This is the fourth edition of the well-known and popular textbook by Strachan and Read. The text is very up-to-date and easy to read. This fourth edition consists of 21 chapters. The first chapters cover information on the basics of DNA, chromosomes, cells and development. Chapters 6, 7 and 8 describe state-of-the art techniques like cloning, hybridization and sequencing. Next, the human genome and its relationship to other genomes is discussed, followed by a chapter on human gene expression and a chapter on gene function in the post-genome era. In Chapters 13 to 17 human genetic variation is described in relation to diseases; this section also includes a chapter on cancer genetics. In the last chapters of the book, applications of human molecular genetics are presented; for example, on genetic testing of individuals, and a chapter on genetic approaches to treating disease. The book is illustrated with high-quality full-color figures, photographs and tables, which are also available in jpeg and powerpoint format via Classwire (www.classwire.com/garlandscience).

This book is excellent for students and researchers from a variety of disciplines interested in human molecular genetics. It gives a complete overview, and the separate chapters can also be studied independently of the rest of the book.

Gene control is an expansion and reorganization of the previous book Gene Regulation: A Eukaryotic Perspective, from David Latchman. The book covers a detailed overview of the processes involved in controlling gene expression. After an introductory chapter, several chapters cover the fundamental processes involved in gene regulation. This includes the role of chromatin structure in gene regulation, regulation of transcription process and the role of post-transcriptional processes in the regulation of gene expression. The remainder of the book deals with the role of ‘gene control’ in specific biological processes; for example, regulation of gene expression in development, and the role of gene-regulatory processes in the specification of individual differentiated cell types. The chapters are illustrated by full color figures, which are helpful and clear. At the end of each chapter, the key concepts are summarized and suggestions for further reading are listed.

The book is suitable for both students and scientists interested in the topic of gene control.