

concepts from the book and premade flashcards that allow students review key terms from the text. In addition, students have the option to use the online site to mark or take notes in their books.

For instructors and professors looking to prepare their students to ask important questions in the quantitative world that awaits the future of biomedical research, *The Molecules of Life: Physical and Chemical Properties* is an excellent selection.

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Principles of Cognitive Neuroscience. 2nd edition.
By Dale Purves, Roberto Cabeza, Scott A. Huettel,
Kevin S. LaBar, Michael L. Platt, and Marty G.
Woldorff. Sunderland, MA: Sinauer Associates, Inc.
Publishers; 2012. US \$124.95 (Hardcover). 601 p.
ISBN: 978-0878935734.

When in a bustling, raucous environment filled with noise, how can we still hear our name being called from across the room? How do you know when looking at a woman standing in front of you that she is your mother? Why is the written word so perplexing for some individuals to grasp? And what are the theoretical models, neural mechanisms, and anatomical substrates underlying such capabilities? These questions and others are cleverly and clearly answered by the authors of *Principles of Cognitive Neuroscience*. The textbook aims to introduce the reader to the field of cognitive neuroscience, a field that, according to the authors, “combines all the difficulties of measuring brain function with all the problems of trying to accurately assess cognition and behavior, as well as the complexities of trying to link them together” (pg. 9). The authors succeed in presenting a simplified, introductory view of cognitive neuroscience while still making it clear to the reader that much in the field remains unknown and in need of further experimentation and evaluation.

This textbook is an ideal introductory text for advanced undergraduates or graduate students studying cognitive neuroscience. The text assumes prior knowledge of neuroscience, although there is an excellent appendix that reviews the basics of the human nervous system as a brief refresher. The book begins with a brief introduction to the field, explicitly and excellently distinguishing cognitive neuroscience from related fields such as cognitive psychology and clinical neuroscience. The authors then provide a thorough review of methods used in the field. This methods chapter is a strength of the book, as it clearly delineates the pros and cons of each method, discusses methods used in both animal and human research, and includes state-of-the-art techniques such as optogenetics. The remainder of the book delves into specific topics in cognitive neuroscience, including sensorimotor systems, attention, memory, emotion, and decision making. The authors elegantly tie in many of the classical experiments

from cognitive psychology with more current research conducted using advanced neuroscience techniques. The text focuses on normal cognition but discusses pathological physiological cognition when interesting and appropriate.

In sum, this text provides a clear, concise, and well-rounded perspective on the rising field of cognitive neuroscience. I applaud the authors for creating a book that is not only educational but also enjoyable to read — something that cannot be said about most textbooks. Any instructor of an introductory cognitive neuroscience course, advanced and inquisitive undergraduate, or beginning researcher will likely find this text to be a valuable resource.

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Pediatric Imaging Essentials: Radiography, Ultrasound, CT and MRI in Neonates and Children.
By Michael Riccabona. Stuttgart, NY: Thieme; 2013.
US \$119.99 (Paperback). 364 p. ISBN: 978-3131661913.

Pediatric Imaging Essentials is a must read for current radiologists and physicians who work with pediatric patients. This book focuses on the key differences between using imaging technologies on pediatric patients versus adults, emphasizing the importance of safety and adherence to current guidelines. The reader is often reminded of the ALARA (As Low As Reasonably Achievable) principle to ensure that patients are not overexposed to harmful radiation. The book opens with special considerations to keep in mind while using ultrasound, CT, and MRI technology on this group of young patients, including key definitions, basic rules for each technique along with the risks that the imaging method carries, and tips on how to effectively instruct pediatric patients using language that they understand. From there, the author systematically explores common ailments that affect neonates and children in key anatomical regions of the human body: the chest, gastrointestinal tract, central nervous system and spine, urinary tract and reproductive organs, and the musculoskeletal system. Other chapters focus on obtaining a proper diagnosis in cases of trauma and child abuse, oncology, common syndromes, and metabolic diseases. At the end of each chapter, the author provides a bibliography that is useful if the reader chooses to pursue additional information. While slightly text heavy, this book includes 633 illustrations and patient images to guide the reader in distinguishing between normal and abnormal findings. The author utilizes tables throughout the book to summarize important information. Additionally, case studies and quizzes throughout the text help ensure that the reader understands key points and is able to apply his or her knowledge to appropriately diagnose pediatric patients. This book is an ideal resource not only for residents and fellows looking for a practice-oriented text, but for seasoned veterans across a variety of