# Special Issue

# Perspectives of Pluripotent Stem Cells in Animals

### Message from the Guest Editor

The in vitro derivation of differentiated cell lineages from pluripotent stem cells (PSCs) can obtain functional cells. Due to their unlimited proliferation capacity and high differentiation potential, PSCs may be induced to differentiate into cell types from the three germ layers, settled PSCs as one of the most promising cell sources for regenerative and biotechnological applications in human and veterinary medicine. Additionally, the development of induced pluripotent stem cells (iPSCs) has revolutionized the potential application of in vitro cell differentiation for animal applications. However, some of the challenges to developing PSC-based biotechnological applications include 1) labor-intensive processes for the derivation of PSCs, 2) large-scale production in a laboratory setting, 3) derivation of host-specific for transplantation, and 4) efficient differentiation of functional PSC-derived cells. The aim of this Special Issue is to present original research and reviews on experimental approaches for the derivation of PSCs and the differentiation of PSC-derived cells in domestic and wild animals. Dr. Oscar Alejandro Peralta

### Guest Editor

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### Deadline for manuscript submissions

closed (30 April 2024)

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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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