

## Special Issue

# Cytogenetics of Domestic Animals: Clinical, Molecular and Evolutionary Aspects

### Message from the Guest Editors

After the discovery of 1;29 Robertsonian translocation in the Swedish red cattle and the demonstration of its deleterious effects on fertility, the cytogenetics applied to domestic animals was applied by several scientific laboratories in all the world. Scientists have been focused to the following sectors: **clinical cytogenetics** (*relationships between chromosome abnormalities and fertility*); **evolutionary cytogenetics** (*chromosome banding homologies and gene order between related and unrelated species*); **molecular cytogenetics** (*use of molecular markers and the FISH-technique to extend the genetic physical maps, to characterize chromosome abnormalities and the chromosome evolution of species*); **environmental cytogenetics** (*use of chromosome or molecular test to establish possible damages to the DNA derived by exposure to mutagens in the environment*). In the special issue, paper-review and original contributions will be published to sum up the knowledge and update the important questions and problems related to the domestic animal cytogenetics, giving attention to the clinical cytogenetics which is under the screen of both breeders and scientists for the animal breeding improvement.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 2022)



## 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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