Western dietary factors during early life on glucose regulation, the gut microbiome, and neurocognition in rats

Consumption of high fat, high sugar Western diets (WD) during adolescence results in neurocognitive impairments and gut microbiome dysbiosis. To gain insight into whether these adverse outcomes are reversible in adulthood, I modeled WD consumption in adolescent female rats to mechanistically evaluate the effects of a WD enriched with either sugar alone or sugar with fat on metabolic outcomes, hippocampal-dependent memory, and gut microbiota before and after a healthy dietary intervention. In this talk, I will also discuss our more recent study on whether regular consumption of low-calorie sweeteners (LCS), which are increasingly being consumed by children due to a widespread presence in the modern food environment, during early life in rats yields impairments on adult metabolic, behavioral, gut microbiome, and neural outcomes. Throughout the talk, I will discuss the impact of this work on our understanding of the lasting effects of early life WD consumption in rats.

HEB Seminar Series
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Via Zoom Meeting ID: 910 5033 6303
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