



Tami M. Brown-Brandl

Tami M. Brown-Brandl, ASABE Fellow, is the recipient of the 2023 Henry Giese Structures & Environment award for outstanding contributions to animal energetics and well-being as well as leading the development of US precision livestock farming research.

Brown-Brandl is a professor and Dr. William E. and Eleanor L. Splinter Chair at the University of Nebraska-Lincoln. Brown-Brandl conducts research on precision animal management, applying technology to the animal environment to aid producers in making management decisions. Brown-Brandl also teaches capstone design for senior agriculture and biological systems engineers as well as bio-environment engineering for graduate students.

Brown-Brandl's career research has led to the development of a forecast cattle heat stress website and a smartphone application. Her work has resulted in updates to American Society of Heating, Refrigerating and Air-Conditioning Engineers and ASABE standards for heat and moisture production data for all phases of swine production. In addition, Brown-Brandl's research has led to new innovations in precision livestock farming including technologies like sensors, RFID systems, and cameras, into animal production to record and summarize individual animal responses. Brown-Brandl has worked on methods of predicting individual animal well-being including stress and illness. In pursuit of her research, Brown-Brandl has developed models to predict animal susceptibility to heat stress using

a knowledge-based hierarchical fuzzy inference system model. Brown-Brandl is also the leader of Robotics Activities for K-12 students, particularly from rural communities. More than 1500 youth have been involved in camps, outreach events, or have attended robotics scrimmages hosted by her teams.

A 28-year member of ASABE, Brown-Brandl has contributed to ASABE on many committees including Society Board of Trustees, foundation board, and nominating committee. She was instrumental in the reorganization of the society on two special initiative committees "Future Thinking" and "Path Forward." She was inducted as an ASABE Fellow in 2019, and has won several awards through ASABE as well as other organizations.

Brown-Brandl has authored or coauthored more than 100 Peer-Reviewed Publications and 125 Conference Proceedings and Abstracts, and \$8.8 Million in grant funding. She has served an associate editor, guest editor, on 4 different journals, and has served as a reviewer on 12 different journals. She is secretary for the animal environment section of CIGR (International Agricultural Engineering Society). Brown-Brandl is also a member of the International Commission for Agricultural Engineers, the American Society of Heating, Refrigerating and Air Conditioning Engineers, and the European Association of Precision Livestock Farming.