Curriculum Vitae

Personal Information

Title	**Dr.**
Name	**Williams Turpin**
Degree	**PhD**
Country	**Canada**
Affiliation	**Mount Sinai Hospital**
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Educational Background

Dr. Turpin completed his PhD in France in the field of food microbiology. Funded by the French ministry of research, he gained extensive experience in microbiology, molecular biology, cells culture, gnotobiology, and bioinformatic. He pursued his scientific journey in human microbiology in Toronto (Canada) as a postdoctoral fellow work with clinical Scientists Drs. Mark Silverberg and Ken Croitoru. Member of the Crohn s and Colitis Canada GEM project recipient of a CIHR fellowship award he revealed the influence of human genetic on the composition of the human gut microbiota. Dr. Turpin acquired extensive knowledge in multi-omic analysis notably on microbiome, gut barrier function, genotyping, gut inflammation, proteomic, metabolomic, and host serology. His analysis skills include GWAS, Mediation analysis, Machine learning, Bioinformatic.

Professional Career

Senior Research associate 2020- present: Translational research. Development of a multi-omic prediction model to identify individuals with high risk to develop Crohn's disease in healthy first degree relatives of Crohn's disease subjects.

Research associate 2017- 2020: Translational research. Identification and analysis of biomarkers that predict onset of Crohn's disease in healthy first degree relatives of Crohn's disease subjects.

Postdoc Fellowship 2012-2017: Translational research. Association of Crohn's disease risk alleles with the intestinal microbiome in healthy first-degree relatives of Crohn's disease subjects. Assessment of mucosa-associated microbiota in Ileoanal Pouches.

PhD, September 2008-December 2011: Food process. Thesis Topic: estimation of the probiotic and nutritional potential of lactic acid bacteria present in the microbiota of a fermented cereal-based food using a molecular approach.

Research Field

Microbiology
Inflammatory Bowel Disease
Translational research
Gut barrier function
Pre-disease pathogenesis
Dietary intervention
Diet and Nutrition
Metabolomic
Proteomic
Anti-microbial serology
Bioinformatic (16s, Shotgun sequencing)
Machine Learning
Gnotobiotic mice
GWAS
Molecular biology
Cell culture
Bile acids

Environmental exposures

Main Scientific Publications

Microbiome is associated with onset of Inflammatory bowel disease

1. Gut Microbiome Composition is associated with future onset of Crohn's Disease in Healthy First-Degree Relatives. PMID: 37263307, 2023. ***Gastroenterology***
2. Novel fecal biomarkers that precede clinical diagnosis of ulcerative colitis. PMID: 33310084. 2020 ***Gastroenterology***

Host genetic association with microbiome composition

3. Association of host genome with intestinal microbial composition in a large healthy cohort. PMID: 27890791, 2016 Nov;48(11):1413-1417 ***Nature Genetics***
4. Large-scale association analyses identify host factors influencing human gut microbiome composition. PMID: 33462485, 2021 Jan 18 ***Nature Genetics***

Association of serological markers with Inflammatory bowel disease onset

5. Anti-microbial antibody response is associated with future onset of Crohn's disease independent of altered gut barrier function, subclinical inflammation, and genetic risk. PMID: 34293299, 2021 **Gastroenterology**
6. Anti-integrin αvβ6 autoantibodies predate UC diagnosis and are associated with adverse disease related outcomes. PMID: 36634824, 2023. ***Gastroenterology***
7. Immune response and barrier dysfunction-related proteomic signatures in preclinical phase of Crohn's disease highlight earliest events of pathogenesis. PMID: 36788016, 2023 ***Gut***

Gut barrier function and risk of Inflammatory bowel disease onset

8. Increased Intestinal Permeability Is Associated With Later Development of Crohn's Disease. PMID: 32791132, 2020, ***Gastroenterology***
9. Altered gut microbiome composition and function are associated with gut barrier dysfunction in healthy relatives of patients with Crohn's disease. PMID: 35850197, 2022 ***Gastroenterology***
10. Mediterranean-Like Dietary Pattern Associations With Gut Microbiome Composition and Subclinical Gastrointestinal Inflammation. PMID: 35643175, ***Gastroenterology***