

CONTENTS

AUTHORS' APPOINTMENTS	vii
FOREWORD	x
PREFACE	xi
ACKNOWLEDGMENTS	xii
SECTION I THE FETUS	
1. BRAIN INJURY IN THE FETUS <i>Adre du Plessis</i>	1
2. IMAGING THE FETAL BRAIN <i>Catherine Limperopoulos</i>	18
SECTION II THE PRETERM INFANT	
3. MECHANISMS OF ACUTE AND CHRONIC BRAIN INJURY IN THE PRETERM INFANT <i>Stephen A. Back</i>	29
4. CLINICAL ASSESSMENT OF THE PRETERM INFANT INCLUDING NEAR-INFRARED SPECTROSCOPY, AMPLITUDE-INTEGRATED ELECTROENCEPHALOGRAPHY, AND ELECTROENCEPHALOGRAPHY <i>Lena Hellström-Westas and Frank van Bel</i>	53
5. IMAGING THE BRAIN OF THE PRETERM INFANT <i>Gareth Ball, Mary A. Rutherford and Serena J. Counsell</i>	66
6. PROTECTING THE BRAIN OF THE PRETERM INFANT <i>Christopher D. Smyser and Terrie E. Inder</i>	81
7. SEIZURES IN THE PRETERM INFANT <i>Hannah C. Glass</i>	95

8.	OUTCOMES AFTER BRAIN INJURY IN THE PRETERM INFANT <i>Marilee C. Allen</i>	99
SECTION III THE TERM INFANT		
9.	MECHANISMS OF BRAIN NEURODEGENERATION IN THE TERM INFANT <i>Frances J. Northington, Raul Chavez-Valdez and Lee J. Martin</i>	121
10.	CLINICAL APPROACH TO TERM ENCEPHALOPATHY <i>Anastasia Dimitropoulos, Steven P. Miller and Jerome Y. Yager</i>	154
11.	IMAGING TERM INFANTS WITH SUSPECTED HYPOXIC-ISCHEMIC ENCEPHALOPATHY <i>Kenneth J. Poskitt, Vann Chau and A. James Barkovich</i>	165
12.	PROTECTING THE BRAIN IN TERM INFANTS <i>Fernando F. Gonzalez and Donna M. Ferriero</i>	183
13.	SEIZURES IN THE TERM NEWBORN INFANT <i>Mona C. Toet and Linda S. de Vries</i>	198
14.	OUTCOMES AFTER BRAIN INJURY IN THE TERM INFANT <i>Beatrice Latal</i>	209
SECTION IV SPECIALIZED TOPICS		
15.	NEONATAL NEUROLOGY IN THE DEVELOPING WORLD <i>Nicola J. Robertson</i>	221
16.	PERINATAL STROKE <i>Kendall B. Nash and Yvonne W. Wu</i>	237
17.	BRAIN INJURY IN NEWBORN INFANTS WITH CONGENITAL HEART DISEASE <i>Patrick S. McQuillen, Steven P. Miller and Annette Majnemer</i>	251
18.	METABOLIC BRAIN INJURY IN THE FETUS AND THE NEONATE <i>Linda De Meirleir</i>	268
19.	THE NUTRITIONALLY DEPRIVED FETUS AND NEWBORN INFANT <i>Raghavendra Rao and Michael K. Georgieff</i>	277
20.	ETHICAL CONSIDERATIONS IN FETAL AND NEONATAL NEUROLOGY <i>Lucie Wade, Michael Shevell and Eric Racine</i>	288
	INDEX	306