

## Special Issue

# The Role of Melatonin in Animal Reproduction Using -Omic Technologies

### Message from the Guest Editors

We invite you to submit original research papers and review articles concerning different aspects of the role of melatonin in animal reproduction using -omic technologies in different animal species. Melatonin is a pleiotropic molecule that regulates various processes. With respect to reproduction, melatonin is involved in follicular development, luteal function, early embryonic development in vivo and in vitro, spermatogenesis, semen quality and pregnancy among others. Furthermore, melatonin is a potent antioxidant with useful applications in several fields due to its capacity to scavenge free radicals and enhance cellular endogenous antioxidant defenses. The purpose of this Special Issue is to collect the latest scientific achievements that address the new advances of melatonin pathways in animal reproduction. Additionally, we aim to stimulate a discussion on applied reproduction in domestic and aquatic animals, focusing on various -omic technologies and their limitations to achieve a comprehensive understanding of the effects of melatonin on animal reproduction. We look forward to receiving your contributions.

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 May 2024)



## Animals

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## 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.

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### Editor-in-Chief

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2. Former Foundation Professor of Animal Welfare, University of Queensland and Foundation Director, Centre for Animal Welfare and Ethics, University of Queensland, Brisbane, Australia

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