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Singapore Oral Health Congress

Embracing Change, Preparing for the Future

Date : 4 August 2019, Sunday
Time : 9.00am - 5.00pm
Venue : The Academia, Auditorium, Level 1
20 College Road, Singapore 169856

Time	Programme
8.30am	Registration
9.00am	Welcome & Opening Address
9.20am	**Cybersecurity And Dental (And Just About Everyone Else)** **Mr Lim Thian Chin**
9.50am	*Keynote Speaker:* **3D Imaging Using CBCT - Do's And Don'ts** **Prof Michael M. Bornstein**
10.50am	Tea Break & Exhibition
11.20am	*Keynote Speaker:* **Dental Implants: How Short Can We Go?** **Dr Nadja Naenni**
12.20pm	**Regeneration Of The Dentoalveolus - Engineering Strategies** **CI A/Prof Goh Bee Tin**
12.50pm	Lunch
1.50pm	**Management Of Failing Implants** **Dr Nadja Naenni**
2.50pm	**Preparing For The Silver Tsunami: Treatment Planning For The Elderly** **Dr See Toh Yoong Liang**
3.25pm	Tea Break & Exhibition
3.55pm	**Clear Aligner Therapy Vs Fixed Appliance Therapy - Will The Cat Get Fat?** **Dr Jason Chua**
4.25pm	**Can One File Rule Them All?** **Dr Wu Siwen**
5.00pm	End

Prof Michael M. Bornstein

Clinical Professor In Oral And Maxillofacial Radiology
Applied Oral Sciences, The University Of Hong Kong
Prince Philip Dental Hospital

Michael Bornstein has been appointed in 2016 as Clinical Professor in Oral and Maxillofacial Radiology at the Faculty of Dentistry, The University of Hong Kong, Hong Kong SAR, China. He is also Visiting Professor at the OMFS-IMPATH Research Group, Department of Imaging and Pathology, University of Leuven, Belgium. He obtained his dental degree (1998) and thesis (Dr. med. dent., 2001) at the University of Basel. He continued with a specialisation in oral surgery and stomatology in Basel (1998-1999) and Bern (2000-2002). In 2004, he was visiting assistant professor at the Department of Periodontics at the University of Texas Health Science Center at San Antonio, USA. From 2007-2014 he was head of the Section of Dental Radiology and Stomatology, University of Bern. In 2009, he obtained the Habilitation (Privatdozent/PhD) and in 2014 he became Asscociate Professor in the field of Oral Surgery and Stomatology.

His fields of research include cone beam computed tomography (CBCT) in clinical dental practice, diagnostic imaging, stomatology/oral medicine, GBR procedures and dental implants. He has published over 140 original articles, and is the author/co-author of numerous case reports, review articles, and book chapters.

3D Imaging Using CBCT - Do's And Don'ts

The introduction of cone beam computed tomography (CBCT) has created new diagnostic possibilities in dental medicine. Although computerized tomography (CT) has been available for quite some time, its use in dentistry has always been limited because of cost, access, and radiation. CBCT has been established as a valuable imaging technique in many dento-maxillofacial specialties, ranging from oral implant surgery to orthodontics. CBCT serves generally two main purposes withing these disciplines: diagnostic imaging and treatmemt planning. For the use of CBCT, one internationally accepted core principle is that all data accquired through the radiographic modality should be evaluated by a trained person. For CBCT, this implies that the whole volume should be analyzed, not only focusing on the basic question indicating the scan, but also accounting for incidental findings in the neighboring areas. It is reasonable to expect dentists to perform evaluation of images in the familiar area of teeth and their supporting structures, while advocating a specialist evaluation for other anatomical areas. For the use of CBCT, there is still considerable ambiguity in offering a decisive suggestion to routinely use this technique for diagnostic procedures. The main reason for this is that the radiation dose of CBCT, despite being lower than that of conventional CT, negates routine clinical usage, when one applies the principle of as low as reasonable achievable (ALARA). Recently, low-dose protocols have been recommended to assist practitioners in dose optimisation. While such protocols for CBCT devices are marketed today by many brands available, there is only limited evidence to demonstrate their diagnostic quality and acceptability for diagnostic imaging in various disciplines of dental medicine.

Dr Nadja Naenni
Senior Teaching and Research Assistant
Specialist in Reconstructive Dentistry SSRD
Clinic of Fixed and Removable Prosthodontics and Dental Material Science
University of Zurich, Center of Dental Medicine

Nadja Naenni graduated with a Master in Dental Medicine at the Center of Dental Medicine, University of Zurich, Switzerland in 2004 and received the "doctor medicinae dentium" (Dr. med. dent.) from the same University in 2005. After a 6-year period as full-time associate in two private practices, she completed the 3-year postgraduate training in Reconstructive Dentistry at the Clinic of Fixed and Removable Prosthodontics and Dental Material Science at the University of Zurich (2011-2013), which lead to the title of 'Specialist of Reconstructive Dentistry' from the Swiss Society of Reconstructive Dentistry (2015).

Since 2013, she is a full-time Senior Research and Teaching Assistant at the above clinic in Zurich, Switzerland (Prof. Christoph Hämmerle) and spent one year (2017) in Malmö and Gothenburg as a guest researcher (Prof Ann Wennerberg).

She is in charge of the postgraduate education programme at her clinic as well as of the synoptic student course, which aims at teaching students in treating complex prosthodontic cases. Her clinical focus lies on the treatment of complex and esthetic cases using all aspects of reconstructive dentistry as well as on the diagnosis and treatment of periimplant diseases. Her scientific interests lie on prosthodontics, implant dentistry and regenerative procedures.

Dental Implants: How Short Can We Go?

Constant efforts are made aiming at reducing the invasiveness of implant therapy. Hence, implant sizes are constantly "shrinking". Thus there are many new and upcoming questions we have to answer today when rehabilitating patients with implants that are getting shorter (and smaller). Not only short implants, but the use of less implants supporting cantilever reconstructions is an emerging concept and offers alternative therapeutical options.

One of the central questions still unanswered is how long an implant has to be to carry a single tooth reconstruction. Can the use of short implants be an alternative to longer implants which may involve time-consuming, invasive and expensive treatments such as sinus floor elevation or vertical ridge augmentation? Can short implants be placed and reconstructed with fixed solutions in case of a heavy resorbed alveolar ridge? Furthermore when reading the literature it is important to be aware of the actual definition of "short implants". When is an implant short? Generally, a focused question answered in this lecture is whether the placement of a long/conventional implant is advantageous over a shorter implant.

Management Of Failing Implants

Today implants are considered a safe and reliable treatment method for missing teeth. There is broad evidence attesting high survival rates both for the implant itself and the respective implant-supported reconstructions. Nevertheless, complication rates of up to 25% are reported for single reconstructions on implants. Thus, numerous implant-related complications appear in daily clinical practice. May these be due to inappropriate planning in the first place, suboptimal implant placement or complications originating from the technical and/or biological complications.

This lecture aims to shed light on the above-mentioned complications and on failing implants in general. It shall help to determine a path to diagnose and treat implant complications.

Speakers' Profiles & Lecture Synopsis

Mr Lim Thian Chin
Director
Critical Info Infrastructure Division
Cyber Security Agency of Singapore

Thian Chin is leading the Critical Information Infrastructure (CII) Division at the Cyber Security Agency of Singapore (CSA). The division is responsible for building the cyber resilience of the Nation's essential services across 11 CII sectors covering government, utilities, transport and services clusters. His team works with sectoral regulators to strengthen the cyber resilience of CIIs, to promote confidence building measures and to deepen the public-private partnership between the government and CII stakeholders. Thian Chin also represents Singapore in International and regional cybersecurity forums where he shares his knowledge on CII protection and cybersecurity capability building.

Thian Chin has over 17 years of experience in Information & Technology governance, risk management, resilience and compliance, and Operational Technology cybersecurity. Prior to joining CSA in August 2015, he was responsible for the regional Technology Governance function in United Overseas Bank. He also led the Technology Risk function in GIC from 2008 – 2013. In his earlier years, he was a Manager and had led a team of auditors in Information Technology in Ernst & Young.

Thian Chin holds a Bachelor's Degree in Computer Engineering from Nanyang Technological University and is an alumnus of the George C Marshall European Center for Security Studies. He is certified as a CGEIT, CRISC, CISM, CISSP, CISA and SABSA practitioner.

Cybersecurity And Dental (And Just About Everyone Else)

In his presentation, Mr Lim will talk about why cybersecurity is required and how it applies to the Dental community. He will share some lessons learnt from the SingHealth cyber attack and challenges of cybersecurity in general. Lastly, he will provide insights on why cybersecurity should be everyone's responsibility and how everyone can play their part.

Dr See Toh Yoong Liang
Senior Consultant, Department Of Restorative Dentistry
National Dental Centre Singapore

Dr See Toh is a Prosthodontist and current head of the Prosthodontics unit in National Dental Centre Singapore. He has spent more than a decade of service in public healthcare, dedicating his time and efforts to serving the dental healthcare needs of Singapore. Dr Seetoh went on a HMDP scholarship to further his education in rehabilitation of patients with head and neck malignancies and now works closely with other members of the Head and Neck SDDC to restore function in patients with tumors in the head and neck. Dr See Toh is the previous head of the craniofacial implant programme and the geriatric and special care dentistry clinic in NDCS and has special interest in oral care for the elderly.

Preparing For The Silver Tsunami: Treatment Planning For The Elderly

As the population demographics of Singapore changes in the upcoming decade, we will be faced with a silver tsunami of elderly Singaporeans who require dental care. Care for this group of elders will also become increasingly difficult due to multi morbidity, polypharmacy, physical disability and cognitive dysfunction. This lecture hopes to bring the audience the type of older adults, the factors that affect their care and also the care models that will aid in the treatment planning.

Speakers' Profiles & Lecture Synopsis

CI A/Prof Goh Bee Tin
Deputy Director, Research & Education
Senior Consultant, Department Of Oral & Maxillofacial Surgery

CI A/Prof Goh Bee Tin is a Senior Consultant in the Department of Oral and Maxillofacial Surgery (OMS), Research Director and Deputy Director (Research and Education) at the National Dental Centre of Singapore (NDCS). Prof Goh is also Vice-Chair, Research in the SingHealth Duke-NUS Oral Health Academic Clinical Program.

Prof Goh obtained her Bachelor of Dental Surgery from the National University of Singapore (NUS) in 1993. She went on to specialise in the field of OMS, obtaining her Dental Fellowship with the Edinburgh Royal College of Surgeons in 1996 and Master of Dental Surgery from NUS in 1997. She was admitted as a Fellow of the Academy of Medicine, Singapore in 2000. In that same year, she was sent on a government scholarship for advanced training in cleft lip and palate and orthognathic surgery in Canada. In 2004, she furthered her training in craniofacial implantology in Sweden and the United Kingdom. She obtained a PhD in 2009 from Radboud University Nijmegen in the Netherlands for her novel research work on modular endoprosthesis for mandibular reconstruction.

She received the Osteopore Innovation Award for her work in clinical tissue engineering and the SingHealth GCEO Outstanding Clinician Researcher Award for her contributions to research at the NDCS. Prof Goh is also appointed Clinical Associate Professor at the NUS Dental Faculty and Adjunct Associate Professor at the Nanyang Technological University. Prof Goh is active in teaching and training postgraduate students. Her research interests include bone tissue engineering and mandibular reconstruction.

Regeneration Of The Dentoalveolus - Engineering Strategies

The long-term success of dental implants, in terms of clinical stability and aesthetic result of the prosthesis, is dependent on the dental implant being supported by adequate amount of bone in the alveolar ridge. The alveolar ridge is a dynamic structure that is tooth-dependent whereby the loss of teeth is followed by resorption of the tooth-bearing alveolus. Most of the dimensional changes occur in the first 2 to 3 months after tooth extraction. In a significantly resorbed ridge, bone augmentation procedures are necessary before or during surgical dental implant placement. Currently, autogenous bone is considered the gold standard as a graft material for this purpose. This implies that the patient is subjected to additional surgery and its associated morbidities and expenses. However, patients seeking dental treatment are often unwilling to undergo complicated and expensive surgery.

To meet the clinical need of maintaining or augmenting bone volume and contour of the alveolar ridge, our team at the National Dental Centre Singapore has been collaborating with bioengineers and material scientists to develop novel devices and innovative approaches to bone regeneration. The techniques are kept simple, minimally invasive and relatively inexpensive so that they may be easily adopted in clinical practice. An overview of the various latest innovations will be presented.

Speakers' Profiles & Lecture Synopsis

Dr Jason Chua
Registrar, Department Of Orthodontics
National Dental Centre Singapore

Dr Jason Chua is a registrar at the Department of Orthodontics at the National Dental Centre of Singapore. He received his Bachelor of Dental Surgery in 2012 and completed his Postgraduate training in Orthodontics in 2017 at the National University of Singapore. A firm believer in lifelong learning, Dr Chua has been a member of the Singapore Dental Association Continuing Professional Education (CPE) committee since 2012. During his free time, Dr Chua enjoys travelling and engages in sports such as badminton and running.

Clear Aligner Therapy Vs Fixed Appliance Therapy - Will The Cat Get Fat?

How does clear aligner therapy (CAT) compare against fixed appliance therapy (FAT)? Is one better than the other in terms of effects on treatment efficiency, periodontal health, root resorption, etc? We will be exploring some of these differences from an evidence-based perspective. This lecture aims to compare these 2 treatment modalities & hopefully shed some light on the use of CAT in today's context.

Dr Wu Siwen
Associate Consultant, Department Of Restorative Dentistry
National Dental Centre Singapore

Dr Wu Siwen completed her BDS degree at the National University of Singapore in 2007. During her undergraduate years, she won many accolades, including being on the Dean's List, the Robert Lin Memorial Medal and the Drs Tay & Partners Dental Surgeons Gold Medal.

Dr Wu completed her postgraduate specialist training in Endodontics from National University of Singapore in 2013 and also obtained Membership in Endodontics from the Royal College of Surgeons of Edinburgh. She is an accredited Specialist in Endodontics with the Singapore Dental Council. She is currently an Associate Consultant at National Dental Centre Singapore.

Can One File Rule Them All?

In the recent years, the evolution of 3D radiographic imaging has equipped us a better understanding and visualisation of the complicated root canal anatomy. This knowledge is essential as we aspire to combine clinical efficiency and simplicity in our endodontic procedures.

This lecture aims to highlight the clinical assessment of canal complexities and to discuss whether one file can effectively do it all in the shaping procedure. It also serves to depict the different actions of endodontic instruments inside the canal and define if one file can efficiently do them all, or if other accessory instruments are required.

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