Multiscale Modeling and Control of Biomedical Systems

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Message from the Guest Editors

Dear Colleagues,

The multiscale modeling and control of biomedical systems is an interdisciplinary field that involves the integration of mathematical modeling, physical and chemical principles, and physiological and biological knowledge to study and manipulate complex biological systems at different spatial and temporal scales. It encompasses a wide range of biomedical applications, including, but not limited to, physiological systems, cellular and molecular systems, neural systems, and diseases.

The goal is to provide a quantitative framework for describing the dynamics and interactions of different components within a biological system, and to generate testable hypotheses that can be validated experimentally with broad applications in biomedical research and clinical practice. These models provide powerful tools to advance our understanding of the behavior of complex biological systems and design interventions and therapies to improve human health.

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Message from the Editor-in-Chief

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