



Muscle Metabolic Response and Adaptation to Exercise, Diet, and Environment

Guest Editor:

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Message from the Guest Editor

This Special Issue aims to share and discuss research topics focusing on molecular mechanisms of the metabolic response of skeletal muscle tissue and cells in the view of genes, transcripts, proteins, metabolites, and epigenetic factors, when exposed to various nutritional conditions and physiological stress-inducing environments. Papers addressing mechanisms of metabolic adaptation and disturbance, especially in terms of mitochondria, energy homeostasis, lipid metabolism, and redox metabolism, including cell culture studies, could be the desired topics in this issue. Meanwhile, other studies regarding skeletal muscle growth, maturation, aging, disease, and farm animal intramuscular fat and postmortem muscle aging are also welcome. Most of these studies may be conducted by use of metabolomics and integrative multi-omics approaches, but also cutting-edge studies targeting a specific key metabolite and inter-organ crosstalk around muscle in the above-mentioned fields are also acceptable.





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Editor-in-Chief

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Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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