

*The Use of EEG and Evoked Potentials as Biomarkers in Neurodevelopmental Disorders*

There are a variety of genetic and familial risk factors that elevate the likelihood a child will develop autism. These include known genetic variants, such as Tuberous Sclerosis Complex, Rett Syndrome and Fragile X syndrome, along with familial risk factors, such as an infant having an older sibling with autism (whose chances of developing autism are 1:5). Since it is well known that children with an autism diagnosis who receive early intervention services have better developmental outcomes, it is imperative to improve our ability to identify the highest risk infants as early in life as possible. In this talk I will discuss how we have used the electroencephalogram (EEG) and the visual evoked potential (VEP) to both interrogate cortical function in several such risk population as well as use the EEG as a biomarker that can be used to identify which infants are most likely to develop autism.