RESEARCH CONNECTIONS AT GRAND ROUNDS

Bacterial density

Featured Speakers JILL HAMILTON MD

Chief, Division of Endocrinology; Director, Centre for Healthy Active Kids; Senior Associate Scientist, Program in Translational Medicine, Hospital for Sick Children; Professor, Dept of Paediatrics, University of Toronto

JAYNE DANSKA Phd

Tanenbaum Chair in Molecular Medicine; Senior Scientist, Program in Genetics and Genome Biology; Associate Chief, Faculty Development and Diversity, Hospital for Sick Children Research Institute; Professor, Dept of Immunology, Dept of Medical Biophysics University of Toronto

Drivers of type 2 diabetes in youth: Immunity, inflammation and the gut microbiome

function

Type 2 diabetes (T2D) is characterized by insulin resistance, hyperglycemia, dyslipidemia and decreased pancreatic β -cell insulin secretion. The incidence of obesity in childhood, a key risk factor for T2D, has increased dramatically worldwide. However, metabolic dysfunction has not been well characterized in pediatric populations where diagnostic parameters to predict metabolic disease are largely based on research in adults. Our collaborative research project is to examine the composition and function of the gut microbiome in obese adolescents enrolled in the SickKids Team Obesity Management Program (STOMP) clinic. We have identified striking variation in the community of intestinal microbes (the microbiome) among these adolescents and correlations between microbiome features and metabolic parameters associated with insulin resistance and T2D risk.

1.0

200

0

400

600

պատարաստրուստություն

1000

1200

1400

800

Base position in 16S rRNA gene

Mean frequency o most common resid in 50 base windov 90 2.0 88

Panel

Dr. Alessandra Granato, Senior Research Associate, Program in Genetics and Genome Biology

Dr. Paul Ryan, Resident, Division of Paediatrics, Hospital for Sick Children

SickKids Research INSTITUTE

Wednesday, February 15, 2023, 9 a.m to 10 a.m.

Hybrid format (virtual & in-person)

Daniels Hollywood Theatre OR Join on Zoom: https://ca01web.zoom.us/j/63164761636?pwd=bzhvbEdxZ3ZFaDIzYWRMWE12dzJQZz09 Meeting ID: 631 6476 1636 Passcode: 553247