

APSS Medtronic Spine Fellowship

(7th March, 2016 – 5th June, 2016)

Fellow:

Kumar Shantanu ANAND, MBBS, MS (Orth.), Dip.SICOT

Anand Hospital, Barihat, Purnea -854301, Bihar, India

Hosts:

1. **Prof. KWAN Mun Keong, University Malaya Medical Centre (UMMC), Kuala Lumpur, Malaysia. (7th March, 2016 – 22nd April, 2016)**
2. **Dr. WONG Chung Chek, Sarawak General Hospital (SGH), Kuching, Sarawak, Malaysia. (23rd April, 2016 – 5th June, 2016)**

The quest for knowledge has always been an enduring endeavour by human beings, and it holds true for a medical practitioner as well. This yearning for learning made me apply for the “APSS Medtronic Fellowship” for the year 2015, and my happiness knew no bounds when I received the acceptance mail subsequently. After all the required paperwork (which included obtaining my temporary Malaysian Medical Council Registration, professional VISA to travel to Malaysia for my fellowship, among others), in which I was robustly and swiftly assisted by **Ms Jenny Wong**, from the secretariat of APSS, and **Mr Fadil Shamsuddin** from Human Resource department of UMMC, I flew to Kuala Lumpur on 7th March, 2016, to join my fellowship at the prestigious **University Malaya Medical Center (UMMC)**. An airport pick-up car, arranged by APSS, transferred me to Hotel Anjung Panyayang, where I was welcomed by the hotel staff, and Ms Jenny Wong herself, who showed me around the UMMC.

I met my host **Prof Kwan Mun Keong** in the evening OT that day (i.e., 7th March, 2016), who welcomed me with great enthusiasm and warmth which set the tone for rest of my stay there. Prof Kwan, and rest of the spine team, which included consultants **Prof Chris Chan Yin Wei, Dr Chiu Chee Kidd** and **Dr Lee Chee Kean**, two other spine fellows - **Dr Elrofai** from Sudan and **Dr Kyaw Soe Naing** from Myanmar, and many resident doctors, made me feel very welcome and comfortable.



With Dr Chiu



With my mentor Prof Kwan



With Dr Elrofai and Dr Kyaw (on my left)

As part of the spine team, I followed the following schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7.15am-8.00am	Morning Class	Morning Class (Pre-op Presentation)	Morning Class	Morning Class (Pre-op Presentation)	Morning Class	Morning Class, Ward Round	Free Day
8.00am-5.00pm	1. Grand Ward round 2. Pre-op Assessment	UMMC Elective OT	Spine Clinic (from 9 am)	UMMC Elective OT	Scoliosis Clinic	UMSC OT	Free Day
5.00pm-10.00pm	UMSC OT		UMSC OT		UMSC OT		Free Day

During my fellowship period of 45 days at UMMC, I got exposed to a varied array of spine surgeries, which included surgeries for correction of spinal deformities, spine trauma and degenerative spine.



At UMMC OT

A summarized log of cases attended by me is as follows:

LOG BOOK: APSS Medtronic Spine Fellowship at UMMC (07/3/2016 - 22/4/2016)				
S.No.	Date	Diagnosis	Procedure	Role
1	07.03.15	AIS Lenke 5	PSF T9-L3	Observed
2	07.03.15	L4/L5 stenosis	PD	Observed
3	07.03.16	T3 mets with Frankle C neurology	PD & instrumentation	Observed
4	08.03.16	Congenital scoliosis with L1 and L3 hemivertebra	PSF & L1 hemivertebra resection	Assisted

5	08.03.16	AIS	PSF	Assisted
6	09.03.16	L4/5 Left LCS	PD	Assisted
7	09.03.16	L4/5 CCS	PD	Assisted
8	10.03.16	TB discitis T12/L1 with epidural abscess	PD and debridement & MIST T9-L3	Assisted
9	10.03.16	TRO TB spine L3/4	Transpedicular biopsy	Observed
10	10.03.16	T12 pseudoarthrosis TRO spondylodiscitis	Transpedicular biopsy	Observed
11	11.3.16	AIS	PSF	Assisted
12	11.3.16	AIS	PSF	Assisted
13	12.3.16	AIS	PSF	Assisted
14	12.3.16	AIS	PSF	Assisted
15	14.3.16	AIS	PSF	Assisted
16	14.3.16	AIS	PSF	Assisted
17	15.3.16	PID L4,L5 with lateral canal stenosis	PD	Assisted
18	15.3.16	T12/L1 Spondylodiscitis	PD & MIST T8-L3	Assisted
19	16.3.16	PID L4/L5	PD	Assisted
20	16.3.16	PID L5/S1	PD	Assisted
21	16.3.16	PID L4/L5	PD	Assisted
22	17.3.16	PID L5/S1 with S1 radiculopathy	S1 Nerve root Injection	Observed
23	21.3.16	AIS	PSF	Assisted
24	21.3.16	AIS	PSF	Assisted
25	22.3.16	TRO L5 Spondylodiscitis	Transpedicular biopsy	Assisted
26	22.3.16	Spondylodiscitis T12/L1	PD & Iliac Bone Graft & MIST T7-L2	Assisted
27	23.3.16	Spondylodiscitis T11/T12	Transpedicular biopsy	Observed
28	23.3.16	L3/4 L4/5 CCS	PD	Observed
29	23.3.16	L4/5 CCS	PD	Assisted
30	23.3.16	L3/4 CCS	PD	Assisted
31	23.3.16	L3/4 L4/5 CCS	PD	Assisted
32	24.3.16	Degenerative disc disease with L4/5 stenosis	PD	Observed
33	24.3.16	neuromuscular scoliosis	1st distraction rodding	Assisted
34	24.3.16	L4/L5 spondylolisthesis (grade 1) with spinal stenosis	PD	Observed
35	25.3.16	cervical myelopathy secondary to C5 spine metastasis	LaminectomyC4-C6 and lateral mass fusion C3-C7	Observed
36	25.3.16	AIS	PSIF	Assisted
37	05.4.16	AIS	PSF	Assisted
38	05.4.16	Cervical myelopathy	C1 resection, C3-C6 laminectomy and lateral fusion	Assisted
39	06.4.16	AIS	PSF	Observed
40	06.4.16	AIS	PSF	Assisted
41	07.4.16	L5 radiculopathy with lateral canal stenosis	PD	Assisted
42	07.4.16	PID with R L5 radiculopathy	PD with L4/L5 discectomy	Observed
43	07.4.16	L4/L5 stenosis	PD	Observed
44	07.4.16	L5/S1 foraminal stenosis	Nerve root injection	Observed

45	09.4.16	AIS Lenke 1C	PSF T4 to T11	Observed
46	12.4.16	AIS	PSF	Observed
47	12.4.16	T12 OVf with pseudoarthrosis	Vertebroplasty	Observed
48	14.4.16	Spondylodiscitis L5/S1	Transpedicular biopsy	Observed
49	18.4.16	L4/L5 stenosis	PD	Assisted
50	19.4.16	AIS	PSF	Assisted
51	19.4.16	L4/L5 stenosis	PD	Assisted
52	19.4.16	TRO TB spondylodiscitis T10/T11	transpedicular biopsy	Assisted
53	20.4.16	Traumatic C7/T1 dislocation	Posterior instrumentation and spinal fusion	Assisted
54	20.4.16	congenital scoliosis	4th rod distraction	Observed
55	21.4.16	L4/L5 bilateral lateral canal stenosis	PD	Assisted
56	22.4.16	AIS	PSIF	Assisted
57	22.4.16	L4/L5 Stenosis	PD	Assisted

The bonhomie, the teamwork and the camaraderie of the Spine Team at the UMMC was a very grateful learning experience for me.



“Durian Time” after late evening OT, courtesy Prof Kwan

I am particularly grateful to my mentor Prof Kwan for letting me have the opportunity to indulge in research work, too, which culminated in my being able to write a paper (a case report of three cases of spine trauma in patients with pre-existing scoliosis) with inputs and guidance from Prof Chris, Dr Chiu and Dr Lee as well.



Spine Research Unit Library and Study Desk at UMMC

The farewell dinner hosted by Prof Kwan, at the end of my fellowship period, at “The Lobsterman” restaurant in Kuala Lumpur, was a fun-filled evening, which shall stay etched in my memory forever.



After wrapping up my stint at UMMC, I flew to Kuching, Sarawak, East Malaysia, on 23rd April, 2016 by Malaysian Airlines, to join the Spine Team at the **Sarawak General Hospital (SGH)**. The Hotal Hung Hung was to be my nest for the next 45 days, which was just a stone's throw away from SGH. Upon arriving there, I met my mentor **Dr Wong Chung Chek**, and was thoroughly impressed by his calm and monk-like demeanor.



From L to R: Dr Ahmad, Dr Wong, me and Dr Renjie at SGH OT

The weekly work-schedule followed at SGH was:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8.00am – 5.00pm	Operation Theater	Morning Ward Round followed by teachings for fellows	Morning Ward Round followed by research meeting for fellows	Operation Theater	Spine Clinic and OPD	Free Day (Emergency OT)	Free Day

The astonishing array of cases at SGH accorded me a great learning opportunity, and I am grateful to the whole Spine Team at SGH which included **Dr Brian, Dr James, Dr Azrul, Dr Aida**, other Spine Fellows **Dr Foo** from Malaysia, **Dr Ahmad** from Oman **and Dr Renjie** from China, and Medical Officer **Dr Jude** and others, which performed under the watchful eyes and able leadership of Dr Wong Chung Chek.



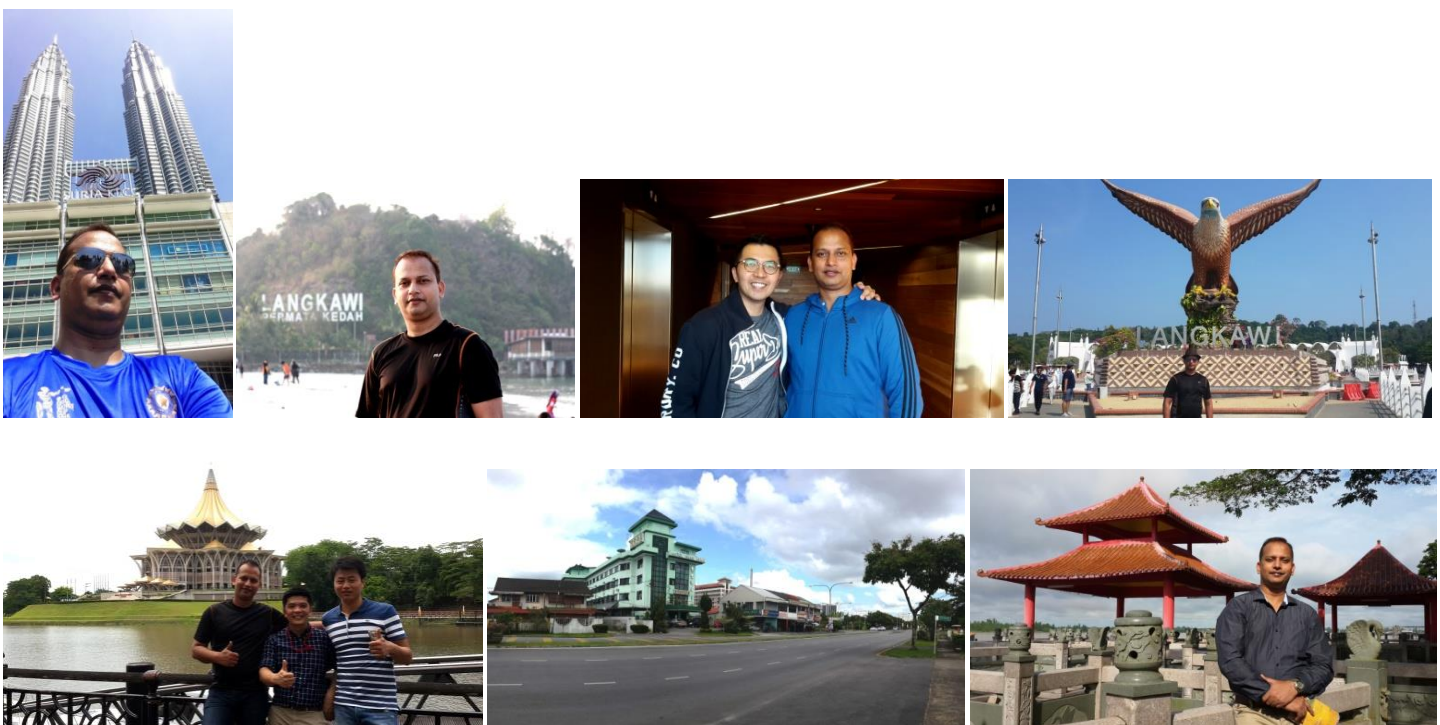
From L to R: Dr Renjie, me, Dr James, Dr Ahmad, Mr Clarence (Neuromonitoring staff) at SGH OT

A brief log of cases observed/assisted by me during my fellowship at SGH is as follows:

LOG BOOK: APSS Medtronic Spine Fellowship at SGH (07/3/2016 - 22/4/2016)				
S.No	Date	Diagnosis	Procedure	Role
1	25/4/2016	Spinal TB with Kyphosis T11/T12	PSO T11 with PSIF T9 to L1	Assisted
2	25/4/2016	L5 Radiculopathy	Transforaminal Steroid Injection Under LA	Observed
3	25/4/2016	Lateral Recess Stenosis	Transforaminal Steroid Injection Under LA	Observed
4	28/4/2016	Congenital scoliosis	PSF and Vertebrectomy L1/L2	Assisted
5	28/4/2016	L4/L5 Spondylolisthesis with Spinal Stenosis	PLIF L4/L5	Assisted
6	28/4/2016	L5/S1 Radiculopathy	Transforaminal Steroid Injection L5/S1 under LA	Observed
7	28/4/2016	T12 Compression #	vertebroplasty T12	Assisted
8	2/5/2016	Adolescent Scoliosis	PSF	Assisted
9	2/5/2016	L3 Chance Fracture	Posterior Instrumentation	Assisted
10	2/5/2016	L5/S1 Disc Prolapse	L5/S1 Foraminal Steroid Injection	Observed
11	5/5/2016	Spondylodiscitis with underlying # C5/C6	Anterior Cervical Corpectomy C5/C6 and Fusion C4?c7	Assisted
12	5/5/2016	L4 and L5 Spondylolisthesis	PLIF L4/L5, L5/S1	Assisted
13	5/5/2016	Multiple Spinal Metastasis	Transpedicular Biopsy T`12 under LA	Assisted
14	5/5/2016	Left Lower Limb Radiculopathy post PLIF L4/L5, L5/S1	Left Transforaminal Steroid Injection L3/L4 under LA	Observed
15	9/5/2016	Multiple Spinal Metastasis secondary to Nasopharyngeal CA	PSIF T2/T3 to T5/T6, PSO T4	Assisted

16	9/5/2016	Spinal Cord Stenosis	PLIF 3 Level L3-S1	Assisted
17	9/5/2016	Left C5/C6 Facet Syndrome	Left C5/C6 Facet Syndrome Block under LA	Observed
18	11/5/2016	T4,5 Spinal Metastasis	PSO T4 WITH PSIF T1 TO T7	Assisted
19	11/5/2016	L3/4 Extradural Lesion	Laminectomy L3/4, Exploration and Excision of Tumor	Assisted
20	11/5/2016	Spinal TB with Kyphosis T12/L1	PSO T12 with PSIF T10 to L3	Assisted
21	11/5/2016	L5/S1 Disc Prolapse	L5/S1 Foraminal Steroid Injection	Assisted
22	11/5/2016	C5/6 Facet Syndrome	C5/6 Facet Joint Injection (Left)	Observed
23	12/5/2016	Hangman Fracture	Posterior Instrumentation C1-C3	Assisted
24	12/5/2016	L1 Compression #	Vertebroplasty L1	Observed
25	23/5/2016	L4/L5 Spondylolisthesis with Spinal Stenosis	PLIF L4/L5	Assisted
26	23/5/2016	Pyogenic L4/L5 Spondylodiscitis	Anterior Debridement L4/L5 and Iliac Bone Grafting	Assisted
27	23/5/2016	L2 Compression Fracture Post Posterior Instrumentation T12/L4	Removal of Implant	Observed
28	23/5/2016	Multiple Level Disc Prolapse with Facet Joint Hypertrophy	Left L4/L5 Facet Joint Injection under LA	Observed
29	26/5/2016	L4/L5 Spondylolisthesis with Degenerative Disc L4/L5, L5/S1	PLIF L4/L5, L5/S1	Assisted
30	26/5/2016	C6/C6 Traumatic Disc Herniation with Cord Compression	ACDF C5/C6	Assisted
31	26/5/2016	L5/S1 Radiculopathy	Left Transforaminal Steroid Injection L5/S1 under LA	Assisted
32	30/5/2016	Severe Thoracic Scoliosis	Posterior Spinal Fusion of T3 to L4 with Resection T7,8,9	Assisted

My fellowship period of 90 days was, however, not limited to academics or clinical work only, as I was also able to enjoy many social outings and sight-seeing trips with my colleagues during the spare time.



During my fellowship, I also was given permission to attend the 19th APOA Congress at Melbourne, Australia (29th March to 1st April, 2016), and SpineWeek, Singapore (16th to 20th May, 2016).



With Both my mentors at APOA Congress, Melbourne, Australia



At SpineWeek, Singapore

These two scientific meets allowed me the opportunity to meet and interact with many world leaders in Spine surgeries such as **Dr Osti** from Adelaide, Australia and **Prof Abumi** from Japan, and watch them present their work.



At SpineWeek, Singapore with Prof Abumi and Dr Chris

I finished my fellowship on 5th June, 2016, and flew back home so much enriched with memories, learning and experiences. I am extremely thankful and grateful to APSS for the opportunity of a life time.

A handwritten signature in blue ink, which appears to read "Kumar Shantanu Anand". The signature is written in a cursive style with a long horizontal line extending from the end.

Kumar Shantanu Anand

APSS-Medtronic Spine Fellow

Date: 02/7/2016