

# Zoo Nutrition Foundation & Nutrition Advisory Group Sixteenth Conference Schedule

## October 19–22, 2025

### Sheraton Oklahoma City Downtown Hotel Oklahoma City, Oklahoma

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#### Saturday, 18 October 2025

4:00 – 6:00 PM	Registration	2 <sup>nd</sup> Floor Foyer
6:30 PM	NAG Steering Committee Meeting	Closed Meeting

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#### Sunday, 19 October 2025

7:00 - 7:45 AM	Registration	Near Plaza Ballroom
7:00 - 7:45 AM	Continental Breakfast Provided	Outside Plaza Ballroom
7:45 - 8:00 AM	Opening Remarks <i>Barbara Henry</i>	Plaza Ballroom
	<u>Workshop: Reduce Drama and Elevate Outcomes</u> <i>Presenter: Marty MacPhee</i>	Plaza Ballroom
8:00 - 10:15 AM	Workshop Part 1 <i>Marty Macphee</i>	
10:15 - 10:30 AM	BREAK	
10:30 – 12:00 PM	Workshop Part 2 <i>Marty Macphee</i>	
12:00-1:00 PM	LUNCH PROVIDED	
1:00 – 2:30 PM	Workshop Part 3 <i>Marty Macphee</i>	
2:30 – 2:35	HOUSEKEEPING <i>Taylor Papstein-Novak &amp; Kelly Kappen</i>	
3:00 – 4:30 PM	Registration	Plaza Ballroom
3:00 – 4:00 PM	Zoo Nutrition Foundation Board Meeting	Board Room

4:00 – 4:45 PM	<b>Poster Set-up</b>	Plaza Ballroom
4:45 - 5:00 PM	<b>Buses to Icebreaker</b>	Meet in Lobby
5:00 – 8:00 PM	<b>Icebreaker</b>	Museum of Osteology

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**Monday, 20 October 2025**

7:00 – 8:00 AM	<b>Poster Set-up</b>	Plaza Ballroom
7:00 – 7:55 AM	<b>Registration</b>	Plaza Ballroom
7:00 – 7:55 AM	<b>Continental Breakfast Provided</b>	Outside Plaza Ballroom
8:00 – 8:10 AM	<b>Opening Remarks</b>	Plaza Ballroom
	<b><u>Session 1: The Smithsonian Women’s Committee Session on Promoting Early-Life Health and Development in Zoo Animals</u></b> <i>Session Chair: Mike Power &amp; Shannon Livingston</i>	Plaza Ballroom
8:12 – 8:52 AM	<b>Microbiomes: The invisible world that ties together animal health and ecosystem function</b> <i>KEYNOTE SPEAKER: Chris Dutton</i>	
8:52 AM	<b>Sponsor: NZCBI Women’s Committee</b>	
8:54 AM	<b>Milk microbiomes: Implications for neonatal nutrition and development</b> <i>Sally Bornbusch*, Carly Muletz-Wolz and Michael Power</i>	
9:15 AM	<b>Factors that inform the formulation of milk replacers for exotic mammals: Biology and macronutrient content</b> <i>Michael Power*</i>	
9:35 AM	<b>Sponsor: NZCBI Women’s Committee</b>	
9:37 AM	<b>Factors that inform the formulation of milk replacers for exotic mammals: Ingredients and Hand-rearing plans</b> <i>Erin Kendrick*</i>	
9:57 AM	<b>Sponsor: Central Nebraska Packing</b>	
10:00 -10:10 AM	<b>POSTER INTRODUCTIONS</b>	Plaza Ballroom
10:10 – 10:40	<b>BREAK and POSTER SESSION</b>	Plaza Ballroom
10:40 AM	<b>Sponsor: Rodent Pro</b>	
10:42 AM	<b>Milk nutrient comparison across three species of rhinoceros: <i>Ceratotherium simum</i>, <i>Diceros bicornis</i>, and <i>Rhinoceros unicornis</i></b> <i>Hannah Shinnerl*, Sally Bornbusch, Piper Thacher, Erin Kendrick, Mike Maslanka and Michael Power</i>	
11:02- 12:32 PM	<b>LUNCH ON YOUR OWN</b>	Offsite



3:07 - 4:07 PM	<b>MEMBERSHIP MEETING</b> <i>Mike Maslanka</i>	Plaza Ballroom
4:07 PM	<b>Sponsor: Australian Outback Plantation</b>	
	<b><u>Session 2: Sustainability</u></b> <i>Session Chair: Larisa Jancewicz</i>	Plaza Ballroom
4:09 PM	<b>Hydroponics and sustainable zoo animal feeding at the Cincinnati Zoo &amp; Botanical Gardens.</b> <i>Barbara Henry* and Zack Burns</i>	
4:30 PM	<b>Feed sustainable: Strategies to minimize risks and enhance the environmental and economic resilience of your zoo's seafood choices</b> <i>Heidi Bissell*</i>	
4:51 PM	<b>HOUSEKEEPING</b>	
5:00 PM	<b>DINNER ON YOUR OWN</b>	
7:00 – 9:00 PM	<b>SCARF BENEFIT AND AUCTION</b>	One Broadway Ballroom

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**Tuesday, 21 October 2025**

7:00 – 7:55 AM	<b>Continental Breakfast Provided</b>	Outside Plaza Ballroom
8:00 AM	<b>Opening Remarks</b> <i>Taylor Papstein-Novak &amp; Kelly Kappen</i>	Plaza Ballroom
	<b><u>Session 3: Carnivore/Omnivore</u></b> <i>Session Chair: Jennifer D'Amato-Anderson</i>	Plaza Ballroom
8:06 PM	<b>Sponsor: Rodent Pro</b>	
8:08 – 8:48 AM	<b>Feeding the Beast: Navigating protein sources, sustainability, and nutrient needs for carnivore species</b> <i>INVITED SPEAKER: Maria Godoy</i>	
8:48 AM	<b>Sponsor: Central Nebraska Packing</b>	
8:49 AM	<b>The Goldilocks Principle: Is 20% protein “just right” for brown bears?</b> <i>Amelia Christian*, Charles Robbins, Troy Tollefson, Anthony Carnahan, Jessie McCleary, Andrea Huriega, Perry Barboza</i>	
9:10 AM	<b>Effect of whole prey inclusion on feeding behavior and welfare of Colombian big cats – jaguars (<i>Panthera onca</i>) and pumas (<i>Puma concolor</i>) under professional care at the Cali Zoological Foundation, Colombia</b> <i>Sandra Gómez, Juan Camilo Vargas, Laura Cubides*</i>	
9:30 – 10:00 AM	<b>BREAK and POSTER SESSION</b>	Plaza Ballroom
	<b><u>Session 4: Operations/Technology</u></b> <i>Session Chair: Jordyn Nylander</i>	Plaza Ballroom

10:01 AM	<b>Zoo Diet Navigator: New features, new partnerships, and new ways to support your nutrition program and sustainability</b> <i>Heidi Bissell*</i>	
10:21 AM	<b>Sponsor: Rodent Pro</b>	
10:23 AM	<b>Development of universal Near Infrared Spectroscopy calibrations in feed derived from animal sources</b> <i>Larisa Jancewicz*</i>	
10:44 AM	<b>Sponsor: Midwest Foods</b>	
10:48 AM	<b>Appdate: Building custom apps to improve nutrition center operations</b> <i>Siga Lapinskas*, Jennifer D'Amato-Anderson*, Jordyn Nylander*</i>	
11:08 AM	<b>Sponsor: Central Nebraska Packing</b>	
11:10 AM	<b>A review of the effect of tariffs on imported horsemeat prices used in zoo carnivore diets</b> <i>Rachael Peck*</i>	
11:31 AM	<b>Sponsor: Mazuri</b>	
11:34 AM	<b>The intersection between nutrition and animal welfare science: Report on the Second AZA Animal Wellbeing Summit</b> <i>Kibby Treiber*</i>	
11:55 AM	<b>HOUSEKEEPING and INSTRUCTIONS FOR ZOO DAY</b>	
12:30 PM	<b>ZOO DAY (LUNCH PROVIDED)</b>	Oklahoma City Zoo Buses load @ 12:30 PM
5:00-7:00 PM	<b>DINNER PROVIDED AT ZOO</b>	Oklahoma City Zoo

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**Wednesday, 22 October 2025**

7:00 – 7:55 AM	<b>Continental Breakfast Provided</b>	Plaza Ballroom
8:00 AM	<b>Opening Remarks</b> <i>Taylor Papstein-Novak &amp; Kelly Kappen</i>	Plaza Ballroom
	<b><u>Session 5: Body Condition &amp; Weight Management</u></b> <i>Session Chair: Siga Lapinskas</i>	Plaza Ballroom
8:05 AM	<b>Sponsor: Standlee</b>	
8:07 – 8:47 AM	<b>From pasture to pancreas: Understanding glycemic and insulin regulation in hindgut fermenter health and disease</b> <i>INVITED SPEAKER: Erica Macon*</i>	
8:47 AM	<b>Sponsor: Mazuri</b>	

8:51 AM	<b>Development of supplemental feeding protocol for Koala (<i>Phascolarctos cinereus</i>) at San Diego Zoo</b> <i>Parker Jewell* and Jordyn Nylander</i>	
9:11 AM	<b>Sponsor: Milliken</b>	
9:14 AM	<b>Dietary strategy to reduce calories, increase movement and visitor engagement in managed crocodilians</b> <i>Cayla Iske* and Jessi Krebs</i>	
9:34 AM	<b>Sponsor: Rodent Pro</b>	
9:35 AM	<b>Taking Body Condition Scoring to the next level</b> <i>Heidi Bissell*</i>	
9:55 AM	<b>Sponsor: Heartland Assays</b>	
9:57 AM	<b>Preliminary development of a body condition assessment tool for Channel Catfish (<i>Ictalurus punctatus</i>)</b> <i>Emily Hutchinson, Rachel Duvall, Patrick Stewart and Scott Williams*</i>	
10:17-10:47 AM	<b>BREAK and POSTER SESSION</b>	Plaza Ballroom
	<b><u>Session 6: Insects</u></b> <i>Session Chair: Nichole Huntley</i>	Plaza Ballroom
10:47 AM	<b>Effect of long-term refrigeration on the nutritional value of gut-loaded mealworms (<i>Tenebrio molitor</i>)</b> <i>Gabriela Leoni and Rachael Peck*</i>	
11:07 AM	<b>Sponsor: Enviroflight</b>	
11:09 AM	<b>Impact of the inclusion of pectin and chitosan on gastrointestinal transit and apparent digestibility in Giant Anteater (<i>Myrmecophaga tridactyla</i>) under professional care</b> <i>Sandra Gómez, Raúl Bustos Méndez and Sharon Martinez Mora*</i>	
11:29 AM	<b>Sponsor: Midwest Foods</b>	
11:33 AM	<b>Sustainable feed meets soil regeneration: The benefits of Black Soldier Fly larvae (<i>Hermetia illucens</i>) frass for animals on exhibit</b> <i>Liz Koutsos*, Carrie Kuball, Ian Bank and Charmaine Espinosa</i>	
11:53 -1:23 PM	<b>LUNCH ON YOUR OWN</b>	
1:23 – 2:33 PM	<b>Discussion about future conferences</b> <i>Mike Maslanka</i>	Plaza Ballroom
2:33 – 3:03 PM	<b>BREAK and POSTER SESSION</b>	Plaza Ballroom
	<b><u>Session 7: Forage and Browse</u></b> <i>Session Chair: Ann Ward</i>	Plaza Ballroom

3:03 PM	<b>Sponsor: TRACKS</b>	
3:05 PM	<b>Lichen lifeline: Integrating natural forage into Caribou (<i>Rangifer tarandus</i>) nutrition and conservation strategies</b> <i>Larisa Jancewicz*</i>	
3:25 PM	<b>Sponsor: Rodent Pro</b>	
3:27 PM	<b>Collaboration, connection and communication: Revising the Dallas Zoo browse program</b> <i>Kerri Slifka*</i>	
3:47 PM	<b>Sponsor: Central Nebraska Packing</b>	
3:49 PM	<b>Management of the browse program at Disney's Animal Kingdom®</b> <i>Shannon Livingston*, Heidi Bissell, Parker Jones and Neus Alcon Bou</i>	
4:10 PM	<b>The Feed the Zoo Program: A community-based approach to browse sourcing and sustainability</b> <i>Patrick Gainer, Barbara Henry*, Erin Lockett and Michael Wenninger</i>	
4:30 PM	<b>Sponsor: Lab Supply</b>	
4:32 PM	<b>Temperate weather browse provision considerations</b> <i>Michael Maslanka*</i>	
4:53 – 5:03 PM	<b>WRAP-UP &amp; FINAL THOUGHTS</b> <i>Taylor Papstein-Novak &amp; Kelly Kappen</i>	
7:00 – 9:00 PM	<b>CONFERENCE BANQUET</b>	One Broadway Ballroom

## POSTERS

PLAZA BALLROOM

Visit with the authors:

Monday 10:10 AM and 2:37 PM, Tuesday 9:30 AM, Wednesday 10:17 AM and 2:33 PM

### **Successful oral chelation of iron from a Malayan Flying Fox (*Pteropus vampyrus*)**

*Kathleen Sullivan\*, Alyxandra Swanhall, Shannon Livingston, Erica Huffstodt, Rachel Daneault, and Natalie Mylniczenko*

### **From rearing to feeding: A nutritional assessment of in-house feeder insects at the Cincinnati Zoo & Botanical Garden**

*Erin Luckett and Barbara Henry\**

### **Differences in serum biochemistry values based on age in Mantled Howler Monkeys (*Alouatta palliata*)**

*Charlotte McGlone\*, Anneke Moresco, Francisco Sanchez-Murillo, Enrique Yarto-Jaramillo, Irindi Citaku and Kimberly. Ange-van Heugten*

### **Participant in the Roy McClements Student-Keeper Paper Competition**

### **Serum biochemistry comparisons between males and females in Mantled Howler Monkeys (*Alouatta palliata*) using i-Stat Alinity V and Vetscan 2**

*Charlotte McGlone\*, Anneke Moresco, Francisco Sanchez-Murillo, Enrique Yarto-Jaramillo, Irindi Citaku, Edgarto Hernández-Díaz, Layna Schmit and Kimberly Ange-van Heugten*

### **High fiber/low sugar: Effect on regurgitation & reingestion in silverback Gorilla (*Gorilla gorilla gorilla*)**

*Ana Frost\*, Liam Kelly, Guin Wogan and Taylor Papstein-Novak*

### **Establishment of Oat Micro-Worm (*Panagrellus redivivus*) Culture at the Cali Zoological Foundation Focused on the Nutritional Management of the Bobo Fish (*Priapichthys caliensis*)**

*Sandra Gómez and Julian Rojas*

### **Effect of pectin and chitosan supplementation on fecal quality in Giant Anteater (*Myrmecophaga tridactyla*) under professional *ex situ* management**

*Sandra Gómez, Raúl Bustos Méndez and Sharon Martinez Mora\**

### **Fecal microbiota transplants as a tool to improve rehabilitation of stranded Northern Elephant Seal (*Mirounga angustirostris*) pups**

*Sophie Guarasci\*, Mattison Peters, Cara Field, Michael Maslanka, Carly Muletz-Wolz, Piper Thacher and Sally Bornbusch*

### **Comparative analysis of serum lipid profiles in sanctuary-housed Chimpanzees (*Pan troglodytes verus*) at Tacugama Chimpanzee Sanctuary**

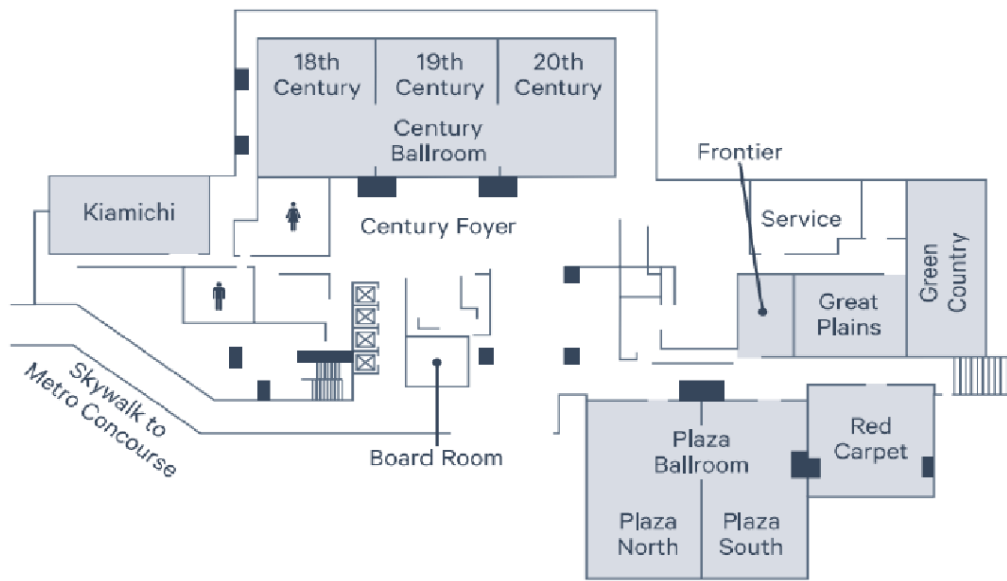
*Ethan Renfro\*, Anneke Moresco, Larry Minter, Ismail Hirji, Zoe Macintyre, Thalita Calvi, Kylie McDaniel, Aimee Drane, Joshua Tremblay, Yedra Feltrer-Rambaud and Kimberly Ange-van Heugten*

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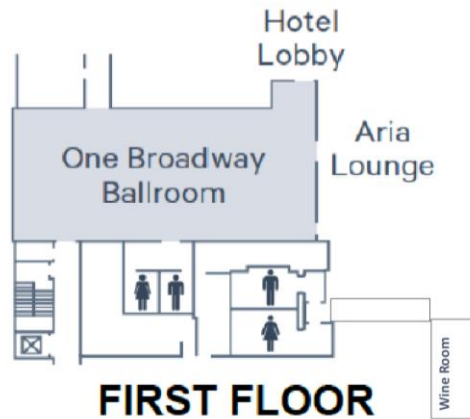
**<sup>#</sup>The Roy McClements Student-Keeper Paper Competition is sponsored by Central Nebraska Packing, Inc.**



# Sheraton Oklahoma City Downtown Hotel



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