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Genomic Islands

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Message from the Guest Editors

Genomic islands (GIs) have been recognized as critical players of rapid evolution in prokaryotes. GIs have been implicated in the distribution of (multiple) antibiotic resistance markers, of xenometabolic pathways, as well as of other adaptive genes for bacterial colonization of new niches. Experimental characterization and metagenomic comparisons have delineated very different GI families. Some of those share common mechanistic characteristics, e.g., integrative and conjugative elements, prophages, or mobilizable genomic islands; some other GIs lack any clear known horizontal transfer mechanisms. We now know that a high diversity exists across members of the different GI families and subfamilies in term of size, architecture, cargo genes, maintenance, dynamics, dissemination mechanism, regulation, and stability.

This Special Issue of *Genes* on “Genomic Islands” will address the diversity of GIs, their transfer mechanisms, as well as molecular details of GI maintenance and evolution. Submissions may include original experimental research papers, comparative genomics analyses, or review articles.



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Special Issue



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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.

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