

# Contents

<b>Preface .....</b>	vii
<b>Preface to the Third edition .....</b>	viii
<b>Acknowledgments to the Third edition .....</b>	ix
<b>Contributors .....</b>	x
<b>Abbreviations .....</b>	xi
<b>Part I Introduction .....</b>	1
<b>1 Introduction .....</b>	3
<b>1.1 Aims and Objectives .....</b>	3
<b>1.2 3D Coordinate Systems for Localization of Brain Structures .....</b>	6
<b>1.3 Intravital and Postmortem Neuroanatomy .....</b>	8
<b>1.4 Terminology .....</b>	9
<b>1.5 Information for Users .....</b>	9
<b>2 Tomography and Landmarks .....</b>	11
<b>2.1 Computed Tomography .....</b>	11
<b>2.2 Magnetic Resonance Imaging .....</b>	11
<b>2.3 Landmarks of Cross-sectional Imaging .....</b>	12
<b>2.4 Clinical Significance of Computer and Magnetic Resonance Tomography .....</b>	15
<b>Part II Atlas .....</b>	17
<b>3 Coronal Sections .....</b>	19
<b>4 Sagittal Sections .....</b>	91
<b>5 Transverse Sections .....</b>	127
<b>6 Brainstem .....</b>	199
<b>Part III Topography of the Head and Neck .....</b>	223
<b>7 Topography of the Cranium, Intracranial Spaces, and Contained Structures .....</b>	224
<b>7.1 Cranial Vault .....</b>	224
<b>7.2 Cranial Cavity .....</b>	236
<b>7.3 Intracerebral CSF Spaces.....</b>	237
<b>7.4 Cerebral Arteries and their Vascular Territories .....</b>	257
<b>7.5 Cerebral Veins.....</b>	289
<b>7.6 Cranial Nerves .....</b>	296
<b>7.7 Subdivisions of the Brain .....</b>	303
<b>7.8 Brain Maturation.....</b>	346

<b>8</b>	<b>Facial Topography .....</b>	357			
8.1	Facial Bones.....	351	8.4	Oral Cavity .....	364
8.2	Nasal Cavity and Paranasal Sinuses.....	358	8.5	Masticatory Apparatus .....	366
8.3	Orbit .....	360	8.6	Lateral Facial Region.....	366
<b>9</b>	<b>Topography of the Head–Neck Region .....</b>	369			
9.1	Pharynx and Parapharyngeal Space.....	369	9.3	Vessels of the Head–Neck Region .....	373
9.2	Craniocervical Junction .....	370			
<b>Part Iv Nervous System—Neurofunctional Systems and Neuroactive Substances.....</b>					377
<b>10</b>	<b>Neurofunctional Systems .....</b>	379			
10.1	Sensory Systems.....	380	10.8	Motor Systems.....	430
10.2	Gustatory System.....	400	10.9	Cerebellar Systems.....	450
10.3	Ascending Reticular System .....	400	10.10	Speech Areas.....	458
10.4	Vestibular System .....	403	10.11	Limbic System .....	462
10.5	Auditory System .....	409	10.12	Autonomic Nervous System.....	470
10.6	Visual System .....	416	10.13	Neuronal Networks.....	472
10.7	Olfactory System .....	427			
<b>11</b>	<b>Neurotransmitters and Neuromodulators .....</b>	483			
11.1	Catecholaminergic Neurons.....	483	11.5	GABAergic Neurons.....	486
11.2	Serotonergic Neurons .....	485	11.6	Glutamatergic and Aspartatergic Neurons.....	487
11.3	Histaminergic Neurons .....	485	11.7	Peptidergic Neurons.....	487
11.4	Cholinergic Neurons .....	486			
<b>Part V Appendix.....</b>					489
<b>12</b>	<b>Specimens and Technique .....</b>	491			
<b>13</b>	<b>Bibliography .....</b>	495			
<b>Index .....</b>					509