Biographical Information

Dr. Dawson’s research interests focus on the early detection and treatment of autism spectrum disorder, and the impact of intervention on the developing brain. Her early work led to the discovery that autism symptoms could be detected before one year of age, leading to a new field of research on infant diagnosis in young children with autism. Her laboratory pioneered the use of electrophysiological techniques to study brain function and development in very young children with autism. Through this work, she and her colleagues have characterized early emerging differences in brain activity associated with autism and developed electrophysiological biomarkers that predict the severity of clinical course. With her colleague, Dr. Sally Rogers, Dr. Dawson developed and empirically validated the first comprehensive behavioral treatment for toddlers with autism, the Early Start Denver Model. At Duke, Dr. Dawson has ventured into new areas of research in neuroscience, genetics, and technology through partnerships with Duke faculty in the School of Medicine, Pratt Engineering, and Arts and Sciences. She is currently exploring innovative methods for screening for autism in primary care, novel approaches for assessing outcomes in clinical trials, early predictors and treatment of anxiety in autism, automated behavioral coding of early symptoms, the use of music therapy to promote speech, and the effectiveness of autologous and allogeneic cord blood for reducing symptoms in young children with autism. She is currently serving as president of INSAR (International Society of Autism Research).

Presentation Abstract (4:30 presentation)

Early intervention and brain plasticity in autism