

BOOK REVIEW

Control, context and consequences

Gene control

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The chapters in the second edition of David Latchman's text on *Gene Control* delineate the structures, molecular components and processes required to control gene expression. Taken together, the chapters provide an outstanding, up-to-date review of modern molecular genetics and functional genomics.

The chapters include levels of control of expression, structure of chromatin, epigenetics transcription, post-transcriptional processes, translation and regulation of gene expression in development. These chapters consider organisms broadly and are not restricted to human biology. Later chapters focus on gene control in cancer and human diseases.

Extensive illustrations are presented throughout each chapter to illustrate concepts, structures and processes.

Noteworthy additions at the end of each chapter include key concepts and further reading with references up to 2014.

Throughout the book, I encountered particularly interesting and thought-provoking sections. These included sections on commitment to differentiated state, regulation of chromatin state regulatory RNA and regulation of transcription through cellular signaling. The chapter on gene control in embryonic development includes interesting information on control of gene expression in embryonic stem cells. The section on gene regulation and human disease ended with a thought-provoking discussion of the application of gene regulation to therapy of human diseases.

This is an excellent text for students in molecular genetics, including undergraduate and post-graduate students. It is also valuable for junior and senior members of the health professions.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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