

Contents

Contributors..... ix

PART 1

Introduction

- 1 The Frontal Lobes and Neuropsychiatric Illness 3
Stephen P. Salloway, M.D., M.S., Paul F. Malloy, Ph.D., James D. Duffy, M.B., Ch.B.
- 2 The Significance of Frontal System Disorders for
Medical Practice and Health Policy 7
Barry S. Fogel, M.D., M.S. (Management)

PART 2

Functional Organization of Prefrontal Lobe Systems

- 3 Frontal Subcortical Circuits: Anatomy and Function 15
Michael S. Mega, M.D., Ph.D., Jeffrey L. Cummings, M.D.
- 4 The Orbitofrontal Cortex 33
David H. Zald, Ph.D., Suck Won Kim, M.D.
- 5 Working Memory Dysfunction in Schizophrenia 71
Patricia S. Goldman-Rakic, Ph.D.
- 6 Lateralization of Frontal Lobe Functions 83
Kenneth Podell, Ph.D., Mark Lovell, Ph.D., Elkhonon Goldberg, Ph.D., A.B.C.N.
- 7 Consciousness, Self-Awareness, and the Frontal Lobes 101
Donald T. Stuss, Ph.D., Terence W. Picton, M.D., Ph.D., Michael P. Alexander, M.D.

PART 3

Prefrontal Syndromes in Clinical Practice

- 8** Regional Prefrontal Syndromes: A Theoretical and Clinical Overview 113
James D. Duffy, M.B., Ch.B., John J. Campbell III, M.D.
- 9** Assessment of Frontal Lobe Functions 125
Paul F. Malloy, Ph.D., Emily D. Richardson, Ph.D.
- 10** Diagnosis and Treatment of “Frontal Lobe” Syndromes 139
Stephen P. Salloway, M.D., M.S.
- 11** Treatment Strategies for Patients With Dysexecutive Syndromes 153
John J. Campbell III, M.D., James D. Duffy, M.B., Ch.B., Stephen P. Salloway, M.D., M.S.

PART 4

Frontal Lobe Dysfunction in Neuropsychiatric Disorders

- 12** Frontal Lobe Dysfunction in Secondary Depression 167
Helen S. Mayberg, M.D., F.R.C.P.C.
- 13** The Frontal Lobes and Schizophrenia 187
A. Meyer-Lindenberg, M.D., Ph.D., Karen F. Berman, M.D.
- 14** The Frontal Lobes and Traumatic Brain Injury 199
Marilyn F. Kraus, M.D., Harvey S. Levin, Ph.D.
- 15** The Frontal Lobes and Content-Specific Delusions 215
Emily D. Richardson, Ph.D., Paul F. Malloy, Ph.D.
- 16** Neurosurgical Treatment for Refractory Obsessive-Compulsive Disorder: Implications for Understanding Frontal Lobe Function 233
Per Mindus, M.D, Ph.D., Steven A. Rasmussen, M.D., Christer Lindquist, M.D., Ph.D., George Noren, M.D.
- Index 247