

Gene Control. Second Edition. By David S. Latchman. New York: Garland Science; 2015. US \$111.50 (Paperback). 500 p. ISBN: 978-0815345039.

Gene Control, second edition, is a concise book that focuses on gene expression and regulation in eukaryotes. Synonymous with the first edition, the chapters build on themselves, culminating in a discussion correlating gene control in regard to human health and disease. The author uses illustrations where appropriate, focusing on simplistic figures that correlate DNA, RNA, and regulatory proteins. This helps the reader avoid the distraction of the minutiae of gene control and provides important concepts to maintain the big picture perspective. Since the first edition in 2010, one change in this edition is the expansion of chapters covering chromatin structure and its role with additional sections relating the epigenome with cell types, cancer, and disease. Throughout the book, each chapter is concluded with summaries of key concepts and suggestions for further reading.

Overall, this book is well organized and provides the reader with a complete and concise gene control reference. This book is intended for an upper-level undergraduate or beginning graduate student well-grounded in molecular biology. Additionally, a new or seasoned principal investigator interested in beginning or conducting research in this field would find this text very useful. The majority of illustrations are not meant to inspire the reader to further exploration in this field; however, the powerful, yet simplistic figures provide an important tool for gaining a deeper understanding for the avid student or scholar. The author effectively provides important references to concepts discussed in previous chapters and specific examples in subsequent chapters. This allows the advanced student or reader to begin with the later chapters and reference back when necessary to understand the mechanism(s) in thorough detail if desired. Therefore, the instructor or reader may find it advantageous throughout a course or independent study to dive first into chapters 10, 11, and 12, which discuss gene control in regard to cell type, cancer, and human disease, respectively.

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Genome Stability: DNA Repair and Recombination. By James E. Haber. Abingdon, UK: Garland Science; 2014. US \$140 (Paperback). 396 p. ISBN: 978-0815344858.

In the first edition of *Genome Stability: DNA Repair and Recombination*, the author provides a detailed summary of the mechanisms behind DNA repair, facilitating genome maintenance, and cancer suppression. Although

a novel and relevant text, the author circuitously navigates the reader through the world of DNA repair and recombination, occasionally making it difficult to follow the progression from one chapter to the next. That being said, this text is a very useful tool for understanding the complexity and importance of the process of recombination. Beginning with the stalled replication fork, the author addresses sources of DNA damage and the repair of double-strand breaks. Although the majority of this text discusses the importance and function of homologous recombination, non-homologous end-joining is briefly presented in Chapter 15. In addition to repair, there is also significant analysis of the role of recombination as it pertains to meiosis. Finally, the author makes interesting connections to therapeutic uses for homologous recombination, devoting an entire chapter to the understanding of gene targeting.

Genome Stability: DNA Repair and Recombination is targeted for a more advanced audience as it assumes a basic understanding of DNA replication and meiosis. Senior undergraduate students or graduate students would benefit from this text to improve their molecular understanding of recombination. It would also be a useful reference tool for research scientists and clinicians working in this field. This text is well written and provides useful schematics to help the reader get a better understanding of the molecular processes being described. Due to the advanced nature of this book, the text is a bit dense at times; however, this is often clarified by corresponding figures. Each chapter begins with a short introductory paragraph and concludes with a summary. At the end of each chapter, a list of suggested additional reading is provided for the reader to further his or her understanding of the subject being described. Overall, this text is a comprehensive exploration of the mechanisms involved in maintaining genome stability and is a useful resource for students and researchers alike.

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The Biology of Cancer. 2nd edition. By Robert A. Weinberg. New York: Garland Science; 2014. US \$112 (Paperback). 876 p. ISBN: 978-0815342205.

The field of cancer biology is a dynamic and rapidly expanding one, with new and exciting discoveries being made each day. Therefore, there is a strong need for a comprehensive guide that discusses not only the basics of cancer biology but also brings to the forefront new developments in the field. What sets the second edition of this popular textbook apart from its predecessor is the current information it provides about all areas of the field