

CENTER FOR ANIMAL WELFARE SCIENCE (CAWS) UPDATE

December, 2017

HIGHLIGHTS FROM THE DIRECTOR

As 2017 rapidly comes to a close, a quick look back at the accomplishments of CAWS members and their students this year illustrates how productive and impactful our work has been. We began the year with a student reception in partnership with the Department of Animal Sciences. This permitted networking within and beyond the Purdue academic community that was beneficial to our students, as well as our corporate and academic partners, several of whom expressed interest in working more closely with our Center.

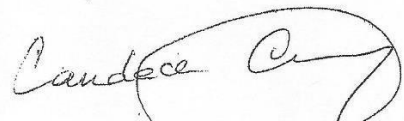
In addition to growing student and stakeholder interest, CAWS grew its membership base, welcoming four new Purdue faculty members and our first affiliate member from Assiut University, Egypt. Member collaborations, facilitated via our annual seed funding opportunity, led to awards for Brianna Gaskill and Colleen Brady for their innovative, high impact proposals to improve the welfare of mice and working horses, respectively.

The CAWS annual symposium was well attended again, drawing over 100 participants from across the country. Guest speaker and renowned animal welfare scientist, Dr. Ian Duncan noted that the quality of the program was outstanding, rivalling the highest offered in North America.

This year CAWS expanded its impacts in engagement and outreach. Marisa Erasmus developed a series of brochures on animal welfare covering multiple species, meeting a need for resources that are easily accessible and useful to diverse extension audiences. Allan Schinckel tested and patented an innovative cooling pad for sows, aimed at improving their welfare when maintained at higher ambient air temperatures.

CAWS members continued to be recognized for the quality of their scholarly work. Member, Maggie O'Haire received the inaugural Vassar Young Alumnae/Achievement award. Purdue students and their coaches, Brianna Gaskill and Marisa Erasmus, brought distinction to Purdue, winning first place in the graduate team and individual graduate student divisions of the annual Animal Welfare Judging Competition.

Read on and visit our revamped website to learn more about our members and our work. And happy holidays!



CAWS Activities and Events

CAWS welcomes its newest members, Drs. Brad Kim, Assistant Professor of Animal Sciences, Stacy Zuelly Assistant Professor of Animal Sciences, Colleen Brady, Professor of Youth Development and Agricultural Education, Dr. Darrin Karcher, Assistant Professor of Animal Sciences, and affiliate member Ahmed Mohammed, Assistant Lecturer of Animal Behaviour and Management, Assiut University, Egypt.



Dr. Kim



Dr. Mohammed



Dr. Brady



Dr. Zuelly



Dr. Karcher

Moving on.....



Dr. Bill Muir, Professor of Animal Sciences retired from Purdue in 2017. Bill served on the CAWS steering committee since its inauguration and continues to advise CAWS. An internationally recognized authority in poultry breeding and genetics associated with animal welfare, Dr. Muir is frequently quoted in a wide variety of news media outlets, including NPR, the Evolution Institute, Forbes, the Today Show, USA Today, BBC News online. His “Super-chicken” model, used in business as a productivity model, is based on his chicken research “Down with the Pecking Order – Geneticist’s Superchicken Research Takes Flight as a Metaphor for Effective Team Management, can be found on Wikipedia.

Despite his retirement, Dr. Muir continues his innovative research on genetics and animal welfare.

CAWS and the Department of Animal Science co-sponsored an Animal Welfare Sciences Career Networking Event at Lily Hall on February 7, 2017. Students had the opportunity to meet with industry, science and medical representatives from companies including Elanco, Abbvie, Covance, Chobani, Belstra Milling and more.



CAWS co-sponsored the Purdue Lectures in Ethics Policy and Science, providing funding for invited speaker Dr. Alison Van Eenennaam, Cooperative Extension Specialist in Animal Genomics and Biotechnology at UC Davis. Dr. Van Eenennaam spoke on “Animal breeding: an important component of agricultural sustainability, or animal cruelty? The event was held on April 11 in LYNN Hall.



Dr. Nicole Widmar was featured in Purdue Agriculture’s “Profiles in Teaching” in December, 2016. Profiles in Teaching focuses on an individual whose work reflects Purdue Ag’s commitment to learning. According to Dr. Widmar “Teaching should extend far beyond the classroom walls. Different learning environments, learning styles and communication modes challenge students and teachers alike.”



Congratulations

We congratulate the **CAWS-sponsored teams** who participated in the Animal Welfare Judging Competition at Iowa State University in mid November. A team from Purdue Veterinary Medicine consisted of Katelyn Wilcox, Ashley Minor and Shelbie Phillips and was coached by Dr. Candace Croney. Coached by Drs. Brianna Gaskill and Marisa Erasmus, the team from Purdue Animal Science, consisting of Rachel Stevenson, Lindsey Robbins (Animal Science grad students) and Lindsay Fisher (CPB grad student) placed 4th in the graduate team division. Becca Smith, Megan LaFollette and Lynda Mugenda (Animal Sciences) won first place in the graduate team division and received the overall high teamscore. Megan LaFollette also received 1st place in the individual graduate student divisions.

Both teams are seen with Dr. Temple Grandin, Professor of Animal Science at Colorado State University and noted consultant on animal behavior.

Pictured below

Animal Science team: Rachel Stevenson, Lindsey Robbins, Lindsay Fisher, Becca Smith, Megan LaFollette, Lynda Mugenda.



Pictured below

Purdue Veterinary Medicine team: Katelyn Wilcox, Ashley Minor, Shelbie Phillips.





Dr. Maggie O'Haire was the recipient of her alma mater's first Young Alumnae/Achievement award, presented during the 2017 Convocation at Vassar College in September 2017. The award is given to a Vassar alumna who graduated within the last ten years and whose personal and professional achievements have had a significant impact on her chosen field.

Grants

Dr. Candace Croney received a \$98,839 grant from the Stanton Foundation for her study "Improving Canine Welfare in Commercial Breeding Operations: Evaluating Rehoming Candidates and Practices".

Drs. Marisa Erasmus, Heng-Wei Cheng, and Don Lay received a \$500,000 four-year grant from NIFA-AFRI for their study "Probiotic *Bacillus subtilis* prevents injurious behaviors and increases skeletal health in laying hens".

Dr. Maggie O'Haire and Ms. Kerri Rodriguez received a monetary award toward research or education related travel or training for their poster presented at the Indiana Clinical and Translational Sciences 8th annual meeting in September, 2016. Their presentation was also selected to be among the top 20 posters for the BioCrossroads Indiana Life Sciences Summit in Indianapolis in October, 2016.

Dr. Maggie O'Haire received a \$275,000 grant from the Indiana Clinical and Translational Sciences Institute (NIH) for her study "Quantifying the Efficacy and Role of Service Dogs for Military Veterans with PTSD and their Spouses".

Publications by CAWS Members

Bauer AE, Jordan M, Colon M, Shreyer T, Croney CC: 2017. Evaluating FIDO: Developing and pilot testing the Field Instantaneous Dog Observation Tool. *Pet Behaviour Science* 4:1-15.

Bauer AE, Olivas, Sonora, Hornstra, Heidie, Pearson, Talima: 2017. Book Chapter. Adding pieces to the puzzle: Assessing the geographic distribution of *Coxiella burnetii* in dairy cattle and goats from the state of Indiana (USA). In Joao Carlos Caetano Simoes, Sofia Ferreira Anastacio and Gabriela Jorge da Silva (Eds), *The Principles and Practice of Q Fever: The One Health Paradigm*. 351-358.

Beck AM: 2016. Foreword xii-xvii in Coppinger R and Coppinger L. *What is a dog?* Chicago, IL: University of Chicago Press.

Beck AM: 2016. Foreword 5-6 in Blazina C: 2016. *When man meets dog: What a difference a dog makes*. Veloce Publishing Ltd.

Bir C, Widmar NJO, Croney CC: 2017. Stated Preferences for Dog Characteristics and Sources of Acquisition. *Animals (Basel)* 7(8). <https://www.ncbi.nlm.nih.gov/pubmed/28783072>

Burris S, Edwards NE, Beck AM, Richards EA: 2016. Incorporating Pets into Acute Inpatient Rehabilitation: A Case Study. *Rehabilitation Nursing*. 41(6).

Campbell DLM, Ali ABA, Karcher DM, Siegford JM: 2017. Laying hens in aviaries with different litter substrates: Behavior across the flock cycle and feather lipid content. *Poultry Science* 96(11):3824-3835.

Gaskill BN, Garner JP: 2017. Stressed out: providing laboratory animals with behavioral control to reduce the physiological effects of stress. *Lab Anim (NY)* 46(4):142-145.

Garner JP, Gaskill BN, Weber EM, Ahloy-Dallaire J, Pritchett-Corning KR: 2017. Introducing Therioepistemology: the study of how knowledge is gained from animal research. *Lab Anim (NY)* 46(4):103-113.

Gaskill BN, Stottler AM, Garner JP, Winnicker W, Mulder GB, Pritchett-Corning KR: 2017. The effect of early life experience, environment and genetic factors on spontaneous home-cage aggression-related wounding in male C57BL/6 mice. *Lab Animal* 46(4):176-184. <https://www.ncbi.nlm.nih.gov/pubmed/28328870>

Johnson JS, Taylor EJ, Green AR, **Gaskill BN**: 2017. Effects of nesting material on energy homeostasis in BALB/cAnNCr., C57BL/6NCrI and CrI:CD1(ICR) mice housed at 20 degrees C. *Journal of the American Association of Laboratory Animal Science* 56(3):254-259.

Kim HW, Kim JH, Yan F, **Cheng HW, Kim YH Brad**: 2017. Effect of heat stress and probiotic supplementation on protein functionality and oxidative stability of ground chicken leg meat during display storage. *J Sci Food Agric* 97(15):5343-5351.

LaFollette MR, O’Haire ME, Cloutier S, Blankenberger WB, **Gaskill BN**: 2017. Rat tickling: A systematic review of applications, outcomes and moderators. *PLoS One*, 12(4):30175320.

Ogata N, Kanda T, Kawahata T et al.:2017. Sedative and physiological effects of brimonidine tartrate ophthalmic solution in healthy cats. *Veterinary Anaesth Analg* 44(5):1091-1100.

Regmi P, Nelson N, Haut RC, Orth MW, **Karcher DM**: 2017. Influence of age and housing systems on properties of tibia and humerus of Lohmann White hens 1: Bone properties of laying hens in commercial housing systems. *Poultry Science* 96(10):3755-3762.

Robinette C, Saffran L, **Ruple A**, Deem SL: 2017. Zoos and Public Health: A partnership on the One Health Frontier. *One Health* 3:1-4. <https://www.ncbi.nlm.nih.gov/pubmed/28616495>

Stella JL, Cronney CC, Buffington CT: 2017. Behavior and Welfare of Domestic Cats Housed in Cages Larger than U.S. Norm. *Journal of Applied Animal Welfare Science* 20(3):296-312. <https://www.ncbi.nlm.nih.gov/pubmed/28481121>

Thompson NM, **Widmar NO**, Schutz MM, Cole JB, Wolf CA: 2017. Economic considerations of breeding for polled dairy cows versus dehorning in the United States. *Journal of Dairy Science* 100(6):4941-4952,

Weng HY, Yadav S, **Olynk Widmar NJ, Cronney C**, Ash M and Cooper M: 2017. Modelling the time at which overcrowding and feed interruption emerge on the swine premises under movement restrictions during a classical swine fever outbreak. *Animal*. 11(3):493-499. <https://www.ncbi.nlm.nih.gov/pubmed/27481403>

Widmar NJ, Dominick SR, **Ruple A**, Tyner WE: 2017. The influence of health concern on travel plans with focus on the Zika virus in 2016. *Prev Med Rep* 6:162-170. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5357690/>

Widmar NJO, Dominick SR, Tuner WE, **Ruple A**: 2017. When is genetic modification socially acceptable when used to advance human health through avenues other than food? *PLoS One*. 12(6):30178227: 2017 <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0182227>

CAWS Members in the News

Drs. Alan Beck and Maggie O’Haire were quoted in the Time Magazine article “The science of pet therapy is getting serious”, by Mandy Oaklander. 4/17/17.

Dr. Alan Beck was quoted in the CJOB AM68- News article “Mood Boosters: Top Tips to Lift Your Spirits in 15 Minutes,” by Marilisa Racco. 1/27/17. <http://www.cjob.com/syn/123/29364/mood-boosters-top-tips-to-lift-your-spirits-in-15-minutes>

Dr. Alan Beck is quoted in the Boston Globe article “Debate Over Pit Bulls is Reignited After Death of Boy in Lowell”, by Michael Levenson. 10/23/2017 <https://www.bostonglobe.com/metro/2017/10/23/debate-over-banning-pit-bulls-reignited-after-death-year-old/uDsOFMz5nxKB2k7wYyQjDL/story.html>

Dr. Candace Croney was quoted in the Pet Age article “Petland Hosts Breeder Tour, Conference for Consulting Veterinarians”, by Pet Age Staff. May 22, 2017. <https://petage.com/petland-hosts-breeder-tour-conference-for-consulting-veterinarians>

Dr. Candace Croney spoke on the development of the Canine Care Certified™ program on the podcast Pure Dog Talk, November 9, 2017. She was also quoted in the NB Herald, New Brunswick, Canada, on how the Canine Care Certified™ program provides consumers with insight into enhancing confidence in their breeder. November 15, 2017.

Dr. Candace Croney is quoted in the DVM360 article “Dog Breeders Encouraged to Complete Certification Program”. 10/26/2017. <http://veterinarynews.dvm360.com/print/453265?page=full>

Dr. Bill Muir was quoted in the Forbes article “Whole Foods Wants To Sell You Slower-Growing Chicken. Is That A Good Thing? , by Steven Savage. January 20, 2017. <https://www.forbes.com/sites/stevensavage/2017/01/20/is-slower-growing-chicken-a-good-thing/#326e24fa95da>

Dr. Bill Muir was quoted in the NPR article “Why Whole Foods Wants A Slower-Growing Chicken”, by Dan Charles. March 30, 2016. <https://www.npr.org/sections/thesalt/2016/03/30/472167748/why-whole-foods-wants-a-slower-growing-chicken>

Dr. Maggie O’Haire is in the News Medical Life Sciences article “Research reveals impact of human-animal bond on mental health and well-being”, by Elanco 2/7/2017. <http://www.news-medical.net/news/20170207/Research-reveals-impact-of-human-animal-bond-on-mental-health-and-well-being.aspx>

Dr. Maggie O’Haire is in the PRNewswire article “New Research Reveals Powerful Health Benefits of Cog Companionship,” by Elanco. 2/7/2017. <http://www.prnewswire.com/News/Service-dog-Study-Shows-Benefits-to-Emotional-Well-being-for-owners/>

Dr. Maggie O’Haire is in the Pet Product News article “Service-Dog Study Shows Benefits to Emotional Well-being for Owners,” by Staff. 2/7/2017. <http://www.petproductnews.com/News/Service-dog-study-shows-benefits-to-emotional-Well-being-for-owners/>

Dr. Maggie O’Haire is in the Digital Journal Press Release “Study Demonstrates the Emotional Benefits of Service Dogs on Owner and Family Members”, by Scott French. 2/14/2017. <http://www.digitaljournal.com/pr/3236822>

Dr. Maggie O’Haire is in the JAVMA article “Study finds service dogs contribute to owners’ emotional well-being”. March 29, 2017. <https://www.avma.org/News/JAVMANews/Pages/170415i.aspx>

Dr. Nicole Widmar was quoted in an AgWeb article “Shift your thinking on these 5 food trends, by Anna-Lisa Laca, December 7, 2017. <https://www.agweb.com/article/shift-your-thinking-on-these-5-food-trends>

Dr. Nicole Widmar was quoted in the Medical Xpress article “Americans OK with GMs for health care, but still wary about food”. August 29, 2017. <https://medicalxpress.com/news/2017-08-americans-gms-health-wary-food.html/>

CAWS Symposium 2017



The CAWS Symposium was held May 17-18, 2017 in Stewart Center and was attended by 140 people. Day 1 featured two workshops: “Integrating Animal Welfare into the Animal Science and Veterinary Curriculum”, moderated by Dr. Janice Kritchevsky and “Food Safety, Economics, and the Humane Food Movement”, moderated by Dr. Marisa Erasmus. On Day 2, the Symposium “Advancing Animal Welfare Science: Overcoming Obstacles to Implementation” featured experts in animal welfare from academia, industry and public health.



Meetings
2018

- March 13-14 AWIC Workshop Animal Welfare Act Requirements, Beltsville, MD
- April 21-24 CFHS National Animal Welfare Conference, Calgary, Alberta, Canada
- May 6-11 Animal Welfare: Evidence Based Management, Chicago Zoological Society
Brookfield, IL
- June 28 UFAW Conference, Newcastle upon Tyne, UK
- July 2-3 International Veterinary Congress, Berlin, Germany