

Nature and nurture in the development of violence

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Dr. Bortolato's research focuses on translational studies on neurodevelopmental disorders (autism-spectrum disorders, Tourette syndrome, pathological aggression, and intellectual disabilities), encompassing clinical trials and preclinical investigations on animal models. The aim of these studies is to identify the mechanisms whereby genetic, environmental, and sex-related vulnerability factors interact to underpin these neuropsychiatric problems, in order to identify novel strategies for their early diagnosis, prevention, and therapy. This presentation will focus on his studies on the gene *MAOA*, one of the major molecules implicated in the development of antisocial behaviors; in particular, he will describe a number of recent discoveries in his lab that are elucidating the mechanisms of interaction between this gene and early-life adversities, which facilitate the pathogenesis of pathological aggression. His talk will also delve into novel potential avenues for treatment of this staggering condition throughout different developmental stages.