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## ***"Determining Manganese Exposure and Risk for Neurodevelopment Disorders"***

### Abstract:

There is strong correlational and epidemiological data to support a link between exposure to high levels of manganese, dopamine dysregulation, and development of Attention Deficit and Hyperactivity Disorder (ADHD) and other neurodevelopmental disorders. Within the Harrison lab we are investigating the mechanisms that underly this connection and in particular genetic differences, including biological sex, that can contribute to the brain's response to metal exposures. Incorporate novel imaging techniques into this work allows enhanced understanding of distribution of manganese across brain areas and allows us to tie this to specific cellular responses.