DESCRIPTION

This is the first book to provide a molecular level explanation of how the senses work, linking molecular biology with sensory physiology to deduce the molecular mechanism of a key step in sensory signal generation.

The editors have assembled expert authors from all fields of sensory physiology for an authoritative overview of the mechanisms of sensory signal transduction in both animals and plants. They systematically cover phototransduction, chemosensory transduction, mechanotransduction, temperature and pain perception, as well as specialized receptors for electrical and magnetic signals.

Required reading for biologists, physiologists and medical researchers with an interest in sensory physiology.

ABOUT THE AUTHOR

Stephan Frings is professor of molecular physiology at Heidelberg University (Germany). Following studies of biology at the University of Konstanz, he completed his Ph.D. in animal physiology in the lab of Anthony D.C. Macknight at the University of Otago, Dunedin (New Zealand). After returning to Germany he worked on transduction channels in olfactory sensory neurons with Bernd Lindemann at the University of the Saarland and with U. Benjamin Kaupp at the Jülich Research Center before moving to Heidelberg University. His group is interested in signal transduction mechanisms of sensory cells, particularly in the regulation of transduction channels.
Jonathan Bradley is an associate of the Howard Hughes Medical Institute at Johns Hopkins University, Baltimore, in the laboratory of King-Wai Yau, studying olfactory sensory physiology and signal transduction. He was born in New York and completed his B.S. in biochemistry at the State University of New York at Stony Brook, followed by a Ph. D. in neuroscience at the California Institute of Technology, under the supervision of Kai Zinn. He was a post-doctoral fellow at the Ecole Normale Supérieure in Paris (France), where he worked with Philippe Ascher, before returning to the USA. He lives in Bethesda, Maryland, with his wife Nathalie and two children, Adrien and Morgane.

To purchase this product, please visit https://www.wiley.com/en-us/9783527604975