

PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute and sponsored by the institute's Center for Neurobiology Research



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The Emergence of Network Activity Patterns – An Early Window to Autism Spectrum Disorder

During neonatal development, sensory cortices generate spontaneous activity patterns shaped by both sensory experience and intrinsic influences. How these patterns contribute to the assembly of neuronal circuits is not clearly understood. Using in vivo calcium imaging in young mouse pups, Dr. Garcia and her lab show that spatially segregated assemblies of interneuron and pyramidal cells are already active at neonatal stages. In this talk, she will cover recent work from her lab indicating that GABAergic inputs shape network patterns that balance the number of interneurons and pyramidal cells during a critical window of development. In addition, Dr. Garcia will discuss how imaging approaches — including longitudinal 2-photon and wide-field calcium imaging — can be used to study the link between genetic predispositions for neurodevelopmental disorders and their impact on early network dynamics and functional connectivity.

FRIDAY, MAR. 14, at 11 a.m.

Room G101 A/B, 4 Riverside Circle
Watch live via Zoom at <https://FralinBioMed.info/PBR-Join>.



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