Applied Cell and Molecular Biology for Engineers

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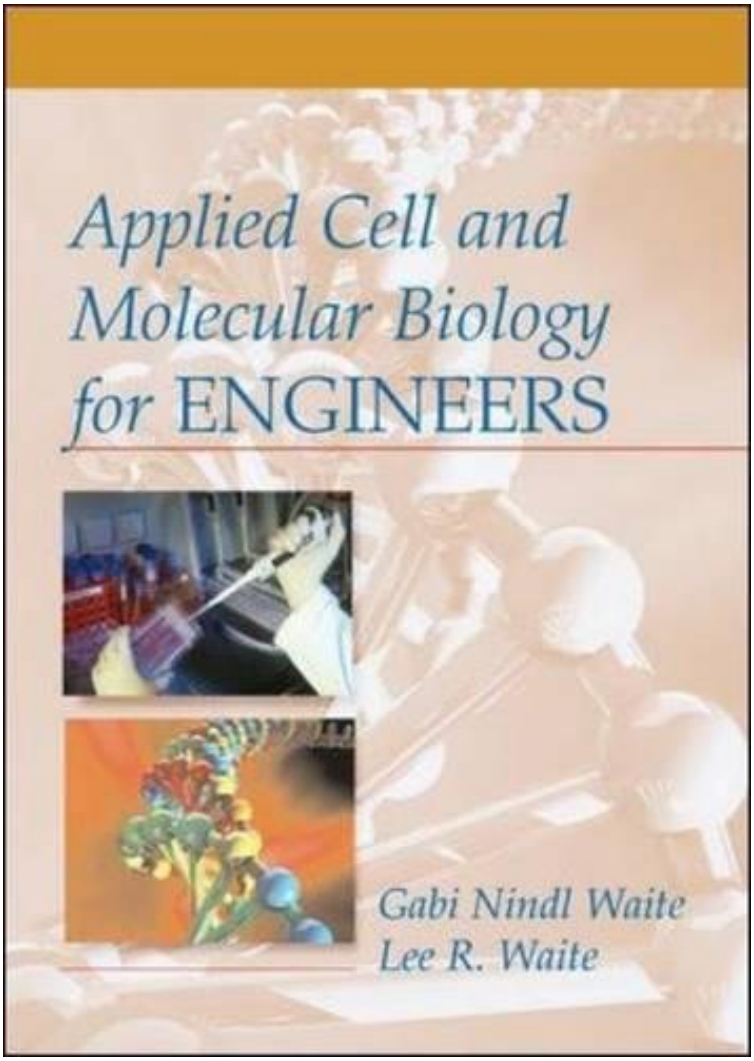

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From McGraw-Hill Education : Applied Cell and Molecular Biology for Engineers before purchasing it in order to gage whether or not it would be worth my time, and all praised Applied Cell and Molecular Biology for Engineers:

2 of 2 people found the following review helpful. Cellular Engineering BookBy MIchelle DI selected this book for my undergraduate cellular engineering class. Overall, this book is appropriate for undergraduate cellular engineering students; however, the focus of many of the chapters is strictly on molecular biology or biochemistry and very little attention is given to engineering applications. Also, receptor-ligand interactions is focused on neural receptors, as opposed to more classical lymphocyte adhesion studies. Also, too much detail is given for certain sections (such as electron transport). It is very difficult to follow this level of detail without additional background information that is beyond the scope of this book.I reviewed multiple books for this class and I selected this book because it offers a short

and thorough review of important molecular cell biology, but I will need to use additional supplemental materials with each chapter to highlight important engineering applications related to the cellular processes covered in those sections of the book.If you have previously taken cell biology and biochemistry and would like to find a book that provides a nice summary of these subjects, this would be an excellent book for that purpose.1 of 1 people found the following review helpful. Excellent book on a very complex subjectBy Peter TeimanPETER TEIMAN FRANKLIN here,Superb introduction to bioengineering. Whilst not in-depth, it certainly covers the important topics.PETER TEIMAN FRANKLIN,Sweden

A Guide to the Fundamentals and Latest Concepts of Molecular and Cell Biology Bridging the gap between biology and engineering, Applied Cell and Molecular Biology for Engineers uses clear, straightforward language to introduce you to the cutting-edge concepts of molecular and cell biology. Written by an international team of engineers and life scientists, this vital tool contains clinical focus boxes and applications boxes in each chapter to link biology and engineering in today's world. To help grasp complex material quickly and easily, a glossary is provided. Applied Cell and Molecular Biology for Engineers features: Clear descriptions of cell structures and functions Detailed coverage of cellular communication In-depth information on cellular energy conversion Concise facts on information flow across generations A succinct guide to the evolution of cells to organisms Inside This Biomedical Engineering Guide Biomolecules: Energetics Components of the cell Cell Morphology: Cell membranes Cell organelles Enzyme Kinetics: Steady-state kinetics Enzyme inhibition Cellular Signal Transduction: Receptor binding Apoptosis Energy Conversion: Cell metabolism Cell respiration Cellular Communication: Direct Local Long distance Cellular Genetics: DNA and RNA synthesis and repair Cell Division and Growth: Cell cycle Mitosis Stem cells Cellular Development: Germ cells and fertilization Limb development From Cells to Organisms: Cell differentiation Systems biology

About the AuthorGabi Nindl is an assistant professor of cellular and integrative physiology and a research professor of applied biology and biomedical engineering.