Hum Genet (2015) 134:813
DOI 10.1007/s00439-015-1557-2

BOOK REVIEW

Alison Thomas: Introducing Genetics

2014, Paperback, 262 pages, ISBN: 9780815345091

Sophie Russ[1]

Published online: 21 April 2015

In *Introducing Genetics*, Alison Thomas aims to present the concepts of genetics in a concise and simple way. It is clear that a great deal of effort has been committed to ensure that this goal is met. The content of the book is presented in a succinct and coherent manner, rendering it a superb resource for all who are interested in discovering the world of genetics. As somebody who is relatively new to the field of genetics—training as a Genetic Counsellor with a background in psychology—I am well aware of how daunting and overwhelming it can feel at the beginning of one's career, as you come to appreciate the volume and complexity of the knowledge to be gained. The structure and style of *Introducing Genetics* help to alleviate some of this fear, and consequently, it is a great book in providing the foundations of this increasingly important discipline for students and health professionals.

After an initial introductory chapter that begins with a brief history of genetics that provides the setting for the rest of the book, Alison Thomas continues to inform about three major areas of genetics: Mendelian, molecular and population. Throughout, the author effectively uses figures to complement explanations, helping the reader to visualise and grasp complex concepts.

The author has carefully considered the best way to structure the information. Each chapter follows the same format; they begin with a short introduction, establishing the context of the chapter and outlining the main concepts that will be covered. This is then followed by the main bulk of the chapter, informing the reader about the main principles, processes, and cytogenetic and molecular techniques important in genetics. Scattered throughout the book are examples from both the plant and animal kingdoms, to aid understanding and provide real-world application. There is a slight tendency to focus on plants to illustrate concepts in the book; however, this is perhaps not surprising given that much of what we know today, including patterns of inheritance, arose from experiments using plants. At the end of each chapter, there is a summary followed by a number of problems to solve. The author states that this is to develop understanding and build confidence. I think they are also very useful for the reader to identify weaknesses in their knowledge and areas that require more work.

In summary, *Introducing Genetics* is a great book to provide a broad background basis in genetics for anybody with little or no knowledge of the field. It is easy to read and structured in a clear and logical manner. Alison Thomas hoped to 'engage, encourage and inform' with this book and I believe all three are achieved.

I would certainly recommend this book for students and health professionals alike, where an understanding of genetics would be of great relevance. This is an ever-expanding audience, as we learn more about the role of genetics in common conditions and as we move beyond the traditional genetics of rare diseases and into the genomic era.

✉ Sophie Russ
RussS@cardiff.ac.uk

[1] Institute of Medical Genetics, Cardiff University, Heath Park, Cardiff CF14 4XN, UK