

CENTER FOR ANIMAL WELFARE SCIENCE (CAWS) UPDATE
DECEMBER, 2015

HIGHLIGHTS FROM THE DIRECTOR

The start of the 2016 year offers the opportunity to look back at our accomplishments last term and to plan ahead for the new year and term. In Fall 2015, CAWS continued the trend of outstanding regional, national and global media coverage of our work. **Dr. Bill Muir's** comments on the implications of the US Food and Drug Administration's DA's controversial decision to approve AquaBounty's genetically modified salmon for human consumption were featured in NBC news, NBC Today Show, BBC news, The New York Times and numerous other outlets. The work of Drs. Nicole Widmar, Candace Croney, Maggie O'Haire and Alan Beck also received significant coverage, showcasing Purdue's diverse and significant research impacts.

Last fall, CAWS welcomed new member, **Dr. Marisa Erasmus**, Assistant Professor and Extension Specialist in Purdue's College of Agriculture. Dr. Erasmus is a teacher of animal well-being and hopes to inspire students to become interested in animal welfare within the agricultural industries.

Looking ahead, this spring brings exciting new opportunities for CAWS members. Our first RFP for collaborative research and outreach on animal welfare was released on January 4. CAWS graduate student travel scholarships for spring are soon to be announced. Previous winners, such as Feifei Yan (featured on our website) have represented CAWS well at national and international venues, even winning national awards for their research. We congratulate all of our students for their past successes and hope to encourage others with new funding and leadership opportunities.

The second annual CAWS symposium on animal welfare science is slated for May 18, featuring keynote speaker, Dr. Ed Pajor, University of Calgary. Dr. Pajor, formerly associate professor of Animal Sciences at Purdue was instrumental in founding the Center for Food Animal Well-being which preceded CAWS, and currently serves as an external academic advisor to us, so we eagerly welcome him back to Purdue. Check our website (<http://www.vet.purdue.edu/CAWS>) for further information and registration details.

Read on for more details about our work!



CAWS Activities and Events



Purdue Animal Science student **Feifei Yan** received the Certificate of Excellence for her presentation at the annual Poultry Science Association meeting, July, 2015 in Champaign, IL. Feifei was awarded a 2015 CAWS graduate student travel scholarship to attend the meeting. Her research focuses on the effect of dietary supplementation of probiotics on performance and skeletal health of laying hens and is performed under the direction of CAWS member, Dr. Heng Wei Cheng and Animal Science professor Dr. Patricia Hester.

www.ansc.purdue.edu/CAWS

Dr. Nicole Olynk Widmar, Associate Professor of Agricultural Economics in the Purdue College of Agriculture, received an award from the University's Office of Engagement, recognizing her work in supporting and educating livestock producers.



Grants: **Dr. Brianna Gaskill** received a grant from the American College of Laboratory Animal Medicine to evaluate cage color or light intensity on rats' lighting preferences and its impact on a rat model for Type II diabetes.

Dr. Gaskill also received a grant from Stanford University to investigate the validation of automated analgesic self-administration as a refined Translational Measure of Rodents' pain and well-being.

Dr. Maggie O'Haire received a grant from the Morris Animal Foundation to conduct a pilot study of the effects of service dogs on mental health and welfare in war veterans with PTSD and/or traumatic brain injury.

CAWS in the Media

Dr. Bill Muir, Professor of Animal Sciences, was interviewed on the Today show, by USA Today, BBC News online and with Eric Hallerman for Wired regarding the FDA's approval of fast-growing genetically engineered salmon, according to *GENeS Media Coverage Report and Analysis*. Among other publications and news outlets, Dr. Muir was quoted in the New York Times, USA Today, NBC News, Reuters, Financial Times, Business Insider, Huffington Post, AFO, Epoch Times, Mashable, Tech Insider and Food Navigator.

Dr. Alan Beck was in the New York Times article "For the Love of Animals", by J. Peder Zane. May 13, 2015.

Dr. Beck has an article published on CNN "Is This ARK Better Than Noah's?", July 23, 2015.

Dr. Beck was in the El Paso Plus article "The Perks of Pets for Active Adults", by J. Peder Zane, June 1, 2015.

Dr. Candace Croney was in the National Hog Farmer article "Animal Care Review Panel Disputes HSUS Targeting of Farm's PEDV Treatment Plan", by the Center for Food Integrity, February, 2015.

Dr. Croney was in the Drovers Cattle Network article "Extension Publication Delves into How the Public Views Animal Agriculture", by Aspen H. Deno, July 10, 2015. The article, written by Ann Cummins, Nicole Olynk Widmar and Joan Fulton (Purdue Department of Agricultural Economics) and **Dr. Croney** can be seen on the Purdue Extension Center for Rural Development website <https://extension.purdue.edu/extmedia/ec/ec-799-w-pdf>

Dr. Croney was in the Purdue Agriculture News article "Purdue's Dog Breeding Standards To Enter Testing Phase", by Keith Robinson, September 28, 2015.

Dr. Brianna Gaskill was interviewed for an article in The Scientist "Brrr-ying the Results", by B. Grant focusing on the effect of cold laboratory housing for mice which potentially alters scientific outcomes, July, 2015.

Dr. Maggie O'Haire was in the Psychology Today article "The Beneficial Effects of Animals on Children with Autism", by Hal Herzog, PhD, May, 2015.

Dr. O'Haire was in the National Institute of Health article "Animals' Presence May Ease Social Anxiety in Kids with Autism", May, 2015.

Dr. O'Haire was in the WLFI-TV story "Purdue Professor Looking to Expand Research on Service Dogs", by Kelly Roberts, July 29, 2015.

Drs. Beck and O'Haire are in the Purdue Exponent article "Experts Prove the Benefits of Puppy Love", by Megan Tarter, October 8, 2015

CAWS Presentations

Dr. Alan Beck

- Presented two “Medical Grand Rounds”. As the 2015. Florence Ettelson Memorial Visiting Lecturer. Providence St. Vincent Medical Center, Portland, OR. November 17-18, 2015.

Dr. Brianna Gaskill.

- The story of a nest: The impact of nesting material on mouse health and welfare. University of British Columbia online seminar. May 27, 2015.
- One Size Fits All? Assessment of cage space in breeding mice and rats. Charles Rivers Short Course. Newton, MA. June 17, 2015.
- A practical approach to rat enrichment. Charles River short course. Newton, MA. June 18, 2015.
- Nesting material: An environmental enrichment success story. Fondazione Guido Bernardini Revisiting refinement in care and use of laboratory rodents. Varese, Italy. June 25, 2015.
- Managing laboratory mouse aggression. Fondazione Guido Bernardini. Revisiting refinement in care and use of laboratory rodents. Varese, Italy. June 25, 2015.

Dr. Jiqin Ni

- An innovative ventilation monitoring system at a pig experimental building. International Symposium of Animal Environment and Welfare. Chongqing, China. October, 2015. Dr. Ni was the leading editor of the symposium proceedings, published by China Agriculture Press.

Dr. Marguerite O’Haire

- Animal-assisted intervention for trauma: A systematic literature review. With Guérin, N.A.[†] and Kirkham, A.C.[†] 24th International Society for Anthrozoology Conference, Saratoga Springs, NY. July 7-9, 2015.
- Development and initial validation of the Observation of Human-Animal Interaction for Research-Modified Version 1 (O’Haire-M1. With Germone, M.M., Daigle, C.L.[†], Gabriels, R.L. 24th International Society for Anthrozoology Conference. Saratoga Springs, NY. July 7-9, 2015.
- Animal-assisted intervention in the classroom for children with autism spectrum disorder and their typically-developing peers. 1st MARS-WALTHAM® Workshop for Research on Human-Animal Interaction in Education Settings. Washington, DC. May 26-27, 2015.
- Human-animal interaction research: An overview and recent research on autism spectrum disorder. School of Psychology, The University of Queensland. Brisbane, QLD, Australia. June 16, 2015.

CAWS Publications

Croney, C., N.O. Widmar, W.M. Muir, J.-Q Ni. 2015. Animal welfare and food production in the 21st century: Scientific and social responsibility challenges. In: Animal Environment and Welfare-Proceedings of the International Symposium, pp. 259-268. Beijing: China Agriculture Press.

Gaskill, B.M., Pritchett-Corning, K.R. The effect of cage space on behavior and reproduction in Cr1:CD1(lcr) and C57BL/6NCr1 laboratory mice. PLOS ONE 10(5):e0128985. doi:10.1371/journal.pone.0127875

Joo, H., P.M. Ndegwa, X. Want, A.J. Heber, **J.-Q. Ni**, E.L. Cortus, J.C. Ramirez-Dorransoro, B.W. Bogan and L. Chai. 2015. Ammonia and hydrogen sulfide concentrations and emissions for naturally ventilated freestall dairy barns. Transactions of the ASABE 58(5): 1321-1331.

Krieger, S. (2015.). *Come, let me guide you: A life shared with a guide dog.* **A.M. Beck & M.E. OHaire** (Eds). West Lafayette, IN: Purdue University Press

Landau, R.E., **Beck, A.**, Glickman, L.T., Litster, A., **Widmar, N.J.O.** and Moore, G.E. (2015.) Survey of US Veterinary Students on Communicating with Limited English Proficient Spanish-Speaking Pet Owners. Journal of Veterinary Medical Education 42(4), 324-331.

Liu, S., **J.-Q. Ni**, A.J. Heber, and W.-Z Liang. 2016. Modeling dynamic ammonia concentrations in layer houses using a distributed lag non-linear model. *Environmental Informatics*. Accepted.

Ni, J.-Q., Diehl, S. Liu, I.M. Lopes, J.S. Radcliffe, and B. Richert. 2015. An innovative ventilation monitoring system at a pig experimental building. In: *Animal Environment and Welfare-Proceedings of the International Symposium*, pp. 58-65. Beijing: China Agriculture Press.

Neerackal, GM., P.M. Ndegwa, H.S. Joo, X. Wang, J.H. Harrison, A.J. Heber, **J.-Q. Ni**, C. Frear, and M. Beutel. 2015. Effects of anaerobic digestion and solids separation on emissions from stored and land applied dairy manure. *Water, Air & Soil Pollution* 226(9): Article 301.

O'Haire, M.E., McKenzie, S.J. **Beck, A.M.** and Slaughter, V. 2015.. Animals may act as social buffers: Skin conductance arousal in children with autism spectrum disorder in a social context. *Developmental Psychobiology*. Advance online publication. Doi:10.1002/dev.21310

O'Haire M.E.*, Guérin, N.A.¹-Kirkham A.C.¹ (2015.). Animal-assisted intervention for trauma: A systematic literature review. *Frontiers in Psychology*, 6, 1121.doi:10.3389/fpsyg.2015..01121 **IF=2.56**

Page, L.H., **Ni, J.-Q.**, Zhang, H. Heber, A.J., Mosier, N.S., Liu, X., Joo, H.-S. Ndegwa, P.M., Harrison, J.H. 2015. Reduction of volatile fatty acids and odor offensiveness by anaerobic digestion and solid separation of dairy manure during manure storage. *Journal of Environmental management* 152, 91-98.

Pritchett-Coning, K.R., **Gaskill, B.N.** 2015. Housing Syrian hamster and Mongolian gerbils in the same secondary enclosure has no apparent negative effects on either species. *Journal of the American Association of Laboratory Animal Science* 54:261-266.

Upcoming Events

- February 23-24 CAWS lecture, Dr. Bernie Rollin, The ethical implications of animal pain, Purdue University
- March 6-8, 2016. Animal Care Conference, Long Beach, CA
- March 17-18, 2016. Symposium on Social Housing of Laboratory Animals, UC Davis, CA
- April 16-19, 2016. National Animal Welfare Conference, Toronto, Ontario
- May 11-14, 2016. Animal Sheltering Expo, Las Vegas, NV
- May 18, 2016. CAWS Spring Symposium, Purdue University
- June 6-8, 2016. Prairie States Animal Welfare Conference, Bloomington, IL

