Special Issue

Multi-Omics in Health and Disease

Message from the Guest Editors

The past decade has seen advances in technologies such as high-throughput sequencing and mass spectrometry, resulting in large-scale production of omic data. Technologies can capture omic data across various cellular levels. However, no one technology can individually capture the full complexity and heterogeneity of disease. To provide a more comprehensive view of human health and disease, the integration of multi-omics data has been proposed to understand, diagnose, and aid in providing targeted treatment/prevention plans to patients. In this Special Issue, we welcome original research and review articles presenting novel computational and bioinformatics methodologies and algorithmic approaches that address the challenges in (1) multi-omics and clinical data integration, (2) handling heterogenous multi-omics big data. (3) bioinformatics tools to integrate and visualise multi-omics biological data, (4) multi-omics data sharing, standards, privacy, and protection, (5) applications of multi-omics approaches to improving our understanding of disease mechanisms and their integration into clinical practice.

Guest Editors

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Deadline for manuscript submissions

closed (15 December 2019)



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Message from the Editor-in-Chief

Methods and Protocols (ISSN 2409-9279) is an open access journal devoted to the publication of new procedural approaches and cutting-edge methodological developments. The ultimate objective of this new forum of scientific communication is to provide researchers with an indispensable tool, enabling better use of the latest scientific technologies. With a broad and totally interdisciplinary focus, Methods and Protocols was established with the objective of facilitating cross-fertilization and cross-talk in the scientific arena. Methods and protocols in Life Sciences, Chemistry, Biomedical Sciences, Engineering, and in their intersections such as Biotechnology and Nanotechnology will constitute the core of the journal. However, we anticipate that other fundamental disciplines such as Physics or Geology will be rapidly incorporated.

Editor-in-Chief

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