1. Record Nr. UNINA9910346752803321 Oliver F. Adunka Autore Titolo New Advances in Electrocochleography for Clinical and Basic Investigation Frontiers Media SA, 2018 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (315 p.) Collana Frontiers Research Topics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Electrocochleography (ECochG) is an approach for objective Sommario/riassunto measurements of physiologic responses from the inner ear. Measurements have classically been made from electrodes placed in the outer ear canal, on the tympanic membrane, the round window niche. or inside the cochlea. Recent innovations have led to ECochG being used for exciting new purposes that drive clinical practice and contribute to the basic understanding of inner ear physiology. Cochlear implant recording electrodes can monitor the preservation of residual, low-frequency acoustic hearing, both in the operating room and postoperatively. ECochG measurements can quantify differential effects of inner ear surgery or other manipulations on vestibular and auditory physiology simultaneously. Various attributes of cognitive neuroscience can be addressed with ECochG measurements from the auditory periphery. These advances in ECochG provide a way to understand a variety of inner ear diseases and are likely to be of value to many

groups in their own clinical and basic research.