

# GRADUATE AG RESEARCH SPOTLIGHT



## Gabriela Morello

*"I am highly motivated by providing a better life for production animals. It is what brought me to the research, what drives me to work hard, and what I want to keep doing in my life."*

*Gabriela Munhoz Morello, Ph.D., Animal Sciences*

**THE STUDENT:** Students in Brazil choose their college majors at age 17, when they begin the rigorous process of applying to a university. São Paulo native Gabriela Munhoz Morello chose agricultural engineering at the State University of Campinas (UNICAMP) because she liked both math and agriculture. In year three of her five-year program, a class in animal welfare sparked her interest and led to two internships with poultry companies and four assistantships that taught her the basics of research. After graduating in 2008, she became an extension assistant in western Kentucky for a U.S. professor she had met at a conference—and moved from a city of 1.5 million inhabitants to a town of 7,000. There she helped poultry producers reduce their energy bills. After completing a master's degree at the University of Kentucky, she chose Purdue both for its reputation and a joint position in Animal Sciences and the USDA-ARS Livestock and Research Behavior Unit. "Because I had an engineering background, I needed to learn more about the animals," she explains. She began her program in August 2011 under the supervision of research animal scientist Jeremy Marchant-Forde and Brian Richert, associate professor of Animal Sciences.

**THE RESEARCH:** Morello's research interest is the welfare and behavior of sows and piglets in farrowing systems. "My main objective was to find ways of reducing piglet mortality in swine production," she says. She targeted the major cause of death in piglets prior to weaning, crushing by their mothers,

by investigating two hypotheses: That something in the environment cause some sows to crush their piglets; and that environmental conditions within the same farrowing room vary from one crate to another. "In my research, I demonstrate that each sow is experiencing different things, even if they are in neighboring crates."

**SHARING RESULTS:** Morello successfully defended her Ph.D. this summer and is now writing to publish her findings. She hopes that as a result, producers might change such settings as temperature, humidity or ventilation to reduce piglet deaths.

**NEXT STEPS:** "I feel like I was treated not as a student, but as a scientist," Morello says of her advisors. As a teaching assistant for a senior-level animal welfare course, she discovered she liked teaching as well as research. After completing her manuscripts, she plans to earn a teaching certificate on her way to a career as a professor and/or a researcher in animal welfare, either in the United States or in Brazil. "I'm open to the best opportunity," she says.

**OUTSIDE INTERESTS:** Morello, a brown belt in karate, practices three times a week with the Purdue Karate Club. She also enjoys playing piano and guitar, singing with Purdue's All Campus and Community Chorale (AC3), and training her two dogs, a miniature pinscher and an Italian greyhound.