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## De Novo Detection of Transposons

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### Message from the Guest Editors

Transposons, or transposable elements (TEs), are ubiquitous genomic components identified in all sequenced genomes. Once considered as ‘junk DNA’ or ‘selfish DNA’, TEs are now known to play critical roles in gene and genome evolution, phenotypic variation and the formation of eukaryotic centromeres and telomeres. TEs have been widely used to develop molecular tools for basic and applied research, such as random and targeted mutagenesis, gene therapy, phenotypic rescue and gene-tagging. They represent the most abundant dispersed type of repeats and constitute a large fraction of some eukaryotic genomes. Therefore, accurate detection of transposons is extremely important for all genome sequencing projects and related research areas. To acknowledge the latest advancements made for improving the efficiency and quality of transposon discovery and for contributing to a better understanding of their evolutionary impacts, we propose the specific topic ‘De Novo Detection of Transposons’.



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