

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 vertebrates and invertebrates, based on recent evidence on the role of ion channels in primary signal generation. They systematically cover all senses:

- Mechanotransduction
- Chemotransduction
- Phototransduction
- Thermotransduction
- Pain Transduction
- Electoreception

By linking molecular biology with sensory physiology, this book provides a molecular level explanation of how the senses work. With its in-depth analysis of the primary steps in signal generation, this volume is essential reading for biologists, physiologists and other scientists with an interest in sensory physiology.



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 (www.molecular-physiology.de).



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