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SingHealth DukeNUS  
ACADEMIC MEDICAL CENTRE

SURGERY

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NEWSLETTER

# SurgeOn



## Introducing the SurgeOn Editorial Team!

**Dr Tan Ek Khoon**  
Senior Consultant  
Department of Hepato-pancreato-biliary (HPB) and Transplant Surgery, SGH-NCCS

**Dr Veronica Alcantara**  
Senior Staff Registrar  
Breast Department, KKH

**A/Prof Frederick Koh**  
Consultant  
Department of Surgery, SKH

**Dr Annalisa Ng**  
Consultant  
Department of Surgery, CGH

**Institutions:**  
Singapore General Hospital, National Cancer Centre Singapore, KK Women's and Children's Hospital, Sengkang General Hospital, Changi General Hospital

**W**e are thrilled to announce the formation of the SurgeOn Editorial Team! The team, comprising nominated candidates from across SingHealth institutions, will each bring unique perspectives to the SurgeOn newsletter, and is committed to delivering content to inform, inspire and engage our faculty and readers.

Together, the team will identify and pursue story leads across institutions and centres that relate to the events, faculty and achievements of the Surgery ACP. Additionally, they will explore and recommend emerging themes, topics and profiles for the newsletter, such as other areas of surgery or medicine relevant to surgeons.

## AWARDS

### ACP Programme Funding FY2023 Cycle 2 Awardees

Congratulations to our ACP Programme Funding FY2023 Cycle 2 Awardees!

#### Clinical & Systems Innovation (CSI) – Innovation Seed Grant



**Dr Phua Chu Qin**

Consultant, Department of Otolaryngology (ENT), SKH  
Project Title: Reshaping Myofunctional Therapy with Development of Artificial Intelligence (AI) Software to Enable Automated Therapy Monitoring & Feedback for Sleep Apnea Patients

#### Nurturing Clinician Researcher Scheme (NCRS) – Nurturing Clinician Scientist Award (NCSA)



**Dr Chue Koy Min**

Associate Consultant, Department of General Surgery, SKH  
Project Title: A Longitudinal Study of the Human Fecal Metagenome Before & After Bariatric Interventions in Obese Patients

#### Global Health Support



**Dr Sean Lam**

Head, Data Science, Health Services Research Centre (HSRC)  
Project Title: ExplaiNable AI Algorithm for Head And Neck Cancer ScrEening (ENHANCE AI)- Development & Validation of an AI-Based Screening Algorithm for Head and Neck Cancer

## Award-winning study on natural killer (NK) cells

**Congratulations to Assoc Prof Lim Chwee Ming who received the Robert Maxwell Byers Award 2023 for outstanding researchers from the American Head and Neck Society!**

The US\$1,000 award is presented to the best clinical paper submitted for presentation at the annual meeting of the American Head and Neck Society. The award was endowed by Dr Byers' former students.

*"What is also promising is that our use of 'off the shelf' NK donor cells that are allogenic—do not need to be matched with recipients' cells—means that the treatment, when approved and validated, can be easily scaled up for patients with NPC."*



**Assoc Prof Lim Chwee Ming**, Deputy Vice-Chair, Research, Surgery ACP; Senior Consultant, SingHealth Duke-NUS Head and Neck Centre; Senior Consultant, Otorhinolaryngology–Head and Neck Surgery, Singapore General Hospital (SGH) and National Cancer Centre Singapore (NCCS); and Director, Clinical Translational Research (CTR), SGH

I am very pleased to receive the prestigious award which acknowledges the efforts of my team. From what I know, the award is highly competitive and has been given mostly to North American researchers or scientists.

One of my research sub-specialties is cancer immunotherapy which looks at how we use cells as drugs to treat cancer. For the American Head and Neck Society meeting held in April 2023, I submitted for consideration for the award a paper on immunotherapy treatment on Nasopharyngeal Carcinoma (NPC), an aggressive head and neck cancer endemic in Singapore, Southeast Asia and Southern China.

### Cancer killing agents

My paper, "Combining 'off the shelf' natural killer cells enhances tumour suppression with cisplatin chemotherapy in nasopharyngeal carcinoma", focused on the use of purified NK cells obtained from healthy donors' peripheral blood mononuclear cells. After undergoing robust expansion in the laboratory, these cells were able to exert potent cytotoxicity effects against NPC cells, in other words, kill the cancer cells.

When tested in rodent models in combination with a chemotherapy drug, cisplatin, the NK cells could suppress the growth of small volume tumours. My team found that combining NK cells treatment with cisplatin chemotherapy

was more effective than by just using NK cells or cisplatin on small tumours.

### Opening up possibilities

Our study opened up possibilities for clinical applications. We demonstrated that immunoprevention, by combining NK cells with cisplatin, may eradicate minimal residual disease state in patients with advanced high-risk NPC to prevent the risk of future NPC relapses.

What is also promising is that our use of 'off the shelf' NK donor cells that are allogenic—do not need to be matched with recipients' cells—means that the treatment, when approved and validated, can be easily scaled up for patients with NPC.

The next step for our research which was funded by the National Medical Research Council (NMRC) Clinician Scientist Award (CSA) is to apply for the NMRC Clinical Trial Grant to test this treatment strategy in advanced NPC patients. I am hopeful and excited that our clinical research can potentially make an impact on our patient care.

### Sharing experiences

I do immunotherapy research because I have an innate curiosity and interest in the science behind using cells as treatment. I know it is not easy to take on both clinical work and research but I hope that when we share our experiences with one another, we can inspire others who are on similar journeys.

In my personal time, I spend it with my family, especially my two young sons. We do sports or outdoor activities so that I can help cut down on their screen time.

## Doing Surgery ACP proud at the SingHealth Excellence Awards 2023

**Congratulations to Clin Assoc Prof Toh Song Tar who received the Distinguished Visionary Leader Award and Clin Assoc Prof Kam Juinn Huar who was conferred the Distinguished People Leader Award!**

### ADVANCING SLEEP MEDICINE

#### Distinguished Visionary Leader Award

This award recognises leaders who

- Are effective at leading teams towards achieving SingHealth or Institution goals to be an Academic Medical Centre of Excellence
- Exercise forward-thinking and transform vision into action by creating an inspirational environment, positive picture of the future and providing a clear sense of direction as to how to get there

*"I hope that, in future, when people talk about our SingHealth-Duke NUS Sleep Centre, it is to say that this is the place they want to go to for treatment or to be trained. Perhaps, one day, our centre will be mentioned in the same breath as Mayo Clinic or Cleveland Clinic, for instance."*



**Clin Assoc Prof Toh Song Tar**, Head and Senior Consultant, Otorhinolaryngology–Head & Neck Surgery, Singapore General Hospital (SGH) and National Cancer Centre Singapore (NCCS); Senior Consultant, SingHealth Duke-NUS Sleep Centre

Quality sleep is critical for good health. I feel that this is something that is not emphasised often enough. Compared to traditional specialties, Sleep Medicine is a relatively new field but we have come a long way from the early days when I headed the SGH Sleep Centre.

#### Sharing knowledge

To establish the SingHealth-Duke NUS Sleep Centre, my team and I reached out to different specialties outside of Otorhinolaryngology, ranging from Neurology, Psychiatry and Psychology to allied health professionals in SingHealth hospitals and centres including KKH, CGH, SKH, and our National Dental Centre's Orthodontics and Oral and Maxillofacial Surgery.

We now have Sleep Centre sites across all our SingHealth Institutions with a wealth of expertise collaborating on harmonising clinical care for patients with sleep disorders. In addition, we have a collaborative environment where we share new ideas and sleep medicine knowledge among our specialists and sleep technicians at all our Sleep Centre sites. We also run a Sleep Surgery course to train local and foreign specialists in the field of Sleep Surgery.

#### Home sleep test

Laboratory sleep studies are costly and can take time for diagnosis and treatment. I used to see patients with

obstructive sleep apnea who had genuine difficulties paying for their tests. I am therefore very glad that I contributed towards the adoption of home sleep tests in 2014. Getting the Ministry of Health to subsidise these tests, not just for SGH, but nation-wide, is something else that I am very proud of.

Such home sleep tests greatly reduce the time taken for the diagnosis of sleep disorders and treatment. At the same time, the home sleep tests allow our clinicians and sleep technicians to perform more value-added work.

#### Hope for the future

As our population ages, more people will have problems like airway obstruction that cause obstructive sleep apnea. Hence, we have to gear up to look after more patients.

I am glad to say that my team is hardworking and willing to hone their skills. In this way, they can develop themselves professionally and help sustain, or even raise, the high standards we have at SingHealth.

I hope that, in future, when people talk about our SingHealth-Duke NUS Sleep Centre, it is to say that this is the place they want to go to for treatment or to be trained. Perhaps, one day, our centre will be mentioned in the same breath as Mayo Clinic or Cleveland Clinic, for instance.



## Collective Efforts of a Cohesive Team

### Distinguished People Leader Award

This award recognises leaders who

- Understand that people are the greatest assets of a company
- Creates a cohesive environment where everyone is treated with respect and trust
- Has exceptional people skills to coach and guide staff towards achieving SingHealth and institutional goals

*"While the award recognises my leadership, I must attribute the award to the collective efforts of my team and department in supporting me. Guidance from senior management has also helped me tremendously in my leadership efforts."*



**Clin Assoc Prof Kam Juinn Huar**, Head and Senior Consultant, Department of General Surgery; Head & Senior Consultant, Hepatopancreatobiliary Service, Sengkang General Hospital (SKH)

I feel happy and humbled to have the honour of winning the Distinguished People Leader Award when there are many other deserving people. While the award recognises my leadership, I must attribute the award to the collective efforts of my team and department in supporting me. Guidance from senior management has also helped me tremendously in my leadership efforts.

#### Teamwork and support

Besides heading the General Surgery Department, I am Director of Trauma Service at SKH. SKH is a young hospital with a relatively young team. As the hospital matures and takes on more responsibilities, we have to deal with new issues and come up with more initiatives and solutions.

To keep things running smoothly really requires teamwork. I am very thankful that I not only have competent clinical and administrative staff, but also a very cohesive team whose members support one another. My team members are also agile and able to come up with innovative ways to solve problems.

#### Mutual respect and clear communications

I practise an open-door policy with my staff as I do not believe in a hierarchical approach. To me, mutual respect is essential. I let my staff know that they are all important to the team and that I value their contributions. I also acknowledge and show appreciation when a team member does well.

I prioritise effective communication within teams. I feel that it is important to get to know team members and their strengths and weaknesses. When they need support in certain areas, I discuss with them how to improve their skills or expertise. Finally, I believe in leading by example to promote good work ethics.

#### Learning and teaching

I am privileged to have had many inspiring mentors and satisfying patient outcomes. As a surgeon, it is crucial to learn from both successes and failures to develop resilience. Each patient gives us a unique opportunity to learn. I hope to pass on my experiences to the next generation of surgeons through my teaching of undergraduate and post-graduate students at SKH.

Surgical work can be hard on personal lives so I am very grateful to have an understanding and supportive wife to hold the fort at home. I also have three adorable young sons who are both sources of stress and stress-relievers.



# SGH Robotic Surgery 20th Anniversary Celebrations

**S**ingapore General Hospital commemorated a major milestone in robotics with the recent SGH Robotic Surgery 20th Anniversary Celebrations. Jointly organised by the Division of Surgery & Surgical Oncology (DSSO) and the Musculoskeletal Sciences (MSKSC), the 3-day multidisciplinary scientific conference and workshops were held from 6 to 8 October 2023 at the National Cancer Centre Singapore (NCCS) Building and The Academia Procedural Skills Laboratory.



Welcome party with GOH, A/Prof Ruban Poopalalingam

Led by co-chairs Prof Brian Goh, Head & Senior Consultant, SGH & NCCS HPB & Transplant Surgery and A/Prof Darren Tay, Senior Consultant, SGH Orthopaedic Surgery, the main scientific forum centred on presenting the key milestones of various sub-specialties, the latest evidence, technologies, and techniques in robotic surgery. SGH Chairman, Medical Board A/Prof Ruban Poopalalingam was there to grace the event as Guest-of-Honour.



The event brought together local, regional, and international clinicians and medical practitioners with a keen interest in the field. About 200 participants comprising nurses, medical staff, trainers, speakers, and sponsors attended the 3-day scientific forum and workshops. The meeting featured a diverse range of sub-specialty tracks including urology, colorectal surgery, obstetrics & gynaecology, upper gastrointestinal surgery, ENT - head & neck surgery, hepato-pancreato-biliary surgery, and orthopaedic surgery where prominent specialists and clinicians led interactive sessions to equip the attendees with invaluable skills. They deep dived into the techniques, medical advancements, and other key developments in the dynamic field of robotic surgery.

The conference also played host to the RS3 Leadership Symposium and Townhall on Surgical Robotics in Singapore, an open forum for thought leaders from various public healthcare and private healthcare institutions to share their best practices, current challenges, and strategies to ensure access to robotic surgery in Singapore. One of the key objectives of this leadership roundtable was to lay the foundation for a workable strategy to build sustainability and international leadership in Singapore robotic surgery.

Nursing Robotic Education Workshop: Ergonomics & Safety, Care of Robotic Instruments held on the second day of the conference saw a strong turnout by nursing colleagues across the public and private healthcare institutions. Their enthusiasm for Robotic Nursing drives innovation and progress in healthcare. The active participation and professional interaction among the trainers and participants provided opportunities and fostered knowledge and skills exchange towards a fruitful workshop.



A dinner was held on the evening of 6 October to acknowledge and recognise the contributions of the faculty and sponsors in making the event a success. Speakers, clinicians, sponsors gathered at this dinner to enjoy networking and building relationships with like-minded peers and leading solution providers.

Several surgical workshops were also held concurrently at the Academia Procedural Skills Laboratory over the next two days of the conference, featuring workshops by the orthopaedic, colorectal, hepato-pancreato-biliary, obstetrics & gynaecology and upper gastrointestinal disciplines. These hands-on sessions created opportunities for the trainees to improve their operative skills in performing robotic surgical procedures.





# DSSO Joy at Surgical Services (J@SS) Updates

## (1) Townhall for Associate Consultants and Junior Consultants (less than 3 years)

J@SS organised a townhall for Associate Consultants (AC) and Junior Consultants (JC) (less than 3 years) and presented the DSSO Service Excellence Award (Jan to May 2023) to the top three departments and individual award winners.

A pre-event questionnaire was administered for all DSSO ACs and JCs to obtain feedback on clinical competency and career progression, mentorship, and overseas trainings. Responses from the 39 participants were generally positive with areas for improvement. Most of the feedback were centered on the need for more administrative support and involvement in hospital committees. The workgroup will be looking into these areas for improvement.



Dr Sachin, J@SS Co-Chair, HOD for Department of General Surgery

Attendees of J@SS Townhall

Dr Jane Seo, J@SS Workgroup member, Department of SPRinT

At the event, 19 individuals, from House Officers to Senior Consultants were awarded the DSSO Service Excellence Award for the months of January to May 2023. The following departments were awarded the Top 3 Departments, having received the highest number of patient's compliments from January to May 2023.

### Top 3 Departments

Department of Breast Surgery

Department of Sarcoma, Peritoneal & Rare Tumours (SPRinT)

Department of Urology



Left to right (Row 1)

(Pic 1): Awardee Dr Liu Xuandao (Department of Otorhinolaryngology – Head & Neck Surgery)

(Pic 2): Awardee Dr Lim Shu Hui (Department of Obstetrics & Gynaecology)

(Pic 3): Awardee Dr Christina Yang (Department of Breast Surgery)

Left to right (Row 2)

(Pic 1): Department of Breast Surgery

(Pic 2): Department of Sarcoma, Peritoneal & Rare Tumours (SPRinT)

(Pic 3): Department of Urology

## (2) Resident Physician and Clinical Fellow Dinner

Our Resident Physicians (RP) and Clinical Fellows gathered for a dinner hosted by DSSO Division Chairman A/Prof Henry Ho, DSSO Chief HR Officer A/Prof Toh Song Tar, and J@SS co-chairs, Dr Sachin Mathur and Dr Preetha Madhukumar. The dinner was held on 1 November 2023 at Hopscotch at Gilman Barrack.

The RPs shared candidly on their experiences and difficulties faced while performing their duties and gave practical suggestions on how the division could help. The dinner was peppered with lighthearted conversation and laughter and not forgetting heartening words and encouragement to the junior RPs.





## Counselling for Chronic Dizziness & Tinnitus

by Clinical Assistant Professor Kenneth Chua, Mr Conrad Chung, Ms Wendy Teo and Ms Joyce Lim at CGH

**Tinnitus Counselling Service by Mr Conrad Chung, Audiologist, Ms Wendy Teo, Senior Audiologist & Ms Joyce Lim, Senior Tinnitus Counsellor at CGH**

Tinnitus is commonly described as a constant ringing or buzzing sound in the ear. In most cases, tinnitus will subside on its own within the first year of its onset. However, for some patients, tinnitus remains persistent and bothersome, to the point of affecting one's quality of life. While there may be underlying medical causes for tinnitus that are treatable, most are a consequence of age-related hearing loss. These cases are usually referred to the CGH Audiology service for tinnitus management.



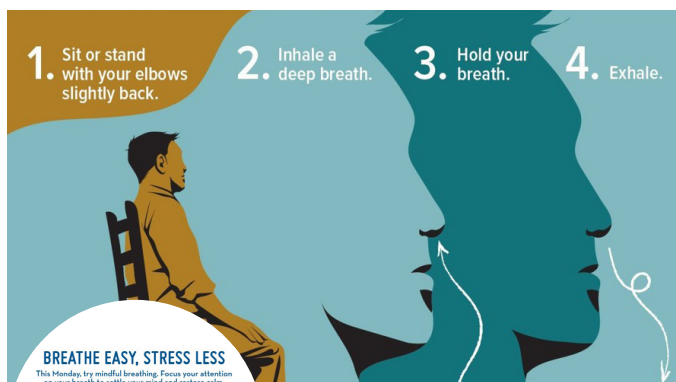
At the tinnitus counselling service, we help patients understand their condition holistically through education. This includes extensive counselling on the severity of their hearing loss, and the mechanisms of hearing and tinnitus. We also practice motivational interviewing, and listen to patients with empathy to better understand their fears and concerns. With the help of validated tinnitus questionnaires, we can better identify the triggers of the condition to better guide our management plans.

Managing tinnitus involves identifying stressors or triggers that can contribute to tinnitus loudness perception, as well as introducing self-help strategies to patients to promote habituation to the tinnitus sound. These strategies include

sound enrichment by various modes, like listening to the radio or reading aloud, or addressing the triggers themselves, such as getting sufficient sleep. Additionally, the use of hearing devices can potentially be beneficial in reducing the perception of tinnitus, especially if the patient has significant hearing impairment. The improvement in hearing will result in an increase in perception of environmental sounds, that can indirectly reduce the perception of tinnitus.

**Dizziness Counselling Service by Clinical Assistant Professor Kenneth Chua, Senior Audiologist at CGH**

Patients with chronic dizziness often have unremarkable laboratory vestibular examinations and have medical clearance from other specialties. However, functional impairments are often still significant and affect their quality of life. Recent diagnostic criteria and identification of persistent postural perceptual dizziness (PPPD) has helped us to better understand the psychological-somatic manifestations of organic disorders. As the literature suggests good efficacy using a combination of cognitive behavior therapy (CBT) and vestibular rehabilitation, the CGH dizziness counselling service piloted a medical-board approved programme in 2020 to help patients whom, despite receiving maximal medical management, still report experiencing functional dizziness. Using elements of CBT, such as deep-breathing, progressive muscle relaxation and guided imagery, in combination with simple vestibular exercises, patients are psycho-educated and have their cognitive biases addressed or restructured. Approaching chronic dizziness like chronic pain and tinnitus neuropsychological models have shown promising results, especially in patients with higher anxiety levels.



Examples of deep breathing techniques used as part of dizziness counselling protocol

The CGH tinnitus and dizziness counselling services are the first and only of their kind in Singapore's public healthcare system.



## CATEGORY: RESEARCH

### SingHealth Medical Student Talent Development Award (SMSTDA) Awardees

Congratulations to the following students and mentors for being awarded the SingHealth Medical Student Talent Development Award (SMSTDA) FY2023 Cycle 1!

#### SMSTDA – Travel Award



**Josephine Hendrikson**  
Year 4 Medical Student  
Duke-NUS Medical School



**A/Prof Claramae Chia**  
Head & Senior Consultant  
Sarcoma, Peritoneal and Rare  
Tumours (SPRinT), SGH & NCCS

Project Title: Outcomes and Quality of Life after Repeat Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy (CRS-HIPEC): A Single Asian Tertiary Centre Experience



**Yeo Sheng Yep, Brian**  
Year 4 Medical Student  
Yong Loo Lin School  
of Medicine



**A/Prof Lim Chwee Ming**  
Deputy Vice-Chair, Research,  
Surgery ACP, Senior Consultant,  
Otorhinolaryngology-Head and  
Neck Surgery, SGH & NCCS

Project Title: The Efficacy and Safety of Cell-Based Immunotherapy in The Treatment of Recurrent or Metastatic Nasopharyngeal Carcinoma – A Systematic Review and Meta-Analysis

#### SMSTDA – Project Award



**Koh Jin Hean**  
Year 4 Medical Student  
Yong Loo Lin School  
of Medicine



**A/Prof Toh Song Tar**  
Head and Senior Consultant,  
Otorhinolaryngology-Head & Neck  
Surgery, SGH & NCCS

Project Title: The Association of Sleep Disorders with Chronic Kidney Disease: A Systematic Review and Meta-Analysis



**Yik Yi-Jean, Vanessa**  
Year 3 Medical Student  
Duke-NUS Medical School



**A/Prof Frederick Koh**  
Consultant  
Surgery, SKH

Project Title: Diagnosing Sarcopenia with AI-Aided Ultrasound (DINOSAUR) – A Validation Study

The SMSTDA is an academic medicine initiative designed to provide developmental opportunities for promising medical students.

The SMSTDA-Travel Award provides recipients the opportunity to travel so they can participate and present their projects on an overseas stage, at international seminars or conferences.

The SMSTDA-Project Award provides recipients the opportunity to work on a project with a supervising faculty of an ACP. The theme of the project can span across research, education, clinical quality/innovation or clinical audit and other worthwhile initiatives.

### SingHealth Publish! Awardees 2023

Congratulations to our remarkable SingHealth Publish! Awardees.



**Dr Tan Yu Guang**  
Associate Consultant  
Urology, SGH & NCCS



**A/Prof Lim Geok Hoon**  
Head & Senior Consultant  
KK Breast Centre, KKH

The SingHealth Publish! Award recognises SingHealth researchers who have published articles in internationally acclaimed scientific or medical journals.

### SingHealth Duke-NUS Research Team Award 2023

Heartiest congratulations to Prof Pierce Chow and his team for winning 1st Prize for the SingHealth Duke-NUS Research Team Award 2023!

#### Prof Pierce Chow

Vice Chair (Research), Surgery ACP;  
NMRC-funded Senior Clinician Scientist;  
Inaugural Programme Director, PhD  
Programme in Clinical Science, Duke-NUS  
Medical School;  
Surgical Director, Comprehensive Liver Cancer  
Clinic, National Cancer Centre Singapore (NCCS);  
Senior Consultant, Department of Hepato-pancreato-biliary (HPB)  
and Transplant Surgery, Singapore General Hospital (SGH) and  
National Cancer Centre Singapore (NCCS)



Project Title:  
Vitamin B12 and Folate Decrease Inflammation and Fibrosis  
in NASH

#### Team members:

Prof Paul Michael Yen, Duke-NUS (Lead)  
Asst Prof Brijesh Kumar Singh, Duke-NUS  
Dr Madhulika Tripathi, Duke-NUS

The SingHealth Duke-NUS Research Team Award is an annual award that aims to recognise and celebrate outstanding and invaluable contributions by research teams to the biomedical research landscape in the SingHealth Duke-NUS Academic Medical Centre (AMC).



## Professor Walter Lee's Visit to SingHealth Duke-NUS

**S**urgery ACP, together with Duke-NUS, had the pleasure of hosting Professor Walter Lee from Duke University from 9 to 10 October 2023. Prof Lee is a Professor in the Departments of Head and Neck Surgery & Communication Sciences and Radiation Oncology. He is also the Co-Director of the Head and Neck Programme in the Duke Cancer Institute. Prof Lee is a renown surgeon-innovator with an interest in global health and developing low-cost medical devices that can be used in low-resource areas.

### Introducing Prof Lee to the Newly-launched Alice Lee Innovation Centre of Excellence (A.L.I.C.E.) @ SGH Campus



Prof Lee and Dr Cheong at A.L.I.C.E. @ SGH Campus

Prof Lee was brought around the new facilities and offices in A.L.I.C.E. @ SGH Campus by Dr Cheong Wai Chye, Deputy Director of A.L.I.C.E. A.L.I.C.E. was launched on 22 September 2023, with the objective of bringing commercial partners and healthcare innovators together while providing a platform for innovation activities to take place. A.L.I.C.E. aims to see innovations take flight and spread its impact to the healthcare ecosystem.

### Technology Talk and Networking at Duke-NUS

In an auditorium filled with passionate innovators, clinicians, medical students, and engineers, Prof Lee was invited to share more about his journey navigating grants as a surgeon-innovator.

Moderated by General Surgery Resident Dr Sabrina Cheok, a group of panellists, comprising Assoc Prof Tan Hiang Khoon, Director, SingHealth Duke-NUS Global Health Institute (SDGHI); Dr Kevin Koh, Founder and CEO, Vivo Surgical; and Mr Richard Lieu, Head of Technology, Vivo Surgical, together with Prof Lee, shared about their experiences in clinical innovation. Assoc Prof Tan, Dr Koh, Mr Lieu and Prof Lee are in the midst of commercialising ENLYT™, a low-cost, portable and flexible endoscope. This device would help increase the detection of early-stage cancer in low-income countries.



Prof Lee sharing about his surgeon-innovator journey in the Duke-NUS Auditorium



From left to right: Dr Sabrina Cheok, Prof Walter Lee, Assoc Prof Tan Hiang Khoon, Dr Kevin Koh, Mr Richard Lieu and Dr Rena Dharmawan

The event attracted many like-minded individuals and paved the way for a new promising future for clinical innovation.

### Global Health Discussion with Global Surgery and SingHealth Duke-NUS Global Health Institute (SDGHI)

Some representatives from the Global Surgery Programme (GSP) and SDGHI convened to discuss global health with Prof Lee. The discussion centered around current and future implementations of GSP and SDGHI. Both teams gained valuable insights from Prof Lee, who has led numerous volunteering efforts and research collaborations globally.



From left to right: Dr Foo Fung Joon, Yee Kaisin, Fadjar Wibowo, Natasha Li En Tai, Deborah Chew, Dr Jonas Karlstroem, Prof Walter Lee, Assoc Prof Tan Hiang Khoon, Dr Taufique Joarder



## Bringing Minimally Invasive Paediatric Surgery to Help Children in Papua New Guinea

### Addressing a Critical Need

In a nation where approximately 10 million people are scattered over 460,000 square kilometres, access to medical care is a daunting challenge. Currently, there are only four trained paediatric surgeons in Papua New Guinea (PNG), with two stationed at Port Moresby General Hospital (POMGEN) and the others in remote regions. Furthermore, the country's two paediatric anaesthetists are also nested in POMGEN.

### Educational Mission: Minimally Invasive Surgery

From 3 to 10 August 2023, our paediatric surgeons and anaesthetists from KK Women's and Children's Hospital (KKH) – Assoc Prof Low Yee, Dr Rambha Rai, Dr Lee Shu Ying and Dr Pang Sing Ying – embarked on a surgical outreach trip to POMGEN with education at its core, focusing on minimally invasive surgery. This theme was selected to address a need identified by the local team.



Our Paediatric Surgeons and Anaesthetists at POMGEN.  
Left to Right: Dr Pang Sing Ying, Dr Lee Shu Ying, A/Prof Low Yee, Dr Rambha Rai

### Teaching Activities and Surgical Breakthroughs

The trip was filled with teaching sessions, including talks on minimally invasive surgery, and anaesthetic considerations and challenges faced in children undergoing such surgery. Discussions were held and patients were assessed for surgery. Teaching continued with surgical tutorials for POMGEN trainees and on-the-job anaesthesia training and case discussions.

One of the team's most significant achievements was the country's first paediatric laparoscopic appendectomy for perforated appendicitis, supervised by the KKH team. Operative instruction, with emphasis on minimally invasive surgical approach, techniques and instrument handling took place on the surgical table during operations. POMGEN surgical trainees were also guided through parts of the operation.

By guiding trainees through complex procedures and providing on-the-job training, the team left behind valuable knowledge and showcased the potential of collaborative efforts in advancing surgical techniques in PNG.



KKH Team taking a POMGEN surgical trainee through the country's first paediatric laparoscopic appendectomy.

### Resource Challenges

The trip also assessed the progress made in PNG's healthcare infrastructure, highlighting improvements and areas that still need attention. The team identified gaps in resources, particularly in the operating theatres, anaesthetic equipment, and medical records. Plans for the future include providing more training opportunities, pathology support, and the development of intensive care units and facilities for paediatric patients.

### A Bright Path Forward

After the disruption caused by the COVID-19 pandemic, this outreach trip successfully strengthened the collaboration between Global Surgery programme and POMGEN.

Fifteen paediatric patients in PNG benefited from life-changing surgeries, while the teaching sessions benefitted approximately 50 staff from the Department of Surgery, POMGEN.

The journey of transformation continues as these dedicated medical professionals work tirelessly to provide the children of PNG with the healthcare they deserve. While it might not make headlines globally, this collaboration is changing lives and the face of healthcare in PNG.



Dr Rambha Rai (left) and A/Prof Low Yee (right) conducting teaching session and talks.



## The Department of Urology 35th Year Anniversary

Singapore General Hospital's Department of Urology marked a significant milestone as it celebrated its 35th anniversary, commemorating over three decades of medical advancement and excellence in patient care. Founded in 1988 by the esteemed Prof Foo Keong Tatt, the department has grown from nascency into a beacon of urological expertise and innovation.

The anniversary was celebrated with a robust two-day academic programme, with participants from around the region and beyond. This global gathering included many of the department's past Fellows, who have since become pioneers in advancing urological care in their respective countries. Prof Ashish Kamat, a globally recognised authority in bladder cancer, delivered a series of keynote lectures, providing valuable perspectives on contemporary challenges and innovations in uro-oncology.

The programme also included a variety of specialised workshops covering endourology, laparoscopic uro-oncology, a cadaveric course in functional urology, and a symposium on cutting-edge emerging technologies in urology.

The highlight of the celebration was the anniversary dinner graced by Deputy Prime Minister Lawrence Wong as the guest-of-honour. This illustrious event was not just a celebration of the past but also a nod to the future of urology. The dinner was marked by the inaugural conferment of the Foo Keong Tatt Distinguished Professorship to Prof Christopher Cheng.



Prof Cheng, a visionary in the field, is committed to pioneering the future of urology with a focus on personalised, precision medicine. His dedication to integrating new technologies and maintaining the department's leading edge is a testament to its enduring commitment to excellence and innovation.

This landmark anniversary not only honoured the legacy of the department, but also set a new benchmark for its journey at the forefront of urological advancements, ultimately enhancing patient care and outcomes.





## Conferment of Foo Keong Tatt Professorship in Urology to Prof Christopher Cheng



We are delighted to announce the conferment of the Foo Keong Tatt Professorship in Urology to Clinical Professor Christopher Cheng Wai Sam, with effect from 1 October 2023.

Professorship is the highest honour that can be bestowed upon a faculty member. The Foo Keong Tatt Professorship in Urology under the Surgery Academic Clinical

Programme was established in honour of Professor Foo's passion, dedication, and contribution to the field of Urology in Singapore. This first professorship in Urology at Surgery ACP strives to achieve peaks of excellence in research, education, and practice, strengthening Singapore's thought-leadership position of Urology globally.

CI Prof Cheng is an outstanding educator, researcher, and clinician. He currently holds the position of Senior Advisor in the SingHealth Board of Advisors and serves as a Senior Consultant Urologist at Singapore General Hospital (SGH) and Sengkang General Hospital (SKH).

CI Prof Cheng played a vital role in the education of new urologists while holding on to the positions of Chairman of the Chapter of Urologists, President of the Singapore Urological Association and Member of the SAB Specialist Training Committee. As a researcher, he has published over 90 peer-reviewed publications in local and international journals (h-index 24) and secured significant funding for his research projects (\$3.1m).

Being the inaugural appointment of this endowed professorship, CI Prof Cheng aims to build the enabling processes and resources needed to address the current

gaps in the delivery of excellent care for patients. The initial stages of the projects will address data gaps within bladder and prostate cancer research, while exploring emerging technologies in machine learning and genomics for personalised, precision medicine in the near future. This way, the exciting rapid advancement of computation biology and transcriptomics for better care can then be leveraged.

CI Prof Cheng's contribution and dedication to the field of Urology fully embodies the goals of the Foo Keong Tatt Professorship in Urology. Please join us in congratulating him as our newly appointed Foo Keong Tatt Professor in Urology.

Philanthropic gifts towards Urology play an important role in pioneering transformative advances in clinical and basic research on functional urology, prostatic diseases, urinary cancers and more. Join us in supporting strategic education and research initiatives to transform the way urologic cancers and conditions are detected and treated. Your valuable support will lead to better treatments and outcomes for patients. Singapore residents will receive a 250% tax deduction. We thank you for your generous donations.

### Lend your support today!



Please indicate the cause as "Urology ETR" or "Foo Keong Tatt Professorship" for accurate allocation of funds.

Please approach any Surgery ACP Admin or SGH Development Office ([giftstosgh@sgh.com.sg](mailto:giftstosgh@sgh.com.sg)) for more assistance.





## Undergraduate Surgery Open House

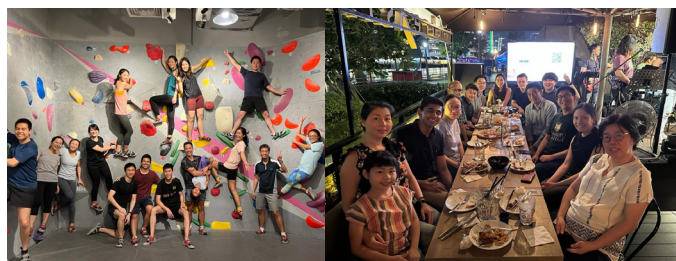


The inaugural Undergraduate Surgery Open House was held on 21 October 2023, with the participation of about 20 Duke-NUS students, ranging from Years 1 to 4 and including some from the MD-PhD programme. The faculty comprised doctors from Singapore General Hospital (SGH), Sengkang General Hospital (SKH), National Cancer Centre Singapore (NCCS), and SingHealth General Surgery Residents.

The day started off with a welcome speech by Assoc Prof Henry Ho, Chairman of Division of Surgery and Surgical Oncology, SGH & NCCS and Academic Chair of SingHealth Duke-NUS Surgery Academic Clinical Programme. He thanked the faculty for putting together a structured programme and hoped the students would gain understanding of some surgical specialties through the Open House. The students were then divided into smaller groups for personalised supervision and coaching by faculty members. They rotated between five different stations at the Surgical Skills & Simulation Centre (SSSC) and Major Operating Theatre Complex in Academia. They first got to have hands-on practice with various tasks in laparoscopy, endoscopy, TURP Simulator, RIRS Simulator and robotic surgery. Afterwards, Dr Joel Soon, Senior Resident, SingHealth General Surgery Residency Programme shared his perspectives on 'The General Surgery Resident's Life' over a sumptuous lunch, followed by a lively Question & Answer segment. The event ended off with a closing speech by Dr Natascha Putri, Deputy Vice Chair (Education) of SingHealth Duke-NUS Surgery Academic Clinical Programme. Positive feedback was received from the students who participated in the Open House, and we look forward to more events in time to come!

## Postgraduate Education & Residents' Corner Otolaryngology and Urology Programme Orientation and Engagement Sessions 2023

Otolaryngology and Urology Programmes welcome our new AY2023 Residents!



Otolaryngology Orientation  
and Engagement 2023

Urology Orientation  
and Engagement 2023

## Postgraduate Education & Residents' Corner General Surgery Programme Orientation cum Resident Engagement

Hear from our residents on the General Surgery Programme Orientation cum Resident Engagement, held on 30 June 2023!



It was the start of the new academic year, and our programme warmly welcomed nine new first-year residents. The event commenced with the usual briefing on residency administration, duties, and a talk from our chief resident. We then gathered at our favourite hangout, the Owl Bar, where current residents and faculty members convened for dinner and drinks. Faculty attendance was robust, with our energetic Programme Director, Mr Teo Jin Yao, and Assistant Programme Directors, Mr Gerald Tay and Mr Lin Jin Lin, taking the lead.

It was a delightful catch-up session, filled with engaging conversations, shared stories, and plenty of fun. Apart from the impressive vocal range of the live band, some faculty members provided the entertainment, with their unrestrained expressions of their passions and thoughts about work and life (you know who you are!). For me, the event stirred a sense of nostalgia as I recalled my own programme orientation four years ago. Unfortunately, the event coincided with the eve of the Multiple Choice Question (MCQ) exams for the outgoing fifth-year residents, which precluded their attendance. Time during residency does pass quickly, and it was a good moment to reflect and enjoy the company and camaraderie.

- Dr Terence Lee (Chief Resident, General Surgery)



Walking into the room, one could immediately sense the energy and excitement. Everyone was raring to begin their first step into residency and General Surgery. The journey may be daunting, but every face looked ready to embark on it. Naturally, they were brought back to reality with our programme director setting the ground rules and expectations, introducing avenues for feedback and support, and laying out the next 5 years.

The introduction of the multitude of logs (surgeries, duty hours, scopes, surgeries again) and their various logging modalities were taken with expressionless faces, as expected from surgery residents in the face of adversity. With the introductions and administrative procedures done and dusted, the incoming residents finally got to meet the rest of the GS residency family. Hard work for the day behind us, it was time to play hard. Advice and laughter were shared in equal portions. Residents from out-postings got the chance to bring news from foreign lands, whilst catching up on the latest. It was a great time for reconnecting outside of a clinical setting and informal learning from each other's experiences. As with every residency gathering, we all left with our "abdomens distended but soft and non-tender".

- Dr Francis Yee (Senior Resident, General Surgery)



## HMDP Experience by Dr Yap Hao Yun



Consultant, Department of  
Vascular Surgery, SGH-NCCS  
Consultant, SingHealth Duke-NUS  
Vascular Centre

### “You want to go to China during COVID-19? Really?”

August 2022. The COVID-19 pandemic had reached Singapore’s shores, and in the wake of Shanghai’s massive city-wide lockdown, I embarked on my HMDP journey. Many thought I was crazy to depart for a land where there would be a 10-day centralised quarantine upon arrival, daily PCR swabs, no WhatsApp, and unpredictable anytime-can-happen lockdowns. Everyone sent me numerous news links and online videos depicting the “horrors” of COVID-19 in China, but I knew that it was time to step out of my comfort zone.

My first thoughts of going to Shanghai for HMDP emerged when I had the opportunity to attend a vascular surgery workshop in Shanghai in mid-2019. I was extremely amazed at the breadth and complexity of cases that were showcased during the workshop, and knew it was a place I could gain valuable surgical skills from. In addition, I thought that being Asians, the Chinese had a disease pattern that was similar to that of Singaporeans, and whatever I learnt in HMDP would be more applicable to my practice in future.

My first OT day in Shanghai was truly eye-opening, to say the least. There were nine cases listed in our elective OT (2 TEVARs, 2 EVARs, 3 lower limb angioplasties, 2 carotid artery stentings), and we had an additional emergency patient that got admitted for an aortic pseudoaneurysm. For two seconds, I wondered how we would ever finish this OT list, but from then on it was simply “just keep swimming”. We eventually finished OT at past 2am. I was exhausted, but extremely in awe at how the entire OT team worked together to finish all the cases without any complaints or mentions about cancelling cases. While we were hard at work, I also noticed that the HPB surgeons in the OT next to ours started an elective living donor liver transplant at 10pm, once again “the norm” in this place.

Despite the heavy workload, in between every case, the vascular fellows would be making notes about the case that we just worked on, and having discussions with the professors about the technical aspects of the case. For most surgeons in China, the opportunity to be trained in a tertiary hospital in Shanghai is a hard-earned one, and a privilege incidentally given to the cohort’s top students from each province. Hard work and diligence are ingrained in them, and perhaps the key to their success. Given the huge volume and complexity of cases, I found myself learning at an amazing speed, both in knowledge and in technical skill, fulfilling exactly what I was in China to do. In addition, despite my limited Mandarin-speaking abilities, I made many friends from all around China, whom I hope to have the opportunity to meet again.

As HMDP progressed, I was also given many opportunities to share more about our work in Singapore. In particular, diabetic foot is a condition that is of great interest in both Singapore and Shanghai. With the easing of COVID-19 restrictions, my HOD, Prof Chong Tze Tec, had the opportunity to visit and we attended a local diabetic foot screening and education event to share our experiences in managing this increasingly common yet complex condition. I look forward to more cross-border collaborations between our institutions.

Lastly, I would like to thank Prof Fu Weiguo and Prof Dong Zhihui from the Vascular Surgery Department of Zhongshan Hospital, Shanghai, China for giving me this opportunity to learn from them. I am also ever grateful to A/Prof Henry Ho and Prof Chong Tze Tec for their support in this journey of mine and hope that I can apply my newfound knowledge to better patient care.





## HMDP Experience

### by Dr Vanessa Tan Yee Jueen



Consultant, Department of Otorhinolaryngology-H&N Surgery, SGH-NCCS  
Director, Centre for Hearing and Ear Implants, SGH

The journey of a thousand miles begins with a single step. On 30 June 2020, I stood at East Coast Park, airport adjacent, the absence of planes overhead a stark reminder of the times we were in. With the Australian borders closed due to the COVID-19 pandemic, I imagined myself swimming across the Australasian Mediterranean Sea to get to my fellowship centre – The Royal Victorian Eye and Ear Hospital.

Yet there was another issue holding me back – approval from Ministry of Health (MOH). I had written two passionate letters to MOH pleading to leave on my previously-approved HMDP funding. I was hungry to develop the acoustic neuroma and hearing implants service by learning from some extraordinary surgeons at the renowned and high-volume Otology center. Securing the highly sought-after fellowship in 2019 was like striking the lottery. As things dragged on, delight turned into despair, as the fellowship position was only available for me until July 2021 as the subsequent fellow had already been selected. Despite the unwavering support from my HoD and Division of Surgery and Surgical Oncology



*With my mentor, Prof Robert Briggs, for my first translabrynthine excision of acoustic neuroma. He is truly an exceptional surgeon who operates in half the time with precision and ease. I was super lucky to learn from this master surgeon who also cared for my growth as a skull base and hearing implant surgeon.*

senior management, the situation brought about by the pandemic kept me from flying overseas.

Streaks of sunshine peeked through the dark clouds when Channel NewsAsia broke news that Australia was opening its borders in November 2020. I tracked the airline websites like a wolf and pounced on the first ticket I could buy. My vision was clear. I set on training myself to be a better surgeon and give patients the best outcomes they deserve. I was prepared to resign if MOH denied me from leaving.

Five days before my flight, I lamented to my friend on the burden of leaving my job, the denial of a previously-approved HMDP funding, the logistics of relocating my family of four, and being at the mercy of such trying times. I was blessed to have a good friend who gave me sound advice and helped change my despair into hope.

I sought the help of SingHealth senior management regarding the status of my HMDP, and with great relief, I was finally allowed to proceed with my training.

The whole journey was a lesson on grit and fortitude. I am happy to look back with a smile that my genuine and humble intentions, paired with my stubbornness, paid off. Now, having worked in a tertiary hospital with more than 300 hearing implants performed yearly during HMDP, I look forward to strengthening our hearing implant service through an improved referral system and by strengthening community services. The fellowship also reminded me of the absolute need for interdisciplinary care. The partnership in lateral skull base tumours between Neurosurgery and ENT at the Royal Melbourne Hospital is a long-standing one that grew with time to provide excellent patient outcomes. "Pain shared, my brother, is pain not doubled but halved" - Neil Gaiman. Interdisciplinary collaboration enables our strengths to combine and lessens the burden on individual clinicians.

The journey of a thousand miles continues, as I work to grow the SGH Hearing Centre implant service and collaborate with the Department of Neurosurgery to provide the best care for our patients. We are only at the start of a long marathon that I so aspire to complete.



1. Celebrating Christmas during the 14 day hotel quarantine. We were thrilled to be released on New Year's eve for fresh air!
2. Walking across a park after quarantine, the grass never looked so green. My son, Zac picked a wild flower and said "Mama, I love you".
3. Many people have asked me if they should bring their family on fellowship. It is a personal choice and bringing my 2 kids along definitely involved a lot of planning! My kids loved preparing delicious meals with fresh Australian ingredients.
4. I am thankful for my supportive husband Dr Edward Zhang who looked after the household during my fellowship. The kids definitely stuck to him like glue during and after that special time so that my hands were free!