

1. Record Nr.	UNINA9910480469503321
Titolo	The Evolutionary Biology of Hearing [[electronic resource] /] / edited by Douglas B. Webster, Richard R. Fay
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 1992
ISBN	1-4612-2784-4
Edizione	[1st ed. 1992.]
Descrizione fisica	1 online resource (LI, 859 p.)
Disciplina	590
Soggetti	Zoology Neurosciences Plant science Botany Plant Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Based on a conference held at the Mote Marine Laboratory in Sarasota, Fla., May 20-24, 1990. "With 355 illustrations, 2 in full color."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Section I Evolutionary Perspective -- 1 An Overview of the Evolutionary Biology of Hearing -- 2 Comparisons of Major and Minor Taxa Reveal Two Kinds of Differences: "Lateral" Adaptations and "Vertical" Changes in Grade -- 3 The Phylogeny of Octavolateralis Ontogenies: A Reaffirmation of Garstang's Phylogenetic Hypothesis -- 4 Evolution of the Vertebrate Inner Ear: An Overview of Ideas -- Section II Invertebrates -- 5 Hearing and Sound Communication in Small Animals: Evolutionary Adaptations to the Laws of Physics -- 6 Ecological Constraints for the Evolution of Hearing and Sound Communication in Insects -- 7 The Processing of Auditory Signals in the CNS of Orthoptera -- 8 The Evolution of Hearing in Insects as an Adaptation to Predation from Bats -- 9 Hearing in Crustacea -- 10 Hearing of Nonarthropod Invertebrates -- Contributed Abstracts -- A. The Mechanoreceptive Origin of Insect Tympanal Organs: A Comparative Study of Homologous Nerves in Tympanate and Atympanate Moths -- B. Organization of the Auditory Pathway in Noctuid Moths: Homologous Auditory Evolution in Insects -- C. Hearing in the Primitive

Ensiferan *Cyphoderris monstrosa* (Orthoptera: Haglidae) -- D. Hair Cell Sensitivity in Cephalopod Statocyst -- Section III Aspects of Hearing Among Vertebrates -- 11 Convergence of Design in Vertebrate Acoustic Sensors -- 12 The Efferent Innervation of the Ear: Variations on an Enigma -- 13 Evolution, Perception, and the Comparative Method -- 14 Structure and Function in Sound Discrimination Among Vertebrates -- Section IV Anamniotes -- 15 Functional and Evolutionary Implications of Peripheral Diversity in Lateral Line Systems -- 16 Functional Aspects of the Evolution of the Auditory System of Actinopterygian Fish -- 17 Evolution of Central Auditory Pathways in Anamniotes -- 18 The Water-to-Land Transition: Evolution of the Tetrapod Basilar Papilla, Middle Ear, and Auditory Nuclei -- 19 Nature and Quality of the Fossil Evidence of Otic Evolution in Early Tetrapods -- 20 The Stapes of *Acanthostega gunnari* and the Role of the Stapes in Early Tetrapods -- 21 The Effects of Body Size on the Evolution of the Amphibian Middle Ear -- 22 Biological Constraints on Anuran Acoustic Communication: Auditory Capabilities of Naturally Behaving Animals -- Contributed Abstracts -- E. Some Unique Features of the Ear and the Lateral Line of a Catfish and their Potential Bearing for Sound Pressure Detection -- F. Comparative Analysis of Electrosensory and Auditory Function in a Mormyrid Fish -- G. Biophysics of Underwater Hearing in the Clawed Frog, *Xenopus laevis* -- Section V Nonmammalian Amniotes -- 23 The Evolutionary Implications of the Structural Variations in the Auditory Papilla of Lizards -- 24 Functional Consequences of Morphological Trends in the Evolution of Lizard Hearing Organs -- 25 Evolution of the Central Auditory System in Reptiles and Birds -- 26 Hearing in Birds -- 27 Evolution and Specialization of Function in the Avian Auditory Periphery -- Contributed Abstracts -- H. Tuning in the Turtle: An Evolutionary Perspective -- I. Paratympanic and Spiracular Sense Organs: Phylogenetic Distribution and Theories of Function, Including Hearing -- Section VI Mammals -- 28 Evolution of the Auditory System in Synapsida ("Mammal-Like Reptiles" and Primitive Mammals) as Seen in the Fossil Record -- 29 Hearing in Transitional Mammals: Predictions from the Middle-Ear Anatomy and Hearing Capabilities of Extant Mammals -- 30 Parallel Evolution of Low Frequency Sensitivity in Old World and New World Desert Rodents -- 31 A Functional Model of the Peripheral Auditory System in Mammals and Its Evolutionary Implications -- 32 Origin of Auditory Cortex -- 33 Mammalian Auditory Cortex—Some Comparative Observations -- 34 Evolution of Sound Localization in Mammals -- 35 The Marine Mammal Ear: Specializations for Aquatic Audition and Echolocation -- 36 Adaptations of Basic Structures and Mechanisms in the Cochlea and Central Auditory Pathway of the Mustache Bat -- Contributed Abstracts -- J. The Story of the Evolution of Hearing Identifying the Sources of Sound -- K. Evolution of Ultrasonic and Supersonic Hearing in Man -- L. Broad Frequency Selectivity at High Sound Pressure Levels is Important for Speech Coding in the Cochlear Nucleus -- M. Direction-Dependent Acoustical Transformation in the External Ear of the Cat: Effects of Pinna Movement -- N. Toward Understanding Mammalian Hearing Tractability: Preliminary Underwater Acoustical Perception Thresholds in the West Indian Manatee, *Trichechus manatus* -- O. The Acoustic Spatial Environment of the Mustache Bat Within the Context of Evolution -- Section VII Epilogue -- 37 Epilogue to the Conference on the Evolutionary Biology of Hearing -- Author Index -- Animal Index.

Sommario/riassunto

To develop a science of hearing that is intellectu- The five-day conference was held at the Mote ally satisfying we must first integrate the diverse, Marine Laboratory in Sarasota, Florida, May - extensive body of comparative research into an 24, 1990. The invited participants

came from the evolutionary context. The need for this integration of fields of comparative anatomy, physiology, biophysics, and a conceptual framework in which it could be structured, were demonstrated in landmark biology, ontogeny, and paleontology. Before the papers by van Bergeijk in 1967 and Wever in 1974. conference, preliminary manuscripts of the invited However, not since 1965, when the American papers were distributed to all participants. This facilitated - even encouraged - discussions through- Society of Zoologists sponsored an evolutionary conference entitled "The Vertebrate Ear;" has there out the conference which could be called, among other things, "lively. " The preview of papers, along been a group effort to assemble and organize our current knowledge on the evolutionary-as with the free exchange of information and opinion, opposed to comparative-biology of hearing. also helped improve the quality and consistency of In the quarter century since that conference the final manuscripts included in this volume. there have been major changes in evolutionary In addition to the invited papers, several studies concepts (e. g. , punctuated equilibrium), in systems- were presented as posters during evening sessions.

2. Record Nr.	UNINA9910962961003321
Titolo	The minipig in biomedical research // edited by Peter A. McAnulty. [et al.]
Pubbl/distr/stampa	Boca Raton, : Taylor & Francis, 2012 Boca Raton : , : CRC Press, , 2012
ISBN	1-04-020942-4 0-429-14939-5 1-280-12162-9 9786613525482 1-4398-1119-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (695 p.)
Altri autori (Persone)	McAnultyPeter A
Disciplina	616.0273
Soggetti	Swine as laboratory animals Medicine - Research Biology - Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	section 1. Origin and management of the minipig -- section 2. Welfare and experimental usage of the minipig -- section 3. Pharmacology and ADME studies in the minipig -- section 4. Safety assessment in the minipig : principle body systems -- section 5. Genetics and immunology -- section 6. Disease models -- section 7. Regulatory perspective and use of the minipig in developing marketed products -- section 8. New horizons and perspectives.
Sommario/riassunto	The Minipig in Biomedical Research is a comprehensive resource for research scientists on the potential and use of the minipig in basic and applied biomedical research, and the development of drugs and chemicals. Written by acknowledged experts in the field, and drawing on the authors' global contacts and experience with regulatory authorities and the pharmaceutical and other industries, this accessible manual ranges widely over the biological, scientific, and practical uses of the minipig in the laboratory. Its coverage extends from the minipig's origins, anatomy, genetics, immunology, and ph

