



animals



an Open Access Journal by MDPI

Cytogenetics of Domestic Animals: Clinical, Molecular and Evolutionary Aspects

Guest Editors:

Dr. Leopoldo Iannuzzi

National Research Council (CNR) of Italy, Institute of Animal Production System in Mediterranean Environment (ISPAAM), Piazzale Enrico Fermi 1, 80055 –Portici (NA), Italy

Dr. Pietro Parma

Department of Agricultural and Environmental Sciences, Milano University, 20131 Milano, Italy

Deadline for manuscript submissions:
closed (30 November 2022)

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.



mdpi.com/si/59573

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Clive J. C. Phillips

1. Curtin University Sustainable Policy (CUSP) Institute, Curtin University, Kent St., Bentley, Western Australia 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

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.

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)

Contact Us

Animals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/animals
animals@mdpi.com
[X@Animals_MDPI](#)