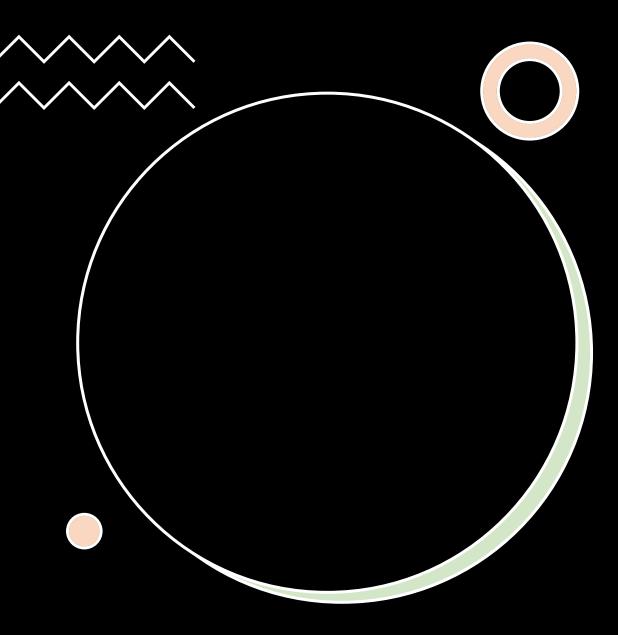


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Chavely Gonzalez Ramirez Biology Major

Dr. Ben Philpot University of North Carolina Department of Cell Biology and Physiology Neuroscience Center

## **"TCF4 expression in the developing Macaque neocortex"**



• My research focused on TCF4, a transcription factor that, when haploinsufficient, causes Pitt-Hopkins Syndrome (PTHS).

Specifically, I quantified TCF4 expression in the developing Macaque neocortex.

 My research is significant as eventual pharmacological or genetic approaches to treat PTHS, and other TCF4-linked disorders require knowledge of TCF4 distribution at the resolution of discrete brain areas and specific cell lineages and types.

My quantitative analysis show that:

• TCF4 is not uniformly distributed across the neocortical layers, but rather concentrates in layers II and IV.

• TCF4 expression is higher in the embryonic and neonatal brain than in the adult brain

My results will critically guide emerging strategies to treat PTHS.