basic information, this book serves a unique role in providing the most recent information in a format that will encourage independent exploration of the primary literature and critical discussion of the authors’ ideas. This makes *Ecological Developmental Biology* more suited to an advanced seminar than a lecture-based course. Further, since Gilbert and Epel frequently indicate what is unknown and where more research is needed, this text also may be a starting point for scientists entering the field.

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**Immunobiology: A Short Course, 6th edition.** By Richard Coico and Geoffrey Sunshine. Hoboken, NJ: John Wiley & Sons Inc. 2009. 416 pp. US $54.95 Paperback. ISBN: 978-0470081587.

With the emergence of swine flu, there is renewed interest in understanding how our immune system protects us. Immunobiology is a rapidly growing field of study, but the varied players and concepts can be overwhelming to someone with little or no familiarity with the subject. *Immunobiology: A Short Course* by Richard Coico and Geoffrey Sunshine provides an excellent and fairly up-to-date overview of the immune system, introducing major concepts without saturating the reader with information. While the textbook is clearly geared toward the needs of medical and pre-medical students, anyone with an interest in learning about or reviewing immunological concepts could benefit from reading it.

The first half of the book primarily focuses on the major components of the adaptive immune system: B cells and T cells. Simple schematics illustrate the development of these cells and their actions in an immune response. In addition, this new edition includes information on Toll-like receptors (TLRs), regulatory T cells (Tregs), and the role of activation-induced deaminase in somatic hypermutation and class-switch recombination. The discovery of TLRs has given rise to the study of the innate immune system, while Tregs are now a much-studied component of self-regulation, one of the unique features of the adaptive immune response. While the increase of information on the innate immune system is a welcome improvement compared to earlier editions, the authors do miss an opportunity to use TLRs as a jumping off point for further comparison of the innate and adaptive immune systems.

The second half of the book is more clinically oriented with chapters on autoimmunity, hypersensitivity, cancer, transplantation, and vaccination. Since much of our understanding of the immune system derives from studying it during infection or extreme cases of over- or under-activity, these chapters provide an important link between the basic science presented earlier in the book and the clinical cases medical students encounter on a daily basis. Every chapter concludes with a summary of important points, references for further reading (both original articles as well as reviews), and review questions. This format is a useful tool for guiding the studies of students, and it also connects curious readers with extensive immunology literature. Although the layout of individual chapters is consistent and helpful, the grouping of topics in the book is sometimes confusing. For example, while it is nice that the authors do not shy away from describing experimental techniques that have been used to study the immune system, this information would be better placed at the end of the book rather than between two chapters on the maturation of the humoral response. These organizational quirks, however, do not significantly impair the reading experience.

Coico and Sunshine succeed in providing new information from the field while maintaining a focus on the best-studied and most clinically relevant aspects of the immune response. *Immunobiology: A Short Course* serves as an excellent introduction to immunobiology by not only providing sufficient and necessary information for
medical students but also by whetting the appetite of those readers who want to learn more.

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**Functional Magnetic Resonance Imaging. 2nd edition. By Scott A. Huettel, Allen W. Song, and Gregory McCarthy. Sunderland, MA: Sinauer Associates Inc. 2008. 510 pp. US $88.95 Hardcover. ISBN: 978-0878932863.**

Over the last 20 years, functional magnetic resonance imaging (fMRI) has matured from an infant technology used by a select few researchers to the dominant research modality in modern cognitive neuroscience. While the inclusion of fMRI theory and technique in neuroscience education is undisputed in value, no text has thus far emerged as sufficiently comprehensive yet accessible to students. This is due, in part, to the fundamentally interdisciplinary nature of fMRI. While many authors could compose a text on the physics of fMRI, the relationship between thought and neuroanatomy, or experimental design and data management, Huettel, Song, and McCarthy have endeavored to give birth to a single work that introduces each of the aforementioned subjects specifically as they relate to fMRI. *Functional Magnetic Resonance Imaging* fills a previously vacant niche in the educational armamentarium of students and professors of cognitive neuroscience.

This highly readable book flows like an introductory college textbook in that it presumes very little knowledge on the part of the reader. Unlike so many other texts discussing fMRI, it warmly welcomes students from a variety of educational backgrounds. For example, elementary terms such as ion, neuron, central nervous system, and standard deviation are defined as they are first mentioned, effectively bringing even the most novice student up to speed.

The book progresses logically from MR scanners and signals to the connection between neuronal and hemodynamic activity to experimental design and statistical analyses while walking the reader through the relevant aspects of physiology and physics along the way. The “thought experiment” questions peppered throughout the book make reading each chapter feel almost interactive and aid in retention of the material. The full-color illustrations, which appear on nearly every page, impart life and add tangibly to the student’s comprehension of the text.

While *Functional Magnetic Resonance Imaging* does not qualify its reader as capable of designing and executing groundbreaking experimentation with fMRI, it was not written for that purpose. In fact, it achieves its intended goal very effectively: It lays the requisite groundwork for further study and gives the student a baseline familiarity with all of the terms and subjects likely to be necessary for a deeper understanding of fMRI. This text allows the reader to take their first step into the rapidly expanding field of cognitive neuroscience research enabled by fMRI and does so in a painless and all-inclusive fashion.

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**Who Owns You? The Corporate Gold Rush to Patent Your Genes. By David Koepsell. West Sussex, UK: Wiley-Blackwell. 2009. 200 pp. US $24.95 Paperback. ISBN: 978-1405187305.**

“Science cannot stop while ethics catches up,” claimed the president of the American Association for the Advancement of Science in 1950. In *Who Owns You? The Corporate Gold Rush to Patent Your Genes*, the author, philosopher, and legal scholar David Koepsell describes and dissects the tangle that results when science, in the form of wide-scale genomic sequencing, is permitted to proceed without a strict ethical and legal framework. Part primer, part prescription, Koepsell’s book offers a portrait of the current state of sequencing technology and