

Pioneers of Neurobiology: My Brilliant Eccentric Heroes. By John G. Nicholls. Sunderland, MA: Sinauer Associates, Inc.; 2015. US \$14.20 (Paperback). 146 p. ISBN: 978-1605353258.

Proper scientific training has long been rooted in organized course work and structured laboratory practice. However, a considerable amount of education occurs beyond the classroom and work bench. In his short memoir, John G. Nicholls regales his readers with stories dating from his undergraduate studies in London to his experiences working abroad with international scientists. Nicholls' vignettes highlight individuals who have been critical to his personal and intellectual development, including distinguished scientists like Sir Bernard Katz, Pasko Rakic, and Edward Zigler. His unique stories describe and embody the idiosyncrasies of many scientists who make the field of neuroscience an exciting and unceasing opportunity for both formal and informal education.

The book begins with tales from his early days in England and eventually segues into his time abroad in many countries, among them Germany, Israel, China, Venezuela, and the United States. Finally, the text ends with stories surrounding his good friend and pre-eminent neurophysiologist Stephen Kuffler. Although the book is not instructive in the conventional sense, it provides the reader with a unique glimpse into one scientist's humorous, enlightening, and sentimental experiences that some may empathize with. *Pioneers of Neurobiology* is not only a wonderful book for any student interested in pursuing a degree in neuroscience, but also a heartwarming read for the seasoned scientist.

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The Immune System. 4th edition. By Peter Parham. New York: Garland Science; 2014. US \$130 (Paperback). 532 p. ISBN: 978-08153443667.

Written for medical, dental, veterinary, and pharmacy students new to immunology, the fourth edition of *The Immune System* concentrates on human immunity, explaining how the various systems function and highlighting their effect on daily life. The authors have chosen to present what is known about the mechanisms used by the immune system so as to keep the narrative succinct. The concise yet thorough account makes it an ideal read for the intended audience. Nevertheless, deciding to present information in this way may be less desirable for teaching undergraduates, who may crave exploration and discovery to keep them engaged. However, the authors further supplement the learning experience for both the

students and teachers by providing ample resources, including a companion book, *Case Studies in Immunology*, which may provide further stimulation.

The book begins by providing a focused introduction to the cells and tissues of the immune system and introducing important concepts that include the new appreciation for the microorganisms inhabiting the human body and their essential roles in maintaining human health. Interestingly, the book highlights the large and underappreciated overlap between the innate and adaptive immune systems that, until recently, were thought to be distinct.

The plentiful illustrations compliment and further clarify the text nicely, utilizing the familiar and successful design employed by *Janeway's Immunobiology*, from which, incidentally, *The Immune System* is adapted. Each section and chapter is clearly documented in a detailed contents section, and each chapter is concisely summarized, creating an accessible and understandable book. Additionally, the chapters include questions that strengthen learning of the material presented. A detailed glossary at the end of the book provides a quick and handy resource to help jog the memory. *The Immune System* is a thorough and coherent overview of the modern understanding of immunity.

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Functional Magnetic Resonance Imaging, Third Edition. By Scott A. Huettel, Allen W. Song, and Gregory McCarthy. Sunderland, MA: Sinauer Associates, Inc.; 2014. US \$102.95 (Hardcover). 573 p. ISBN: 978-0878936274.

In the most recent edition of *Functional Magnetic Resonance Imaging*, the authors present an engaging textbook that provides an in-depth look at this innovative imaging technique. The book begins with an introduction to functional magnetic resonance imaging (fMRI) and the equipment used, focusing on the important safety aspects that must be kept in mind. From there, the authors dive into the physics behind this imaging technique and highlight the biological and neurophysiological aspects that account for how fMRI has revolutionized the imaging field. The next section explores the statistical analyses behind imaging interpretation before discussing advanced and combinatorial approaches to fMRI methods. New to this edition are expanded sections on the physiological basis of fMRI, as well as commentary on the ethical and methodological controversies currently surrounding this imaging technique.