Students have returned to the U of I campus and Spring Semester is in full swing. Increasing daylight brings renewed optimism for another productive trip around the sun (at least it does for me!). The Department hosted Dean Kidwell for an Animal Sciences orientation this month. It was fun to share what we do and why it matters with the new leader of ACES. Our efforts encompass seven general areas and ANSC faculty volunteers presented an overview of each of these areas (Rod Johnson, Immunophysiology and Behavior; Kelly Swanson, Nutrition; Romana Nowak, Reproductive Biology; Jon Beever, Genetics, Genomics, and Bioinformatics; Anna Dilger, Meat Sciences and Muscle Biology; Rod Mackie, Microbiology; and Dan Shike, Production and Environment Management). These faculty members did a great job providing an overview of our efforts in these disciplines. My goal for this orientation session was to share the breadth of our efforts, the quality of our programs, and the impact of what we do. Little tidbits of information drive these points home. For instance, we are the number 1 department in the U.S. in research (publications, grants, and citations). In 2015 we published 189 refereed journal articles (averaging 5.5 publications per faculty member). We don’t just excel in research. In 2016, 24 of our faculty were listed as “teachers ranked as excellent by their students”. Our freshman enrollment in Animal Sciences is up almost 25% in each of the last 2 years. Our faculty won 10 awards for their research and teaching last year. In 2015, our faculty gave 149 research presentations in the U.S. and 27 different countries. I tip my hat to the faculty, staff, and students who make this happen. Our efforts impact food production and food security, bioenergy and the environment, health and wellness, rural economies of Illinois by providing markets for grains, forages, and byproducts.

What we do:

“We discover and communicate knowledge about the disciplines of animal science that enhance food production and improve the wellbeing of humans and animals”.

Why it matters:

“Our discoveries and students contribute to a safe, affordable, sustainable, and abundant food supply which improves human and animal nutrition and health”.

In this issue of “Tails of Animal Sciences” we highlight recent events in the Department and accomplishments of some of our faculty, students, and programs. If you are curious about the type of research faculty have been engaged in recently, Jamie Evans has listed 3 pages of publications that have come out since November. Remarkable!
Dr. Phil Cardoso is the 2017 winner of the ADSA/ASAS Midwest Outstanding Young Extension Specialist Award. Animal/Dairy science societies only gives out one of these each year. This is a very prestigious award for our Societies. Thanks to those who helped with the nomination. Please tell Phil congratulations when you see him.

Well deserved Dr. Cardoso!

Dr. Matt Wheeler was named the Mentor of the Year at the International Embryo Technology Society's 43rd Annual Meeting in Austin, Texas. Dr. Wheeler was awarded this distinction by the Morulas Student Trainee Association of the IETS. He is only the 4th recipient of this prestigious IETS award. Dr. Wheeler has been the major advisor to 26 M.S. and 9 Ph.D. students, 18 post-doctoral fellows, 20 visiting scholars, and 117 undergraduate research students. Please help us congratulate Dr. Wheeler on this noteworthy achievement.

Welcome Hudson Clay McCann born January 4th weighing 8lbs. 7 oz. Congratulations to Dr. Josh McCann and his wife, Jennifer.
Nicole Lopez took first place in the Undergraduate Research Poster Competition at the International Embryo Technology Society's Annual Meeting in Austin, TX. Nicole is an undergraduate research assistant in Dr. Wheeler's lab. Her abstract was entitled, "A simple handmade protocol to extract DNA from small numbers of cells". Please help us congratulate Nicole on her excellent work!

Reference to Nicole's abstract:

Enrollment in the fall, 2016, on-line dairy classes were 17 students in Advanced Dairy Reproduction (instructor Dick Wallace), 33 students in Ration Building and Balancing (instructor Mike Hutjens), and 26 students in Calf and Heifer Feeding and Management (instructor Mike Hutjens). Twelve students from the U of IL campus were enrolled, six veterinarians, and sixteen students for U of IL credit. Remaining students enrolled as non-credit students including students from Tarleton State--Texas, University of Kentucky, and Iowa State University (credit awarded by their universities).

Two dairy classes will be offered starting on January 23rd.

Advance Dairy Feeding and Nutrition—2 credits—Mike Hutjens, instructor
Dairy Health Treatment and Prevention—1 credit—Dick Wallace, instructor

**DR. ROBINSON PRESENTATION**

Dr. Jim Robinson was on campus to present the **James L. Robinson Nutrition Impact Award** as part of the Division of Nutritional Sciences Endowed Awards Ceremony. Jim and his wife endowed this award in the Division of Nutritional Sciences when he retired. This year’s award recipient was Tzu-Wen Liu, DNS doctoral student advised by Dr. Kelly Swanson. Dr. Robinson also presented on his recent trip to Africa while on campus.
# STUDENT RECOGNITION

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
<th>Thesis Title</th>
<th>Congratulations</th>
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<tbody>
<tr>
<td>Katherine Vande Pol</td>
<td>Professor Ellis</td>
<td>&quot;The impact of sow gestation housing system (individual vs. group) on the reproductive performance of sows across 6 parities &amp; the effect of farrowing pen size on pre-weaning mortality&quot;. We wish Katherine success in her Ph.D. studies with Dr. Ellis.</td>
<td>Congratulations Katherine!</td>
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<tr>
<td>Samantha Wojnicki</td>
<td>Professor Ryan Dilger</td>
<td>&quot;Immunomodulatory effects of whole yeast cells and capsicum in weanling pigs challenged with pathogenic Escherichia coli&quot;. We wish Samantha success in her post-graduation professional career.</td>
<td>Congratulations Samantha!</td>
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<tr>
<td>Elizabeth Hogan</td>
<td>Professor Anna Dilger</td>
<td>&quot;The effects of virus-induced maternal inflammation on offspring methylation patterns in skeletal muscle &quot;. We wish Elizabeth success in her position as visiting research specialist at the Roy J. Carver Biotechnology Center, University of Illinois.</td>
<td>Congratulations Elizabeth!</td>
</tr>
<tr>
<td>Hans Muller Paul</td>
<td>Professor Cann</td>
<td>&quot;Biochemical characterization of five GH130-family enzymes from Caldanaerobius polysaccharolyticus ATCC BAA-17 and insights on their metabolic role and reaction mechanisms&quot;. We wish Hans success in his PH.D. studies with Dr. Cann.</td>
<td>Congratulations Hans!</td>
</tr>
<tr>
<td>Stephen Blackmore</td>
<td>Professor Steelman</td>
<td>&quot;Upper-respiratory infection triggers EAE onset in autoimmune prone T-cell receptor&quot;. We wish Stephen success at the Walter Reed Medical Center, working with Dr. Lydie Trautmann in the Military HIV research program, advancing the understanding on how ART, HIV and potential vaccines effect the brain.</td>
<td>Congratulations Stephen!</td>
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Strategies to gain body condition score in pasture-based dairy cows during late lactation and the far-off nonlactating period and their interaction with close-up dry matter intake.

Effects of precalving body condition and prepartum feeding level on gene expression in circulating neutrophils.

miR-148a and miR-17-5p synergistically regulate milk TAG synthesis via PPARGC1A and PPARA in goat mammary epithelial cells.

Far-off and close-up dry matter intake modulate indicators of immunometabolic adaptations to lactation in subcutaneous adipose tissue of pasture-based transition dairy cows.

Peroxisome proliferator-activated receptor delta facilitates lipid secretion and catabolism of fatty acids in dairy goat mammary epithelial cells.

Hepatic Activity and Transcription of Betaine-Homocysteine Methyltransferase, Methionine Synthase, and Cystathionine Synthase in Periparturient Dairy Cows Are Altered to Different Extents by Supply of Methionine and Choline.

Methionine and Choline Supply during the Periparturient Period Alter Plasma Amino Acid and One-Carbon Metabolism Profiles to Various Extents: Potential Role in Hepatic Metabolism and Antioxidant Status.

Corium molecular biomarkers reveal a beneficial effect on hoof transcriptomics in peripartal dairy cows supplemented with zinc, manganese, and copper from amino acid complexes and cobalt from cobalt glucoheptonate.

miR-30e-5p and miR-15a Synergistically Regulate Fatty Acid Metabolism in Goat Mammary Epithelial Cells via LRP6 and YAP1.

Prepartum body condition score and plane of nutrition affect the hepatic transcriptome during the transition period in grazing dairy cows.

Better postpartal performance in dairy cows supplemented with rumen-protected methionine compared with choline during the peripartal period.
Rumen-protected methionine compared with rumen-protected choline improves immunometabolic status in dairy cows during the peripartal period.


Fleming SA, Dilger RN. Young pigs exhibit differential exploratory behavior during novelty preference tasks in response to age, sex, and delay. Behav Brain Res. 2017;321:50-60.


## SPRING 2017 ACADEMIC DEADLINES

<table>
<thead>
<tr>
<th>DATE</th>
<th>DEADLINE</th>
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<tr>
<td>Friday, Feb. 10</td>
<td>Last day to drop or C/NC first eight-week course</td>
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<tr>
<td>Monday, Feb. 27 through Friday, March 31</td>
<td>Advising and intercollegiate transfer/curriculum changes for fall</td>
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<tr>
<td>Friday, March 10</td>
<td>Last day to drop, C/NC, or elect grade replacement for a semester course</td>
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<tr>
<td>Monday, March 13</td>
<td>Second eight-week courses begin</td>
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<td>Friday, March 17</td>
<td>Last day to add second eight-week course</td>
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<td>March 18 - March 26</td>
<td>Spring Break</td>
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<td>Monday, April 3</td>
<td>Priority registration for summer and fall begins</td>
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<tr>
<td>Friday, April 14</td>
<td>Last day to drop or C/NC second eight-week course</td>
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<td>Monday, April 24</td>
<td>Open enrollment begins for eligible students</td>
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<td>Wednesday, May 3</td>
<td>Last day of class</td>
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<td>Thursday, May 4</td>
<td>Reading Day (no classes, no final exams)</td>
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<tr>
<td>May 5 - 12</td>
<td>Final exams</td>
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