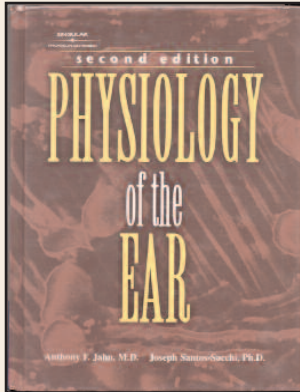


Physiology of the Ear, 2E

By *AF Jahn and J Santos-Sacchi*



1-56593-9948
 (C) 2001, 7 x 10
 Hardcover

With 650 pages dedicated to the physiology of the ear this was never going to be “Can’t put that book down” – bestseller.

It starts gently enough with a fascinating trek through the history of auditory understanding and the development of our knowledge regarding the ear and its functions. It rapidly then makes its way via the genetics of cerumen and the “wrinkles” of the external canal to plunge you into in depth discussions regarding the immunology and gas exchange properties of the middle ear.

I was doing relatively well in my understanding until I reached the “Introductions” to psychoacoustics and sound. An ‘A’ level in further Maths and Physics did not begin to prepare me for the detailed applied Physics and Neurophysiology to follow. For example, concepts like the “Complex Impedance Plane” (a two dimensional coordinate system with the complex number $[Z] \sin?$ as a measure of middle ear resistance) did wonders for my insomnia but little for my understanding of glue ear!

If you have an interest in comparative anatomy or simply like small furry animals then the chapter on comparative vascular anatomy of the mammalian cochlea is a must. It has angiogram upon angiogram of the cochlea of your favorite guinea pig, gerbil and rabbit.

The tone of the book continues with detailed equations describing various theories of endolymphatic flow, numerous graphs of action potentials and frequency of “spike firing” diagrams.

Despite my cynicism, this book can only be commended as a near complete anthology of all aspects of Auditory Physiology. It is filled with references from leading researchers from all over the world and no doubt if one could read and assimilate only a small percentage of it you would have an unparalleled understanding of the complexities of the ear.

To be fair, some chapters including those on otoacoustic emissions and Eustachian tube function I found highly informative and clinically very useful, especially a very interesting list of clinical tests for various aspects of Eustachian tube function.

As a scientific reference book this edition is truly masterful. To the research fellow studying otoconia and their membrane I’m sure it will prove invaluable, but to the FRCS or MSc (Audiology) candidates its role is that of a place in the department reference or MSc (Audiology) candidates its role is that of a place in the department reference library and not in your pile of selected revision books.

REVIEWED BY:

Mr. Elliott Benjamin BSc (Hons), MRCS, DLO, Specialist
 Registrar in ENT, UK in ENT News, Volume 10, Number 6,
 January/February 2002