Early Life Environmental Determinants of Health and Disease

According to the developmental origins of health and disease paradigm, early life environmental stressors can alter developmental trajectories by disrupting the homeostasis of one or more systems, and in doing so produce identifiable biochemical signatures characteristic of the disease process or outcome. Dr. Arora and his colleagues at the Icahn School of Medicine at Mount Sinai in New York have been working to identify environmental and metabolic signatures that predict the risk of later life neurological disorders. Central to this work is the development of technologies that use human teeth to reconstruct prenatal and early childhood environmental exposures and the biological responses to those exposures. In this presentation, he will share recent findings from his laboratory on autism spectrum disorder and amyotrophic lateral sclerosis (Lou Gehrig's disease).

Biographical Sketch

Dr. Manish Arora is the Edith J. Baerwald Professor and Vice Chairman of Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai in New York. He also the Division Chief of Environmental Health. Dr. Arora graduated as a dentist from India, undertook postgraduate public health training in Australia and postdoctoral training at the Harvard School of Public Health. Dr. Arora received the New Innovator (DP2) Award from the NIEHS and NIH Director's office in 2014. He is the recipient of the PECASE medal from the office of President Barrack Obama.