

Special Issue

Molecular Muscle Adaptations Across the Lifespan

Message from the Guest Editors

This Special Issue aims to explore the dynamic molecular changes in muscle tissue over the course of a lifetime, examining how factors such as exercise, sedentary behavior, and disease influence muscle physiology. Contributions should contain studies utilizing human and animal models, as well as cellular models, to provide a comprehensive view of how muscles adapt from youth through old age, including responses to varying levels of physical activity and pathological conditions. This issue will cover a range of topics including, but not limited to, muscle hypertrophy, atrophy, the impact of chronic diseases such as sarcopenia and muscular dystrophy, and the molecular pathways governing muscle adaptation and maladaptation. By integrating findings across multiple scales and species, this Special Issue will offer significant insights into the mechanisms driving muscle changes, potential therapeutic targets for muscle-related diseases, and strategies for maintaining muscle health throughout the lifespan.

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Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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