

Noise Induced Hearing Loss and Gene Expression Analysis using the R language

Introduction

Noise Induced Hearing Loss is called the primary cause of acquired hearing loss in the industrial world. The cochlea is the part of the inner ear that converts mechanical vibrations into nerve impulses and transmits them to the brain, it houses a lot of the important central units contributing to hearing. The chosen research focuses on the effects of exposure to different noise levels in mice to gain a deeper understanding about how sound affects hearing since clear physiological definitions are known about the causes of hearing sensitivity and hearing loss, but it is not known is a comprehensive understanding of the complex molecular mechanisms responsible for noise-induced threshold elevation and the processes responsible for hearing threshold recovery.

A multitude of experiments were performed by the chosen research but for this project the bioinformatics experiment about gene expression was done.

Materials and Methods

[illegible]

Results

[illegible]

Conclusion and Discussion

[illegible]

References



- [1] Nopporn Jongkamonwiwat, Miguel A. Ramirez, Seby Edassery, Ann C.Y. Wong, Jintao Yu, Tirzah Abbott, Kwang Pak, Allen F. Ryan, and Jeffrey N. Savas, "Noise Exposures Causing Hearing Loss Generate Proteotoxic Stress and Activate the Proteostasis Network", Nov-2020. [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7722268/>. [Accessed: 08-Apr-2022].
- [2] "GEO Accession viewer", Nov-2020. [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7722268/>. [Accessed: 08-Apr-2022].