

Analysis Tutorial Prospectus

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1. Title
  - Amplitude and Latency Analysis of Auditory Brainstem Response Waveforms
2. Research question
  - Do ABR waveform latencies and amplitude differ after noise induced hearing loss?
3. Objectives
  - Communicate methods to build and use an R program that visualizes waveform plots, identifies ABR latencies, and quantifies ABR amplitudes.
4. Approach
  - Auditory brainstem responses provide information about central nervous system processing of auditory information. I will build on previously written code that visualizes ABR waveforms, generating code that identifies ABR amplitudes and latencies. Packages to be used include the pracma package, which contains functions such as findPeaks(), peaks(), valleys(), etc. Tidyverse will be used to generate plots of ABR latencies and amplitudes.
5. Selected References

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