

Special Issue

Effect of Genetic and Nongenetic Factors on Functional and Milk Production Traits in Livestock

Message from the Guest Editors

Understanding the nature of the genetic associations between production, health and fertility traits considering nongenetic factors (e.g., production systems, regions and weather conditions) is essential to optimize the genetic selection in livestock. Several phenotypes derived from milk (e.g., SCC, casein, lactose, κ -hydroxybutyrate, and saturated and UFA) are very useful as indicator traits to improve functional traits. On the other hand, recent advancements in genomic tools offer new opportunities for animal breeders to incorporate functional traits along with milk production traits. In the context of genomic studies, areas fruitful for genetic improvement of dairy productivity also include genome-wide association studies (GWASs) and post-GWAS analyses with a growing emphasis on the role of gene \times environment interaction. Such studies identify genomic regions and candidate genes for functional and milk production traits. This Special Issue aims to present original research or reviews related to genetic and environmental factors affecting livestock performance, with particular focus on health and milk production traits.

Guest Editors

Dr. Mehdi Bohlouli

Institute of Animal Breeding and Domestic Animal Genetics, Justus-Liebig-Universität Gießen, Giessen, Germany

Dr. Katharina May

Institute of Animal Breeding and Domestic Animal Genetics, Justus-Liebig-Universität Gießen, Giessen, Germany

Deadline for manuscript submissions

closed (25 June 2023)



Animals

an Open Access Journal
by MDPI

Impact Factor 2.7
CiteScore 5.5
Indexed in PubMed



mdpi.com/si/113414

Animals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
animals@mdpi.com

[mdpi.com/journal/
animals](https://mdpi.com/journal/animals)





Animals

an Open Access Journal
by MDPI

Impact Factor 2.7
CiteScore 5.5
Indexed in PubMed



[mdpi.com/journal/
animals](https://mdpi.com/journal/animals)



About the Journal

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: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

Editor-in-Chief

Prof. Dr. Clive J. C. Phillips

1. Curtin University Sustainable Policy (CUSP) Institute, Curtin University, Kent St., Bentley, WA 6102, Australia
 2. Former Foundation Professor of Animal Welfare, University of Queensland and Foundation Director, Centre for Animal Welfare and Ethics, University of Queensland, Brisbane, Australia
-

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PubAg, AGRIS, Animal Science Database, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q1 (Veterinary Sciences) / CiteScore - Q1 (General Veterinary)