PROJECT RESUME

Recent systematic evidence has shown an association between early life stress exposure and certain

neurodevelopmental outcomes in the child. However, the anatomical correlates and mechanisms through which exposure to stress influences neurodevelopmental outcomes is unclear. In recent years, there has been an intensive research effort focusing on characterising the influence of the gut microbiome brain development and function. Here we propose that that exposure to early life stress alters the development of the brain and gut in the offspring which can leads to changes in the composition of the gut microbiome. In this project we will characterise the anatomical changes that result from early life exposure to stress in the brain and gut of the offspring, and whether stress exposure affects the composition of the gut microbiome. This will allow us to describe the impact of early life stress exposure on the development of major organ systems in the offspring.

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