The success of individualized medicine, advanced crops, and new and sustainable energy sources requires thoroughly annotated genomic information and the integration of this information into a coherent model. An in-depth overview of this field, *Genome Annotation*, explores automated genome analysis and annotation from its origins to the challenges of next-generation sequencing data analysis.

The book initially starts with an overview of the last 16 years since the sequencing of the first complete microbial genome. It explains how current analysis strategies were developed, including sequencing strategies, statistical models, and early annotation systems. The authors then discuss visualization techniques for displaying integrated results as well as state-of-the-art annotation tools, including MAGPIE, Ensembl, Bluejay, and Galaxy. The pipelines for the analysis and annotation of complex, next-generation DNA sequencing data are also discussed. Each chapter includes extensive references and pointers to relevant tools for the interested reader.
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