

Contents

	Preface	ix
I	Animal Models/Basic Functions	1
1	Hemispheric Asymmetry in the Visual System of Birds <i>Onur Güntürkün</i>	3
2	A Hippocampal Theory of Cerebral Lateralization <i>Akaysha C. Tang</i>	37
3	Stress and Coping: Asymmetry of Dopamine Efferents within the Prefrontal Cortex <i>Craig W. Berridge, Rodrigo A. España, and Thomas A. Stalnaker</i>	69
4	The Nature and Determinants of Handedness <i>Alan A. Beaton</i>	105
II	Neuroimaging and Brain Stimulation Studies	159
5	Characterizing Functional Asymmetries with Brain Mapping <i>Karl J. Friston</i>	161
6	Anatomical Brain Asymmetries and Their Relevance for Functional Asymmetries <i>Lutz Jäncke and Helmuth Steinmetz</i>	187

7	Transcranial Magnetic Stimulation Studies of Asymmetry of Cognitive Functions in the Brain <i>Alvaro Pascual-Leone and Vincent Walsh</i>	231
III	Visual Laterality	259
8	Interaction between the Hemispheres and Its Implications for the Processing Capacity of the Brain <i>Marie T. Banich</i>	261
9	Asymmetries in Encoding Spatial Relations <i>Bruno Laeng, Christopher F. Chabris, and Stephen M. Kosslyn</i>	303
10	Complexities of Interhemispheric Communication in Sensorimotor Tasks Revealed by High-Density Event-Related Potential Mapping <i>Clifford D. Saron, John J. Foxe, Charles E. Schroeder, and Herbert G. Vaughan, Jr.</i>	341
IV	Auditory Laterality	409
11	Hemispheric Asymmetries in the Processing of Tonal Stimuli <i>Robert J. Zatorre</i>	411
12	Dichotic Listening in the Study of Auditory Laterality <i>Kenneth Hugdahl</i>	441
13	Effects of Attention on Hemispheric Asymmetry <i>Daniel S. O'Leary</i>	477
V	Emotional Laterality	509
14	The Functional Neuroimaging of Human Emotion: Asymmetric Contributions of Cortical and Subcortical Circuitry <i>Diego Pizzagalli, Alexander J. Shackman, and Richard J. Davidson</i>	511

15	Regional Brain Activity in Anxiety and Depression, Cognition/Emotion Interaction, and Emotion Regulation <i>Wendy Heller, Nancy S. Koven, and Gregory A. Miller</i>	533
16	The State and Trait Nature of Frontal EEG Asymmetry in Emotion <i>James A. Coan and John J. B. Allen</i>	565
VI	Neurological Disorders	617
17	Agenesis of the Corpus Callosum <i>Maryse Lassonde and Hannelore C. Sauerwein</i>	619
18	Developmental Disorders: Dyslexia <i>Mark A. Eckert and Christiana M. Leonard</i>	651
19	Structural Correlates of Brain Asymmetry: Studies in Left- Handed and Dyslexic Individuals <i>Michel Habib and Fabrice Robichon</i>	681
VII	Psychiatric Disorders	717
20	Frontal and Parietotemporal Asymmetries in Depressive Disorders: Behavioral, Electrophysiologic, and Neuroimaging Findings <i>Gerard E. Bruder</i>	719
21	The Laterality of Schizophrenia <i>Michael F. Green, Mark J. Sergi, and Robert S. Kern</i>	743
	Contributors	773
	Author Index	777
	Subject Index	793