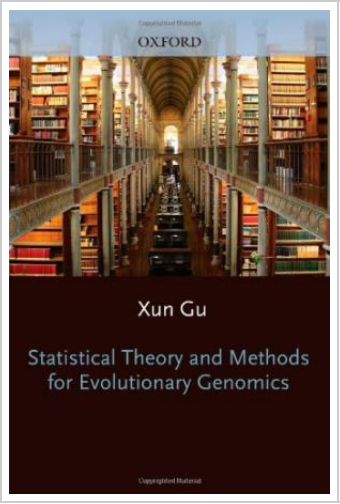

Statistical Theory and Methods for Evolutionary Genomics (Hardback)

By Xun Gu, Gu Xun

Oxford University Press, United Kingdom, 2010. Hardback. Book Condition: New. 248 x 168 mm. Language: English . Brand New Book. Evolutionary genomics is a relatively new research field with the ultimate goal of understanding the underlying evolutionary and genetic mechanisms for the emergence of genome complexity under changing environments. It stems from an integration of high throughput data from functional genomics, statistical modelling and bioinformatics, and the procedure of phylogeny-based analysis. Statistical Theory and Methods for Evolutionary Genomics summarises the statistical framework of evolutionary genomics, and illustrates how statistical modelling and testing can enhance our understanding of functional genomic evolution. The book reviews the recent developments in methodology from an evolutionary perspective of genome function, and incorporates substantial examples from high throughput data in model organisms. In addition to phylogeny-based functional analysis of DNA sequences, the author includes extensive discussion on how new types of functional genomic data (e.g. microarray) can provide exciting new insights into the evolution of genome function, which can lead in turn to an understanding of the emergence of genome complexity during evolution.

Reviews

This ebook is really gripping and fascinating. it had been writtern extremely perfectly and useful. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- ***Leopold Hills***

Totally among the finest publication I actually have at any time study. I am quite late in start reading this one, but better then never. I found out this publication from my dad and i suggested this pdf to discover.

-- ***Karolann Deckow IV***