

Table of Contents

Preface.....	xiii
Editor	xv
List of Contributors.....	xvii
Chapter 1 TRP Channels: What Do They Look Like?	1
<i>Mario G. Rosasco and Sharona E. Gordon</i>	
Chapter 2 Molecular Mechanisms of Temperature Gating in TRP Channels.....	11
<i>León D. Islas</i>	
Chapter 3 TRP Channels in Vision.....	27
<i>Ben Katz, Richard Payne, and Baruch Minke</i>	
Chapter 4 Sensory Mechanotransduction and Thermotransduction in Invertebrates	65
<i>Shana Geffeney</i>	
Chapter 5 Osmomechanical-Sensitive TRPV Channels in Mammals	85
<i>Carlene Moore and Wolfgang B. Liedtke</i>	
Chapter 6 A Critical Role for TRP Channels in the Skin	95
<i>Pu Yang, Jing Feng, Jialie Luo, Mack Madison, and Hongzhen Hu</i>	
Chapter 7 TRP Channels at the Periphery of the Taste and Trigeminal Systems	113
<i>Sidney A. Simon and Ranier Gutierrez</i>	
Chapter 8 TRP Channels and Pain	125
<i>Ricardo González-Ramírez, Yong Chen, Wolfgang B. Liedtke, and Sara L. Morales-Lázaro</i>	
Chapter 9 TRP Channels in the Heart	149
<i>Marc Freichel, Michael Berlin, Alexander Schürger, Ilka Mathar, Lucas Bacmeister, Rebekka Medert, Wiebke Frede, André Marx, Sebastian Segin, and Juan E. Camacho Londoño</i>	
Chapter 10 Renal Functions of TRP Channels in Health and Disease.....	187
<i>Vladimir Chubanov, Sebastian Kubanek, Susanne Fiedler, Lorenz Mittermeier, Thomas Gudermann, and Alexander Dietrich</i>	

Chapter 11	Fertility and TRP Channels	213
	<i>Ida Björkgren and Polina V. Lishko</i>	
Chapter 12	The Role of TRP Channels in the Pancreatic Beta-Cell	229
	<i>Koenraad Philippaert and Rudi Vennekens</i>	
Chapter 13	Airway Pathogenesis Is Linked to TRP Channels	251
	<i>Helen Wallace</i>	
Chapter 14	ThermoTRPs: Role in Aging	265
	<i>Celine Emmanuelle Riera</i>	
Chapter 15	Roles of Neuronal TRP Channels in Neuroimmune Interactions	277
	<i>Alejandro López-Requena, Brett Boonen, Laura Van Gerven, Peter W. Hellings, Yeranddy A. Alpizar, and Karel Talavera</i>	
Chapter 16	TRP Channels in the Brain: What Are They There For?	295
	<i>Seishiro Sawamura, Hisashi Shirakawa, Takayuki Nakagawa, Yasuo Mori, and Shuji Kaneko</i>	
Index		323