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   Titolo              Translational Research in Audiology, Neurotology, and the Hearing
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                       Lobarinas, Arthur N. Popper, Richard R. Fay

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   Descrizione fisica  1 online resource (XVIII, 265 p. 25 illus., 19 illus. in color.)

   Collana             Springer Handbook of Auditory Research, , 0947-2657 ; ; 58

   Disciplina          617.8

   Soggetti            Neurosciences
                       Otorhinolaryngology
                       Neurobiology

   Lingua di pubblicazione   Inglese

   Formato             Materiale a stampa

   Livello bibliografico   Monografia

   Note generali       "with 24 illustrations."

   Nota di bibliografia   Includes bibliographical references at the end of each chapters.

   Nota di contenuto   Preface -- Perspectives on Auditory Translation Research -- Current
                       Issues in Clinical and Translational Research in the Hearing Sciences,
                       Audiology, and Otolaryngology -- Auditory Processing Disorder:
                       Biological Basis and Treatment Efficacy -- Sudden Sensorineural
                       Hearing Loss -- Development of Drugs for Noise-Induced Hearing Loss
                       -- Cisplatin-Induced Hearing Loss -- Past, Present, and Future
                       Pharmacological Therapies for Tinnitus -- Developing a Molecular
                       Therapeutic for Hearing Loss -- Photons in the Ear -- Clinical and
                       Translational Research: Challenges to the Field.

   Sommario/riassunto  Translational Research is the interface between basic science and
                       human clinical application, including the entire process from animal
                       studies to human clinical trials (phases I, II, and III). Translational
                       Research moves promising basic science results from the laboratory to
                       bedside application. Yet, this transition is often the least-defined,
                       least-understood part of the research process. Most scientific training
                       programs provide little or no systematic introduction to the issues,
                       challenges, and obstacles that prevent effective research translation,
                       even though these are the key steps that enable high-impact basic
                       science to ultimately result in significant clinical advances that improve
                       patient outcome. This volume will provide an overview of key issues in

translation of research from "bedside to bench to bedside", not only from the perspective of the key funding agencies, but also from the scientists and clinicians who are currently involved in the translational research process. It will attempt to offer insight into real-world experience with intellectual property and technology transfer activities that can help move auditory technologies ahead, as scientists and clinicians typically have little or no formal training in these areas. Translational Research in Audiology and the Hearing Sciences will be aimed at graduate students and postdoctoral investigators, as well as professionals and academics. It is intended to function as a high-profile and up-to-date reference work on Translational Research in the auditory sciences, emphasizing research programs in the traditional areas including drugs and devices, as well as less traditional, still emerging, areas such as sensorineural hearing loss, auditory processing disorder, cochlear implants and hearing aids, and tinnitus therapies.