



BioMed Research International

Special Issue on
**Preventing Hearing Loss and Restoring Hearing: A
New Outlook**

CALL FOR PAPERS

People with hearing loss represent one of the largest disability groups worldwide, and the prevalence of hearing loss is predicted to rise with an ageing population. Substantial progress has been made in recent years towards understanding some of the biological processes involved in the development of hearing impairment as well as therapeutic ways to prevent and mitigate the hearing loss. For example, we have better understanding of the maintenance and regeneration of the sensorineural tissues in the cochlea. The sensory hair cells in the cochlea can potentially be regenerated by reactivating genes that control their development, and various types of stem cells can be transformed into sensory hair cells or auditory neurones. In addition, drugs that reduce oxidative stress or prevent apoptosis have been shown to protect hearing from excessive noise and ototoxic drugs. Furthermore, our knowledge of central auditory changes associated with the peripheral injury or auditory processing problems is rapidly increasing. The aim of this special issue is to advance our understanding of the causes and mechanisms of hearing loss, reactive auditory plasticity, and rehabilitation from hearing loss and propose novel strategies to protect and restore hearing.

We invite investigators to contribute original research articles and review articles that will address the causes and mechanisms of hearing loss, changes in central auditory pathways after cochlear injury or congenital deafness, diagnostic evaluation and prevention of hearing loss, rehabilitation after hearing loss, and biological restoration of hearing. Potential topics include, but are not limited to:

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- ▶ Molecular and cellular mechanisms underlying sensorineural hearing loss
- ▶ Animal models of presbycusis and noise-induced and drug-induced hearing loss
- ▶ Genetic models of deafness
- ▶ Auditory plasticity and rehabilitation after hearing loss
- ▶ The link between hearing loss and tinnitus
- ▶ Latest technologies for clinical evaluation of hearing loss
- ▶ Prevention of hearing loss
- ▶ New pathways for hair cell regeneration
- ▶ Cell-, drug-, and gene-based therapies to restore hearing

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/otolaryngology/phlrl/>.

Lead Guest Editor

Srdjan M. Vlajkovic, Department of Physiology and Centre for Brain Research, The University of Auckland, Private Bag 92019, Auckland, New Zealand

s.vlajkovic@auckland.ac.nz

Guest Editors

Peter R. Thorne, Department of Physiology, Section of Audiology and Centre for Brain Research, The University of Auckland, Private Bag 92019, Auckland, New Zealand

pr.thorne@auckland.ac.nz

Ramesh Rajan, Department of Physiology, Monash University, Melbourne, VIC 3800, Australia

ramesh.rajan@monash.edu

Jonathan E. Gale, UCL Ear Institute, University College London, London WC1X8EE, UK

j.e.gale@ucl.ac.uk

Manuscript Due

Friday, 16 May 2014

First Round of Reviews

Friday, 8 August 2014

Publication Date

Friday, 3 October 2014