



This extensively illustrated textbook is a welcome introduction to the complex topic of developmental neuroscience. The goals of Price and colleagues (all, Univ. of Edinburgh, UK) in writing *Building Brains* were to present key findings on developmental mechanisms in a rigorous but accessible and enthusiastic manner through the ample use of colorful, detailed figures and images and clearly written text. The book is organized into 12 chapters covering neural development subtopics such as models and methods, anatomy, induction, neuroectoderm patterning, neurogenesis, migration, morphology, axon guidance, map formation, synaptogenesis, programmed cell death, and experience-dependent development. Highlights include term definitions in the margins next to the text as well as in a glossary; references to supporting research literature within the text and suggestions for additional reading in an addendum; text boxes offering greater detail on important developments, human disease examples, and controversial issues; small images identifying the relevant animal model (vertebrate and invertebrate) next to figures and diagrams; end-of-chapter bulleted summaries; and a companion website that includes all figures. Overall, a student-friendly guide for those new to the field of neural development. **Summing Up:** Recommended. ★★ Upper-division undergraduates and graduate students.—*C. L. Iwema, University of Pittsburgh*

49-2047 QH460 2011-7489 CIP
Carlson, Elof Axel. **Mutation: the history of an idea from Darwin to genomics.** Cold Spring Harbor Laboratory, 2011. 163p bibl index afp ISBN 1936113309, \$55.00; ISBN 9781936113309, \$55.00

Carlson (emer., Stony Brook Univ.) presents the concept of mutation as it has evolved through decades of research. From Darwin's "fluctuating variations" to modern understanding of molecular genetics, the book takes readers through one theory after another to see how various scientists asked key questions in heredity and evolution. The book proves that current understanding of gene mutation did not develop overnight. Rather, the link between mutation and evolution was based on the technologies of the time and improvements in methodologies in mutagenesis and biochemistry, allowing scientists to study the effects of specific mutations. This book provides an excellent view of mutation theories from a historical perspective, and it gives the reader an appreciation for those involved in the process and the difficulty some theories faced in gaining acceptance by the scientific community. Chapters at the end of the book focus on mutation's relationship to society, eugenics, and the overall philosophy of science. It is an easy read for scientists and nonscientists alike, and a valuable resource for genetics or history of science courses. **Summing Up:** Highly recommended. ★★★ Academic and general readership, all levels.—*M. C. Pavao, Worcester State College*

49-2048 [Internet Resource]
CELLS alive!
URL: <http://www.cellsalive.com/>

[Revisited Sep'11] *CELLS alive!* is a large site that presents basic information about cell biology, microbiology, immunology, and microscopy. The site has been maintained and updated (annually) since 1994, and was last reviewed in 1997 (CH, Sup'97, 34Sup-062). Its creator, Jim Sullivan, has a background in biology, but his stock and trade is biological graphics and imagery. This may be the reason for the many digital images and animations of cells, bacteria, and viruses that augment the site. The left side of the page is divided into the sections Contents, Interactive, Get, and Galleries, making navigation simple. *CELLS alive!* aims to educate: there are interactive models (Adobe Flash Player

required) of prokaryotic and eukaryotic cells, mitosis, meiosis, and the cell cycle. The site also provides quizzes and puzzles for readers to test their knowledge. Its educational focus is marred somewhat by the ubiquitous advertisements on the sides and bottoms of its pages.

The site also seems geared toward selling CD-ROMs and downloads of site content, plus videos not available on the site. Multiuser pricing for classroom use is available. Since many of the animations are quite small, purchasing a download or CD would be necessary for class use (not to mention licensing restrictions). Clicking on animation thumbnails should take one to ordering information, but many of these links are broken; instead, users should click on the image of the CD or monitor, if available, below the thumbnail. For personal use and viewing of the videos online, a media player such as QuickTime is required. *CELLS alive!* is suitable for lay readers; first-year students may find it a useful resource for reviewing basic facts. **Summing Up:** Recommended. ★★ Lower-division undergraduates and general audiences.—*J. Lee, University of Calgary*

49-2049 [Internet Resource]
Charles Darwin's Papers Online, ed. by John van Wyhe.

URL: http://darwin-online.org.uk/manuscripts_announcement.html
[Visited Sep'11] *Charles Darwin's Papers Online* is the largest digitized collection of private papers of Charles Darwin held by Cambridge University Library. The Darwin family and the Pilgrim Trust donated the original print collection to the library in 1942. The collection contains 20,000 items and 100,000 images that have been added to *The Complete Work of Charles Darwin Online* (CH, May'07, 44-5038) under the Manuscripts tab. Content is continually added and includes drafts of Darwin's publications, his diary from the *Beagle* voyage, collections of specimen seeds, correspondence with colleagues and family, experiment notebooks, photographs, and even Emma Darwin's recipe book. The digitized images are scans of the microfilmed documents and have been digitally enhanced. Despite the high-quality images, Darwin's handwriting is still mostly unreadable and only a small portion of the documents has been transcribed. Navigation of the collection is simple; it can be browsed in the same sequence as the original catalogue, or users can search the collection.

The relationship of this collection to the entire Web site can be confusing; for example, the advanced search option on the manuscripts page expands the search to the entire site. Cambridge University Library's description of the collection at <http://www.lib.cam.ac.uk/deptserv/manuscripts/darwin.html> provides a good explanation of the "classmarks" assigned to various documents, which may be helpful to users. The images can be downloaded in PDF format. Additionally, the text and image of transcribed documents can be viewed side by side or individually. *Charles Darwin's Papers Online* is a historically significant collection of primary documents. Unfortunately, usage may be limited until more of the text is transcribed to enhance readability. However, this extraordinary free resource should be highlighted in any course about Darwin or evolution, and will be beneficial to researchers. **Summing Up:** Recommended. ★★ Upper-division undergraduates through professionals.—*B. M. Weston, formerly, University of Idaho*

49-2050 QP623 2011-1258 CIP
Darnell, James. **RNA: life's indispensable molecule.** Cold Spring Harbor Laboratory, 2011. 416p bibl index afp ISBN 1936113198, \$39.00; ISBN 9781936113194, \$39.00

Darnell (Rockefeller Univ.; member, National Academy of Sciences) has been at the forefront of molecular biology throughout his illustrious