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REJUVENATE

Rerouting towards REsilience to JUVENile stress-induced psychopATHologiEs in Adulthood: Spotlight on behavioural profiling and lifestyle interventions

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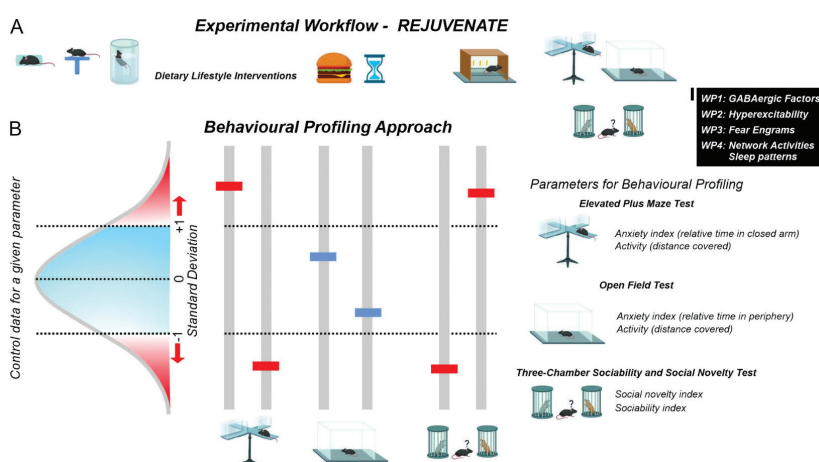
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This study investigates the enduring impact of childhood adversities, specifically Juvenile Stress (JS), on mental health. JS is linked to an increased susceptibility to mood and anxiety disorders in adulthood, but resilience varies among individuals. The primary objectives include understanding the mechanisms connecting JS to vulnerability and resilience, testing lifestyle interventions for mitigating JS's negative effects, and addressing sex-related differences in stress responses and intervention effectiveness. The study focuses on hippocampal functioning, GABAergic alterations, and aims to explore behavioral, cognitive, molecular, cellular, and network-level outcomes in resilient and susceptible individuals. Lifestyle interventions like diet patterns will be assessed, considering sex-dependent variations. Early neural and behavioral biomarkers will be examined to predict long-term outcomes and intervention effects. In this collaborative project, we will combine advanced expertise in behavioral neuroscience with systems, cellular, and molecular methodologies to thoroughly investigate the neural foundations of the impact of Juvenile Stress (JS) on vulnerability and resilience later in life. Our goal is to establish multimodal predictive and descriptive biomarkers capable of identifying the risk and resilience outcomes



associated with JS. Additionally, we will assess the effects of lifestyle interventions on behavior and related mechanisms, aiming to establish highly translational interventions as a potential approach to enhance mental health resilience following exposure to JS.