Evdokia Anagnostou, M.D.
MIND Institute Distinguished Lecturer Series – June 8, 2016

Biographical Information

Dr. Evdokia Anagnostou is a child neurologist and a senior clinician scientist at the Bloorview Research Institute at the University of Toronto. She received her undergraduate degree from McGill University, completed her neurology training at McGill University in 2003 and postdoctoral fellowship in Autism/Developmental Disabilities at Mount Sinai School of Medicine in 2005.

With a mission of improving outcomes and quality of life for children with autism spectrum disorders and their families, Dr. Anagnostou joined the Bloorview Research Institute in 2008 where she built and co leads the Autism Research Centre. She has extensive funding in translational neuroscience and neuropsychopharmacology.

Presentation Abstract (4:30pm presentation)
Translational therapeutics in ASD

Emerging data from studies cross species suggest several potential molecular targets for ASD and other neurodevelopmental disorders. However, a large gap still exists between the time a potential target is identified and the first phase III trial. Several reasons account for this gap, including targets not amenable to pharmacological intervention, difficulty in stratifying patients into those most likely to respond to the intervention, and/or identifying appropriate clinical end-points or biomarkers.

Dr. Evdokia Anagnostou will present data from several early clinical trials in ASD and discuss lessons learned, and she will describe the development of an integrated discovery system called POND (Province of Ontario Neurodevelopmental Disorders Network), which includes an ICH—GCP compliant clinical trials network dedicated to neurodevelopmental disorders, embedded in a multiplatform, multisite biomarker core. Participants contribute a genomic sample, extensive phenotypic behavioral and cognitive data, and samples for other biomarker discovery. Classification algorithms are used within heterogeneous data to allow for new clustering techniques, in an effort to identify biologically homogeneous subgroups. Mouse and cell are used to facilitate translation. Children recruited in the clinical trials already have contributed all of the above to allow for prediction of treatment response.