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引言

Principles of Population Genetics, Fourth Edition is a thoroughly updated introduction to the field that is at last ascending to its rightful position of centrality to evolutionary genomics and human genetics. Rapid and inexpensive genotyping and sequencing have produced a profusion of data on genetic variation, along with a pressing need to inform students from many fields about the models that describe the underlying processes that give rise to observed patterns of genetic variation. This book provides a balanced presentation of theory and observation for students at the undergraduate and graduate levels as well as newcomers from fields like human genetics. The logical development of the models of population genetics encourages a deeper understanding of the principles, and the text has been rewritten with the goal to optimize its use as a teaching aid. It introduces the principles of genetics and statistics that are relevant to population studies, and examines the forces affecting genetic variation from the molecular to the organismic level. Integrated throughout the book are descriptions of molecular methods used to study variation in natural populations, as well as explanations of the relevant estimation theory using actual data.

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