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Nota di contenuto	Part I Brain -- 1. Structural anatomy of the brain -- 2. White matter anatomy of the brain -- 3. Vascular anatomy -- 4. Brain anatomy at 7T (images axial/coronal) -- Part II Brain stem -- 5. Structural anatomy of the brain stem -- 6. White matter anatomy of the brain stem -- 7. Vascular anatomy (3T) -- 8. Brain anatomy at 7T (images axial/coronal) -- 9. Functional anatomy of major lobes -- Part III Cerebellum -- 10. Structural anatomy of the cerebellum -- 11. White matter anatomy of the cerebellum -- 12. Functional anatomy of the cerebellum -- Part IV Cranial nerves -- Olfactory nerve -- Optic nerve -- Oculomotor nerve -- Trochlear nerve -- Trigeminal nerve. - Abducens nerve -- Facial nerve -- Vestibulo-coclear nerve -- Vagus nerve -- Spinal accessory nerve -- Hypoglossus nerve. Part V Surgical and endoscopic illustrative anatomy -- Cavernous sinus -- Cerebellar pontine angle -- Superior orbital fissure -- Trans-sphenoidal -- Sub-occipital approach -- Circle of Willis: Anatomy and surgical ap proach. - Orbital Surgery. - Pineal Gland Surgery. - Craniotomies. - Sellar and parasellar surgery. - Neurovascular conflict (Trigeminal nerve). - Part VI Sample cases (Imaging and interpretative pearls).
Sommario/riassunto	This book combines classic MR anatomy with current understanding of human brain function. Recent advances in neuroscience have highlighted the importance of correlating brain anatomy with

underlying brain function, since the brain contains a highly sophisticated organization of anatomical and functional relationships that are not readily “visible” with standard imaging. The use of magnetic resonance imaging is rapidly increasing in the field of neuroscience, and remains at the forefront for offering insights into the normal and pathologic structure and function of the human brain. The relatively recent concepts of structural and functional connectivity make it even more important to visualize the brain as a whole rather than looking at its individual parts. This holistic approach is vital in understanding concepts such as neuroplasticity that are currently incorporated into physical and cognitive rehabilitation programs for patients with stroke or neurodegenerative diseases. Ultimately this combined approach may reduce both overdiagnosis and misdiagnosis when integrated into routine clinical routine. This book will be of interest to neuroradiologists, general radiologists and neurologists alike, as well as medical students, residents and fellows.