

1. Record Nr.	UNINA9910300453003321
Titolo	Island of Reil (Insula) in the Human Brain : Anatomical, Functional, Clinical and Surgical Aspects // edited by Mehmet Turgut, Canan Yurtta, R. Shane Tubbs
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-75468-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XI, 298 p. 57 illus., 48 illus. in color.)
Disciplina	617.48
Soggetti	Nervous system - Surgery Neurology Neurosciences Neurosurgery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: Anatomy of the Human Insula: Embryological Development of Insula -- Gross Anatomy of the Human Insula -- Surgical Anatomy of the Insula.-Middle longitudinal fasciculus in the human brain from fiber dissection.-Structural Connectivity of the Insula to Other Cortical Regions.-Neuroimaging Techniques for Investigation of the Insula.-Measurements of the Insula Volume using MRI -- Neuroimaging in Social Anxiety Disorder -- Part 2: Functions of the Human Insula: Nociceptive Local Field Potentials Recorded from the Human Insula are not Specific for Nociception.-Participation of the Insula in Language.-Role of the Anterior Insula in Decision Making -- Lateralization of the Insular Cortex.- Gustatory Areas within the Insular Cortex.-Role of the Insula in Human Cognition.-Right Anterior Insula: Core Region of Hallucinations in Cognitive Neurodegenerative Diseases.-Role of the Insula in Visual and Auditory Perception.-Role of the Anterior Insula in Autism.-Role of the Insular Cortex in Emotional Awareness.-Alterations of Reil's Insula in Alzheimer's Disease -- Contribution(s) of the Insula to Speech Production.-Role of the Insula in Auditory Processing -- Role of the insula in non-motor symptoms of Parkinson's disease -- Part 3: Clinical Disorders Related with Insula -- Insular Cortex Epilepsy.-Role

of the Insula in Meditation -- Neuropsychological Deficits due to the Insula Damage -- Role of the Insula in Schizophrenia -- Part 4: Surgery of the Insular Cortex.-Surgical Techniques for Investigation of Role of the Insula in Epilepsy.-Surgery of insular diffuse low-grade gliomas.- Role of the Insula in Temporal Lobe Epilepsy Surgery Failure.

---

#### Sommario/riassunto

This book provides an in-depth review of the insula, with emphasis on anatomical, diagnostics, clinical, and surgical features. The insular cortex is involved in a variety of functions, but a comprehensive resource cataloging these functions is not available in the current literature. This book gathers highly informative chapters written and edited by leading international authorities in the field and covers the full range of the insular cortex, approaching it in four main sections: firstly, the embryology and anatomy of the human insula; secondly, the functions of the human insula, including its role in nociception, language, decision making, cognition, emotional awareness etc.; thirdly, clinical disorders related to the insula such as epilepsy, schizophrenia, and Parkinson's disease; and fourthly, surgical techniques for insular gliomas and temporal lobe epilepsy. This comprehensive reference book will be an ideal source for neurosurgeons, neurologists and neuroanatomists seeking both basic and more advanced information regarding this unique structure in the human brain.

---