Program Name:	St. Jude-VIVA Survivorship Series 4 Webinar #1
Event Date:	Friday, 31 October 2025
Event Time:	8:00pm – 9:30pm (Singapore Time)

Programme Synopsis

Lecture Title:
Microbiomes and Non-communicable Diseases in Children
Professor Ting Fan Leung, The Chinese University of Hong Kong
Microbes at various mucosal sites are potent driver of immunological maturation. Under the epithelial barrier hypothesis, there are cross-talks between microbiomes at different epithelial interface and inflammatory activity at those organs. Such processes modulate the occurrence and severity of a range of non-communicable diseases ranging from allergic diseases, neurodevelopmental disorders to obesity in children. This presentation illustrates the epidemiology, mechanistic links and possible mitigating strategies through microbe-based options for these prevalent paediatric conditions.

Lecture Title:
Nutritional Modulation of Microbiome in Cancer
Dr Sunny Wong, Nanyang Technological University
Emerging research reveals that the gut microbiome plays a pivotal role in cancer development, progression, and response to therapy. Nutrition, as a key environmental factor, profoundly shapes the composition and function of the microbiota. This seminar explores how dietary components—such as fiber, fats, and proteins—modulate the gut microbial community. Moreover, the interplay between specific dietary patterns and microbial metabolites highlights novel avenues for cancer prevention and adjunctive therapy. Understanding the mechanisms by which nutrition modulates the microbiome may offer innovative strategies to improve cancer outcomes and personalize nutrition-based interventions in oncology.

Gut Feelings: How Dietary Diversity Influences Health from the Inside Out

Ms. Winsy Leung, The Chinese University of Hong Kong

The gut microbiome plays a central role in human physiology, contributing to nutrient metabolism, immune modulation, and maintenance of mucosal integrity. Among the various environmental factors influencing its composition, dietary diversity is a primary determinant. Diets characterized by a broad range of plant-based, fiber-rich, and minimally processed foods are associated with increased microbial richness and functional resilience. In contrast, Western industrialized dietary patterns—high in saturated fats, refined sugars, and ultra-processed ingredients—are linked to reduced microbial diversity and dysbiosis. These shifts in microbial ecology have been implicated in the pathogenesis of metabolic, inflammatory, and oncologic conditions, particularly those affecting the gastrointestinal tract. Understanding the interplay between diet and the gut microbiome provides a critical foundation for advancing nutritional strategies that support long-term health and disease prevention.

Presenter Bio

Professor Ting Fan Leung

Alice Ho Miu Ling Nethersole Charity Foundation Professor of Paediatrics
Department of Paediatrics
The Chinese University of Hong Kong
Shatin, New Territories
Hong Kong SAR

Professor Leung graduated from The Chinese University of Hong Kong in 1992, and obtained Doctor of Medicine degree at his alma mater in 2004. He received Immunology and Allergy subspecialty training in The Hospital For Sick Children in Toronto, Canada in 1997-98. Professor Leung is currently a professor in Department of Paediatrics at The Chinese University of Hong Kong and Head of the Paediatric Allergy team at the Prince of Wales Hospital. Professor Leung is a Co-Chair of Microbiome and Biodiversity Committee of Asia Pacific Association of Allergy, Asthma and Clinical Immunology and Past President of Hong Kong Society for Paediatric Immunology, Allergy and Infectious Diseases. He has published more than 440 articles in peer-reviewed journals with an H-index of 49. His main research interests include natural history, novel diagnostics, genetics and host-microbe interactions of allergic diseases.

Associate Prof Sunny Wong

Associate Professor of Nutrition, Digestion and Metabolism and Assistant Dean, Academic Medicine, Lee Kong Chian School of Medicine
Associate Professor, Lee Kong Chian School of Medicine
Nanyang Technological University
Singapore

Dr Sunny Wong is a clinician-scientist and an Associate Professor at the Lee Kong Chian School of Medicine, Nanyang Technological University Singapore. He received his MBChB at the Chinese University of Hong Kong, and his DPhil in University of Oxford on human genetics and infectious diseases. He completed his clinical training in gastroenterology and endoscopy in the Prince of Wales Hospital Hong Kong. His main research interest is on gut microbiome, investigating the host-microbe interaction in digestive and metabolic diseases, and exploring this for discovery of novel biomarkers and therapeutics. He has won several awards, including the Asia Pacific Digestive Week Emerging Leaders Lectureship (2021), the Sir David Todd Lectureship (2020), the Lo Ying Shek Chi Wai Foundation Meritorious Research Award (2020), and the

Croucher Foundation Award (2014). He has published over 180 peer-reviewed articles including papers in Nature Genetics, Nature Communications, Gastroenterology and Gut. He is currently an Associate Editor for the Journal of Gastroenterology and Hepatology.

Ms. Winsy Leung

Department of Paediatrics
The Chinese University of Hong Kong
Hong Kong SAR

Winsy Leung is a U.S.-credentialed Registered Dietitian with specialized training in paediatric nutrition. She received her Master's degree in Clinical Nutrition from New York University, U.S.A., and is currently pursuing a PhD in Medical Sciences at the Department of Paediatrics, The Chinese University of Hong Kong. Her research focuses on childhood eating challenges in Hong Kong, including picky eating, food neophobia, and avoidant/restrictive food intake disorder (ARFID). In addition, she is exploring the role of diet in shaping the gut microbiota and its potential links to non-communicable paediatric conditions such as eczema and autism spectrum disorder. Winsy is passionate about turning scientific insights into everyday solutions that support child development.

Moderator Bio

Dr Stephanie Dixon

Assistant Member, Department of Oncology,
Division of Survivorship, St. Jude Children's Research Hospital
USA

Dr. Stephanie Dixon MD, MPH is an Assistant Member in the Division of Cancer Survivorship at St. Jude Children's Research Hospital. Dr. Dixon received her medical degree from the University of Michigan College of Medicine and her Master's of Public Health from the Rollins School of Public Health at Emory University. She completed a combined internal medicine and pediatrics residency at the University of Cincinnati and Cincinnati Children's Hospital followed by fellowship in pediatric hematology and oncology and childhood cancer survivorship at St. Jude. She joined the faculty at St. Jude in 2020 where her clinical care focuses on patients with lymphoma and survivors of childhood cancer. Dr. Dixon's research focus is in late mortality and cardiometabolic health outcomes in survivors of childhood cancer including translating findings from observational research into interventions to prevent or mitigate late-effects of treatment. Her combined experience in survivorship, internal medicine, obesity medicine and population health is uniquely suited for research focused on cardiometabolic outcomes and targets for intervention to reduce risk in children and adolescents being treated for cancer and survivors.