



genes



an Open Access Journal by MDPI

Evolution of Gene Regulatory Networks

Guest Editors:

Dr. Marek Mutwil

School of Biological Sciences,
Nanyang Technological
University, 60 Nanyang Drive,
Singapore, 637551, Singapore

Dr. Federico Manuel Giorgi

Department of Pharmacy and
Biotechnology, University of
Bologna, 40126 Bologna, Italy

Deadline for manuscript
submissions:

closed (30 April 2020)

Message from the Guest Editors

Dear Colleagues,

Prediction of gene regulatory networks and gene function is currently among the most active topics in computational biology. The overwhelming accumulation of high-throughput sequencing data, capturing genomes and gene expression data for thousands of organisms species, requires us to invent novel bioinformatical approaches to efficiently process this data. Furthermore, it is becoming clear that the evolution of novel traits, such as organs, tissues, and metabolites, cannot be fully explained by genomic approaches since genomics might not reveal which genes work together to express a given trait. Consequently, current approaches use transcriptomics, proteomics, metabolomics and novel data processing and machine learning algorithms to try to infer the gene function and regulation.

This Special Issue invites research articles, reviews, and short communications including but not limited to: methods to construct functional and gene regulatory networks, novel approaches to process high-throughput data to produce these networks, and comparative approaches that study the evolution of these networks.

Dr. Marek Mutwil

Dr. Federico Manuel Giorgi

Guest Editors



mdpi.com/si/35180

Special Issue



genes



an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving 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?

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

Journal Rank: JCR - Q2 (*Genetics and Heredity*) / CiteScore - Q2 (*Genetics (clinical)*)

Contact Us

Genes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/genes
genes@mdpi.com
[X@Genes_MDPI](#)