MUSCULOSKELETAL SCIENCES

# 14

### OUR BEIJING JST EXPERIENCE DR REBECCA LIM APN WEN JING

ANC SANGEETHA

PIONEERING PATHWAYS: JOURNEY IN SURGICAL INNOVATION & BIOELECTRONICS DR JIANG LEI

NEWS

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## PIONEERING PATHWAYS: JOURNEY IN SURGICAL INNOVATION & BIOELECTR<mark>onics</mark>

**Dr Jiang Lei** is a Consultant with the SGH Department of Orthopaedic Surgery, specialising in spine surgery. He currently holds an NMRC CS-IRG NIG Award for his project on "Spinal Cord Bioelectronic Bypass: Towards Restoring Volitional Motor Function after Acute Spinal Cord Injury".

Hi Jiang Lei, we note that you are very active in the research and innovation space within MSKSC ACP! You currently hold an NMRC CS-IRG NIG Grant on Spinal Cord Bioelectronic Bypass. Could you tell us more about that?

Spinal cord injury remains the greatest challenge facing a spine surgeon, because injury to the spinal cord is often irreversible despite the recent advances in spine surgery and the best efforts of the medical team. Recent advances in neuromodulation, however, has demonstrated that residual circuits below a site of spinal cord injury can be harnessed to restore motor function in paralysed patients.

My research hopes to take this concept one step further by recording signals above the site of injury and using these signals to trigger stimulation of the spinal cord distal to the injury, effectively creating a spinal cord bypass. This approach has been shown to work in rats and the results will soon be published in Science Advances. The grant allows us to apply this concept to a preclinical large animal model, setting the stage for translation to pilot human clinical trials.



I find excitement in speaking to juniors with innovative ideas and feel that the future of the ACP is bright.



Is this area of research something that has always been aligned with your clinical / academic interests?

I was lucky to be exposed to the department early as a medical student and was inspired by our strong research culture. While it is always satisfying to help individual patients, I see the value of research as a means to help a greater population of patients and that remains my motivation to pursue research. I decided on my research direction late in my clinicianscientist residency as I wanted to study a topic that was aligned with my clinical passion, spine surgery.

## Understand that your research in this area started from your time with the University of Cambridge. Tell us more about that.

I always had a plan to complete my research year overseas as I recognised the value of embedding myself in a world-leading research institution. It was a long process of cold-calling professors working on various topics relating to spinal cord injury but finally **Professor James Fawcett** got back to me and linked me up with my research mentors, **Dr Damiano Barone** and **Professor George Malliaras**. The recent pandemic was a challenging period as it disrupted the start of my MPhil at Cambridge, but I am glad I persevered with my plans.

The people I met during my time at the University of Cambridge truly inspired me. The graduate students and post-docs were brilliant experts in their field, but they remained very humble and were always ready to share their expertise with me. It was challenging, coming from a medical background, to be immersed in an engineering lab, but this encouraged me to seek knowledge in unfamiliar fields, including programming, 3D-printing and electrical engineering. I really enjoyed the multi-disciplinary nature of the lab and it was satisfying to see different specialists coming together to solve a clinical problem with advanced technology.

The path to successful research is never straightforward. Whilst in surgery, we expect most of our surgeries to go well, leading us to grow accustomed to success, experiments however tend to run the opposite way. I have learnt that failure is truly part of good research, but as long as we keep the end goal in mind, perseverance pays off. The Eureka moment when an experiment goes something well is different from the satisfaction of seeing a patient do well, and both of these experiences motivate me as a clinician-scientist.



## What are some of the things you hope to achieve in the long term through this research?

The ultimate goal of this research is to bypass spinal cord injury using bioelectronics, restoring motor function to paralysed patients. However, bringing a technology to market is a separate challenge beyond doing good research so I am breaking up this journey into small, achievable targets with the end in sight.

The technologies developed from this research, however, extend beyond spinal cord injury to other neurological conditions such as stroke and movement disorders. I am collaborating with other specialists, such as **Dr Jack Lo** from neurosurgery, to investigate the role of bioelectronics in stroke as well. Neuromodulation is a relatively new field of study in Singapore, and I hope that with more clinicians interested in this field, we can build a consortium of clinicians and scientists to advance medical care in various fields with bioelectronics.



## Is there anything else that you would like to mention to the readers out there?

I am thankful to the mentors and colleagues who have facilitated my ongoing journey as a clinician-scientist. As much as I am inspired by the seniors before me, I find excitement in speaking to juniors with innovative ideas and feel that the future of the ACP is bright.



SGH Orthopaedic Surgery

# SGH SKIN BANK

The SGH Skin Bank (SSB) is the de facto national skin bank that provides skin allografts for the treatment of all severe burn cases in Singapore. Let's look back at its history!



Singapore was heavily dependent on imported skin allografts from overseas allograft banks including USA, Canada, Australia and Netherlands. In 1998, SGH established its allograft recovery programme to provide a local source of allografts.

#### **Did You Know?**

From 2002 to 2011, only an average of 5 local skin donors donated about 10,000 cm2 skin allografts yearly. This rate could not meet peacetime and emergency preparedness demands in Singapore. Overseas skin allografts accounted for 91% of total skin used on patients.



Donor pool was expanded beyond brain death donors to include cardiac death donors. With cardiac death donors, skin allograft recovery could be done at the bedside with mobile sets containing the items required for skin retrieval.



Fig. 1 – Mobile Set containing the items required for skin retrieval - personal protective equipment, solutions, dressing, sterile instruments including battery operated dermatome (right), and other necessary items.



2017

Upper age limit of skin donors was increased from 75 to 90 years old to increase donor pool. SGH Burn Centre implemented a Burns protocol for early surgery and rapid coverage using a biosynthetic dressing (Biobrane) designed for superficial to mid-dermal partial thickness burns. This allowed Singapore to reduce the usage of allograft significantly.

# 2015

Arrangements were made to begin nationwide expansion of skin donation coverage that includes all public health institutions, private hospitals and hospices / nursing homes.

The above strategies have led to Singapore's achievement of allograft self-sufficiency without any overseas procurement since 2017.



Rinsing



**Antibiotic Treatment** 



Inspect, Trim & Measure

Storage in Liquid Nitrogen





Soak & Package Fig. 2 – Skin Processing and Cryopreservation\*

Storage



Left to right: Ms Heng Wee Ling, Ms Nurulfathin, Ms Crystal Yick, Ms Ho Wen Ning, A/Prof Alvin Chua, Dr Chong Si Jack, Prof Tan Bien Keem, Dr Sakabe Junichi, Dr Chan Wing Yue, Ms Michelle Wong, Dr Keya Roy, Ms Nurazilah.

# UK Study Trip

A recent study trip to the United Kingdom from 3rd to 9th of March 2024 presented a group of surgeons from the orthopaedic and hand surgery disciplines the opportunity to gather valuable insights on system models and best practices in the areas of research, education and philanthropy from renowned institutions in the UK.



**Royal National Orthopaedic Hospital**  **St Bart's Hospital** 

Imperial College London

**University of Cambridge** 

**University of Oxford** 

The trip programme included visits to institutions with longstanding traditions in research including Imperial College London, University of Oxford and the University College London Aspire Create Lab. The trip delegates had the chance to observe and learn more about the musculoskeletal research projects being carried out as well as the resources and facilities available at these institutions.

Centre for Rehabilitation Engineering and Assistive Technology (Aspire CREATE)





**Device Development** 



Neuromodulation

Imaging

**Imperial College London** 



**Virtual Reality** 



**Patient Specific** Instrumentation Guide



**Blast Simulation** 

**JAN - JUN 2024** 

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Apart from research, the trip delegates were also able to gain valuable takeaways in the areas of education and philanthropy. A visit to the Royal National Orthopaedic Hospital in Stanmore provided interesting perspectives on the adoption of QI and competency-based training as well as the integration of philanthropy with clinical care and recovery pathways for patients.



Horatio's Garden is named after Horatio Chapple, a schoolboy who wanted to be a doctor.

In 2010, Horatio volunteered at the Duke of Cornwall Spinal Treatment Centre in Salisbury during his school holidays. Talking with patients he noticed there was a lack of outdoor space for patients with spinal injuries and their loved ones.

#### Horatio's Garden 🚽

In memory of Horatio Chapple, whose life was cut short in 2011 at just 17 during a polar bear attack in Svalbard. The garden offers private pods, gardening, arts & craft as well as live music.





The trip also presented numerous opportunities for networking and engagement with diverse groups of people including clinicians, researchers, engineers and more, all of whom play key roles in advancing clinical care and academic medicine in their respective institutions. The ACP looks forward to further develop these connections and partnerships in its academic medicine journey!



# Education Events



#### NUS YONG LOO LIN (YLL) PHASE 3 EOPT OSCE EXAM

It's another nerve-racking year for NUS YLL Year 3 Orthopaedic Surgery medical students, as they underwent their End of Posting Test (EOPT) OSCE!

The OSCE exam was successfully held on 9th March 2024 at SGH with the collaborative efforts of examiners from various institutions: SGH, KKH, CGH, TTSH, NTFGH, NUH, KTPH, Mount Elizabeth, WHC and support from our admin colleagues. **A/Prof Goh Seo Kiat** was the OSCE in-charge and **Dr Audrey Han** was the OSCE coordinator.



#### **MSK TRI-FACULTY MICROSURGERY PROGRAMME FOR MEDICAL STUDENTS**

MSK Tri-Faculty Microsurgery Programme for Medical Students hosted a workshop tailored for students from Duke-NUS, YLL and LKC. This event provided a unique introduction to topics not typically covered in medical school, such as microsurgery skills including end-to-end anastomosis and tendon repair. Generously sponsored by Medtronic and J&J, the workshop featured core faculty members **Dr Chew Kong Yik, Dr Fong Hui Chai, Dr Michael Hsieh, Dr Henry Soeharno, Dr Chung Sze-Ryn, Dr Kang Yong Chiang** and **Dr Dawn Chia.** Junior doctors from SGH PRAS & HRM joined the workshop as instructors.





Credit: Yvonne Yen MD-PhD, Sean Kong MS4 & Duke-NUS Plastic, Reconstructive & Microsurgery Student Interest Group





#### ORTHOPAEDIC SURGERY SUTURING & IMPLANT WORKSHOP



The Orthopaedic Surgery Suturing and Implant Workshop provided an immersive experience for medical students to delve into the intricate world of orthopaedic surgery. Led by **Dr Suraya** and supported by J&J, the workshop offered a hands-on approach to mastering suturing techniques and familiarisation with various orthopaedic implants.

Other orthopaedic surgeons: **Dr Ng Yeong Huei**, **Dr Henry Soeharno**, **Dr Benjamin Ang** and junior doctors from SGH OTO joined the workshop as instructors too.



Photos credit: Jolene Lee & Duke-NUS Orthopaedic Surgery Student Interest Group

#### **ADULT & PAEDIATRIC ORTHOPAEDIC EMERGENCY CONDITIONS WORKSHOP**







Photos credit: Jolene Lee & Duke-NUS Orthopaedic Surgery Student Interest Group



**Dr Woo Yew Lok** and **Dr Andrew Chou** spearheaded a workshop focusing on emergency conditions in both adult and paediatric patients. This session was organised for the Duke-NUS Orthopaedic Surgery Interest Group, known as Orthopaeduke. Dr. Andrew Chou facilitated hands-on learning by providing 3D models of children's forearms, allowing medical students to practice manipulation and reduction techniques.

## Singapore Integrated Programme (SGIP) Plastic Surgery Programme Retreat 2024

Plastic Surgery faculty members and residents work hard all year round but what is work without play?! The programme organises a retreat annually to provide a chance for bonding and mingling in a social setting. This year's theme is escape room game!

The activity was held on 9 March 2024 at the Asian Civilisations Museum. The groups had to find clues in the museum to solve the puzzles.



WORKING HARD TOGETHER AS A TEAM.





WINNING TEAM GETS A BOX OF CHOCOLATES AND DISCOUNT VOUCHERS!



AFTER THE INTENSE BATTLE OF WITS, IT'S TIME TO CHILL AND FILL THE TUMMIES!

ENDING THE DAY WITH HIGH TEA.

## Orthopaedic Residency Retreat

The residency annual retreat was a fantastic success! This dinner gathering brought together our residents and dedicated Orthopaedic faculty members involved in examination preparation and didactic teaching of our residents. The dinner served as an opportunity for our esteemed educators to connect and bond with each other over delightful meals and insightful discussions.





# Spine SDDC News

#### **Official Launch of CGH-NNI Integrated Spine Centre**

The CGH-NNI Integrated Spine Centre was officially launched on 3 February 2024 as part of ongoing efforts to care for patients with diseases and disorders of the spine, spinal cord and nerves. Established in collaboration with the National Neuroscience Institute since 2001, the centre provides comprehensive and focused care for patients with spinal conditions from diagnosis to treatment and rehabilitation.





Robotic Spine Surgery Program at CGH-NNI Integrated Spine Centre



#### SingHealth Duke-NUS Spine Centre Visionary Retreat

Themed "One SingHealth Academic Medical Centre – Cluster Seamless Spine Care" where Orthopaedic Surgery, Neurosurgery, Allied Health, Rehabilitation Medicine and Pain Medicine come together to brainstorm on the new care model for spine and a shared vision for SingHealth Duke-NUS Spine Centre.



#### Basic Spine Cadaver Course (14 Oct 2023)

Neck or Back Pain? Spine and Neck Treatment – Anterior Cervical Discectomy and Fusion (ACDF) surgery for Cervical Radiculopathy

The ACDF surgery video was uploaded on our YouTube channel (@SingHealth) on 1st May 2024.



The course allows participants to gain an appreciation of spinal anatomy and common pathologies, understand the principles of open and MIS thoracolumbar spine surgery and troubleshoot surgical implants on imaging.



## OUR BEIJING JST EXPERIENCE

#### **ROBOTIC AND MINIMALLY INVASIVE SURGERY (MIS) OF THE WRIST AND SMALL JOINTS OF THE HAND**



**Dr Rebecca Lim** SGH Hand & Reconstructive Microsurgery



here did you go for your HMDP and why did you choose that location? I went to Beijing Ji Shui Tan Hospital (JST), Beijing, China for my HMDP fellowship on 'Robotic and Minimally Invasive Surgery (MIS) of the Wrist and Small Joints of the Hand'. The reason I chose this place was because it is currently the National Tertiary Referral Centre for Orthopaedic Surgery with an enormous patient load, and it is also the very institution that invented the first global robot used primarily for bone fixation in Orthopaedic Surgery.



"I was able to bring a team of 2 nurses with me –NC (APN) Wen Jing and ANC Sangeetha D/O Krishnan, and we had a wonderful time learning and adapting the life overseas together."

#### Tell us more about your HMDP experience.

I was under the tutelage of **Prof Liu Bo**, a renowned wrist surgeon who specialises in wrist arthroscopy, robotic surgery with a keen interest in triangular fibrocartilage complex (TFCC) repairs. I was able to bring a team of 2 nurses with me – **NC (APN) Wen Jing** and **ANC Sangeetha D/O Krishnan**, and we had a wonderful time learning and adapting the life overseas together.



The sprawling campus of the Beijing JST hospital

#### HMDP -

#### Wen Jing

"This training has been a positive experience for me and widened my insight. It gave me a glimpse of how hospitals in different countries work differently in specific social contexts. It also enlightened me on how to develop hand surgery nursing in Singapore and appreciate what we have been doing better."

#### Sangeetha

"The attachment at JST has widened my clinical knowledge in Wrist Arthroscopy, Small Joint Arthroplasty and Advanced Minimally Invasive Surgery (MIS) of the Hand & Wrist, as JST has very a high volume of patients. It has given me a very positive experience and broadened my perspectives, including how the Operating Theatre in another country is set up and managed. This encourages me to be a resourceful person in my department to guide my colleagues in these subspecialised fields and its perioperative management."



Invitation to deliver lectures to Huangshi Love & Health Hospital, affiliated to Hubei Polytechnic University





Humanitarian mission to Xinjiang, performed a free functioning muscle transfer for chronic brachial plexus injury



Teaching medical students from Peking University Faculty of Medicine

### Were there any memorable moments during your fellowship?

There were many memorable experiences during my fellowship. Besides clinical work, I was able to participate in humanitarian missions to Fujian Province and Xinjiang, deliver lectures at various conferences and even taught medical students from Peking Medical University on effective communication such as 'Breaking Bad News'.

I also managed to co-author several publications in wrist arthroscopy and robotics with my colleagues and mentor in JST, and I am currently working on a robotic surgery atlas with my USA and China counterparts.

In addition, we had many rewarding and fun experiences travelling around China, visiting many historical places of interest and making many new friends.



Delivering a lecture at the 22nd International Congress of Plastics and Reconstructive Surgery in Shanghai **JAN - JUN 2024** 

### THE AMERICAN DREAM ACCOMPLISHED – CLINICAL FELLOWSHIP AT THE COMPLEX JOINT RECONSTRUCTION CENTRE @ HOSPITAL FOR SPECIAL SURGERY



A/Prof Lincoln Liow SGH Orthopaedic Surgery

#### Hi Dr Lincoln, thanks for spending time with us for this interview today! Our first question is one that always pops up: How did you get to do a clinical fellowship at Hospital for Special Surgery?

In a way, I took more than 10 years to prepare for it. It was a culmination of time spent in the US for military training, my research fellowship at Massachusetts General Hospital, Harvard Medical School and clearing the United States Medical Leaving Examinations (USMLE) while I was a resident. I got to know **Dr Thomas Sculco** and **Dr Peter Sculco** at AAOS 2019 and subsequently visited them on a self-paid visitation at HSS. Shortly after, they informed me that I had secured my fellowship position. I was over the moon to be given this opportunity.



2023 HSS Adult Reconstruction and Joint Replacement (ARJR) and Complex Joint Reconstruction Centre (CJRC) Fellowship Graduation at The Knickerbocker Club

#### What did you do in the fellowship?

It was a great fellowship, and understandably so as it is one of the highest rated US fellowships for adult reconstruction. I did a total of 510 surgeries in my fellowship year, which comprised of 350 primary arthroplasty cases and 160 revisions. My key takeaway was to learn surgical skills to handle complex revision techniques, to ensure safe exposure, efficient implant extraction, perform advanced joint reconstruction and to obtain a stable, functional joint as well as soft tissue techniques to aid exposure or restore function.

I also ran a complex revision clinic where I saw patients with multiple revised arthroplasties with no good solutions, which changed my perspective of arthroplasty. We helped those that we could, but in some patients, sometimes the best solution was to avoid another operation.

Fellow education was extremely structured and covered all aspects of arthroplasty. These included arthroplasty conferences with different focus areas, for example weekly grand rounds where controversial topics would be presented, mentorship conferences where junior arthroplasty surgeons would present their outpatient disaster cases to seek second opinion from senior surgeons, custom implant conferences where 3D modelling was performed to aid surgical planning in patients with complex congenital/ dysplastic deformities, radiographic analysis conferences where fellows would be quizzed on interesting radiographs.



Custom 3D printed acetabulum with PSI guides for challenging hip reconstruction

Every Friday, a renowned Visiting Professor would share insights on orthopaedic / nonorthopaedic related topics. The fellows would also run a lab twice a month to practice uncommon, but essential advanced surgical techniques such as extended trochanteric osteotomy, tibial tubercle osteotomy, marlex mesh extensor mechanism reconstruction, and acetabular cup cage revision just to name a few.

I participated actively in research as well, presenting at the HSS alumni day on custom triflange for massive acetabular bone loss. My research project titled "Rotating-hinge revision total knee arthroplasty provides greater arc of motion gains for patients with severe arthrofibrosis" won the Best Poster Award at the 2023 Fellow Research Awards. I attended multiple education-related conferences such as the AAOS and AAHKS, allowing me to keep abreast with the latest in arthroplasty research.



Having a great time in the Operating Rooms with Peter

## That sounds like a lot of work! Did you have any fun?

The HSS surgeons were really hospitable and they were kind enough to engage the fellow group after hours. I was invited to various events, the HSS Autumn Benefit fundraising event, East River fishing (giant striped bass!), Thanksgiving and Christmas dinners as well as road trips. I did a half-marathon at Lake Placid with my co-fellows, which was a great experience at the birthplace of the Iron-man race. I had an unforgettable time with my family, hanging out at Central Park, chasing the fall colours and the spring blossoms, celebrating Christmas at the Rockefeller Centre, going skiing with my kids, chilling at Jazz clubs and attending lots of Broadway musicals. We had our graduation at the Knickerbocker club and an unforgettable roasting session by my fellow class. It was so much fun!



Dinner with present and past fellows during AAHKS 2022

Encapsulating MSKSC ACP's unwavering commitment to making a meaningful impact in the community, our philanthropy guide showcases the transformative power of generosity in advancing patient care and research. Additionally, it highlights the currently active campaigns on GiveAsia, inviting readers to join hands in supporting crucial initiatives aimed at improving musculoskeletal health and enhancing patient outcomes. From research endeavours to compassionate patient care programmes, each campaign embodies the spirit of philanthropy, fostering hope and healing for individuals in need. Musculoskeletal Sciences ACP hopes to continue inspiring positive change, one donation at a time.



**MSKSC ACP Philanthropy Booklet** 

## Ponor Engagement

Led by A/Prof Andrew Chin, MSKSC ACP hosted a donor engagement dinner at Butterfly Table, a charming Peranakan private dining venue. Against the backdrop of intricately crafted heritage, we shared tales of impact and transformation made possible by the generosity of donors. Amidst the savoury delights of Peranakan cuisine, we fostered meaningful connections and deepened our commitment to driving positive change in our communities. The evening served not only as a showcase of our past achievements but also as an invitation for potential donors to join us in writing the next chapter of impactful giving.





MSKSC ACP is currently running six impactful fundraising campaigns on GiveAsia. Each campaign targets a specific aspect of our mission, from supporting patients' treatment costs to funding vital research endeavours. Your contribution to these campaigns will directly empower individuals battling musculoskeletal issues, providing them with essential resources and hope for a brighter future. Join us in making a difference today by donating or sharing our GiveAsia campaigns and being a beacon of hope for those in need.



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# Mission Trip to Cambodia

Cambodia, classified as one of the United Nations' Least Developed Countries, grapples with limited access to complex reconstructive surgeries, particularly for traumatic brachial plexus injuries—a pressing concern as the country sees approximately 5.4 fatalities daily from road traffic accidents, according to the United Nations Development Programme. This issue is compounded by the high trauma rates commonly experienced in developing nations.

# نامینی نامی نامینی نامی نامی نامی نامی نامی نامی نامی

Rigerstaan Patient Registration

All smiles despite ending late into the night, after multiple brachial plexus reconstructive surgeries including a contralateral C7 nerve root transfer.



The team and local staff at Children's Surgical Centre before returning to Singapore.

In response to these challenges, a team from Singapore and the United Kingdom has been visiting the Children's Surgical Centre, Cambodia, to reach out to patients requiring upper extremities surgeries since 2013. After a hiatus in trips during the Covid-19 pandemic, these trips have resumed. Most recently, a team from the Department of Hand and Reconstructive Microsurgery, Singapore General Hospital visited the hospital for 5 days in January 2024. Led by **Dr Lam Wee Leon**, the team included **Dr Joyce Tie**, **Dr Andrew Yam**, and two residents in hand surgery, **Dr Camelia Tang** and **Dr Lim Zhi Xue**. Two other consultants from NUH and KTPH also joined the trip. Their objective was clear: to address the pressing medical needs of the local population and to train local surgeons.

There were various highlights from the trip. One such highlight was the increasing recognition that the use of artificial dermal matrix could be a useful addition to the armamentarium in treating large soft tissue defects, even in resource-poor countries.



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These materials are typically expensive and we are grateful to PolyNovoTM for their generous donations of BTM (Biodegradable Temporizing Matrix) and also Molnlycke for Granudacyn, donating an antiseptic cleansing solution. These supplies proved crucial in addressing large burns contractures without the need for donor site morbidity and free flaps, especially in a resource-constrained setting. Local nurses and doctors were also trained on postoperative care following the BTM and tendon transfers -a vital step in ensuring continuity of care for patients after the mission trip.



Use of BTM for large skin defects following burns contracture release, avoiding donor site morbidity.





Dr Andrew Yam examining a girl with OBPI (Obstetrical brachial plexus injury)

Over the course of a week-long mission, the team performed a total of 32 surgeries, including plexus surgeries for adults and children, burn contracture releases and various neglected trauma injuries. Additionally, corrective surgeries were conducted for children with congenital hand anomalies and spastic deformities, aiming to improve their quality of life significantly.

Training local surgeons was a pivotal aspect of the mission trip, emphasising the importance of sustainability and local capacity building. The medical team from Singapore invested significant efforts in ensuring that local surgeons had the opportunity to learn and enhance their skills, thereby contributing to long-term improvements in healthcare delivery in Cambodia.

Children with significant burns contractures playing with toys from Singapore.

It was especially gratifying to see how the skillsets of the various surgeons complemented each other and allowed complex decisions to be made within a short time.

Through their expertise and collaborative efforts with local staff, the mission not only provided immediate medical relief to patients in need, but also contributed to the groundwork for ongoing support and development within Cambodia's healthcare infrastructure. We would like to thank MSKSC ACP for supporting us on this trip and hope to make similar trips in the very near future.

> Dr Lam Wee Leon SGH Hand & Reconstructive Microsurgery



# BEIJING OUTREACH TRIP 2024

The SingHealth Beijing Outreach Strategy Trip from 21 to 24 January 2024 was an opportunity for delegates to add value to our SingHealth branding, increase outreach efforts and cultivate close working relationships with renowned academic institutions in Beijing, China.

The SingHealth Team met up with top leadership from the following institutions:

- Jishuitan Hospital
- Peking Union Medical College Hospital
- Peking University Third Hospital
- Peking University International Hospital
- Tsinghua University

In addition, the SingHealth Team also embarked on a series of exploratory engagement sessions with the following insurance/medical consultancy advisor partners:.

- Ping An Insurance
- AIA Beijing & Mr Gao Sihua () an independent insurance adviser for 17 years, recommended by AIA Singapore
- Saint Lucia Consulting
- MSH Insurance

Through this trip, the team successfully explored collaborations in the areas of clinical services, research & innovation, as well as education & training opportunities, including a showcase of the SDGHI Asian Institute for Healthcare Leadership & Management Programme for future partnerships.

#### MSKSC participants involved:

Prof Andrew Tan, Prof Tay Boon Keng, A/Prof Darren Tay, Dr Eric Liu, Ms Tiffany Thng.







# GLOBAL HEALTH Jaffna, Sri Lanka Trauma Care Project





Our team of Orthopaedic doctors **A/Prof Denny Lie** and **Dr Kizher Shajahan**, as well as **A/Prof Jonas Karlstroem** from SDGHI, travelled to Jaffna, Sri Lanka, to conduct an AEFIX workshop, aimed at teaching the local clinicians on how to use the frugal innovation device.





## Collaborations with SGH Patient Liaison Service (PLS)



#### Women's Health Public Webinar (21st Feb 2024)

The Women's Health Public Webinar was a transformative journey with our multidisciplinary specialists in surgical oncology and plastic surgery as they unveil insights, techniques, and advancements in the early detection of women's cancer. **Dr Cindy Goh,** Consultant from SGH Department of Plastic, Reconstructive & Aesthetic Surgery covered the topic on restorative procedures following breast cancer surgery and **Dr Chew Khong Yik**, Senior Consultant from SGH Department of Plastic, Reconstructive & Aesthetic Surgery and **Dr Chew Khong Yik**, Senior Consultant from SGH Department of Plastic, Reconstructive & Aesthetic Surgery was a moderator for the webinar.

#### The Arch Enemy: Flatfoot Public Webinar (19th Apr 2024)

The public webinar on flat foot addressed various issues including preventive measures and treatment options, both surgical and non-surgical. Expert speakers provided insights into challenges associated with flat feet and shared valuable information on effective management of this condition. Attendees learned about preventive measures and treatment avenues, empowering them to make informed decisions about foot health. Chaired by **Dr Tay Kae Sian**, Director of Foot & Ankle Surgery at SGH Department of Orthopaedic Surgery, panelists included specialists **Dr Toh Rui Xiang** and **Dr Kizher Buhary**, along with Principal Podiatrist **Mr Gordon Williams.** 





#### Hand & Reconstructive Microsurgery Public Webinar (27th Apr 2024)

Speaker **Dr Rebecca Lim** delved into the intricacies of osteoarthritis affecting the hand and fingers, providing valuable insights into its diagnosis and management. Meanwhile, **Dr Chung Sze Ryn** explored the complexities of understanding wrist pain, offering attendees a comprehensive understanding of its underlying causes and potential treatment options. Moderated by **Dr Robert Yap**, Head & Senior Consultant from the SGH Department of Hand & Reconstructive Microsurgery, the webinar provided attendees with invaluable knowledge to better comprehend and address hand and wrist-related issues.

## I've Got a Curved Spine, What's Next? Public Webinar (22nd June 2024)

In honor of World Scoliosis Awareness Month, a recent webinar with experts **A/Prof Reuben Soh**, **Dr June Quek**, and **Dr Ouyang Youheng** discussed nonsurgical and surgical treatments for scoliosis, moderated by **Dr Ng Yeong Huei**. The event, attended by over 800 participants, provided insights into managing this condition, which affects 2-3% of the global population. Attendees engaged with panelists, gaining valuable knowledge on effective treatment strategies.

## Tune in to the SGH YouTube Channel to view the recordings of these webinars!



## Knee Preservation Talks @ Community Centres

Two public symposiums were held by 4 orthopaedic surgeons: **Dr Lee Kong Hwee**, **Dr Hamid Razak**, **Dr Soong Junwei** and **Dr Don Koh**, at Whampoa Community Club and Kallang Community Club.

The speakers covered various aspects of knee pain and knee preservation surgery. Dr. Lee Kong Hwee elucidated the root causes of knee pain and offered insights into its complexities. Dr. Don Koh delved into the intricacies of knee preservation surgery, explaining its mechanisms and efficacy. Dr. Hamid Razak addressed the audience's queries on candidacy and eligibility criteria for knee preservation surgery. Finally, Dr. Soong Junwei discussed the prospects and benefits of knee preservation surgery, instilling hope in those grappling with knee discomfort.

These symposiums served as invaluable platforms for individuals and their families seeking guidance and understanding about knee pain and the available treatment options.



# INTRODUCING OUR MSK PODCAST!





Dr Lam Wee Leon Hand & Reconstructive Microsurgery, SGH



Dr Chung Sze-Ryn Hand & Reconstructive Microsurgery, SGH



Dr Michael Hsieh Plastic, Reconstructive & Aesthetic Surgery, KKH



**Dr Kenny Tay** Orthopaedic Surgery, SGH

**MSK Waves** is your compass in the sea of musculoskeletal knowledge, where we navigate through the latest advancements, research breakthroughs, and clinical insights. But we are not just here to talk amongst ourselves.

In every episode, we're joined by invited guest speakers—experts in their fields—who will share their wisdom and perspectives, enriching our discussions and broadening our understanding.

Whether you are a medical professional seeking to expand your understanding, a patient navigating treatment options, or simply fascinated by the science behind movement and structure, MSK Waves is your ticket to a deeper understanding of the complex world of Musculoskeletal Sciences. So, tune in, subscribe, and join us in riding the waves of discovery together!



### INAUGURAL EPISODE!

Tune in to our first podcast episode as we catch up with **Prof Kevin Chung**, Professor of Surgery at the University of Michigan Medical School's Department of Plastic Surgery.



Scan the barcode on your Spotify App to tune in!



# **MSKSC GRAND ROUND**



# **VALUE BASED CARE**

### for the Surgical Services

7.30 - 9

6 PM

onwards

A.L.I.C.E @ SGH Campus | SingHealth Tower Level 2

	1 Aug 2024	2 Aug 2024
30 - 9.30 AM	<b>Morning Grand Round:</b> Value-Based Care for Hospital Productivity	<b>Morning Grand Round:</b> Value-Based Care Approaches for the Surgical Patient Journey
12 - 2 PM	Lunchtime Plenary Address by Prof Hamish Laing Director, Value-Based Health and Care Academy Professor of Enhanced Innovation, Engagement and Outcomes, Swansea University.	Lunchtime Plenary Address by Prof Rajarshi Bhattacharya Divisional Director of Surgery & Cancer, Imperial College Healthcare NHS Trust. Professor of Surgery, Case Western Reserve University, Ohio, Cleveland, US.
2 - 4 PM	A.L.I.C.E Fireside Chat:	SDGHI Symposium:

Innovating for Value-Based Surgical

Wine & Cheese Session:

Surgical Department Sharings

Services through Industry Collaborations

GHI Symposium: Exploring Frugal Innovation for Value-**Based Healthcare** 

**Throwback Surgical Resus Round** (Note: By Invitation Only. Venue will be Academia Level 3 Atrium)

### **SCAN FOR MORE INFO**

UPCOMING

/ENTS



#### **ORGANISED BY**



SingHealth DukeNUS **SURGERY** 

# SENIOR Executive

# INTRODUCTION

Hey there,

I'm Julieanna! Known to many in KKH as Jules/Julie/Jul (among many other versions of my name!) As a Senior Executive in the Department of Plastic, Reconstructive & Aesthetic Surgery, KKH, I wear many hats to ensure the smooth running of the administrative side of our department , some say I "pao ka liao"! But I won't be able to do what I do without a great team!



Ms Julieanna Md Noor KKH Plastic, Reconstructive & Aesthetic Surgery



# WHAT I DO?

What precisely do I do for a living? I'm the department's "go-to" gal for any problems, questions, requests—you name it, and I'll do all in my power to solve it for you! On a more serious note, though, I answer to our Clinical Head of Department.



Our department comprises administrative, nursing, allied health, and medical staff. I collaborate extensively with colleagues from the departments and hospitals within and outside of SingHealth. Many are unaware of the extensive back-end administrative work that goes on within the hospital.

# AFTER WORK ACTIVITIES

Having supportive colleagues and a strong sense of camaraderie can indeed make all the difference in how I feel about going to work each day. When surrounded by people you enjoy working with and who share your dedication to getting the job done well, it creates a sense of purpose and motivation that can be energising. Having a workplace that feels like a second home can make the challenges of the day feel more manageable and even enjoyable.

It is not all work and no play! We have regular gettogether "makan" sessions on special occasions, for example, junior doctors' farewell dinners, nurses' day celebrations, and administrative professional week among many others! So yes, we are well-fed! We even had a paintball session once!





# outside of kkh

Outside the hospital walls, I am a devoted mother of 4 kids and 4 furry kids! On top of that, being involved in my kids' schools and the neighbourhood Resident Network is how I keep myself busy and stay committed to both my family and community. It's important to carve out time for myself and I prioritise going for walks or jogs on weekends to clear my mind and enjoy some quiet time. Finding those moments of tranquillity amidst such a bustling schedule is rejuvenating!





@kkH.S9

# **Team & Contacts**

#### **KEY APPOINTMENT HOLDERS**

Academic Chair Assoc Prof Tan Mann Hong tan.mann.hong@singhealth.com.sg

Academic Deputy Chair Prof Tan Bien Keem tan.bien.keem@singhealth.com.sg

Director, Clinical Quality & Governance Assoc Prof Agnes Tan Beng Hoi agnes.tan.b.h@singhealth.com.sg

#### **CLINICAL**

Vice-Chair, Clinical Services Assoc Prof James Loh Sir Young james.loh.s.y@singhealth.com.sg

Deputy Vice-Chair, Inpatient Services Assoc Prof Andrew Chin Yuan Hui andrew.chin.y.h@singhealth.com.sg

Deputy Vice-Chair, Outpatient Services Assoc Prof Denny Lie Tjiauw Tjoen denny.lie.t.t@singhealth.com.sg

Deputy Vice-Chair, Operating Theatres Assoc Prof Goh Seo Kiat goh.seo.kiat@singhealth.com.sg

Deputy Vice-Chair, Clinical Innovation & Partnerships

#### RESEARCH

Vice-Chair, Research Prof Howe Tet Sen howe.tet.sen@singhealth.com.sg

Deputy Vice-Chair, Research Assoc Prof Joyce Koh Suang Bee joyce.koh.s.b@singhealth.com.sg

Deputy Vice-Chair, Research Dr Kinjal Mehta kinjal.vidyut@singhealth.com.sg

#### FACULTY AFFAIRS & ACADEMIC DEVELOPMENT (FAAD)

Vice-Chair, FAAD Prof Andrew Tan Hwee Chye andrew.tan.h.c@singhealth.com.sg

Deputy Vice-Chair, FAAD (Medical Faculty) Assoc Prof Inderjeet Singh Rikhraj inderjeet.rikhraj@singhealth.com.sg

Deputy Vice-Chair, FAAD (Associate Medical Professional) Assoc Prof Dinesh Shree Kumar shree.kumar.dinesh@singhealth.com.sg

#### **EDUCATION**

Vice-Chair, Education Assoc Prof Arjandas Mahadev arjandas.mahadev@singhealth.com.sg

Deputy Vice-Chair, Education Dr Andy Yeo Kuei Siong andy.yeo.k.s@singhealth.com.sg

Deputy Vice-Chair, Education Dr Robert Yap Tze-Jin robert.yap.t.j@singhealth.com.sg

#### STRATEGIC INITIATIVES

Vice-Chair, Strategic Initiatives Assoc Prof Ong Yee Siang ong.yee.siang@singhealth.com.sg

Deputy Vice-Chair, Innovation Assoc Prof Wong Merng Koon wong.merng.koon@singhealth.com.sg

Deputy Vice-Chair, Philanthropy Assoc Prof Andrew Chin Yuan Hui andrew.chin.y.h@singhealth.com.sg

#### **RESEARCH PERSONNEL**

Senior Research Fellow I Assoc Prof Andy Yew Khye Soon andy.yew.k.s@sgh.com.sg

Assistant Director, Transplant Research Assoc Prof Alvin Chua Wen Choong alvin.chua.w.c@sgh.com.sg

Engineer Ms. Pivatidevi Pareatumbee pivatidevi.pareatumbee@sgh.com.sg

Clinical Research Coordinator Mr. Teo Chengjun chengjun.teo.h@sgh.com.sg

#### **ADMINISTRATION**

Deputy Director Ms. Tiffany Thng Suyin tiffany.thng.suyin@sgh.com.sg

Assistant Manager Ms. Nurul Azizah Binte Johari nurul.azizah.johari@sgh.com.sg

Assistant Manager Ms. Tan Yean Fang tan.yean.fang@sgh.com.sg

Senior Executive Mr. Ivan Neo Lin Wen ivan.neo.l.w@sgh.com.sg

Senior Executive Ms. Tee Yi Lin tee.yi.lin@sgh.com.sg

Executive Ms. Krystal Myat Thiri Aung krystal.aung.m.t@sgh.com.sg

Executive Ms. Vivienne Chia Hwee Qi vivienne.chia.h.g@singhealth.com.sg

Associate Executive Ms. Jayaparvathy V jayaparvathy.v@sgh.com.sg

Senior Associate Ms. Nur Azura Binte Abdul Majid nur.azura.a.m@sgh.com.sg

## **MSK MINIONS**

### Moving In

In 2024, we moved into new places both in our personal and professional lives.

MSK minions Yi Lin & Azizah celebrated the recent move-ins to their new houses.

At Academia Office, the buzz centered around our snazzy new 'Huddle Room'! Decked out for serious brainstorming and spontaneous pow-wows, it's where we gather daily to dish out ideas, hash out plans, and hustle as a team.



YI LIN'S HOUSE WARMING

AZIZAH'S OPEN HOUSE



Special thanks to Dr Henry Soeharno, SGH Orthopaedic Surgery for the cover photo.

## Keeping up with MSKSC ACP

@msksc\_acp

