Special Issue

Statistical Computing in Medical Genetics: Current Approaches and Applications

Message from the Guest Editor

The field of medical genomics aims to tackle complex questions relating to the etiology and pathology of disease, as well as response to treatment and interaction with environmental exposures. With the reducing cost of high-throughput technologies has come the ability to capture an extensive breadth and depth of "omic" data for clinical cohorts. Along with this has come the need to develop and apply powerful statistical computing approaches to address research questions. In this Special Issue, we will cover the topic of statistical computing in medical genomics. The issue will highlight research that has applied new or alternate approaches in the field. There will be an emphasis on methods involving a) genomic data integration to identify biological processes and pathways involved in disease pathogenesis; b) variable selection methods for understanding gene-gene and gene-environment interactions; c) machine learning methods to identify genomic signatures predictive of disease outcomes.

Guest Editor

Prof. Dr. Rodney A. Lea

Genomics Research Centre, School of Biomedical Sciences, Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, QLD 4001, Australia

Deadline for manuscript submissions

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Genes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
genes@mdpi.com

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Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the Genes team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider Genes for your next genetics paper?

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan

Department of Pathology, The University of Alabama at Birmingham, 1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

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