
Contents

1	The Economical Impact of Pain	1
	Darrell J. Gaskin, Patrick Richard and Joseph Walburn	
2	Metabolomics and Pain	19
	Luigi Barberini, Luca Saba, Antonio Noto, Claudia Fattuoni and Gabriele Finco	
3	Brain Neuroanatomy	35
	Adam G. Thomas	
4	Physiopathology of Pain	75
	Serge Marchand	
5	Magnetic Resonance Imaging	97
	Michele Anzidei, Fabrizio Boni, Vincenzo Noce, Daniele Guerrieri, Beatrice Sacconi and Carlo Catalano	
6	Anticipatory Brain Responses and Expectancy Effects on Pain: Theory, Research Findings and Functional Networks	123
	Christopher Brown	
7	Anticipation and Placebo Analgesia	153
	Dominic E. Nathan, Taylor M. Ludman and Luana Colloca	
8	Neuroimaging of Chronic Pain	171
	Martin Diers and Christopher Milde	
9	Imaging of Pain in the Peripheral Nerves	215
	Claudia Cejas and Diego Pineda	
10	Neuroimaging in Migraines	267
	Antonio Russo, Alessandro Tessitore and Gioacchino Tedeschi	
11	Rheumatic Pain	297
	Debbie L. Morton and Anthony K.P. Jones	
12	Neuroimaging Studies of Somatoform Pain Disorder: How Far Have We Come?	319
	Atsuo Yoshino, Yasumasa Okamoto and Shigeto Yamawaki	
13	Neuroimaging of Visceral Pain	341
	James K. Ruffle, Jens B. Frokjaer and Adam D. Farmer	

14 Multiple Sclerosis and Pain	375
Daniela Seixas and Daniel Teles	
15 Sex and Gender Effects in Pain	395
Bettina Pfleiderer, Anika Ritzkat and Esther Pogatzki-Zahn	
16 The Neuroimaging of Vicarious Pain	411
Esslin L. Terrighena and Tatia M.C. Lee	
17 Acupuncture Analgesia: A Review of Peripheral and Central Mechanisms	453
Mikiko Murakami and Albert Leung	
18 Neuroimaging of Paediatric Pain	485
Caroline Hartley and Rebecca Slater	
Index	507

Neuroimaging of Pain

Saba, L. (Ed.)

2017, XIV, 508 p. 241 illus., 139 illus. in color.,

Hardcover

ISBN: 978-3-319-48044-2