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## Advances in the Cytogenetics of Livestock

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submissions:

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### Message from the Guest Editor

Dear Colleagues,

Cytogenetics is a branch of genetics dealing with the study of chromosomes, their number and structure, and the mechanisms that they undergo. Cytogenetic techniques make it possible not only to observe chromosomes, but also to perform quantitative and qualitative assessments of the karyotype of a given animal species. In situ fluorescence hybridization, comparative genomic hybridization, flow cytometry, and other methods are currently used with great success. Many cytogenetic assays are used to identify damage to genetic material. This branch of genetics has found application in a wide variety of biological and veterinary studies, as well as in studies on the breeding and improvement of livestock animals. Genome stability and integrity are extremely important factors influencing animal health and functioning. The karyotype analysis of farm animals via various genetic techniques will make it possible to broaden knowledge and present new scientific achievements. Cytogenetic assays and their results will enable the selection of animals for desired traits or the culling of animals with genomic instability, thus contributing to genetic progress in livestock.



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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: 3.0 (2022, ranks 12 /62 (Q1) in ‘Agriculture, Dairy & Animal Science’; 13/143 (Q1) in ‘Veterinary Sciences’), 5-Year Impact Factor: 3.2.

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