

BRIEF CONTENTS

Preface xix

Media and Supplements xxiii

PART I Background

- CHAPTER 1
The Development of Neuropsychology 1
- CHAPTER 2
Research on the Origins of the Human Brain and Behavior 28
- CHAPTER 3
Nervous System Organization 53
- CHAPTER 4
The Structure and Electrical Activity of Neurons 85
- CHAPTER 5
Communication Between Neurons 115
- CHAPTER 6
The Influence of Drugs and Hormones on Behavior 139
- CHAPTER 7
Imaging the Brain's Activity 174

PART II Cortical Organization

- CHAPTER 8
Organization of the Sensory Systems 202
- CHAPTER 9
Organization of the Motor System 232
- CHAPTER 10
Principles of Neocortical Function 255
- CHAPTER 11
Cerebral Asymmetry 283
- CHAPTER 12
Variations in Cerebral Asymmetry 316

PART III Cortical Functions

- CHAPTER 13
The Occipital Lobes 350

- CHAPTER 14
The Parietal Lobes 374
- CHAPTER 15
The Temporal Lobes 400
- CHAPTER 16
The Frontal Lobes 427
- CHAPTER 17
Cortical Networks and Disconnection Syndromes 462

PART IV Higher Functions

- CHAPTER 18
Learning and Memory 480
- CHAPTER 19
Language 515
- CHAPTER 20
Emotion and the Social Brain 548
- CHAPTER 21
Spatial Behavior 575
- CHAPTER 22
Attention and Consciousness 607

PART V Plasticity and Disorders

- CHAPTER 23
Brain Development and Plasticity 635
- CHAPTER 24
Neurodevelopmental Disorders 670
- CHAPTER 25
Plasticity, Recovery, and Rehabilitation of the Adult Brain 699
- CHAPTER 26
Neurological Disorders 730
- CHAPTER 27
Psychiatric and Related Disorders 761
- CHAPTER 28
Neuropsychological Assessment 793

Glossary G-1

Name Index NI-1

Subject Index SI-1