

Special Issue

Advances in Animal Nutrition and Muscle Biology

Message from the Guest Editor

Recent advances in animal nutrition science have increasingly highlighted the pivotal role of molecular mechanisms, particularly in the context of skeletal muscle growth and regeneration in animals. The intent of this Special Issue is to feature submissions that investigate the impact of various diets and nutrients on skeletal muscle development and function, using molecular biology and single-/multi-omics approaches. We are particularly interested in original research articles and reviews focused on, but not limited to, the following topics:

- Interactions between diets/nutrients and gene expression, including epigenetic regulation in skeletal muscle growth and regeneration;
- Functional feed additives and bioactive plant-derived compounds that modulate molecular pathways in the skeletal muscle;
- The nutritional regulation of muscle cell fate and activity through cellular signaling pathways;
- Single- and multi-omics integration and network-based predictions to uncover nutrition-responsive mechanisms in skeletal muscle biology;
- Novel omics tools and technologies applied to nutritional and dietary studies in animals.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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