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Book Review

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Essential Cell Biology

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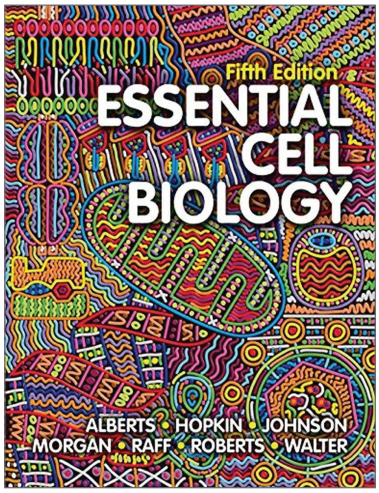

Authors:	Bruce Alberts
	Karen Hopkin
	Alexander Johnson
	David Morgan
	Martin Raff
	Keith Roberts
	Peter Walter
Title:	Essential Cell Biology 5th Edition
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'Essential cell biology' is often used in university courses, but it is written and illustrated to make it accessible to just about everyone willing to make an effort to learn what cells do. We are made of cells. Cells provide all the nutrients we consume. And the continuous activity of cells makes our planet habitable. To understand ourselves and the world of which we are a part, we need to know something about the life of cells. In Essential Cell Biology, the authors introduce readers to the fundamentals of cell biology.

Bruce Michael Alberts is an American biochemist and the Chancellor's Leadership Chair in Biochemistry and Biophysics for Science and Education at the University of California, San Francisco. Also, he was the 20th President of the National Academy of Sciences and authored the first edition in 1997. Five editions were published by 2019. Karen Hopkin received her PhD from the Albert Einstein College of Medicine and is a science writer. Karen Hopkin and other professors authored this fifth edition after Professor Alberts's death.

This textbook contains twenty chapters, an appendix, and an index. The chapter's subtitles are written at the beginning of each chapter. Also, the chapter-related questions at the ending of each chapter. Notable are the chapters about the cell and biological system, edited in a very detailed way, according to the chapter sequence. Overall, the diagrams and illustrations are done very well. I didn't really find anything bad about this textbook.

In addition, all the chapters contain the essential knowledge about all kinds of cells. In each chapter, is not only the cell biology described but also the new scientific technology and techniques of the individual topics are well explained. At the end of the chapters, the main contents were summarized as key concepts. And review questions and the answers are introduced, allowing the readers to self-assess their knowledge.

Therefore, it's a great textbook with a lot of information, and it's extremely easy to understand. It doesn't require readers to have any background knowledge of any of the subjects, though basic scientific understanding is preferred, or else you will spend some extra time going through everything to comprehend it. The Fifth Edition introduces powerful new techniques that allow us to examine cells and their components with unprecedented precision, such as super-resolution fluorescence microscopy and cryo-electron microscopy, as well as the latest methods for DNA sequencing and gene editing.

It has a useful index with terminological terms listed on 23 pages in alphabetical order. Most of the revisions in this edition improve the illustrations, figures, and the photo images' visual quality. And the new biological experiments and the latest scientific concepts are enriched.

In conclusion, many of the most fascinating questions in cell biology remain unanswered. But this book contains the current understanding of what human beings know. Professor Alberts and co-author's fifth edition will greatly benefit students of the health sciences, biologists, and basic scientists. I highly recommend it to anyone interested in biology and cells.