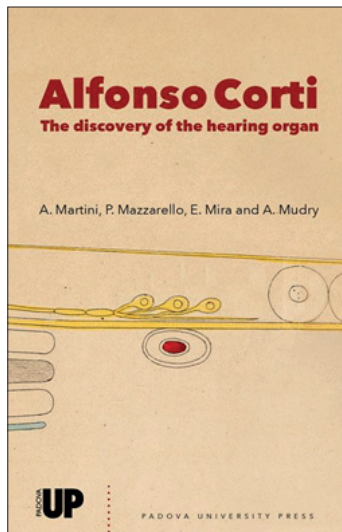


## BOOKS

## Books

**Alfonso Corti and the discovery of the hearing organ**

Alessandro Martini, Paolo Mazzarello, Eugenio Mira, Albert Mudry

Edizioni: Padova University Press, 2022

«This beautiful book celebrates the discovery of the hearing organ by the Italian anatomist Alfonso Corti in 1851. He first described the microscopic anatomy of the organ that contains the cellular receptors that transduce and carry airborne vibrations into electric signals to the auditory nerve and brain. Already by then, and still today, this organ was and is regarded as the most difficult of the organs in the human body to study. Indeed, it is a stealthy and miniscule organ surrounded by the hardest bone in the body. Since his discovery, researchers have continued to fascinate over this complex and gracile organ. In one intriguing chapter of this book, we learn about the life of Marquis Alfonso Corti and his devotion for anatomy and cellular microscopy. His personal character earned him great respect among both colleagues and high profile anatomists at the time. The

authors describe how Corti established several scientific collaborations with anatomists and histologists in Europe, such as in Vienna, Bern (Gustav Valentin), Würzburg (Albert von Kölliker and Rudolf Virchow), and Paris. We also learn about the history of the University of Pavia and the prominent anatomist and surgeon Antonio Scarpa, who was also devoted to ear research. This was a time when Darwinism and evolution spread across Europe, which established a basis for the development of comparative anatomy, with particular progress in ear science. A specific chapter is devoted to the evolution of the inner ear. From medical historians we learn early history on Aristotle and the improvements in microscopic techniques and innovative techniques to preserve and stain biological material that were fundamental to Corti's discoveries. Surprisingly, he produced only four publications in his lifetime, having abandoned research abruptly after 1851. The book gives us new insights into Corti's endeavours. For example, new documents explain why he remained fairly anonymous as a submerged histologist, despite his name being commonly known. In this volume, we meet and gain knowledge about a great representative of the Italian anatomy research during the 19th century. The biography is followed by a synopsis of scientists who followed in Alfonso Corti's footsteps through the present, offered together with beautiful anatomic reproductions of Corti's organ. Important followers were Nobel Prize winner Santiago Ramón y Cajal and Swedish anatomist Gustaf Retzius, nominated for the Nobel Prize nine times. They showed a similar passion for inner ear anatomy. Several others have provided new insights into the physiology, biochemistry, and especially, genetics involved in the coordinated development of this organ. This book provides a historic background on the emergence of clinical applications from basic research leading to novel treatments for patients suffering from hearing loss that any otologist and anatomist would find intriguing. Here, much more is to come, and the future looks brilliant. This book is highly recommended. As a grand finale, the authors present the original copy of Alfonso Corti's paper "*Recherches sur l'organe de l'ouïe des mammifères*".

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