

CLSA Approved Project

Applicant

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Project Title

Disentangling the genetic and environmental underpinnings of social behavior in midlife and old age

Project Summary

The proposed project will examine how a broad range of successful aging determinants, as measured by biological (volume loss indicators in higher association cortex), social (e.g., social embeddedness), psychological (e.g., cognitive impairment indicators) and lifestyle (e.g., sleep quality indicators) outcomes, are potentially influenced by lifestyle and genetic factors in a prospective cohort sample comprised aging adults.

Given aging populations, it has become increasingly important to understand which genetic, lifestyle and environmental factors support healthy aging and longevity (Lee et al., 2018; Niculescu et al., 2011). Alongside genetic markers, lifestyle choices and environmental encounters influence desirable aging outcomes. Using probabilistic Bayesian modelling strategy (Bzdok et al., 2020), findings from the study will add insights into the complex interplay of how genetic factors and living in different environments contribute to explaining health outcomes in old age.

Keywords

Aging, Social support, Biomarkers, Big biomedical data, Bayesian modelling, Successful aging, Healthy life expectancy