

Human Population Genetics and Genomics

By Alan R. Templeton

Human genetics and genomics research often employs tools and approaches derived from population genetics, and knowledge of the underlying basis and principles of these tools is needed for their proper use and interpretation. These studies also often employ statistical approaches and analysis, so an understanding of some basic statistical theory is also needed.

Human Population Genetics and Genomics provides researchers and students with knowledge of population genetics and relevant statistical approaches in order to become more effective users of modern genetic, genomic, and statistical tools. In-depth chapters offer thorough discussions of systems of mating, genetic drift, gene flow and subdivided populations, human population history, genotype and phenotype, detecting selection, units and targets of natural selection, adaptation to temporally and spatially variable environments, selection in age-structured populations, and genomics and society.

THIS BOOK

- comprehensively explains the use of population genetics and genomics in medical applications and research employing new genetic technologies
- discusses the relevance of population genetics and genomics to major social issues, including race and the dangers of modern eugenics proposals
- provides an overview of how population genetics and genomics helps us understand where we came from as a species and how we evolved into who we are now

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