2025 APSS Medtronic Fellowship Report

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Host: Prof. Yong-Chan Kim

Director

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Kyung Hee University Hospital at Gangdong, Seoul, Korea



Fellowship Center - Kyung Hee University Hospital at Gangdong, Seoul, Korea

Fellowship period: May 29th 2025 to June 19th 2025 (3 weeks)





Introduction

During this training experience, I am sincerely grateful to the Asia Pacific Spine Society (APSS) and Kyung Hee University Hospital for their invaluable assistance, which enabled me to complete this learning journey successfully. APSS played an essential bridging role in facilitating my connection with Professor Yong-Chan Kim at Kyung Hee University Hospital, making this meaningful opportunity possible. This overseas training was not just a chance to advance my skills; it also provided a unique opportunity to gain insights into the forefront of international spinal surgery advancements, greatly broadening my professional and academic perspectives.

Under the leadership of Professor Yong-Chan Kim, the Orthopedic Department at Kyung Hee University Hospital has earned a strong international reputation for excellence in spinal deformity correction and other spinal surgeries. The team's high surgical volume and impactful research publications further underscore their global influence. Training with this distinguished team offered me a deep understanding of how clinical practice and academic research intertwine.

A heartfelt thank you to Ms. Jennifer Matthew and all the members of the APSS Secretariat for seamlessly coordinating the commencement of the fellowship. Their support and efforts ensured that everything went smoothly from the very beginning, making this opportunity possible.



Training Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00-12:00	Outpatient Clinic	Surgery all day	Outpatient Clinic	Surgery all day		Potential surgeries
13:30-17:00	Research or Study meeting	Surgery all day	Outpatient Clinic	Surgery all day	Research or Study meeting	
18:00-24:00		Potential surgeries		Potential surgeries	Night meeting	











Operation Theater:

The operating theater was a well-equipped, modular facility featuring advanced technologies such as neuro-monitoring, a surgical microscope, C-arm, endoscopic equipment and all kinds of bone grafts (allograft, DBM, BMPs,...). Due to the high volume of surgeries, every nurse and technician was thoroughly familiar with the surgical procedures, each actively fulfilling their role. The surgeries proceeded very smoothly as a result.

Each surgery day involved 4-5 operations, amounting to 40-50 cases per month. Among these, adult spinal deformity correction surgeries were the primary focus, accounting for around 25-30 cases. Correction techniques included TLIF, PLIF, OLIF, LLIF, and various grades of osteotomy from Grade 1 to Grade 6. Most of the cases here are revision operation cases from other hospitals from diverse regions, therefore the difficulties of each case are at a high level. Additionally, there are sometimes PELD and endoscopic discectomy performed late in the day.











Illustration of an ASD case from surgical planning to positioning and intra-operative C-arm checking



I had a chance to attend the operation right from the second operation day, which is a very good opportunity for me to receive lectures and tips directly from Professor Yong-Chan Kim.







Professor allow me to attend the operation and give me direct lectures

Study Meeting

Professor Yong-Chan Kim usually gave me tasks to study at home, which he called "homework" and he tried to arrange 1-2 study meetings per week. During the study meeting, I have to prepare a presentation about a specific subject, such as the PLIF technique, OLIF technique, Pedicle Subtraction Osteotomy technique, etc... At the end of the study meeting, he will give me feedback on my work and show me afterwards his own presentation about the same subject, giving me lectures and his experiences. His enthusiasm for the work is incredible. Even on the weekend, he also arranges study meetings and will be there on time to guide you on your presentation.







Study Meeting at Kyung Hee University Hospital





Outpatients' clinic:

During my fellowship, I had the opportunity to follow the professor during his outpatient clinic time at the Spine Center in Kyung Hee University Hospital every Monday and Wednesday morning, where the patient volume was immense. In the Spine Center, we took patient histories, conducted clinical examinations, and discussed management plans. These sessions led to valuable discussions on diagnosis and patient management strategies. I also participated in post-operative follow-ups, during which my mentor explained the challenges faced during surgery and the post-operative period, as well as how he managed complications.

This clinic provided an excellent opportunity to interpret MRIs and X-rays, investigate, and examine patients with a variety of spinal conditions. I am surprised by the professional work and attitude of all the members of the Spine Team here. Each person works with all their energies and so the work goes very smoothly.





Reflection and Gratitude

This training, spanning from May 29th to June 19th, 2025, lasted three weeks. I stayed in an Airbnb apartment just 5 minutes walking from the hospital. This convenient, well-equipped, and comfortable accommodation met all my basic needs and saved me a considerable amount of commuting time. This arrangement greatly enhanced both the efficiency of my studies and the quality of my daily life, allowing me to rest quickly after intensive surgeries and meetings, preserving energy for continued learning.

My primary techniques in clinical practice have been pediatric scoliosis; however, I had limited experience with adult spinal deformity correction surgeries, an area that presented a gap in my clinical work. In reality, there are many patients who require this type of surgery, and not all spinal deformities can be resolved through endoscopic or simple fusion surgeries. Therefore, this training allowed me to address this gap by learning essential techniques in ASD correction surgery. These techniques require not only precise execution but also attention to many intricate details in clinical application. By observing these surgeries repeatedly, I gradually mastered these nuanced aspects, which have significantly boosted my confidence in ASD correction and enhanced the overall quality and precision of my surgeries.

The spinal surgery team at Kyung Hee University Hospital also demonstrated exceptional kindness and dedication to teaching. I am especially grateful to Prof. In-Seok Son, Prof. Sung Min Kim and Dr. XiongJie Lie who provided technical guidance during surgeries and actively shared their experiences and clinical insights post-surgery. Their enthusiasm for teaching encouraged me to participate in a wide variety of surgeries, allowing me to acquire new knowledge in each procedure, whether it involved surgical techniques or postoperative recovery management. This training experience has brought notable improvements to my technical skills, clinical experience, and academic perspective, while deepening my understanding of the diverse demands within spinal surgery.







APSS MEDTRONIC SPINE FELLOWSHIP **LOGBOOK** Date of Age Gender **Diagnosis Procedure** Main surgery Surgeon L3-4, L4-5 severe 03/06/2025 66 Male PLIF L3-4, L4-5 Prof. Yongstenosis Chan Kim Myelopathy C3-4, 03/06/2025 73 ACDF C4-5, C5-6 Prof. Yong-Male C4-5 Stenosis Chan Kim 78 Prof. Yong-03/06/2025 Female Adjacent segment Instrumentation disease post L5-Chan Kim from T9-L5, LLIF S1 fusion, flat L3-4, L4-5 back syndrome 03/06/2025 90 Infection post Prof. Sung Female Debridement L3-4, LLIF L3-4 removal of the Min Kim cage 05/06/2025 65 L2-3, L3-4, L4-5 Posterior Prof. Sung Female stenosis, flat back Instrumentation Min Kim svndrome from D11 to S1. PSO L3, LLIF L3-4, L4-5 05/06/2025 58 Male L3 compression Kyphoplasty L3 Prof. Yongfracture Chan Kim 87 Myelopathy C5-6, Prof. In-05/06/2025 Female ACDF C5-6 stenosis Seok Son 05/06/2025 69 Male Far lateral L3-4 PELD L3-4 Prof. Yongdisc Protrusion Chan Kim 70 L2 compression Prof. Sung 10/06/2025 Male Kyphoplasty L3 fracture Min Kim 85 Disc protrusion Prof. In-10/06/2025 Female Endoscopic L3-4, left side Seok Son discectomy Radiculopathy 10/06/2025 75 Male Stenosis L2-3, L3-PLIF L2-3, L3-4 Prof. Yong-Chan Kim Disc protrusion 10/06/2025 56 Female Endoscopic Prof. In-L4-5, right side Seok Son discectomy Radiculopathy 12/06/2025 L3-4 right side TLIF L3-4 64 Female Prof. Sung Radiculopathy Min Kim PJF after L2-3, 12/06/2025 83 Male Instrumentation Prof. Yong-Chan Kim L3-4, L4-5, and D10-iliac L5-S1 fusion, PSO L2, LLIF L3lumbar kyphosis, 4, L4-5

L1 fracture

Asia Pacific Spine Society





12/06/2025	83	Female	Adjacent segment	PLIF L3-4, L5-S1	Prof. Yong-
			disease post L4-5		Chan Kim
			fusion		
12/06/2025	72	Male	Stenosis L2-3, L3-	PLIF L2-3, L3-4	Prof. Yong-
			4		Chan Kim
17/06/2025	74	Female	Stenosis L3-4, L4-	PLIF L3-4, L4-5	Prof. Yong-
			5,		Chan Kim
			Spondylolisthesis		
			LA		
17/06/2025	64	Female	Stenosis L4-5,	PLIF L4-5	Prof. Yong-
			Spondylolisthesis		Chan Kim
			L4		
17/06/2025	57	Female	Disc protrusion	Endoscopic	Prof. In-
			L4-5, right side	discectomy	Seok Son
			Radiculopathy		
17/06/2025	84	Male	Myelopathy C3-4,	ACDF C3-4, C4-5	Prof. Yong-
			C4-5, stenosis		Chan Kim

