DESCRIPTION

*Journal of Otology* is an open access, peer-reviewed journal that publishes research findings from disciplines related to both clinical and basic science aspects of auditory and vestibular system and diseases of the ear. This journal welcomes submissions describing original experimental research that may improve our understanding of the mechanisms underlying problems of basic or clinical significance and treatment of patients with disorders of the auditory and vestibular systems. In addition to original papers the journal also offers invited review articles on current topics written by leading experts in the field. The journal is of primary importance for all scientists and practitioners interested in audiology, otology and neurotology, auditory neurosciences and related disciplines. *Journal of Otology* welcomes contributions from scholars in all countries and regions across the world.

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EDITORIAL BOARD

*Editor-in-Chief*

**Shiming YANG**, Chinese PLA General Hospital, Department of Otolaryngology Head and Neck Surgery, Beijing, China

Genome editing as treatment for genetic hearing loss. We are interested in using direct delivery of protein/RNA complex in vivo for CRISPR-Cas9 mediated genome editing to treat genetic deafness. Gene therapy to treat hearing loss. We are developing the use of different serotypes of AAV for gene delivery and to treat different forms of hearing loss, including ARHL, NIHL and genetic hearing loss.

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**Matti Anniko**, Uppsala University, Uppsala, Sweden
Inner ear and labyrinth, most of my research is in this field. I have about the same research profile as professor Yang Shiming. Focus on structure and function of the labyrinth (morphology also including transmission and scanning electron microscopy, electrophysiology, immunohistopathology, ototoxicity, ageing of the labyrinth, animal models, in vitro analyses of cultured cells of the inner ear, pharmacotherapy of the inner ear, etc) but not audiology. Clinically I am focused on advanced head and neck surgery.

Barbara Canlon, Karolinska Institute, Department of Physiology and Pharmacology, Stockholm, Sweden
Ear, Inner ear, Animal Behavior, Brain Development, Mouse Models, Medical Neurosciences, Cochlea, Neuroscience, Neurobiology and Brain Physiology, Cell Biology

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Tinnitus, Etiology, Pathophysiology, Evaluation, Management

Michael Tong, The Chinese University of Hong Kong, Hong Kong, Hong Kong
Communicative Sciences especially Speech and Hearing sciences, Neuroscience of speech and hearing, Nasopharyngeal cancer, Epidemiology and public health topics related to ENT, Minimally invasive surgery in ENT HNS especially endoscopic ear surgery, Robotics and artificial intelligence applications

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Auditory implants (CI, BCI, AMEI), Facial nerve, Cholesteatoma, otosclerosis, Ménière’s disease

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Middle ear surgery, Biomaterials in middle ear, Eustachian tube, Tympanoplasty, Tympanomastoidectomy

Guangdi Chen, University at Buffalo, Buffalo, New York, United States of America
Auditory electrophysiology, including cochlear electrophysiology and central auditory electrophysiology

Wei Chen, Chinese PLA General Hospital, Beijing, China
Cochlear implantation (CI) combined with stem cell delivery for treatment the patients with profound hearing loss

Zhengyi Chen, MASSACHUSETTS EYE AND EAR INFIRMARY, Boston, Massachusetts, United States of America
Dr. Zheng-Yi Chen’s research interests include the understanding of the causes of hearing loss, the development of treatment by inner ear regeneration, gene editing, and gene therapy.

Fanglu Chi, Fudan University Eye Ear Nose and Throat Hospital, Shanghai, China
Neurotology and lateral skull base surgery, Inner ear hair cell regeneration, Cochlear implantation research, Vestibular vertigo

Juan Chiossone, Central University of Venezuela, Caracas, Venezuela
Otology, General Otology and Neuro-otology, Dizziness and Vertigo, Cholesteatoma, Otosclerosis, Meniere's Disease, Facial Nerve, Acoustic Neuromas, Adult and Pediatric Hearing Loss, Hearing Assistive Devices, Cochlear Implants, Hearing Aids, BAHA

Pu Dai, Chinese PLA General Hospital, Beijing, China
Hereditary hearing loss, Genetics, Ear surgery, Skull base surgery, 3-D video2

Dalian Ding, University at Buffalo Hearing Research Laboratories, Buffalo, New York, United States of America
Dalian Ding has a great deal of experiences in both in vivo and in vitro studies in the field of inner ear. His areas of expertise include anatomy and physiology of the cochlear and vestibular system. Dalian Ding worked at neurotoxic and ototoxic mechanisms of chemicals, presbycusis, cochlear microcirculations, blood-cochlea barrier, endolymphatic hydrops, noise and / or blast wave induced.

Maoli Duan, Karolinska Institute, Stockholm, Sweden
Stem cell/gene therapy, Noise and drug-induced hearing loss and their protection/treatment, Otology, Neurotology

Yanmei Feng, Shanghai Sixth People's Hospital, Minhang, China
Audiology, Vertigo, Tinnitus, Deafness, Hearing loss

John Ferraro, The University of Kansas, Lawrence, Kansas, United States of America
Clinical applications of auditory evoked potentials

Vural Fidan, Ministry of Health Eskisehir Yunus Emre State Hospital, Eskisehir, Turkey
As otorhinolaryngologist interested in Laryngology, Cancer research and Cleep medicine

Weiqiang Gao, Shanghai Jiao Tong University - Fahua Campus, Shanghai, China
Hair cell differentiation, Hearing loss, Stem cells, Cancer research

Zhiqiang Gao, Peking Union Medical College Hospital, Dong Cheng Qu, China
Micro otology, Neurology, Lateral skull base surgery, Hearing implantation

Shusheng Gong, Beijing Tongren Hospital, Beijing, China
1) Peripheral and cortex plasticity after cochlear implant (CI) in children with profound hearing loss, 2) Gene therapy and drug target discovery for clinical purpose to restore deafness, 3) Hair cell regeneration in the inner ear

**Marcos Goycoolea**, Las Condes Clinic Otorhinolaryngology Department, Las Condes, Chile

Otology, Audiology, Ear, Deafness, Pediatric Otolaryngology, Audiology, Ototoxicity, Auditory Neuroscience, Auditory Processing, Sound Localization

**Minxin Guan**, Zhejiang University Library, Hangzhou, China

maternally inherited nonsyndromic and aminoglycoside induced hearing loss

**David Z.Z. He**, Creighton University, Omaha, Nebraska, United States of America

Dr. He’s laboratory focuses on characterization of genes underlying the unique structure and function of cochlear inner and outer hair cells as well as molecular mechanisms of biological aging of hair cells by employing a variety of in vitro and in vivo experimental techniques including electrophysiology (system and cellular), immunocytochemistry, advanced imaging, mouse genetics and molecular biology.

**Bo Hua Hu**, University at Buffalo, Department of Communicative Disorders and Sciences, Buffalo, New York, United States of America

Underlying mechanisms and prevention of acquired hearing loss

**Karl-Bernd Hüttenbrink**, University Hospital Cologne, Köln, Germany

Middle ear research, Surgery of the middle ear

**Dan Jiang**, St Thomas’ Hospital, London, United Kingdom

Prof. Jiang has vast experience in all fields of adult and paediatric ENT and his clinical interests include ear surgery, hearing implants, deafness, dizziness and management of lateral skull base tumours.

**Peng Jin**, Emory University School of Medicine, Atlanta, Georgia, United States of America

Research program in Dr. Jin's laboratory focuses on the role of epigenetics and noncoding repeat RNAs in human diseases. Dr. Jin has combined various disciplines to understand the roles of epigenetic alphabet in human diseases, particularly neurodevelopmental and neurodegenerative disorders. Dr. Jin is also interested in the role of polymorphic noncoding repeats in human genome.

**Ken Kitamura**, Tokyo Medical and Dental University, Department of Otolaryngology, Bunkyo-Ku, Japan

Cholesteatoma, Tympanomastoid surgery, Otopathology, Sensorineural Hearing Loss

**Göran Laurell**, Uppsala University, Uppsala, Sweden

Audiometry, Ototoxicity

**Jun Hoo Lee**, Seoul National University College of Medicine, Seoul, South Korea

Cochlear Implantation, Hearing, Tinnitus, Cochlea, Sensorineural Hearing Loss, Otitis Media, Hearing Loss

**Daqing Li**, University of Pennsylvania, Department of Otorhinolaryngology, Philadelphia, Pennsylvania, United States of America

Basic and Translational Research in Otorhinolaryngology-Head & Neck Surgery, Vector Development and Targeted Gene Delivery in Ear, Nose, Throat, Head & Neck, Molecular Approach for the Treatment of Head and Neck Cancer

**Hongzhe Li**, Loma Linda University, Loma Linda, California, United States of America

Dr. Li’s research is primarily to identify the mechanisms by which circulating ototoxic drugs cross the blood-labyrinth barrier into the cochlear compartments and accumulate in sensory hair cells to induce cytotoxicity. Confounding factors such as noise exposure, age, genetic variation and disease conditions are also considered. A variety of in vitro and in vivo experimental techniques including electrophysiology, immunofluorescence, advanced imaging, mouse genetics and molecular biology are used, with a long-term goal to prevent or reduce the traumatic impacts from these inner-ear insults in a single or a combined format.

**Huawei Li**, Fudan University Eye Ear Nose and Throat Hospital, Shanghai, China

My research is focused on the biological treatment of sensorineural hearing loss, including the protection of hair cell from injuries induced by ototoxic drugs, noises and genetic disorders, the regeneration of hair cells by activating inner ear stem cells, as well as developing digital equipment for the diagnosis of inner ear disorders in clinic.

**Xinmin Li**, University Of Alberta, Department of Psychiatry, Edmonton, Alberta, Canada

As a clinician scientist in biological psychiatry and neuropsychopharmacology, Dr. Li has been a leader in advancing the theory of white matter dysfunction and neurodegeneration in psychiatric disorders. Dr. Li has published more than 150 papers and filed four patents in the field of neuropsychopharmacology. He has been well funded by national and international granting agencies.

**Xi Lin**, Emory University School of Medicine, Atlanta, Georgia, United States of America

Mechanisms of genetic deafness caused by connexin and pendrin mutations, which are the most commonly-found mutations responsible for over 50% of the human congenital deafness cases in newborns. Focus is to understand how membrane channels/receptors contribute to the normal cochlear physiology and homeostasis and to conduct related translational researches.
Ke Liu, Chinese PLA General Hospital, Beijing, China
Cochlear ribbon synaptic plasticity and its possible contributions to hearing loss and tinnitus, Hair cell death, regeneration, and protection in inner ear, The molecular mechanism of Auditory Neuropathy (AN), The role of macrophages in response to noise induced or aging related hearing loss, Hearing loss and cognitive disorders, Gene therapy and drug targeting based on the inner ear delivery.

Wei Liu, Uppsala University, Uppsala, Sweden
Morphology of human cochlea research

Xuezhong Liu, University of Miami School of Medicine, Miami, Florida, United States of America
Otology, Adult and pediatric hearing loss, Genetic hearing loss, General Otolaryngology (Ear, Nose and Throat)

William Martin, National University of Singapore, Singapore, Singapore
Dipole localization modelling of auditory evoked potentials, Development of boothless audiology technology and protocols, Health communication, Public health, Ambient noise monitoring technologies for applications in audiology, Hearing is ageing, Community noise, Community based delivery of hearing services, Neurobiological mechanisms of tinnitus, Tinnitus management, Noise induced hearing loss prevention

David Moore, Cincinnati Children's Hospital Medical Center Communication Sciences Research Center, Cincinnati, Ohio, United States of America
Hearing, Learning difficulties

Stephen O’Leary, The University of Melbourne, Melbourne, Australia
Professor O'Leary is recognized internationally for his clinical and research activities in ear disease, hearing and balance, and particularly for contributions to cochlear implantation. His primary translational research is the protection of the inner ear during cochlear implant surgery, which promises to enable implant recipients to maintain their hearing in the ear that receives the cochlear prosthesis. He has a track record in the aetiology and prevention of infection with cochlear implantation, and the use of neurotrophins to regenerate the auditory nerve after deafness.

Gerard O'Donoghue, Queen's Medical Centre, Nottingham, United Kingdom
Professor O'Donoghue’s principal interests lie in the field of cochlear implantation in children and adults.

Metin Önerci, Hacettepe University, Ankara, Turkey
Rhinology, Endoscopic Surgery

Nicolás Pérez, University of Navarra Clinic, Pamplona, Spain
Otoacoustic emissions from distortion products in the diagnosis of auditory pathologies, Ménière's disease, Early detection of neonatal hearing loss – universal detection programme using transitory otoacoustic emissions, Development of clinical programme for Oto-Neurological examinations, Diagnostic testing – development of instrumental evaluation programme for patients with dizziness and vertigo using Electронystagmography, Videonystagmography (2/3D), high frequency rotating sinusoidal stimulation and Dynamic Posturography, Ménière's disease, diagnostic criteria (glycerol test) and therapeutic intratympanic gentamicin, Positional Vertigo, Central vestibular syndromes - differential diagnosis, New vestibular examination techniques, Otitis media, Labyrinthitis, Endolympathic hydrops, Central hearing implants (brain stem hearing implants), Development of experimental implant model and evaluation of the modifications (histological and functional) in the central auditory channel

Milan Profant, Saints Cyril and Methodius Hospital, Department of Otorinolaryngology Head and Neck Surgery
Audiometry, Otology

Jianhua Qiu, Xijing Hospital, Xian, China
Hair regeneration, Auditory implantation, Inner ear stem cell

Wei Qiu, University of Pittsburgh, Pittsburgh, Pennsylvania, United States of America
Noise-induced hearing loss caused by complex noise exposure, Noise-induced cochlear synaptopathy, Combined effects on the human auditory system associated with occupational co-exposure to solvents and noise, Hearing protection program

Tianying Ren, Oregon Health & Science University, Portland, Oregon, United States of America
Cochlear mechanics, Otoacoustic emissions, Auditory physiology

Richard Salvi, University at Buffalo Hearing Research Laboratories, Buffalo, New York, United States of America
Tinnitus, Hearing, Noise-induced hearing loss, Hyperacusis, Central auditory system

Xiaorui Shi, Oregon Health & Science University, Portland, Oregon, United States of America
Cochlear homeostasis, Blood-labyrinth barrier, Stria vascularis, Pericytes

Shomeshwar Singh, The ENT Clinic, New Delhi, India
Speech development in deaf signers using a novel approach - See Sound Live, a smart phone application developed by myself (patent pending) that can be used by deaf signers to get feedback
of their speech efforts visually. Once the brain starts to get feedback of speech efforts, the user is able to 'See sound' or 'Hear with their eyes' that allows development of basic and advanced speech.

**Davide Soloperto**, Azienda Ospedaliera Universitaria Integrata Verona, Verona, Italy

Cellular physiology of spiral ganglion neuron of cochlea, Noise induced central auditory developmental delay, Tinnitus, Mechanism of auditory learning, Stem cell physiology

**Wei Sun**, University at Buffalo, Buffalo, New York, United States of America

Cellular physiology of spiral ganglion neuron of cochlea, Noise induced central auditory developmental delay, Tinnitus, Mechanism of auditory learning, Stem cell physiology

**Rafael Urquiza**, Malaga University, Faculty of Medicine, Department of Otolaryngology, Málaga, Spain

Ear, Inner ear, Otology, Audiology, Hearing Disorders, Deafness, Pediatric Otolaryngology, Auditory Neuroscience, Deaf Studies, Audition

**Jian Wang**, Dalhousie University, Halifax, Nova Scotia, Canada

Ototoxicity and noise-induced hearing loss, Cochlear gene therapy, Auditory coding and plasticity

**Qiuju Wang**, Chinese PLA General Hospital, Beijing, China

Prof. Qiju Wang is a clinical physician and expert for hearing diagnosis, genetic consultant and medical treatment for the patients with different types of hearing impairment, including congenital deafness, sudden deafness, auditory neuropathy, enlarged vestibular aqueduct syndrome, as well as drug-induced hearing loss, vestibular vertigo, vestibular neuritis, positional vertigo, children dizziness and other inner ear disease. Prof. Qiju Wang’s research interest is also in the field of mechanism studies on genetic deafness and clinical applications.

**Hao Wu**, Shanghai Jiaotong University School of Medicine Xinhua Hospital, Shanghai, China

Wu is dedicated to clinical and research work of lateral skull-base diseases, especially acoustic neuroma, jugular paragangliomas, and other cerebellopontine angle lesions. He is also focused on management of deafness/Auditory implantation

**Dinghua Xie**, The Second Xiangya Hospital of Central South University, Changsha, China

Clinical Otology, Cochlear implant, Clinical audiology

**Li Xu**, Ohio University, Athens, Ohio, United States of America

Speech perception and pitch perception with cochlear implants, Studies on speech perception theories and speech-processing strategies to improve performance of cochlear implant users, Studies of lexical tone development (e.g., lexical tone perception and production) in prelingually deafened children with cochlear implants, Evaluation of speech perception outcomes in hearing-impaired listeners with nonlinear-frequency-compression hearing aids

**Shankai Yin**, Shanghai Sixth People's Hospital, Minhang, China

Diagnosis and treatment of deafness, Vertigo, OSAHS

**Lisheng Yu**, Peking University People's Hospital, Beijing, China

Meniere's disease, Post aurial injection, Migraine

**Huijun Yuan**, Army Medical University, Medical Genetics Center, Chongqing, China


**Fan-Gang Zeng**, University of California Irvine, Irvine, California, United States of America

Cochlear Implant, Auditory Neuropathy, Auditory Neuroscience, Tinnitus, Hyperacusis, Speech

**Jinsheng Zhang**, Wayne State University School of Medicine, Department of Otolaryngology Head and Neck Surgery, Detroit, Michigan, United States of America


**Hongbo Zhao**, University of Kentucky Medical Center, Lexington, Kentucky, United States of America

Cochlea, Inner ear, Deafness

**Hui Zhao**, Chinese PLA General Hospital, Beijing, China

Oto-microsurgery, Hearing loss, Singel side deafness, Inheritant deafness, Hereditary deafness, Cholesteatoma, External ear canal disease, Cochlear implantation

**Jing Zheng**, Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States of America

The goal of my lab is to identify and investigate molecules that play essential roles in mammalian hearing. We are currently investigating several proteins that are important for hearing, Prestin, the motor protein required for the cochlear amplification (Zheng et al., Nature, 2000), CEACAM16, an adhesive protein of the tectorial membrane required for delivering outer hair cells' mechanical feedback and thereby amplification (Zheng et al., PNAS, 2011), and CAMSAP3, a microtubule-binding protein involved in many cellular functions including motile cilia formation (Robinson et al., PNAS, 2020). We have found that animals with a knock-down of CAMSAP3 protein display signs and symptoms reminiscent of primary ciliary dyskinesia, which includes hydrocephalus, subfertility, hyposmia, anosmia, rhinosinusitis, otitis media, and hearing loss. As we continue this investigation, these studies will enrich our understanding of cochlear physiology at the molecular level and allow us to further develop better strategies to prevent hearing loss.

**Jing Zou**, Tampere University, Faculty of Medicine and Health Technology, TAMPERE, Finland

Sensorineural hearing loss, Meniere’s disease, Temporal bone imaging, Nanomedicine
INTRODUCTION

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The aim of the Journal of Otology is to provide a forum for papers concerned with clinical and basic science issues regarding the auditory and vestibular systems. The journal welcomes reports on clinical studies, case studies, experimental studies, as well as theoretical papers. The journal is willing to accept original papers in the form of full-length papers, short communications, letters to the editor, and reviews.

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