

What causes autism? Three experts, invited speakers from the Icahn School of Medicine at Mount Sinai, New York, will share their views. A description of a joint research project will also be presented, together with some preliminary results.

Heterogeneous clinical features of Autism Spectrum Disorder (ASD), biomarker development, and genetic discovery

Alex Kolevzon, MD, is Professor of Psychiatry and Pediatric at the Icahn School of Medicine at Mount Sinai. He is a child and adolescent psychiatrist whose research focuses on developing new treatments in ASD and related neurodevelopmental disability. His talk will focus on the heterogeneous clinical features of ASD, biomarker development, and genetic discovery. Further, he will clarify how advances in the understanding of the genetic architecture of ASD is informing new treatment development.

Demystification of the concept of heritability in autism, and description of the challenges of finding environmental risks

Avi Reichenberg, PhD, is Professor of Psychiatry and Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai in NY. He is a neuropsychologist and a psychiatric epidemiologist and studies environmental and genetic risk factors for psychiatric disorders. His talk will attempt to demystify the concept of heritability in autism, and to describe the challenges of finding environmental risks for the disorder.

Statistical methods for evaluating the impact of prenatal exposures on neurodevelopment

Chris Gennings, PhD, is Professor of Biostatistics in the Department of Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai. Her research program focuses on biostatistical methods development for mixtures of environmental exposures and nutrition. Her talk will demonstrate statistical methods for evaluating the impact of prenatal exposures on neurodevelopment, including autism and cognitive function. She will also describe a novel metric for dietary nutrition.

What is already known about early exposure to hormonally active chemicals and ASD risk?

Shanna Swan, PhD, is Professor in Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai in NY. She is an environmental epidemiologist and studies the impact of early life environmental exposures on development, with an emphasis on sex differences in the impacts of these exposures. Her talk will review what is known about early exposure to hormonally active chemicals and ASD risk and will present new data on this question from her ongoing pregnancy cohort study.

The Autism and Prenatal Endocrine Disruptures (A-PED) study

Susanna Edlund is an experienced child phycologist specialized in autism and is currently working at the Childand Adolescent Psychiatric clinic in Lund. She is a PhD student in the current A-PED project and will give a brief description of the study. She will also present preliminary results obtained from information extracted from over 1000 ASD patient journals in Skåne, regarding perinatal risk factors, co-morbidity, and heredity.

Welcome!

Organizers: The Lund-fraction of the A-PED study; Karin Källén, Christian Lindh, and Nils Haglund

Notification of participation to: <u>Karin.kallen@med.lu.se</u>. The number of participants is limited to 70 persons.