Dean Kidwell arrived November 1st and has had a busy month as the new leader of the College of ACES. One of her short term goals is to gather impact soundbites for people, departments and programs. In response, I took a stab at communicating what we do and why it matters.

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 reality, we do even more than this, but I think these 2 phrases communicate our main contribution to the University of Illinois Land Grant Mission. 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. Last week I met with the Illinois Purebred Dairy Cattle Association and gave them a status report on our dairy program. I’ve included some of those fun facts in this months “Tails”.

As we approach this Thanksgiving season, I am thankful for your contributions to our ”why it matters”!

Steve and Spenser
Dr. Kelly Swanson has been selected as the next Kraft Foods Human Nutrition Endowed Professor. A generous gift from Kraft Foods established the prestigious professorship in the Division of Nutritional Sciences in 2001. Dr. Swanson will be the third faculty member of the Division to earn this recognition, following Dr. George Fahey and Dr. Kelly Tappenden. Dr. Swanson, whose home department is Animal Sciences, is a world-renowned comparative nutritionist with unique expertise in nutritional genomics. His research is truly interdisciplinary and thus an outstanding reflection of our interdisciplinary nutritional sciences program. Professor Swanson’s official appointment as the Kraft Foods Human Nutrition Professor will begin January 1, 2017 and is for a 5-year period. Dr. Swanson will be formerly introduced as the Kraft Foods Human Nutrition Endowed Professor at an investiture ceremony on April 20, 2017.

Congratulations Dr. Swanson
NATIONAL ACADEMY OF MEDICINE HONOREE

Alicia Carriquiry, an Iowa State University Distinguished Professor of statistics, has been elected to the National Academy of Medicine. Alicia received her M.S. from the University of Illinois, Department of Animal Sciences. The full story can be found online at:

http://www.news.iastate.edu/news/2016/10/17/namcarriquiry

DR. TEMPLE GRANDIN VISIT

Dr. Temple Grandin (PhD in Animal Sciences, Univ of IL) spent a day in the Animal Sciences Department on October 26th. She met with our Immunophysiology and Behavior group, met with the ANSC 221 class, and gave a seminar for Animal Sciences faculty, staff, and grad students. The title of her presentation was: “The Importance of Good Stockmanship.”

Dr. Grandin is a professor of animal science at Colorado State University, world-renowned autism spokesperson and consultant to the livestock industry on animal behavior. She is widely celebrated as one of the first individuals on the autism spectrum to publicly share insights from her personal experience of autism. She is also the inventor of the "hug box", a device to calm those on the autism spectrum. In the 2010 Time 100, an annual list of the 100 most influential people in the world, she was named in the "Heroes" category.[3] She was the subject of the award-winning, semi-biographical film, Temple Grandin. Dr. Grandin obtained her B.A. at Franklin Pierce College in 1970. In 1974 she was employed as Livestock Editor for the Arizona Farmer Ranchman and also worked for Corral Industries on equipment design. In 1975 she earned her M.S. in Animal Science at Arizona State University for her work on the behavior of cattle in different squeeze chutes. Dr. Grandin was awarded her Ph.D in Animal Science from the University of Illinois in 1989.
The U of I Dairy Program continues to function at a very high level. To contemplate where we are headed, it’s always good to look in the rearview mirror. When I was at the U of I in Graduate School back in the late 70’s, dairy cows in Illinois averaged 14,000 lbs of milk/year. The average milk production for Illinois herd’s is now around 23,000 lbs. How did this happen? Where are we headed? I ask students in my Capstone class this question every semester: “When you are old like me, will cows average 50,000 lbs of milk/year?” Of course they can, if society invests in agriculture research and education. Research and education have contributed to these improvements. We make discoveries every day in the areas of nutrition, genetics, reproduction, health, behavior, equipment, and, facilities. We train students and graduate students to go out into the Industry and do great things. We share our discoveries with producers and the dairy support industries. This is all part of the Land Grant Mission. In the past year, our Dairy research team has done research with 13 different companies and generated over $800,000 in support. Our Dairy faculty generated 41 research publications this past year. These research funds have contributed to the support of 14 Masters students, 11 PhD students, and 8 visiting scholars. The U of I Dairy Farm is milking 130 cows now and we intend to increase the herd to 180 cows in milk by the end of 2017. Our rolling herd average continues to increase. The Dairy Farm supports our teaching and research efforts in the Animal Sciences Department and the College of Veterinary Medicine. We employ approximately 20 undergraduate students at the Dairy Farm and another 20 students in our dairy research labs. This is a great example of how research compliments our academic mission. These students get to work hand in hand with our Dairy Farm staff, Graduate Students, and our faculty. This gives them a chance to be mentored by literally, the top dairy experts in the world. Last year our Dairy faculty gave a total of 27 invited presentations in the U.S. and 20 invited presentations at International conferences. Our faculty received 5 prestigious national awards for their accomplishments in research, teaching, and/or extension education. I’m proud of what the U of I Dairy Team has accomplished. I hope some of these highlights make you smile and say: “Wow, I didn’t know all this was happening at the U of Illinois!”
ACES GRADUATE STUDENT RECOGNITION

**ANSC**
Abdulrahman Alharthi, King Saud University Scholarship- advised by Dr. Juan Loor
Emily Arkfeld, 2016 ASAS Midwest Young Scholar- advised by Drs. Anna Dilger and Dustin Boler
Fernanda Batistel, Coordination of Personal Improvement for Graduate Education (CAPES) Scholarship- advised by Dr. Juan Loor
Rachel Braz Arcanjo, CNPq Scholarship- advised by Dr. Romana Nowak
Benjamin Bohrer, Kinsman International Research Award- advised by Drs. Anna Dilger and Dustin Boler
Gloria Casas-Bedoya, W.G. Pond International Travel Award- advised by Dr. Hans Stein
Katelyn Detweiler, Jonathan Baldwin Turner Graduate Fellowship- advised by Dr. Maria Cattai de Godoy
Kankanit Doungkamchan, Royal Thai Government Scholarship- advised by Dr. David Miller
Ahmed Elolimy, Egypt Cultural and Educational Bureau Scholarship- advised by Dr. Juan Loor
Jolie Caroline Gonzalez Vega, 2016 Stahly Outstanding Swine Nutrition Award and 2016 ASAS Midwest Young Scholar- advised by Dr. Hans Stein
Nicholas Grohmann, Hennrich A. Graduate Award- advised by Dr. Michael Ellis
Parker Henley, Fighting Illinois Pork Club Fellowship, advised by Dr. Dan Shike
Joshua McCann, 2016 ASAS Midwest Young Scholar- advised by Drs. Juan Looor and Dan Shike
Sarah Morrison, Clark Fellowship in Applied Dairy Cattle Nutrition- advised by Dr. James Drackley
Hans Muller Paul, Coordination of Personal Improvement for Graduate Education (CAPES) Scholarship, advised by Dr. Isaac Cann
Maci Oelschlager, Nesheim Fellowship- advised by Dr. Ryan Dilger

Martin Overholt, Floyd McKeith Scholarship- advised by Drs. Anna Dilger and Dustin Boler
Arnulfo Pineda Baide, Mitchell Fellowship in Animal Nutrition- advised by Dr. James Drackley
Kathryn Polkoff, Jonathan Baldwin Turner Graduate Fellowship- advised by Dr. Matt Wheeler
Halie Rando, National Defense Science and Engineering Graduate (NDSEG) Fellowship- advised by Dr. Anna Kukekova
Emily Tucker, Jonathan Baldwin Turner Graduate Fellowship- advised by Dr. Romana Nowak
Katherine Vande Pol, Jonathan Baldwin Turner Graduate Fellowship- advised by Dr. Michael Ellis
Gabriel Vasconcelos Pereira, Coordination of Personal Improvement for Graduate Education (CAPES) Scholarship- advised by Dr. Isaac Cann
Meagan Weatherly, Nesheim Fellowship- advised by Dr. Phil Cardoso
Zheng Zhou, David H. and Norrain A. Baker Graduate Fellowship- advised by Dr. Juan Loor

**DNS**
Celeste Alexander, Jonathan Baldwin Turner Fellowship- advised by Dr. Kelly Swanson
Amanda Dainton, Division of Nutritional Sciences Excellence Fellowship- advised by Dr. Maria Cattai de Godoy
Tzu-Wen Liu, David H. Baker Nutrition Scholar Award- advised by Dr. Kelly Swanson
Jan Lumibao, NIH Predoctoral Traineeship, Fellowship in the Tissue Microenvironment Training Program- advised by Dr. Rex Gaskins
Linsey Ly, Kraft Human Nutrition Fellowship- advised by Dr. Jason Ridlon
Patricia Wolf, Frank W. Kari Memorial Award- advised by Dr. Rex Gaskins
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Advisor</th>
<th>Thesis Title</th>
<th>Location/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saige Sulzberger</td>
<td>Student</td>
<td>Professor Cardoso</td>
<td>&quot;Effects of clay supplementation on rumen environment, metabolism, inflammation, and performance in dairy cows&quot;</td>
<td>We wish Saige success in her position as manager of the dairy research farm at the University of Minnesota. Congratulations Saige!</td>
</tr>
<tr>
<td>Pedro Vilela Carvalho</td>
<td>Student</td>
<td>Professor Shike</td>
<td>&quot;Enhancing feeding value of corn residues to improve beef cattle production&quot;</td>
<td>We wish Pedro success during his Ph.D. studies in beef cattle nutrition at Penn State. Congratulations Pedro!</td>
</tr>
<tr>
<td>Chloe Long</td>
<td>Student</td>
<td>Professor Shike</td>
<td>&quot;Effects of Exogenous Phytase Supplementation on Phosphorus Metabolism and Digestibility in Beef Steers&quot;</td>
<td>We wish Chloe success in Ontario, Canada, after her graduation. Congratulations Chloe!</td>
</tr>
<tr>
<td>Jessica Hekman</td>
<td>Student</td>
<td>Professor Kukekova</td>
<td>Selected among 14 finalists of the Graduate College Research Live! competition where students explain their graduate work with 2 slides.</td>
<td>Congratulations Jessica!</td>
</tr>
<tr>
<td>Erin Bryan</td>
<td>Undergrad</td>
<td>Animal Sciences Undergrad</td>
<td>The National Pork Board’s Swine Research and Education Experience Award</td>
<td>Congratulations Erin!</td>
</tr>
<tr>
<td>Kyle Wilson</td>
<td>Student</td>
<td>Professor Boler</td>
<td>&quot;Establishing the Relationships Among Carcass Characteristics and Meat Quality Traits of Pork&quot;</td>
<td>We wish Kyle success in his post-graduation professional career. Congratulations Kyle!</td>
</tr>
</tbody>
</table>
**NATIONAL 4-H DAIRY QUIZ BOWL**

For Immediate Release

by Dave Fischer, 4-H Dairy Coordinator/Coach

November 9, 2016

**Illinois Places Second at National 4-H Dairy Quiz Bowl**

The Illinois 4-H Dairy Quiz Bowl Team excelled at the 2016 National 4-H Dairy Quiz Bowl competition held in Louisville, Kentucky on November 4th and 5th. Illinois 4-H’ers brought home the 2nd place win out of a field of nineteen teams from throughout the United States. Team members included: Jared Dickman, Lanark; Charlie Elliott, Freeport; Connor Erbsen, Lanark; and Jordon Oellerich, Lena, IL. In addition, based on the written test, Connor Erbsen placed 5th and Jordon Oellerich placed 8th high individual out of 76 participants.

The 4-H Dairy Quiz Bowl has become a premier educational 4-H event as it challenges the contestants’ dairy knowledge in various areas including; dairy production, business management, dairy products and dairy science. Competition includes answering a 50-question test and a double elimination contest. Each round consists of a series of 5 team questions and 20 toss-up questions. The Illinois team won 5 rounds with their only double loss to the 1st place team from New York. Thank you to Diamond V of Cedar Rapids, Iowa for sponsoring the quiz bowl team jackets. Dave Fischer, University of Illinois 4-H Dairy Program Coordinator, serves as the team coach and is assisted by Becky Meier, Ridott, IL.

The following day, this same Illinois foursome also participated in the NAILE youth dairy judging contest where they finished 9th high team overall and 10th high team in presenting oral reasons among 22 teams in the 4-H/FFA division. Charlie Elliott placed 13th high individual overall, and Connor Erbsen placed 20th high individual overall. Elliott also placed 4th high individual in the Jersey breed, and Erbsen placed 3rd high individual in the Brown Swiss breed and 5th in Guernsey. The team also placed 4th high team in the Guernsey breed, 7th in Jersey, and 8th in both Ayrshire and Brown Swiss. The judging team is coached by Dave Fischer.

Special thanks to the Illinois 4-H Foundation and River Valley Dairy, Tremont, IL for sponsoring team expenses.

Placing in the “top 10” individuals at the 2016 National 4-H Dairy Quiz Bowl contest in Louisville, KY were 8th place Jordon Oellerich and 5th place Connor Erbsen.

The Illinois 4-H Dairy Quiz Bowl team placed 2nd at the 2016 National 4-H Dairy Quiz Bowl contest in Louisville, KY. Pictured (L to R) are: Becky Meier, asst. coach; Connor Erbsen, Lanark; Charlie Elliott, Freeport; Jared Dickman, Lanark; Jordon Oellerich, Lena; and Dave Fischer, coach.
MEDIA RELEASE

For immediate release 11/15/16

Illinois teen wins National 4-H Hippology Contest

A 19-year-old Illinois 4-H member won the Eastern National 4-H Horse Roundup Hippology Contest held Nov. 5 in Louisville, Ky. Aubrey Sieve completed her 4-H career with the contest, held as part of the North American International Livestock Expo.

“I am so grateful for my time in 4-H,” Sieve said. “It has taught me so much about the world and myself. Through the wins and losses, I am better because of my 4-H experience.”

Sieve, is the daughter of Gail and Daniel Sieve of Lisle and a member of the Just Say Nay 4-H Club of DuPage County.

Sieve was part of the Illinois 4-H team which placed third of 19 teams in competition at the national 4-H contest. Also competing were Bailey Ricketts and Madde Klinkey, both of Kane County; and Kaiti Collins of Carroll County.

The team also finished first in the judging phase of the contest, second in the stations phase, and fourth in the written exam phase of the contest.

Sieve was a steady competitor throughout each phase of the contest, placing first in the stations phase, fourth in the written exam, and sixth in the judging portion of the event out of 76 participants.

This was the teen’s third year to compete at the Eastern National. She placed in the top 10 with her team presentation in 2014, and placed fifth with the Horse Bowl team in 2015.

Klinkey finish eighth overall, placing ninth in judging, 10th in the written exam, and in the top 15 in stations. Klinkey said she was “blessed to have had the opportunity to learn and compete with these wonderful and talented people.”

Klinkey is the 17-year-old daughter of Sandy and Rob Klinkey of St. Charles and a member of the A Bit More 4-H Club.

Kaiti Collins finished the day in 15th place, with a top 15 finish in stations. She is the 17-year-old daughter of Diane and Jeff Collins of Polo. She is a member of the Boots ‘N Spurs Equine Club and the Milledgeville Hotshots 4-H Clubs.

Collins acknowledge the work and dedication of her teammates. “There are no words to describe how thrilled I am to have been a part of this dynamic team,” Collins said. “We have spent countless hours working and studying our brains out all for this amazing opportunity; and it all paid off.”

Ricketts finished in 22nd place in the contest and excelled in the station division where she placed second. She had a top 15 finish in the written exam portion of the contest. Ricketts is the 18-year-old daughter of Julie and Jeff Ricketts of St. Charles and a member of the Y-Not 4-H Club.

“Hippology has taught me so much about hard work, teamwork, and confidence,” Ricketts said. “I’m proud of where my participation in the 4-H horse program has culminated, and incredibly honored to have worked with such gifted teammates.”

Debra Hagstrom, University of Illinois Extension equine specialist, oversees the state 4-H hippology program. The team was coached by 4-H alumna Dana Daugherty Taylor of Macon County. The Illinois 4-H Foundation provides financial support for the team at the national contest.

About 4-H: Illinois 4-H helps youth learn skills for living. University of Illinois Extension provides 4-H programs in every county in Illinois. Illinois 4-H impacts the lives of 200,000 youth each year through sustained learning clubs and groups and short-term programming.

For Further Information Contact:
For Further Information Contact: Deb Hagstrom, U of I Extension Specialist, Equine, 217-333-1785, hagstrom@illinois.edu
News Writer: Judy Mae Bingman, Extension Media Communications Specialist, 217-300-2113, jmbingma@illinois.edu
The Illinois 4-H Hippology team finished third in the Eastern National 4-H Horse Roundup Hippology Contest held Nov. 5 in Louisville, Ky. They placed first in the judging phase of the contest, second in stations, and fourth in the written exam phase. Pictured, left to right are Coach Dana Taylor, and members Aubrey Sieve, Madde Klinkey, Kaiti Collins, and Bailey Ricketts.

Aubrey Sieve completed her 4-H career won a first-place win at the Eastern National 4-H Horse Roundup Hippology Contest held Nov. 5 in Louisville, Ky. Sieve, is the daughter of Gail and Daniel Sieve of Lisle and a member of the Just Say Nay 4-H Club of DuPage County.
MEDIA RELEASE
For immediate release 11/15/16

Strong finish for Mercer County 4-H public speakers

A team of Mercer County 4-H members placed six in the Eastern Nationals 4-H Horse Roundup Team Presentation Contest held Nov. 5 in Louisville, Ky., as part of the North American International Livestock Expo. Kiersten Pratt and Brandi Welch presented “Trick or Treat.” Thirteen teams competed in the national contest.

“Being in the 4-H horse program has been an incredible experience and has given me the confidence and communication skills I need to succeed in the future,” Pratt said. “I’m honored to have had the opportunity to represent Illinois in national competition.”

Pratt is no stranger to the national speaking scene, also competing as an Illinois delegate in 2013 and 2015. She is the 18-year-old daughter of Sue and Tim Pratt of Arlington and a member of the county’s 4-H Horse Bowl and Hippology club.

Welch is the 18-year-old daughter of James Welch and Kerri Welch, both of Aledo, and a member of several clubs, including the Kimel 4-H Club, the Horse Bowl and Hippology Club, the 4-H Dog Club, and the Citizen Science 4-H Club.

Debra Hagstrom, University of Illinois Extension equine specialist, oversees the state 4-H horse speaking program. The team was coached by Sue Pratt. The Illinois 4-H Foundation provides financial support for the team at the national contest.

About 4-H: Illinois 4-H helps youth learn skills for living. University of Illinois Extension provides 4-H programs in every county in Illinois. Illinois 4-H impacts the lives of 200,000 youth each year through sustained learning clubs and groups and short-term programming.

For Further Information Contact: Deb Hagstrom, U of I Extension Specialist, Equine, 217-333-1785, hagstrom@illinois.edu
News Writer: Judy Mae Bingman, Extension Media Communications Specialist, 217-300-2113, jmbingma@illinois.edu
For Immediate Release:  
by Dave Fischer, IL 4-H Dairy Coordinator/Coach  
October 10, 2016

**IL 4-H’ers Place at National Dairy Judging Contest**

The 2016 National 4-H Dairy Cattle Judging Contest, held at the World Dairy Expo in Madison, WI, was another memorable event for Illinois 4-H’ers. The Illinois 4-H dairy judging team placed 10th high team overall in a very strong contest among 28 state teams. Illinois team members included: Hadley Ehlers, Campbell Hill; Brock Irwin, Belvidere; Bria Koester, Dakota; and Alex Walden, Mode, Illinois.

Bria Koester placed 2nd top individual in the Brown Swiss breed among 112 contestants. Furthermore, in the “top 25” individuals by breed, Brock Irwin was 12th in Holsteins and 15th in Ayrshire; Hadley Ehlers placed 20th in the Jersey breed; Alex Walden was 25th in Ayrshire; and Bria Koester 25th in Holsteins.

On a “top 10” team basis by breed, Illinois placed 7th in Ayrshires and 7th in Holsteins. The Illinois 4-H team was sponsored by the Illinois 4-H Foundation, River Valley Dairy of Tremont, and Illinois Milk Producers’ Association. In addition, the team jackets were sponsored by Equity, Effingham, Illinois. The team was coached by Dave Fischer, University of Illinois Extension 4-H Dairy Program Coordinator.

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Bria Koester placed 2nd top individual in the Brown Swiss breed among 112 contestants, during the 2016 National 4-H Dairy Judging Contest held in Madison, WI.  
The Illinois 4-H dairy cattle judging team placed 10th overall at the 2016 National 4-H Dairy Judging Contest held in Madison, WI during the World Dairy Expo. Pictured (left to right): Dave Fischer, coach; Alex Walden, Mode; Hadley Ehlers, Campbell Hill; Brock Irwin, Belvidere; and Bria Koester, Dakota, IL.
Dr. Stein and two of his Ph. D. students, John Mathai and Jerubella Abelilla, attended the Chinese Swine Industry Symposium in Shanghai on October 20-21.

http://asaschina.org/Yindex/index.html

The conference was organized by the American Society of Animal Science; Shanghai Gentech Industries Group; Shanghai Su-Pro Bio-Tech Co., Ltd.

Dr. Stein gave two presentations: "Effects of feed processing on the nutritional value of feed ingredients or diets fed to pigs," and "Non-antibiotic feed additives in diets for pigs. John gave a presentation on "Effects of fiber on the optimum threonine:lysine ratio for 25 to 50 kg growing gilts," and Jerubella presented a poster titled "Composition and degradation of carbohydrate fraction in feed ingredients."


Better postpartal performance in dairy cows supplemented with rumen-protected methionine compared with choline during the peripartal period.
Zhou Z, Vailati-Riboni M, Trevisi E, Drackley JK, Luchini DN, Loor JJ.

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

Transcriptome-Wide Analysis Reveals the Role of PPARγ Controlling the Lipid Metabolism in Goat Mammary Epithelial Cells.
Shi H, Zhao W, Zhang C, Shahzad K, Luo J, Loor JJ.

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.
Osorio JS, Batistel F, Garrett EF, Elhanafy MM, Tariq MR, Socha MT, Loor JJ.

Short communication: Proteins from circulating exosomes represent metabolic state in transition dairy cows.


Recent Faculty Publications


Articles published after September 1, 2016
Multiple cellobiohydrolases and cellobiose phosphorylases cooperate in the ruminal bacterium Ruminococcus albus 8 to degrade cellooligosaccharides.
Devendran S, Abdel-Hamid AM, Evans AF, Iakiviak M, Kwon IH, Mackie RI, Cann I.

Bacteroides intestinalis DSM 17393, a member of the human colonic microbiome, upregulates multiple endoxylanases during growth on xylan.
Wang K, Pereira GV, Cavalcante JJ, Zhang M, Mackie R, Cann I.

Orenia metallireducens sp. nov. Strain Z6, a Novel Metal-Reducing Member of the Phylum Firmicutes from the Deep Subsurface.

Precise gene editing paves the way for derivation of Mannheimia haemolytica leukotoxin-resistant cattle.
Shanthalingam S, Tibary A, Beever JE, Kasinathan P, Brown WC, Srikumar S.
### FALL 2016 ACADEMIC DEADLINES

**November 19–27**  
- Fall Break

**November 21**  
- Spring 2017 open registration begins for all except non-degree students

**December 2**  
- Deadline to drop GRAD POT B course without grade of W  
- Deadline for GRAD to elect credit/no credit or change credit/no credit to regular grade basis for GRAD POT B course

**December 7**  
- Last day of instruction

**December 8**  
- Reading day (no classes, no final examinations)  
- Last day for GRAD to add/drop POT B course without petitioning Graduate College  
- Last day for GRAD to add/drop semester course without petitioning Graduate College

**December 9–16 (excluding weekend)**  
- Final examination period

**December 22, 2 PM**  
- Faculty deadline for reporting grades

**January 9**  
- Transcripts on hold for Fall 2016 grades are released

**January 25**  
- Transcripts on hold for Fall 2016 degrees are released