Acknowledgments: We thank Dan Eberl for the JO15 line and helpful advice regarding our electrophysiology setup, and Asuza Kamikouchi for providing the remaining JO lines. We also thank Dr. Guopei Yu for advice regarding the statistical analysis of data, and Dr. Steven D. Schaefer MD, FACS for his enthusiastic support and encouragement. This work was supported by funds from the New York Eye & Ear Infirmary, New York, NY; and the Children’s Hearing Foundation, New York, NY.


New Books

Hedgehog Signaling Protocols.


The Hedgehog signaling pathway is important to understanding the regulation of development in both invertebrates and vertebrates. Its misregulation is associated with many human diseases. This well-organized book presents several different experimental approaches toward understanding its molecular events in a variety of model systems. Protocols are presented in a clear manner with excellent illustrations of techniques, experimental resources, and representative results. In 16 chapters, the 38 contributors provide a valuable resource for geneticists, biochemists, and molecular biologists studying this important pathway. Following a description of Hedgehog protein purification, applications in several model systems are discussed, including the chick limb, Xenopus, rats, zebrafish, and Drosophila. Specific techniques include manipulating Hedgehog signaling with retroviral expression systems, cell cycle analysis using flow cytometry, detecting tagged Hedgehog with immunocytochemistry, confocal analysis, RNAi, germline clone analysis, clonal analysis in somatic tissues, GAL4/UAS targeted gene expression, biochemical fractionation of cells, immunoprecipitation to study protein-protein interactions, and gene sequence analyses. Each chapter is accompanied by a useful and up-to-date bibliography of cited references. Price: $99.50. For more information, email humana@humanapr.com.