



CLSA Approved Project

Applicant

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Project Title

Biomarkers for Frailty and Unsuccessful Aging

Project Summary

One of the main manifestations of unsuccessful aging, frailty, is highly prevalent among older adults, yet it is vastly under-diagnosed. A reason for this under-diagnosis is that testing for frailty in clinical practice requires time-consuming inputs from clinicians and patients. Another reason is that testing is often based on questionnaires that lack accuracy and reliability, or physical performance tests that lack feasibility in the acute care setting. Thus, there is an unmet need to measure frailty objectively and efficiently with minimal human work. We propose to address this need by studying biomarkers that are associated with frailty, musculoskeletal aging and loss of muscle mass, cardiovascular aging, and age-related diseases or impairments.

Keywords

Artificial intelligence, Biosignals, Biomarkers, Frailty, Aging