Record Nr. UNINA9910298400103321 Autore Marani Enrico Titolo Head and Neck: Morphology, Models and Function / / by Enrico Marani, Ciska Heida Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-92105-3 Edizione [1st ed. 2018.] 1 online resource (534 pages) Descrizione fisica 611.91 Disciplina Soggetti Neurosciences Human anatomy Otolaryngology, Operative Human physiology **Anatomy** Head and Neck Surgery **Human Physiology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Skull cap and trepanation -- Malformation and identity Nota di contenuto -- The development of the bony skull -- Gustation, the act or sensation of tasting -- Oral cavity: Lips, tongue and teeth -- Nose, nasal cavities, smell and paranasal sinuses -- The eye, orbit and vision -- The ear and cochlear implant.-Dip and nod, shake and twist, turn and toss -- Brain and spinal cord: its macroscopy -- Cranial nerves --Sleep and Head and Neck -- Blood supply and lymphatic drainage --Pharynx, larynx, trachea and oesophagus -- Regio and trigonum --Head and neck reflexes -- Cervical vertebral column -- Development of the face and branchial organs -- Spatial coherences and external appearance.-Summary Head and Neck. Sommario/riassunto This book offers a critical review of the head and neck from an anatomical, physiological and clinical perspective. It begins by providing essential anatomical and physiological information, then

discusses historical and current views on specific aspects in subsequent chapters. For example, the anatomy of the skull cap or cranial vault

provided in the first chapter is discussed in the context of malformation and identity, as well as the development of the bony skull, in the following chapters. These chapters provide steppingstones to guide readers through the book. There are new fields of research and technological developments in which Anatomy and Physiology lose track of progress. One of the examples discussed is the automated face recognition. In some respects, e.g. when it comes to cancers and malformations, our understanding of the head and neck and the resulting therapeutic outcomes – have been extremely disappointing. In others, such as injuries following car accidents, there have been significant advances in our understanding of head and neck dysfunctions and their treatment. Therefore head movements, also during sleep, and head and neck reflexes are discussed. The book makes unequivocal distinctions between correct and incorrect assumptions and provides a critical review of alternative clinical methods for head and neck dysfunctions, such as physiotherapy and lymphatic drainage for cancers. Moreover, it discusses the consequences of various therapeutic measures for physiological and biomechanical conditions, as well as puberty and aging. Lastly, it addresses important biomedical engineering developments for hearing e.g. cochlear implants and for applying vestibular cerebellar effects for vision. .