




Probiotics in Periodontal & Oral Mucositis Management:

Rethinking Adjunctive Care in Dentistry

 **Wednesday, 13th August 2025**

 **6.00pm – 9.30pm**

 **Carlton Hotel, Singapore**



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To Register

Speakers



**Professor
Dr Wim Teughels
(DDS, PhD)**

KU Leuven, Department of Oral Health Sciences, Periodontology & Oral Microbiology, Belgium



**Assistant Professor
Dr Charlene Goh**

Associate Consultant, National University Centre of Oral Health Singapore, National University Health System, Singapore

Agenda



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Time	Topic	Speaker
6:00 – 7:00PM	Dinner & Registration	
7:00 – 7:10PM	Opening Remark	Dr Weelyn Teh
7:10 – 8:30PM	Advancing Periodontal Outcomes: Evidence-based Microbiome Modulation with <i>L. reuteri</i> Probiotics	Prof Wim Teughels
8:30 – 9:00PM	Effect of <i>L. reuteri</i> Administration on Cancer Therapy-induced Oral Mucositis	Asst Prof Charlene Goh
9:00 – 9:30PM	Interactive Closing Session: Rethinking Adjunctive Care in Dentistry	Dr Weelyn Teh & Speakers



Professor Dr Wim Teughels

DDS, PhD

Katholieke Universiteit Leuven, Department of Oral Health Sciences, Periodontology



Professor Wim Teughels graduated in 2000 as a dentist at the Katholieke Universiteit Leuven (KULeuven) in Belgium. At the same university, he obtained in 2006 the degree of specialist in Periodontology and he defended successfully his PhD thesis entitled "Microbial Interactions Involved in Bacterial Colonization of Epithelial Cells". He also received a "European Federation of Periodontology (EFP) certificate in Periodontology". In 2007, he was a visiting researcher at the University of California at Los Angeles (UCLA) and he was appointed assistant professor at the Faculty of Medicine of the KULeuven. His teaching obligations consist of a variety of subjects within the field of Periodontology and Human Anatomy. Currently, he works as a professor at the KULeuven and as the vice-head of the Periodontology section of the University Hospitals Leuven. He holds a visiting professorship at Cukurova University (Turkey) and held a visiting professorship at Universiti Malaya (Malaysia) in 2024.

His research focuses on Periodontology and oral microbiology with a special emphasis on bacterial adhesion, microbial interactions, antimicrobials and probiotics. His research work has been funded by grants of the KULeuven, Fund for Scientific Research Flanders, NIH (NIDCR) and different companies. This has led to more than 200 publications in international journals and more than 10 chapters in books. He received several national and international awards and is frequently invited both nationally as internationally for lectures regarding the concept of "probiotics". In 2012, Prof. Teughels became an associate editor for the Journal of Periodontal Research and an associate editor for the "Carranza's Clinical Periodontology" textbook.

Comprehensive information about his research topics, expertise, teaching, and publications can be found on his KU Leuven profile: <https://www.kuleuven.be/wieiswie/en/person/00034705>.

Lecture Title:

*Advancing Periodontal Outcomes: Evidence-based Microbiome Modulation with *L. reuteri* Probiotics*

Lecture Synopsis:

Traditional periodontal therapies focus on mechanical plaque removal, antiseptics, and adjunctive antibiotics. However, concerns over antimicrobial resistance and the disruption of microbial balance highlight the urgent need for alternative approaches. Since most plaque-related oral diseases originate, at least partially, from a dysbiosis within the dental plaque biofilm, restoring microbial homeostasis with beneficial bacteria such as *L. reuteri* probiotics has shown significant potential.

This lecture will explore the latest scientific evidence on probiotic use in periodontitis, including key clinical studies demonstrating their efficacy. We will discuss how to select the right probiotic strains, their mechanisms of action, and what current guidelines say about their role in periodontal therapy. Through real-world case studies, attendees will gain practical insights into integrating probiotics into patient care, ultimately empowering them to adopt this innovative approach confidently.

Assistant Professor Dr Charlene Goh

Dr. Charlene Goh is an Assistant Professor at the Faculty of Dentistry, National University of Singapore, and an Associate Consultant at the National University Centre for Oral Health Singapore. She holds a Doctor of Public Health (Epidemiology) and a Master of Public Health from Columbia University, alongside a Bachelor of Dental Surgery from NUS.



Her research focuses on the oral-systemic link, particularly the nitrate-nitrite-nitric oxide pathway, and how digital technologies such as mHealth, AI, and wearable sensors can support disease prevention and sustainable behavior change. Dr. Goh serves on the Editorial Board of the Journal of Clinical Periodontology and is a two-time recipient of the NUS Faculty Teaching Excellence Award for her contributions to cariology, epidemiology, and evidence-based dentistry education.



Speaker's Lecture:

Effect of L. Reuteri Administration on Cancer Therapy-induced Oral Mucositis

Oral mucositis (OM) is a common and often dose-limiting adverse effect of cancer therapy, particularly among patients undergoing radiotherapy for head and neck malignancies. Despite its clinical significance, effective preventive and therapeutic options remain limited.

This session, delivered by Assist. Prof Dr. Charlene Goh, will introduce a landmark randomized controlled trial conducted at the National University Cancer Institute, Singapore, evaluating the safety and therapeutic potential of the probiotic strains *Limosilactobacillus reuteri* DSM 17938 and ATCC PTA 5289 in the management of radiotherapy-induced OM. As one of the first clinical investigations of its kind in this patient population, the study underscores a growing interest in microbiome-based interventions as part of integrated supportive cancer care.

The lecture will also briefly reference foundational preclinical research that laid the scientific basis for this clinical trial, highlighting the biological plausibility of probiotic therapy in mucosal protection. This session promises to offer valuable insights for clinicians, researchers, and healthcare professionals exploring innovative approaches to improving patient quality of life during cancer treatment.