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## Modeling Genotype by Environment Interaction for Precision Farming and Improved Animal Welfare

Guest Editors:

**Prof. Francesco Tiezzi**

Department of Animal Science,  
North Carolina State University,  
Raleigh, NC 27695, USA

**Dr. Luiz F. Brito**

Department of Animal Sciences,  
Purdue University, 270 S Russell  
St, West Lafayette, IN 47970, USA

**Prof. Breno Fragomeni**

Department of Animal Science,  
University of Connecticut, Storrs,  
CT 06269, USA

Deadline for manuscript  
submissions:

**closed (31 December 2021)**

### Message from the Guest Editors

Dear Colleagues,

Precision livestock farming and selection for animal welfare show an inherent advantage of including genotype by environment interactions. This involves scouting for new data sources (e.g. sensors), testing or refining statistical models (e.g. machine learning), unravelling genomic regions associated with such interactions, and engaging livestock industry stakeholders about the potential of these new methods and approaches (e.g. interactive selection index composition).

We invite original research papers, literature reviews and technical notes that address the topic of selection for novel and innovative traits incorporating the modelling of genotype by environment interactions. List of topics includes, but is not limited to: use of sensors in measuring phenotypes or determining condition, selection and genomic basis of tolerance to thermal stress, modelling of longitudinal data, behavioral genomics, and genetic by environment interaction in the determination of relevant breeding goals and product quality traits. Papers having any livestock species as subject are welcome.

Prof. Francesco Tiezzi

Prof. Luiz F. Brito

Prof. Breno Fragomeni

Guest Editors



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# Special Issue



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2. Curtin University Sustainability  
Policy (CUSP) Institute, Kent St.,  
Bentley 6102, Australia

## Message from the Editor-in-Chief

*Animals* is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 3.0 (2022, ranks 12 /62 (Q1) in ‘Agriculture, Dairy & Animal Science’; 13/143 (Q1) in ‘Veterinary Sciences’), 5-Year Impact Factor: 3.2.

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## Contact Us

*Animals* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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