

CLSA Approved Project

Applicant

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Project Title

Epidemiology of music perception, production, and engagement

Project Summary

We are interested in understanding the influence of genes on musical ability. From a previous study by our group, we know that genetic differences can influence rhythmic ability (whether or not you can clap along to the beat of music), and other studies show that musical abilities are heritable. The present study aims to find specific genetic variants that contribute to differences in music perception, production, and engagement. We will analyze data from multiple datasets, including the Canadian Longitudinal Study on Aging. These cohorts have collected genetic data as well as survey information about various musicality traits, including music perception, production, and engagement. Using various statistical methods, including genome-wide association studies (GWAS) and post-GWAS analyses, we can determine whether differences in participants' genetic data relate to their music survey responses. Then, we can determine how the genetics of musicality may relate to various health traits.

Keywords

Musicality, Genetics, Cross-trait analysis