. Clay Zimmerman</td>
<td>Summary and wrap-up</td>
<td></td>
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<tr>
<td>5:40 PM</td>
<td>Poolside Barbeque</td>
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**Tuesday, February 4, 2020** - Pre-Conference Sponsored by Virtus Nutrition “Novels Aspects of Fatty Acid Nutrition in Dairy Cows”

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15 AM</td>
<td>Dr. Kevin Murphy</td>
<td>Virtus Nutrition</td>
<td>Welcome and introductions</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Dr. Barry Bradford</td>
<td>Michigan State University</td>
<td>“Transition cows - How fatty acids affect immunity, production and health”</td>
</tr>
<tr>
<td>9:20 AM</td>
<td>Dr. Joe McFadden</td>
<td>Cornell University</td>
<td>“Fatty acid nutrition and biology to optimize health and production”</td>
</tr>
<tr>
<td>10:10 AM</td>
<td>Refreshment Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:40 AM</td>
<td>Dr. Kevin Harvatine</td>
<td>Pennsylvania State University</td>
<td>“The intersection of dietary and milk fatty acids - How photoperiod and variability affect production”</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Buffet Lunch</td>
<td></td>
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</table>

**Tuesday, February 4, 2020** – Symposium

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1:00 PM</td>
<td>Dr. José Santos</td>
<td>University of Florida</td>
<td>Welcome</td>
</tr>
<tr>
<td>1:05 PM</td>
<td>Dr. Saqib Mukhtar</td>
<td>University of Florida</td>
<td>IFAS update</td>
</tr>
<tr>
<td>1:10 PM</td>
<td>Dr. William Thatcher</td>
<td>University of Florida</td>
<td>“Fatty acids and fertility – the contributions of Dr. Charlie Staples”</td>
</tr>
<tr>
<td>1:50 PM</td>
<td>Dr. Tom Jenkins</td>
<td>Clemson University</td>
<td>“Factors that modify rumen fatty acid outflow versus feed input”</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Dr. Jacquelyn Boerman</td>
<td>Purdue University</td>
<td>“What have we learned about fatty acid digestibility in dairy cattle?”</td>
</tr>
<tr>
<td>3:10 PM</td>
<td>Refreshment Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:40 PM</td>
<td>Dr. Rodrigo Bicalho</td>
<td>Cornell University</td>
<td>“The role of the calf microbiota on performance and health”</td>
</tr>
<tr>
<td>4:20 PM</td>
<td>Dr. Michael Steele</td>
<td>University of Guelph</td>
<td>“Pre-weaning calf nutrition and rumen epithelium development, metabolism and health”</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Welcome Reception</td>
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**Wednesday, February 5, 2020** – Symposium

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<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>6:30 AM</td>
<td>Continental Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Dr. Pedro Veiga</td>
<td>Cargill Animal Nutrition</td>
<td>“Dietary strategies for the cow calf herd – the experience of the Brazilian beef industry”</td>
</tr>
<tr>
<td>8:40 AM</td>
<td>Dr. Philippe Moriel</td>
<td>University of Florida</td>
<td>“Nutritional strategies for developing replacement Bos Indicus-influenced beef heifers”</td>
</tr>
<tr>
<td>9:20 AM</td>
<td>Dr. Rodolfo Cardoso</td>
<td>Texas A&amp;M University</td>
<td>“Nutritional control of puberty in beef heifers, mechanisms and application”</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Refreshment Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Dr. Diwakar Vyas</td>
<td>University of Florida</td>
<td>“The role of N recycling in improving efficiency of N utilization in dairy cattle”</td>
</tr>
<tr>
<td>11:10 AM</td>
<td>Dr. Antonio Faciola</td>
<td>University of Florida</td>
<td>“Digestion and nutrient flow in continuous culture system and animal responses. Do they match?”</td>
</tr>
<tr>
<td>11:50 AM</td>
<td>Ruminant Nutrition Symposium Adjourns</td>
<td></td>
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</tr>
</tbody>
</table>
Meeting Site & Hotel Accommodations

Best Western Gateway Grand Hotel
4200 NW 97th Blvd.
Gainesville, Florida 32606
(Exit 390 off of I-75).

All reservations must be made directly with the hotel in order to get the discounted group rate. Contact the Best Western Gateway Grand Hotel directly at (352) 331-3336 and mention group **Ruminant Nutrition Symposium 2020** to get group’s special rate.

https://www.bestwestern.com/Ruminant Nutrition Symposium

- **Standard Double Rooms** are available at a rate of $95.00 per night plus 11.5% tax. All standard rooms have two double beds, microwave and mini-fridge.

- **King Standard Rooms** are available at a rate of $99.00 per night plus 11.5% tax upon availability. All King Standard Rooms have 1 king size bed and a pullout sofa, a wet bar with a microwave and mini-fridge.

- **Complimentary continental breakfast** will be served in the lobby each morning for all guests.

- **Complimentary high speed wireless internet access** in each guest room.

- **Complimentary Airport Shuttle** - The Best Western Gateway Grand will provide complimentary transportation to and from the Gainesville Regional Airport. Courtesy phones are located near baggage claim in the airport terminal.

Reservations must be made by **January 17, 2020** to assure availability and the group rate.

The Florida Ruminant Nutrition Symposium is organized by the Department of Animal Sciences, Institute of Food and Agricultural Sciences, at the University of Florida. The 2019 symposium was graciously sponsored by 22 industry leaders. Their contributions were greatly appreciated, and certainly enhanced the program.

- Adisseo
- Ag Processing Inc.
- Alltech
- Anpario
- Arm & Hammer Animal and Food Production
- Balchem
- Biomin
- Buffalo-Warren
- Central Life Sciences
- Diamond V
- DSM Nutritional Products
- Feed Components
- Feedworks USA Ltd.
- Furst McNess
- Micronutrients
- Milk Specialties Global
- Pancosma
- Quality Liquid Feeds
- Suwannee Valley Feeds
- Virtus Nutrition
- Westway Feed Products LLC
- Zinpro Performance Minerals

If your company is interested in becoming a sponsor of the 2020 Florida Ruminant Nutrition Symposium, please contact:

**Dr. José E.P. Santos** – Tel: (352) 294-6998 or E-mail: jepsantos@ufl.edu

**Rachel M. Garland** – Tel: (352) 392-1916 or E-mail: rachelgarland@ufl.edu
REGISTRATION AND SPONSORSHIP FORM

31st ANNUAL FLORIDA RUMINANT NUTRITION SYMPOSIUM
February 3 to 5, 2020

Name of Company (print): ____________________________
(Exactly as you want it to appear in the Symposium proceedings)

We are pleased to serve as a sponsor of the 31st Annual Florida Ruminant Nutrition Symposium scheduled February 3 to 5 2020 at the Best Western Gateway Grand hotel in Gainesville, FL. The sponsorship amounts are $1,600, $1,200 or $800, with the check payable to ‘University of Florida - Ruminant Nutrition Symposium’. For your convenience you can charge the sponsorship fee to your credit card at the following website:

http://dairy.ifas.ufl.edu/rns/info.shtml

or directly at


When you pay the sponsorship fee with credit card at the preceding website, you are registering for the Symposium. If you decide to pay the sponsorship fee by check, fill out this form, attach the check and return it to us. Please check your choice of sponsorship below. All sponsorships entitle the sponsor to 1 to 4 complimentary registrations, acknowledgment at the Symposium, company name and contact information in the Symposium proceedings, and distribution of company’s promotional materials to conference attendees. By submitting this form, you are registering for the symposium. DO NOT REGISTER ONLINE FOR THE SYMPOSIUM IF YOU SUBMIT THIS FORM WITH PAYMENT.

☐ Lunch Sponsor - $1,600 (4 complimentary registrations)
☐ Break Sponsor - $1,200 (2 complimentary registrations)
☐ Regular Sponsor - $800 (1 complimentary registration)
☐ Registration - $180

Due Date is January 17, 2020:

Please complete this form and return to Rachel M. Garland either by mail (Department of Animal Sciences, 2250 Shealy Drive, University of Florida, Gainesville, FL 32611-0910), Fax (352) 294-2036, or email (rachelgarland@ufl.edu). If you are a sponsor, please submit promotional materials such as pencils, pens, pads, company brochures on products, etc., that will be provided to each registrant. Attendance is estimated at 250 people. To submit promotional materials, send to Rachel Garland at the address above.

Name: ____________________________________________
(Please Print)

Address: __________________________________________

Telephone: ___________________ Email: ___________________

Assigned name (s) for registration: _______________________
(Please Print)

For Sponsors, the contact information provided here will appear in the Symposium proceedings.