

APSS MEDTRONIC

FELLOWSHIP REPORT 2023

Fellow: Dr Goparaju VNR Praveem

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Fellowship period: 02 October 2023 to 30 December 2023

Host: Dato Professor Dr. M.K. Kwan

Fellowship centre- University of Malaya, Kuala Lumpur Malaysia.

Introduction

The APSS (Asia Pacific Spine Society) extends a distinctive annual opportunity to Spine Surgeons seeking to elevate their expertise in Spine Surgery. This enriching experience involves fellowships at prominent high-volume spine centers across the Asia Pacific Region. My awareness of this program was from my mentor, and upon application, I was fortunate to be selected for this invaluable opportunity. I would like to express my sincere gratitude to Ms. Jennifer Mathew and Ms. Kaelyn Liew from the APSS secretariat for orchestrating the logistical aspects of my fellowship, including air travel, accommodation, and airport transfers.The accommodations provided were not only spacious but also offering access to amenities such as a swimming pool and gym. The proximity of local establishments facilitated an environment conducive to focused training.

My fellowship was at the University of Malaya Medical Center (UMMC) under the guidance of Dato Prof. Kwan MK, a distinguished figure in the realm of spinal deformities. Within UMMC, I was integrated into the Spine Research Unit (SRU), led by the esteemed Professor Dato Dr. Kwan Mun Keong, along with other distinguished members such as Professor Dr. Chris Chan Yin Wei, Associate Professor Dr. Chiu Chee Kidd, Dr. Chung Weng Hong, Dr. Satur Veithen, Mariam, and Josephine. Mariam and Jospehine provided me with a comprehensive orientation tour of the university hospital and the campus. They meticulously ensured that I had all the essentials, including obtaining my ID, securing a locker in the operating theater, and providing a detailed weekly schedule prior to the commencement of my fellowship.

Spine Team Weekly Roster 2023						
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0700-0800	Ward round	Spine Teaching + Preop Presentation	Preop teaching	Spine Teaching + Preop Presentation	Ward round	
					Research meeting	
0800-0900	Spine clinic Research	Long case teaching	OT		Long case teaching	
0900-1300		от		от	Scoliosis clinic	OT
1300-1700					Research	
1700-2200					от	

Clinical meetings

A cornerstone of my experience was the bi-weekly clinical meetings, where pre-operative case presentations took center stage. These sessions were not merely didactic but encouraged interactive discussions among faculty, fellows, postgraduates, and undergraduates. The focus, particularly on Adolescent Idiopathic Scoliosis (AIS), provided me with an in-depth understanding of the intricacies involved in patient screening, assessment, counseling, and surgical execution within a high-volume scoliosis center.

The cohesive team at SRU made certain that I comprehended their protocols for providing both conservative and operative management. The utilization of user-friendly Electronic Medical Records (EMRs) with readily accessible patient data proved instrumental in my in-depth

exploration of long-term follow-ups. This approach facilitated a comprehensive understanding of the natural progression not only in spinal deformities but also in various subspecialties, encompassing degenerative, trauma, infective, and tumor pathologies.

Spine and Scoliosis Clinic



Every Monday, there were spine clinics, meticulously evaluating patients. Those requiring surgical interventions were provided with comprehensive counseling, utilizing smart and easily understandable audio-visuals and pictorial representations of spinal conditions. These materials highlighted the pathology based on its location, elucidating the risk-benefit ratio.

Every Friday, there was a scoliosis clinic, exposing me to a diverse array of deformity cases, both those managed operatively and those under conservative care. During these sessions, I had the opportunity to scrutinize and discuss the long-term outcomes of operative procedures, including the progress of growth rod graduates and brace graduates. Additionally, I gained hands-on experience in the supervised performance of MAGEC expansion. Notably, the hospital boasted a state-of-the-art brace lab, utilizing 3D printing technology to craft patient-specific braces.



Academic Activities and Workshops

Thailand and Vietnam Surgeons visit

In addition to the regular weekly clinical meetings and academic sessions, I had the distinct privilege of engaging in two operative courses over the course of my three-month fellowship. This provided me with a unique opportunity to interact and collaborate with surgeons from diverse backgrounds, including Japan, Thailand, and Vietnam. The courses featured in-depth lectures that delved into various facets of scoliosis, fostering both learning and social interaction. The experience not only enhanced my understanding of scoliosis but also allowed me to build valuable connections with fellow surgeons from different parts of the world. Furthermore, I had the honor of participating in an APSS basic spine course.



Japanese Surgeons visit



OR experience

In the operating room (OR), I had the privilege of observing a diverse array of deformity cases, ranging from severe curves to traumatic, degenerative, and infective conditions. Witnessing supervised bending views in Adolescent Idiopathic Scoliosis (AIS), understanding the significance of lower limb scannograms in cases with pelvic obliquity, and calculating Upper Instrumented Vertebra (UIV) and Lower Instrumented Vertebra (LIV) tilt angles preoperatively were valuable insights that I intend to incorporate into my planning for AIS cases.

The adoption of innovative practices, such as the use of a cross bar, the concept of two surgeons operating, and ensuring safety during freehand pedicle screw and extrapedicular wired screw insertion, collectively contributed to a substantial reduction in operative time, blood loss, and perioperative complications. Noteworthy were the unique cases involving percutaneous mono screws for fracture reduction, the use of a navigation-guided rod bending system, and distinctive approaches to C1-2 fixations, all of which broadened my perspective on devising solutions for various spine problems.

Faculty members were instrumental in ensuring my active involvement in various procedures, encouraging me to discern differences and engage in discussions. This experience significantly expanded my viewpoint as a surgeon, making me realize that there are multiple approaches to any given case. I vividly recall a particular day during the operative course when the entire team collaborated to operate on four scoliosis cases, showcasing the collective expertise and teamwork that defines the excellence of this center.



Beyond the professional enrichment, my stay in Malaysia was marked by an immersion in the local culture. The warmth and helpful attitude of the Malaysian people left an indelible impression. However, it was my mentor, Dato Professor Kwan MK, who stood out as the epitome of approachability and patience despite his stature. His insights into the Malaysian healthcare system, life in Malaysia, and his personal journey as a spine surgeon were captivating and inspiring. As I reflect on my fellowship, I extend my deepest gratitude to all the members of the SRU, including Professor Dr. Chris Chan Yin Wei, Associate Professor Dr. Chiu Chee Kidd, Dr. Chung Weng Hong, Dr. Satur Veithen, Mariam, and Josephine. Their hospitality and generosity transformed my fellowship into a truly enriching and unforgettable experience. Dining with the entire unit and receiving my fellowship completion certificate were poignant moments that underscored the camaraderie and professional growth achieved during my time at UMMC.

In conclusion, my fellowship in Malaysia was not just a professional learning opportunity but also a cultural immersion. The meticulous mentorship, cutting-edge practices, and the warmth of the Malaysian people have left an enduring impact on my journey as a spine surgeon.



Receiving Certificate

