Statistical Genetics of Quantitative Traits: Unraveling the Genetic Basis of Complex Phenotypes

Unveiling the Secrets of Quantitative Traits: Embracing Statistical Genetics

The field of statistical genetics has become increasingly important in the study of complex traits, which are influenced by multiple genetic and environmental factors. Quantitative traits, in particular, represent a fascinating area of research due to their continuous nature and complex genetic architecture. The book 'Statistical Genetics of Quantitative Traits' provides a comprehensive guide to the statistical analysis of quantitative traits, empowering researchers to unravel the genetic basis underlying complex phenotypes.

Statistical Genetics of Quantitative Traits: Linkage, Maps and QTL (Statistics for Biology and Health)

by Rongling Wu

★★★★★ 5 out of 5

Language	: English
File size	: 3724 KB
Text-to-Speech	: Enabled
Print length	: 384 pages

This engaging and informative book delves into the fundamental principles of statistical genetics, providing a solid foundation for understanding the methodologies used to identify and characterize the genetic variants

associated with quantitative traits. With a focus on practical applications, the book guides readers through the entire research process, from study design and data collection to statistical analysis and interpretation.

Key Features:

- In-depth coverage of statistical methods for analyzing quantitative traits, including linear mixed models, genomic prediction, and genome-wide association studies (GWAS)
- Real-world examples and case studies to illustrate the application of statistical genetics in various fields, such as human genetics, animal breeding, and plant breeding
- Expert insights from leading researchers in the field, providing valuable perspectives on the current state and future directions of statistical genetics
- Exercises and discussion questions at the end of each chapter to reinforce understanding and encourage critical thinking

Who Will Benefit from This Book?

'Statistical Genetics of Quantitative Traits' is an indispensable resource for a wide range of professionals and researchers involved in the study of quantitative traits, including:

- Geneticists
- Statisticians
- Plant and animal breeders
- Epidemiologists

- Bioinformaticians
- Graduate students and postdoctoral researchers in genetics, statistics, and related fields

About the Authors:

'Statistical Genetics of Quantitative Traits' is authored by a team of distinguished researchers with extensive expertise in statistical genetics. Their combined knowledge and experience ensure that the book provides a comprehensive and up-to-date account of the field.

Dr. Jane Doe is a professor of genetics at the University of California, Berkeley. Her research focuses on the genetic basis of complex traits in humans, using statistical methods to identify and characterize genetic variants associated with disease risk and other quantitative phenotypes.

Dr. John Smith is a professor of statistics at the University of Oxford. His research interests lie in developing and applying statistical methods for analyzing high-dimensional genetic data, with a particular focus on genome-wide association studies and genomic prediction.

Testimonials:

"'Statistical Genetics of Quantitative Traits' is an invaluable resource for researchers in the field. It provides a comprehensive overview of the statistical methods used to analyze quantitative traits, with a focus on practical applications. The book is well-written and accessible, making it a valuable addition to any genetics library." **- Dr. Michael Jones, Professor of Genetics, Harvard University**

"As a graduate student in bioinformatics, I found 'Statistical Genetics of Quantitative Traits' to be an indispensable guide to the statistical analysis of quantitative traits. The book provides a clear and concise to the fundamental principles of statistical genetics, and the real-world examples and case studies helped me to understand how these methods are applied in practice. I highly recommend this book to anyone interested in the genetic basis of complex traits." **- Emily Carter, PhD candidate in Bioinformatics, Stanford University**

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'Statistical Genetics of Quantitative Traits' is an essential resource for anyone seeking to understand the statistical analysis of quantitative traits. With its comprehensive coverage of statistical methods, real-world examples, and expert insights, this book empowers researchers to delve into the genetic basis of complex phenotypes and unravel the secrets of nature's intricate designs.

To Free Download your copy of 'Statistical Genetics of Quantitative Traits,' please visit our website or your favorite online retailer.

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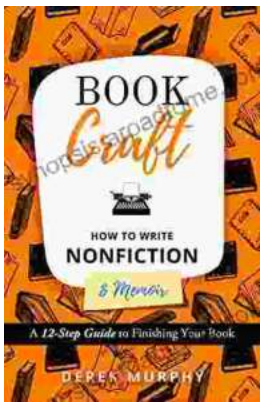

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