

# Topical Collection

## Stem Cells in Domestic Animals: Applications in Health and Production

### Message from the Collection Editors

Over the past decade, stem cell research has emerged as an area of major interest for its potential applications, both in human and veterinary medicine. The management of companion and sport animals requires new treatments and preventive strategies. In livestock species, stem cell therapy could be used to treat several medical conditions that negatively affect meat and milk production or reproductive efficiency. Stem cells modified with therapeutic agents might be employed to combat mastitis in dairy cow, sheep, goat or buffalo, with benefits also for human health. Reproductive performances could be improved by the integration of stem cells into the in vitro embryo production system, representing in another way the importance of stem cells in addressing commercial goals. The importance of domestic animals as models for human diseases has been recognized. The quantity of tissue available for decellularization is greater as compared to small animal models such as mice, and larger animal species more closely resembling some human behavior can be used for translational applications in cell therapy. Domestic animals are also models for stem cell secretome studies and clinical trials.

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## Animals

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### 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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