



# Scientific Foundations of Audiology: Perspectives from Physics, Biology, Modeling, and Medicine

*Anthony T. Cacace, Emile de Kleine, Avril G. Holt, Pim van Dijk*

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With advancements across various scientific and medical fields, professionals in audiology are in a unique position to integrate cutting-edge technology with real-world situations. *Scientific Foundations of Audiology* provides a strong basis and philosophical framework for understanding various domains of hearing science in the context of contemporary developments in genetics, gene expression, bioengineering, neuroimaging, neurochemistry, cochlear and mid-brain implants, associated speech processing and understanding, molecular biology, physics, modeling, medicine, and clinical practice.

### Key features of this text include:

- Highly technical information presented in a cohesive and understandable manner (i.e., concepts without complex equations)
- Discussion of integrating newly developed technology within the clinical practice of audiology
- State-of-the-art contributions from a stellar array of international, world-class experts

*Scientific Foundations of Audiology* is geared toward doctoral students in audiology, physics, and engineering; residents in otolaryngology, neurology, neurosurgery, and pediatrics; and those intermediaries between innovation and clinical reality.

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