

I am currently a postdoctoral researcher at Michigan State University working jointly under the guidance of Drs. Arjun Krishnan, Amy Ralston, and David Arnosti in affiliation with the Departments of Biochemistry and Molecular Biology, and Computational Mathematics Science and Engineering. For two years, I have been funded through MSU's TEAM-UP initiative, a highly competitive award that supports postdocs engaging in cross-disciplinary and collaborative research. My long-term research goal is to establish an independent research group that combines computational modeling and wet-bench experiments to understand how brain disorders alter gene interaction networks during different stages of brain development and in various cellular contexts.

I began my career as a researcher at the University of Oklahoma, where I worked as an undergraduate research assistant in the genomic sequencing lab of Dr. Bruce Roe for four years. During my time there, I learned to employ computational approaches to answer biological questions. In addition to studying genomics in the Roe lab, I gained an appreciation for neuroscience while studying psychology for a semester at Oxford University. Upon completion of my undergraduate degree, I was able to combine my enthusiasm for bioinformatics and neuroscience by joining Dr. Genevieve Konopka's lab in the Department of Neuroscience at the University of Texas Southwestern Medical Center. There, I focused primarily on two projects aimed at investigating the role of language-related transcription factor FOXP2 in neural development using human neural progenitor cells, mouse models, and next-generation sequencing approaches. My work on the first project described the contribution of chromatin decondensation by FOXP2 to human neuron development and was published in *Cell Reports*. The second project relied on analysis of single-cell RNA-sequencing data to elucidate the role of *Foxp2* in the developing mouse cortex.

As a postdoc at MSU, I leverage my diverse training to facilitate collaborative research between experimental and computational groups, including building computational tools that integrate diverse data from thousands of sources. I am passionate about understanding etiology of and finding treatments for neurodevelopmental and psychiatric disorders, and I plan to solve these problems by forming hypotheses built using big data and cutting-edge machine learning techniques.