

Special Issue

Intestinal Immunity, Oxidative Stress, and Gut Microbiota: Mechanisms and Nutritional Interventions in Swine

Message from the Guest Editor

Swine intestinal health is critical for efficient production and animal welfare, as intestinal immunity imbalances and oxidative stress often trigger diseases, while the gut microbiota acts as a core regulator of these processes.

This Special Issue aims to gather high-quality studies that clarify the intricate interactions between swine intestinal immunity, oxidative stress, and the gut microbiota, decode their underlying molecular/physiological mechanisms, and highlight effective nutritional interventions.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

1. Mechanisms by which gut microbiota/metabolites regulate swine intestinal immune responses.
2. Pathways of oxidative stress affecting swine gut microbiota diversity and intestinal barrier function.
3. The efficacy and mechanisms of functional nutrients modulating the gut microbiota–immunity–oxidative stress axis.
4. Dynamic changes in the above processes in specific swine stages and corresponding nutritional strategies.
5. The application of multi-omics in analyzing swine intestinal health mechanisms.

Guest Editor

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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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