

Altered listening changes the way we predict the auditory environment

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Propositions

- 1. The medial geniculate body (MGB) of the thalamus is an often neglected relay in the auditory pathway that might be affected by tinnitus. (This thesis)
- 2. If the functioning of the MGB in the auditory pathway is altered in tinnitus, then not only the MGB but also a network consisting of auditory and non-auditory brain areas might be maladaptive. (This thesis)
- Aging influences how temporal and formal auditory predictions are processed. (This thesis)
- 4. Sensory gating as represented by auditory position predictions is intact in persons with tinnitus. (This thesis)
- 5. Fundamental research can help elucidate which mechanisms underlie tinnitus.
- 6. Non-significant findings are a critical element of the scientific process and should be shared with the scientific community.
- 7. Fundamental research is further needed to improve the diagnosis and treatment of persons with tinnitus.
- 8. Ambitious and novel projects frequently take more time than anticipated, which entails that pilot data should be carefully inspected to resolve possible technical or design issues. (*Realization during the completion of this dissertation*)
- 9. The most exciting phrase to hear in science, the one that heralds new discoveries is not 'Eureka!' but 'That's funny!' (*Frans de Waal*)
- 10. Everything seems impossible until it is done. (Nelson Mandela)