

New Textbooks and New Editions

Dorret Boomsma and Jacqueline Vink

An Introduction to Behavior Genetics by Terence J. Bazzett

Hardcover: 350 pages

Publisher: Sinauer Associates, Inc.;

1st edition (August 31, 2008)

ISBN-10: 0878930493

ISBN-13: 978-0878930494

This textbook provides an introduction to behavior genetics, suitable for undergraduate or graduate students from a variety of disciplines. Though focused primarily on human research, animal models of behavior are also included. After an introduction on the basis of genetics, neurogenetics and the Human Genome Project, a series of chapters follows that explain methods of study and review the genetic influences on normal and abnormal behaviors. The importance of genetic influences on cognition, mood, and sexual behaviors, as well as health issues are discussed, but these chapters do not go into much detail about linkage or genetic association studies. The book concludes with two chapters on the practical applications of behavior genetics, including an insight into potential careers, and a discussion on the future. This discussion is very much limited to the future of genetic counseling, gene therapy and education. The book gives a very accessible introduction to behavior genetics. It is perhaps less suitable to teach the statistical concepts and methods that are widely used in the field.

Population Genetics by Matthew Hamilton

Hardcover: 424 pages

Publisher: Wiley-Blackwell

(April 13, 2009)

ISBN-10: 1405132779

ISBN-13: 978-1405132770

This very well-written book has as its ambition to offer an up-to-date survey of population genetics. It succeeds very well! Population genetics is build on

basic mathematics and the book is written and organized in such a way that it offers, a step-by-step explanation of the basic mathematics required for understanding population genetic theory. For more advanced (graduate) students there are separate sections and boxes in the text with more detailed mathematical material. In addition, the book has highly instructive 'interact boxes' that point the reader to gratis software to run simulations and see fundamental concepts demonstrated. These boxes give very clear instructions to simulate for example, the consequences of assortment, to test assumptions of coalescent models, or to simulate the response to selection for a QTL with variable effect size.

Most of the book is devoted to 'simple' phenotypes (i.e. phenotypes completely determined by genotype) with two excellent chapters near the end of the book focusing on quantitative trait variation. The last chapter provides the reader with a discussion of historical topics (since the 1940s and 1950s). There also is a very attractive website (www.wiley.com/go/hamiltongenetics).

Handbook of Behavior Genetics by Yong-Kyu Kim (Editor)

Hardcover: 560 pages

Publisher: Springer; 1 edition

(April 1, 2009)

ISBN-10: 0387767266

ISBN-13: 978-0387767260

This handbook consists of 34 single or multiple-author chapters, summarizing and reviewing the current state of the art in of behavior genetics. The first chapter is on the history of the field, followed by chapters on methods in human genetics (2 chapters on biometrical modeling and one on linkage). This section is short compared to the rest of the book and therefore rather limited in its scope. However, the next three sections, each with around 9 chapters, offer excellent

reviews on the genetics of cognition, mental ability, and brain volume; on the genetics of personality including childhood temperament, adult sexual orientation and exercise behavior; and on the genetics of psychopathology (depression, schizophrenia, autism, and addictive behavior). Nearly all chapters review the human studies, but there a few chapters on rodent behavior and *drosophila* models. It almost is unavoidable that by the time a handbook such as this is published, the field has moved on. Thus, for example, genome-wide association studies or the results currently appearing from e.g. psychiatric genetics are hardly included.

Principles of Genetics by D. Peter Snustad and Michael J. Simmons, 5th edition

Paperback: 848 pages

Publisher: John Wiley & Sons Ltd;

(July 14, 2009)

ISBN-10: 0470398426

ISBN-13: 978-0470398425

This is the fifth edition of a popular textbook on genetics. It offers a perfect balance between the basic principles of genetics and the current advances in molecular genetics. The text comprises 25 chapters and starts with basic features of genetics, then presents the concepts of classical genetics, followed by topics on molecular genetics and genomics, including regulation of gene expression and the genetic basis of development. The last chapters present the concepts of quantitative, population and evolutionary genetics. Chapters are illustrated with high-quality figures, photographs and tables to clarify the text. Every chapter contains 'basic exercises', 'testing your knowledge' and 'question and problems' sections which can help students to test and enhance their understanding of the concepts in the chapter. Because of the wide coverage of all areas of genetics this book is suitable

for both undergraduate and graduate students from different disciplines.

**Measuring the Mind:
Conceptual Issues in
Contemporary Psychometrics
by Denny Borsboom,
2nd edition**

Paperback: 196 pages
Publisher: Cambridge University
Press; 1 edition in paperback
(1 Jun 2009)
ISBN-10: 0521102847
ISBN-13: 978-0521102841

This is the second edition of *Measuring the Mind* which was originally published in 2005. It is a book that is both philosophical and methodological. It addresses basic questions about measurement in psychology and psychiatry, such as whether it is possible to measure attributes like intelligence, personality and attitude. The book provides an in-depth treatment of the philosophical foundations of widely used measurement models in psychology. In three chapters, classical test theory, latent variable theory and representational

measurement theory are positioned in terms of the underlying philosophy of science. Each chapter also offers a very clear formal introduction to these theories. Special attention is devoted to the central concept of test validity and future directions to improve the theory and practice of psychological measurement are outlined. The book does not talk about genetics, but certainly introduces concepts that will be easily recognized by geneticists who work with genetic multivariate models.



In Memoriam

Robert Maria Jozef Derom June 18, 1922 – July 29, 2009

It is with great sadness that we record the death of Robert Derom on Wednesday, July 29, 2009, in a car accident nearby his home in Destelbergen, Belgium.

A relief for all his family is the very happy times they had celebrating his 60th wedding anniversary in the presence of all his children, grandchildren and great-grandchildren just one month beforehand. The funeral and burial were held at the village church of Destelbergen on 5 August, 2009.

Robert Derom was a great gemellologist, founder of the landmark East Flanders Twin Registry, and founding editor of this journal, *Twin Research*, in 1998. A full obituary will appear in a later issue.