**Inaugural NUS Dentistry-NUCOHS Clinical Dentistry and Research Symposium (CDARS)**

## Advancing Clinical Dentistry through Research and Innovation

# PRINCIPLES OF FLAP DESIGN & BONE GRAFTING IN REGENERATIVE DENTAL SURGERY

Date : Saturday, 16 May 2026
Time : 1:00 PM to 5:00 PM
Venue : Level 10 Seminar Room (S10-05), NUS Dentistry, 9 Lower Kent Ridge Road, Singapore 119085
CPE : 4 Points

| Categories | Early Bird (Extended to 30 April 2026) | Regular (From 1 May 2026) |
|---|---|---|
| Lecture | $200 | $225 |
| Lecture & Hands-on Workshop | $400 | $450 |

**Register here**

SCAN HERE

For enquiries, please contact cdars@nus.edu.sg

## Workshop Overview

This half-day workshop introduces the core principles of regenerative dental surgery, alongside updates on the latest technologies and clinical techniques. Participants will gain practical experience through hands-on sessions in flap design, membrane handling, and bone grafting.

Invited speakers from Malaysia and Taiwan will share their surgical experiences and clinical insights, providing participants with valuable perspectives for enhancing their practice.

**Organised by:** NUS National University of Singapore | Centre for Advanced Dental Education, Faculty of Dentistry

**Sponsored by:** Osteopore® Empowering Natural Tissue Regeneration | ESSEX

# Agenda

| Time | Programme |
|---|---|
| 12:50 – 13:00 | Registration |
| 13:00 – 13:10 | Opening Address<br>*By A/Prof Raymond Wong Chung Wen* |
| 13:10 – 13:30 | "Guided Bone Regeneration: Principles and Practice"<br>*By Dr Sng Jie Han Timothy* |
| 13:30 – 14:00 | "Open Membrane Technique for Socket Preservation & Guided Bone Regeneration"<br>*By Prof. Dr. David Ngeow* |
| 14:00 – 14:30 | Tea Break |
| 14:30 – 14:50 | "Application of Alloplastic Bone Graft with Polycaprolactone (PCL) Membrane on Secondary Socket Healing in Third Molar Surgery"<br>*By Dr Tan Chuey Chuan* |
| 14:50 – 15:10 | "Clinical Applications of Osteopore Mesh in Implant Bone Regeneration and Full-Arch Rehabilitation"<br>*By Dr Wu Hung I* |
| 15:10 – 15:30 | Preview of new product launch (Osteopore)<br>*By Dr Lim Yu Jing* |
| 15:30 – 16:55 | Hands-on (dry models)<br>• Incision and Flap Design<br>• Membrane Handling<br>• Primary Closure & Suturing Techniques |
| 16:55 – 17:00 | Closing Address<br>End of Course Feedback |

## Speaker/Trainer

**Associate Professor Raymond Wong Chung Wen**

A/Prof Raymond Wong is the Vice Dean, Graduate Studies and Lifelong Learning; Associate Professor (tenured). Clinically, he serves as the NUHS Cluster Lead (OMFS) and Senior Consultant in the Division of OMFS at the National University Centre for Oral Health, Singapore. He holds several international leadership roles, including Councillor to the International Association of Oral & Maxillofacial Surgeons (IAOMS), Member of the IAOMS Education Committee, Executive Councillor-at-Large of the Asian Association of Oral & Maxillofacial Surgery, and Regional Affairs Officer for the Asia Pacific Board of AO CMF.

He obtained his Bachelor of Dental Surgery from the University of Malaya in 1997, was awarded the University Entrance Scholarship and Book Prizes for Excellence for the First, Second and Final (Part 1) Professional Examinations. He received the sole ASEAN Scholarship to pursue his Master of Dental Surgery (OMFS) at the National University of Singapore, graduating in 2003.

From 2007 to 2008, he went to the United Kingdom on a Health Manpower Development Program award from the Singapore Ministry of Health in Advanced Orthognathic Surgery, working as a Specialist Registrar in Trauma and Orthognathic Surgery in the Sunderland Royal Hospital, England and as a Clinical Fellow in Cleft and Orthognathic Surgery at Morriston Hospital, Swansea, Wales. He obtained his PhD (Medical Sciences) from Radboud University, the Netherlands, in 2011.

His research interests are in the technological implementation of the 4th Industrial Revolution in surgery, e.g., patient-specific implants, 3D printing, obstructive sleep apnoea, and clinical research outcomes. He has published more than 50 high-impact, internationally indexed, peer-reviewed publications and serves on the Editorial Boards of Nature Scientific Reports and BMC Oral Health.

## Speaker/Trainer

**Associate Professor Intekhab Islam**

A/Prof Intekhab Islam is the Discipline Director of Oral and Maxillofacial Surgery at the Faculty of Dentistry, National University of Singapore, and a Senior Consultant at the National University Centre for Oral Health Singapore (NUCOHS).

He currently also serves as Chairman of the Chapter of Oral & Maxillofacial Surgeons, College of Dental Surgeons, Singapore.

He obtained his Bachelor of Dental Surgery from the University of North Bengal, India, and was later awarded the NUS Research Scholarship, after which he completed his MSc in Restorative Dentistry at the National University of Singapore.

He subsequently underwent postgraduate training in Oral and Maxillofacial Surgery at NUS and completed a PhD in Bone Tissue Engineering.

Intekhab further pursued subspecialty training in Temporomandibular Joint reconstruction and replacement at Ninewells Hospital, Dundee, Scotland, under the Academic Medicine Development Award jointly awarded by the NUHS and the Ministry of Health, Singapore.

His research interests include bone tissue engineering and the use of virtual and augmented reality for surgical simulation, training, and dental education. He is also a recipient of the NUS and Faculty of Dentistry Teaching Excellence Awards.

## Speaker/Trainer

**Dr Sng Jie Han Timothy**

Dr Timothy Sng is currently an Associate Consultant at the National University Centre for Oral Health Singapore (NUCOHS) and an Academic Fellow at the Faculty of Dentistry, NUS.

He graduated from the National University of Singapore (NUS) with a Bachelor of Dental Surgery in 2017. As a recipient of the NUS Faculty of Dentistry Academia Talent Development Programme (ADTP) Award, he pursued specialist training under the NUS Oral & Maxillofacial Surgery residency programme in 2020.

He obtained his Master of Dental Surgery (Oral & Maxillofacial Surgery) in 2023 and completed his advanced surgical training, attaining specialist accreditation in 2025.

His clinical and research interests include temporomandibular joint diseases, orthognathic surgery for facial deformities, and paediatric maxillofacial surgery. In 2024, he was awarded the AO CMF Asia Pacific Fellowship at Peking University School of Stomatology, where he further expanded his expertise in the surgical management of cleft and craniofacial deformities.

He is actively involved in undergraduate and postgraduate teaching and serves as the curriculum coordinator for the Oral and Maxillofacial Surgery undergraduate module at NUS. He has also presented his research and delivered lectures at regional and international conferences, reflecting his ongoing engagement in academic surgery and education.

## Synopsis

**Guided Bone Regeneration: Principles and Practice**

This session introduces key surgical principles of flap design and their critical role in successful guided bone regeneration (GBR). Participants will explore practical considerations such as flap elevation, tension-free closure, and preservation of vascularity to optimise healing and regenerative outcomes.

The session will also review commonly used barrier membranes and bone graft materials, inclyding their clinical indications and handling techniques. Together, these concepts provide a practical foundation for predictable regenerative oral surgery in everyday clinical practice.

## Speaker/Trainer

Professor David Ngeow

Prof David Ngeow is currently a lecturer in the Department of Oral & Maxillofacial Clinical Sciences, Faculty of Dentistry, University of Malaya. He graduated from the University of Malaya in 1992 and was a private practitioner for 9 months before he was offered the post of tutor-ship at his alma mater.

Three years later, he served as a Senior House Officer at the Queen Victoria Hospital, East Grinstead, England, where he obtained his Fellowship in Dental Surgery from the Royal College of Surgeons in Ireland and the Royal College of Surgeons of England.

Upon returning to Malaysia, he became a pioneer lecturer at Universiti Kebangsaan Malaysia during its early establishment and later joined the University of Malaya in 2000.

Professor Ngeow has an extensive academic and research portfolio, having published 11 book chapters, 28 journal articles, and 219 scientific papers. He was recognised in the World's Top 2% Scientists (2022 and 2024) in the report by Stanford University.
An active educator and international speaker, he has been invited to speak at 182 events and programmes and has organised and delivered lectures in 48 implant courses. His latest area of interests focus on bone grafts, membranes, and synthetic substitutes.

## Synopsis

**Open Membrane Technique for socket preservation and guided bone regeneration**

There are many bone graft materials available for socket preservation and guided bone regeneration, namely autograft, allograft, xenograft, and synthetic bone; in addition, there are many types of membranes available in our armamentarium. They include collagen membrane, titanium mesh, and synthetic barrier.

Some of these bone grafts and materials help avoid ethical issues for patients who do not agree to have products made of previously living human or animal tissue. This presentation shares some of the speakers' experience performing various cases of open membrane technique for socket preservation and guided bone regeneration.

## Speaker/Trainer

Dr Tan Chuey Chuan

Dr Tan Chuey Chuan is a Lecturer in the Department of Oral and Maxillofacial Clinical Sciences, Faculty of Dentistry, University of Malaya. She obtained her Doctor of Dental Surgery (DDS) from Universiti Sains Malaysia in 2009 and subsequently served with the Ministry of Health Malaysia until 2019.

During her specialist training, she was awarded the Membership of the Faculty of Dental Surgery (MFDS) from the Royal College of Surgeons of Edinburgh.

She later completed her Master of Clinical Dentistry (Oral and Surgery) with distinction at the University of Malaya.

Dr Tan is actively involved in clinical practice, teaching, and research. Her academic and clinical interests include oral implantology, traumatology, dentoalveolar surgery, and craniofacial deformities. She is committed to advancing evidence-based practice and contributing to the training and development of the next generation of oral and maxillofacial surgeons.

## Synopsis

**Application of Alloplastic Bone Graft with Polycaprolactone (PCL) Membrane on Secondary Socket Healing in Third Molar Surgery**

This session will present the clinical outcomes of using an alloplastic bone graft in combination with a polycaprolactone (PCL) membrane in an open technique following mandibular third molar surgery. Periodontal defects distal to the second molar remain a common concern after impacted third molar removal, potentially compromising long-term periodontal stability.

Drawing from a prospective clinical study, this session will highlight the healing outcomes of PCL membrane when used with alloplastic grafting. Emphasis will be placed on radiographic bone fill, reduction in probing depth, soft tissue healing, and keratinised tissue regeneration.

## Speaker/Trainer

Dr Hung I Wu

Dr Hung I Wu is an implant surgeon based in Taipei, Taiwan, with extensive clinical experience in advanced implant surgery and full-arch rehabilitation. He is actively involved in the ownership and management of four dental clinics in the Greater Taipei region, where his clinical practice focuses on complex implant treatment and comprehensive full-mouth reconstruction.

Dr Wu specialised in the surgical and prosthetic management of advanced implant cases, including full-arch implant rehabilitation (All-on-X), guided bone regeneration (GBR), bone augmentation procedures such as BBA, and advanced implant protocols. He frequently manages cases involving severe tooth loss, significant bone resorption, and complex restorative challenges.

He serves as an official lecturer for the Bredent Fast & Fixed system, where he shares clinical expertise and treatment strategies related to full-arch implant therapy.

Dr Wu is actively engaged in international continuing education and collaboration, having completed advanced training programmes, including ZAGA Barcelona, Full Arch Club Lisbon, and specialised courses in pterygoid and advanced implant techniques, as well as digital full-arch workflows.

Through ongoing international collaboration and continuous education, Dr Wu remains committed to advancing predictable full-mouth rehabilitation through evidence-based treatment planning, precise surgical execution, and modern digital workflows.

## Synopsis

**Clinical Applications of Osteopore Mesh in Implant Bone Regeneration and Full-Arch Rehabilitation**

Applications will include bone augmentation around single implant sites as well as its practical use in All-on-X full-arch implant rehabilitation when localized bone loss is present. Pre-operative and post-operative CBCT imaging, intraoperative photographs, and long-term clinical follow-up will be shared to demonstrate surgical planning, treatment workflow, and clinical outcomes.

# NUS Dentistry Course Registration, Payment, Withdrawal, and Cancellation Guidelines

1. **Registration**

- **Application Processing**: All applications are processed strictly on a first-come, first-served basis.
- **Confirmation of Enrolment**: Enrolment is deemed confirmed only upon full receipt of the course fee by NUS Dentistry.

2. **Payment**

- GST Inclusion: All published course fees are inclusive of the prevailing Goods and Services Tax (GST).

3. **Withdrawals and Refunds**

3.1 **Withdrawal Procedure**

- Participants must submit their withdrawal request in writing via email.
- All required supporting documents must be provided via email after the submission of the withdrawal request.

3.2 **Refund Policy**

- More than 30 Days Before Course Commencement (i.e., before 16 April 2026): Participants are eligible for a full refund.
- Within 30 Days of Course Commencement or Non-Attendance (No-Show): No refund will be granted. Participants remain fully liable for the full course fee.

4. **Amendments, Cancellations or Postponements by NUS Dentistry**

- NUS Dentistry reserves the right to cancel, reschedule, or amend course dates at its discretion.
- **In the event of a course cancellation**: A full refund of the course fee will be issued to all registered participants.
- **Liability for Expenses**: NUS Dentistry shall not be responsible for any travel, accommodation, or other expenses incurred by participants as a result of course cancellation or postponement.