



# APSS DePuy Synthes Travelling Fellowship Program 2018 Report

17<sup>th</sup> May 2018 to 9<sup>th</sup> Jun 2018  
Group II

- i. Dr. Alex Ching Lik, Hui (HONG KONG)
- ii. Dr. Kyaw Linn Linn (MYANMAR)
- iii. Dr. Md Asraf Ul Matin (BANGLADESH)
- iv. Dr. Kostyantyn Lytvynenko (Ukraine)



## Day 1 (17/5/2018)

Our fellowship program started in Melbourne, Australia. Here I met the other 2 fellows: Dr. Asraf UI Matin from Bangladesh and Dr. Kyaw Linn Linn from Myanmar. After we met in the hotel, we went to meet Dr. Michael Johnson who was the Head of Department of Orthopaedics in Royal Children's Hospital, which was the biggest children hospital in Canada. Dr. Johnson brought us to a tour in the hospital in the morning. It was a brand new hospital which was located just next the zoo, so that every child was surrounded by animals and plants which make them not feel like being in hospital at all. It was really impressive that the building was so spacious and the design could be so children friendly.

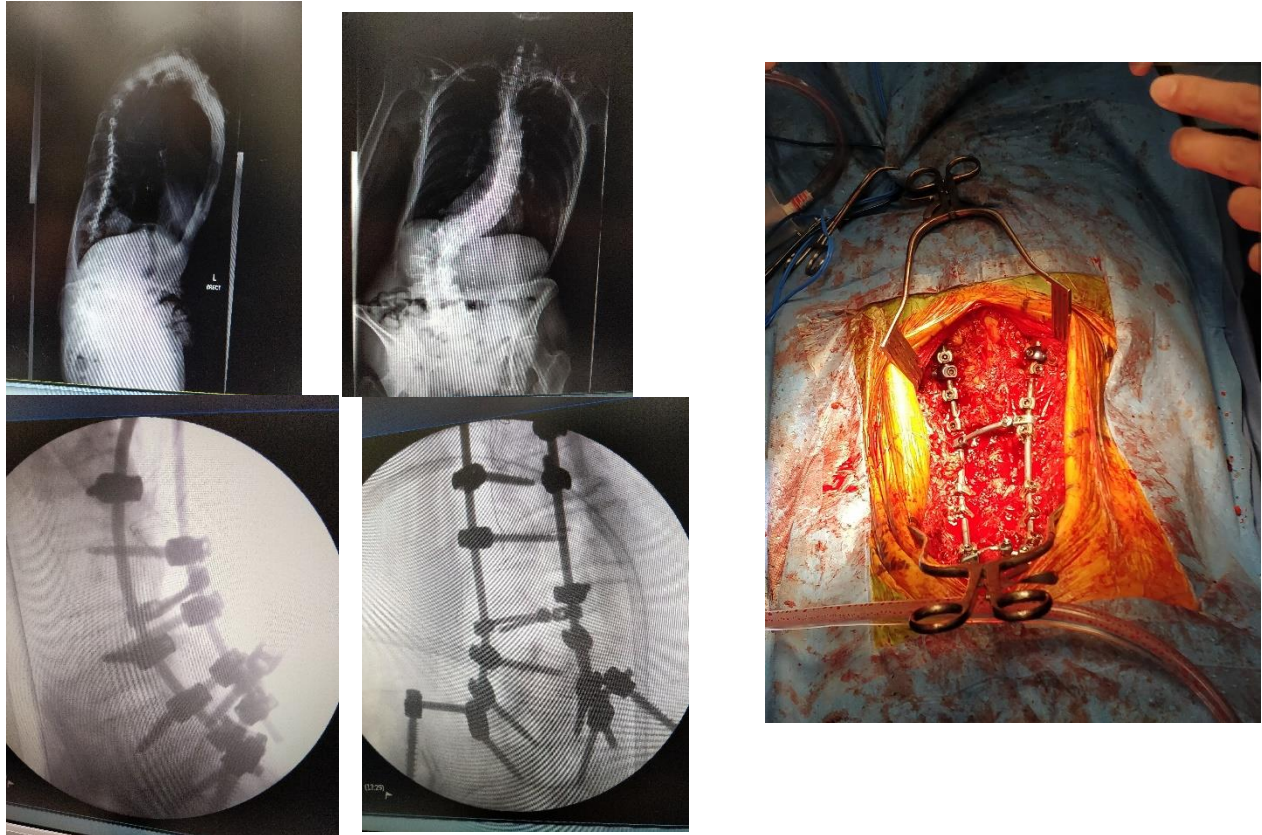
Then, we met Dr. Krist Lundine, who was a spine consultant. He showed us many of his interesting cases. In the afternoon, we saw patients with Dr. Johnson in his private clinic. Here we learnt a lot about different treatments of scoliosis.





## Day 2 (18/5/2018)

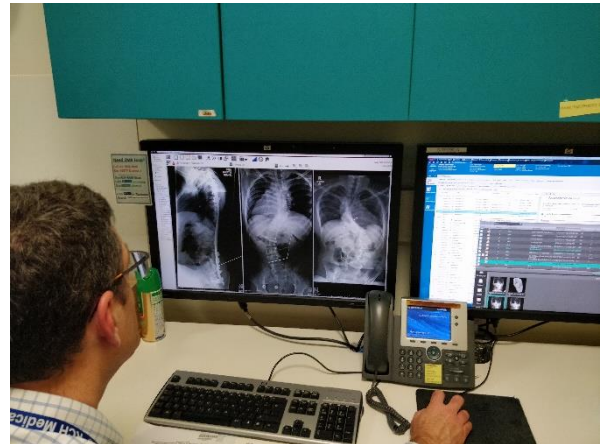
Today we went to Austin Hospital which was a spine trauma center with both emergency and rehabilitation service for spine trauma patients. Dr. Alvin who was one of the consultant orthopaedic surgeon here kindly took us around and showed us the orthopaedic wards and operation theatres. He also shared with us the management of spine trauma patients in their center. Then, Dr. Gerald Guan demonstrated us a challenging case of degenerative scoliosis in an elderly patient. He showed us how to correct the deformity and discuss with us the techniques and tricks he usually used.



## Day 5 (21/5/2018)

Today we were scheduled to observe Dr. Nattrass's operation in the morning. This was a 14 years old girl with adolescent idiopathic scoliosis. Dr. Nattrass demonstrated thoracic fusion from T2 down to T12. We learnt a lot of tricks and tips during his demonstration.

In the afternoon, we visited Dr. Johnson's scoliosis clinic. He showed us a lot of cases including some congenital scoliosis treated by bipolar rods systems. He also taught us what we should assess before the operation and some tricks during the surgery.



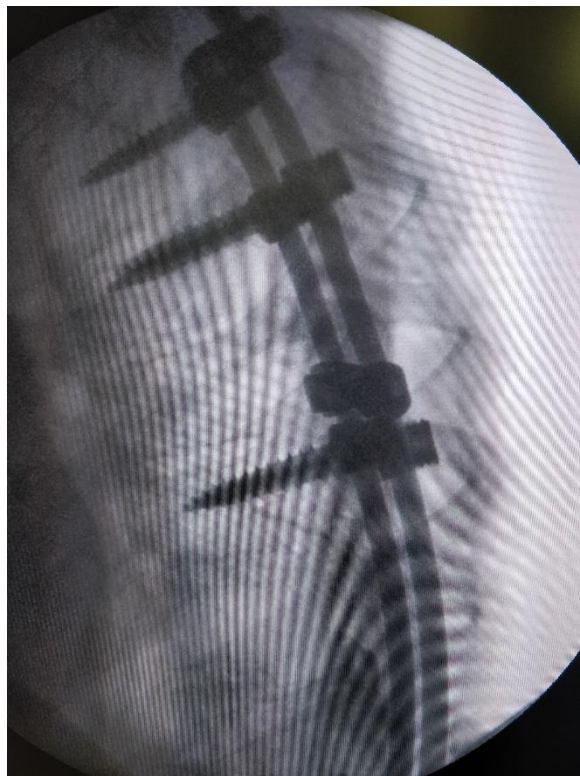


## Day 6 (22/5/2018)

This was the last day in Melbourne. In the morning, we visited Dr. Johnson's clinic, where we saw many cases including a case of severe spondylolisthesis. He taught us a lot including how to examine the patient and what we should do in treating spondylolisthesis.



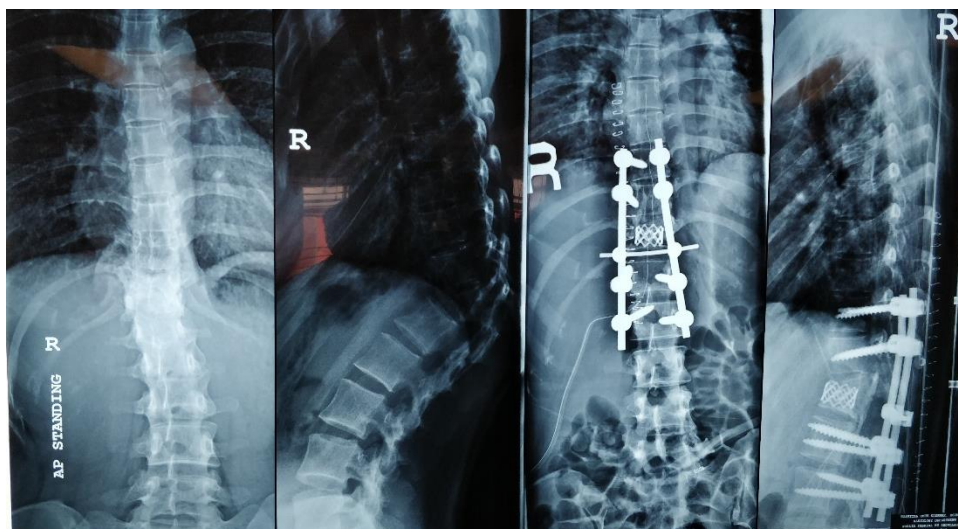
In the afternoon, we observed an operation in Royal Melbourne Hospital. Dr. Turner did a case of thoracic kyphosis with anterior release followed by posterior fusion from T3 down to L2. It was really interesting case. Dr. Turner was so nice teaching us the tricks in performing the operation.



## Day 7 (23/5/2018)

We left Melbourne one day earlier than initial schedule for a spine course hold in Kuching. Therefore, we left Melbourne at midnight and arrived our hotel in Kuching of Malaysia at about 11am.

Dr. CC Wong kindly arranged us transport from Kuching to Sarawak General Hospital. His secretary kindly picked us up in the hospital and brought us to the operation theatre for live demonstration of a case of posterior thoracic spinal fusion from T5 to L2. Here Dr. Wong spent plenty of time discussing the details and rationale of his surgical approach. Then we enjoyed our lunch together. And the next case, Dr. Wong invited Alex to assist a case of TB spine at T11/12 treated with posterior spinal fusion and pedicle subtraction osteotomy at T12.



## Day 8 (24/5/2018)

Today was the 2nd day of Kuching Operative Spine Course. At first, Dr. Wong showed us case summary of the operations. The first case was a T1 bone metastasis from thyroid cancer. Dr. Wong used posterior approach with pedicle screws insertion from C5 to T3. He showed us his technique in inserting the pedicle screws an subaxial spine and T spine. This was amazing! Then, he excised the vertebral pedicles and body piecemeal. Finally, he inserted a harms cage with bone cement inside and complete the final construction. It took only about 4.5 hours for the whole operation!

Then, Dr. Wong showed us his presentation about techniques in treating osteoporotic bone and importance of sagittal balance. This was really inspiring!

The second case was a case of renal failure with pathological C1/2 fracture. Dr. Wong performed a O-C3 posterior instrumentation with posterior fusion from C1-2. This time he demonstrated how to insert the lateral mass screws in C1 and pedicle screws in C2.





## Day 9 (25/5/2018)

This was the last day of Kuching Operative Spine Course. Dr. Wong led us to see the patients who were operated in the past 2 days. We reviewed their x-rays and Dr. Wong kindly explained the findings to us. We had a fruitful discussion about all the cases.



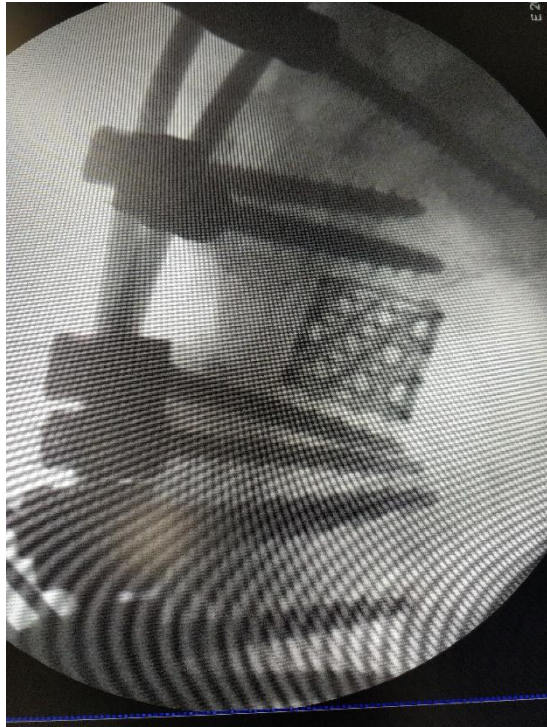
Then, we attended the spine clinic with Dr. Wong and his team. It was a busy clinic. We saw many patients with different kinds of spine problems.





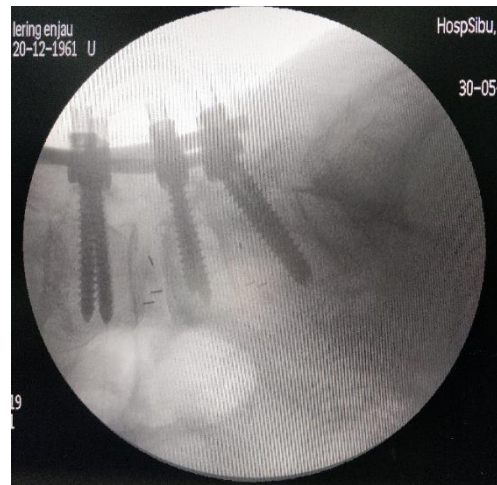
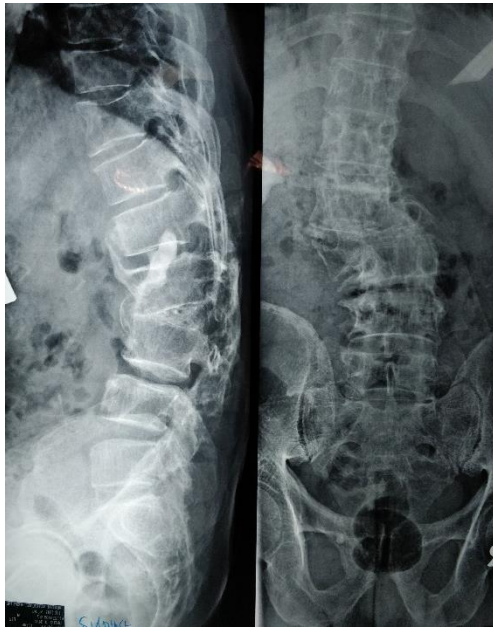
## Day 12 (28/5/2018)

It was another OT day in Sarawak General Hospital. Today was occupied by a complicated and challenging case which was previously cancelled in the spine course due to long list. This was a 60 years old lady with left radiculopathy and marked kyphosis at upper lumbar region. Dr. Wong planned to do TLIF at L5/S1 together with pedicle subtraction osteotomy to correct the kyphotic curve to lordosis. It was amazing! We could not imagine how such a big kyphosis could be corrected by just posterior approach. But they did it!



## Day 14 (30/5/2018)

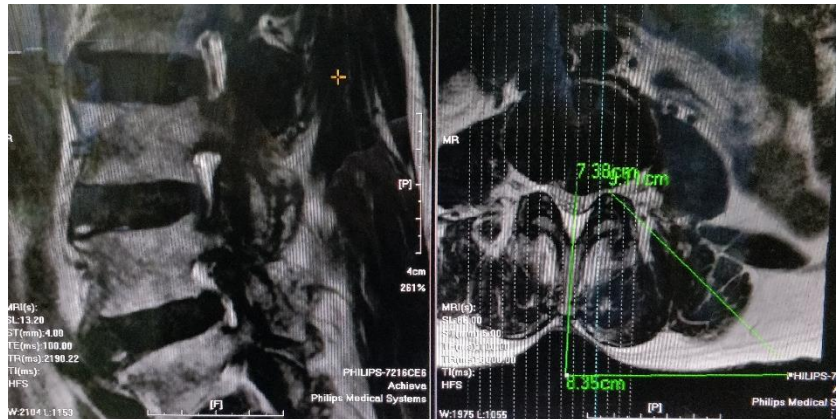
Another challenging operation was arranged in a local hospital in Sibuluan. We needed to take a 30-minutes flight from Kuching airport. This was a patient suffering from right leg claudication resulted from both sagittal and coronal deformity due to old traumatic AO type C fracture. At first, Dr. Wong did L4/5/S1 TLIF, then followed by PSO at L2. The operation only took around 5 hours! Then, Dr. Wong and his team brought us for farewell lunch in a hotel. Then we headed to our next station – Taiwan!





## Day 16 (1/6/2018)

Today Dr. CH Li, who was the Department Head of Taichung Veteran General Hospital, showed us many interesting spine operations. At first, he demonstrated two cases of minimally invasive spine surgeries including PELD using interlaminar and transformational approaches. He showed us his techniques in treating different cases.



Dr. Pang also demonstrated us another case of total en bloc L5 spondylectomy for HCC bone metastasis. He used combined anterior and posterior approach. It was so amazing that he excised the whole posterior arch and the vertebral body en block after he cut the pedicles with Gigli saw!



Finally, Dr Li showed us a case of adjacent segment disease after L4/5 PLIF. He demonstrated two level OLIF at L2/3/4.

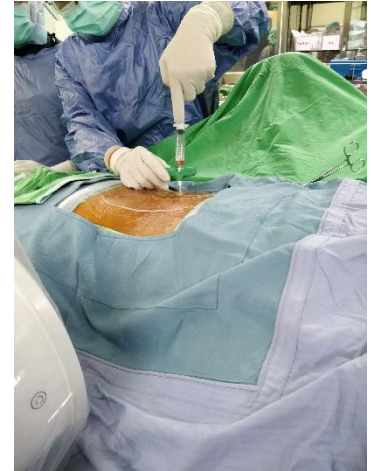




## Day 17 (2/6/2018)

We were scheduled to visit China Medical University Hospital today in Taichung. It was a private hospital. Dr. YJ Chen, who was the Chief in spine surgery, and his team members specially arranged 5 different interesting cases for us even on Saturday.

Dr. Chen was a pioneer in vertebroplasty. During the demonstration of vertebroplasty of a case of acute compression fracture, he kindly shared with us his tips and tricks and also his publications in vertebroplasty. We were inspired by his techniques and unique opinion in vertebral fracture treatment.



Dr. HT Chen, who was the Chairman in Taiwan Society of Minimally Invasive Spine Surgery, also demonstrated us a case of L4/5 TLIF using Wiltse approach. He also showed us the O-arm machine and discussed with us the use of O-arm navigation in spine surgery.

Dr. CC Zhang, who was a pioneer in minimally invasive spine surgery, demonstrated another case of L5/S1 PID treated with PELD using interlaminar approach. In this case, he taught us his technique in doing MIS surgery.

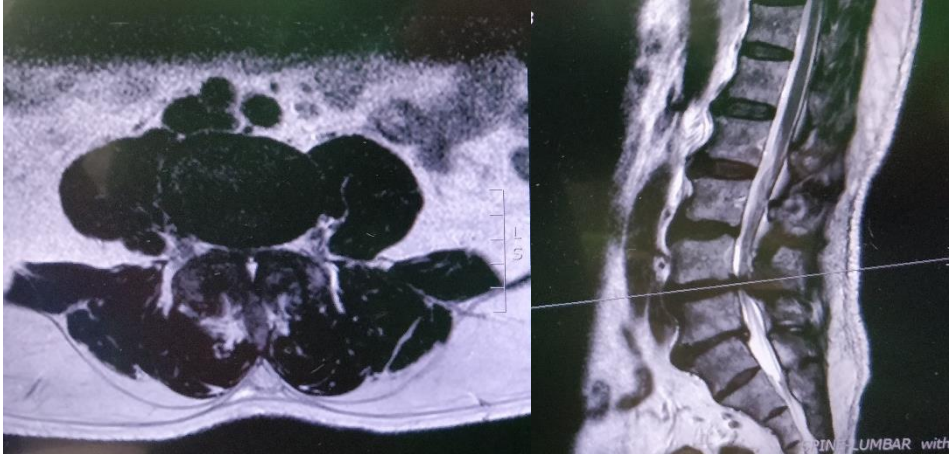


After the fruitful educational demonstration, they brought us to massage and sightseeing in a brand new opera house in Taichung.

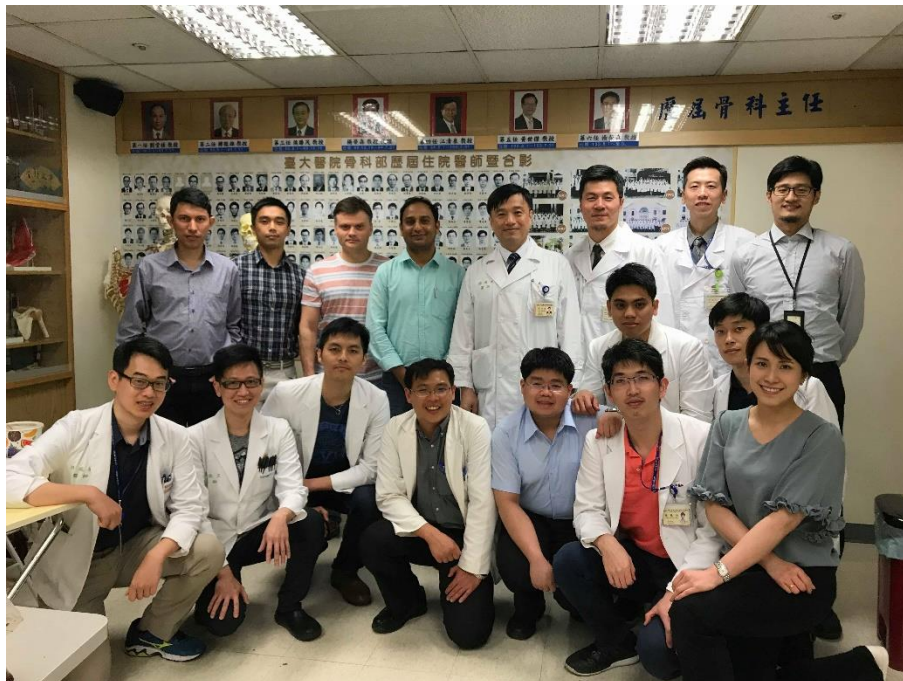


## Day 19 (4/6/2018)

Today we visited the National Taiwan University Hospital in Taipei. Dr. TC Huang kindly waited us in the hospital and brought us to the operation theatre where Dr. MH Hu was going to perform TLIF at L4/5. Prof SH Yang gave us a brief introduction of his minimally invasive approach of TLIF using a midline incision. This was really inspiring as this combined the advantages of MIS surgery and the use of midline wound. He generously taught us a lot of his tips and tricks during the operation.



Also, he specially arranged a spine presentation in the afternoon after this operation. He and his team members presented a number of difficult spine cases and shared with us his treatment plan and results.





## Day 20-21 (5-6/6/2018)

We visited Taipei Veteran General Hospital in these 2 days. The Head of Department, Prof MC Chang, and his colleagues brought us to see many cases including MIS TLIF, PELD, ACDF, etc. At dinner, he treated us a nice shanghai cuisines in restaurant.



The next morning, we joined morning ward round with Prof Chang to see his post op cases. He kindly introduced the electronic medical record system and his post op plan for his patients.

Then, Prof ST Wang showed us a case of multiple levels lumbar decompression and fixation with Dynesys. He then showed us a video and presented to us the history of his hospital.





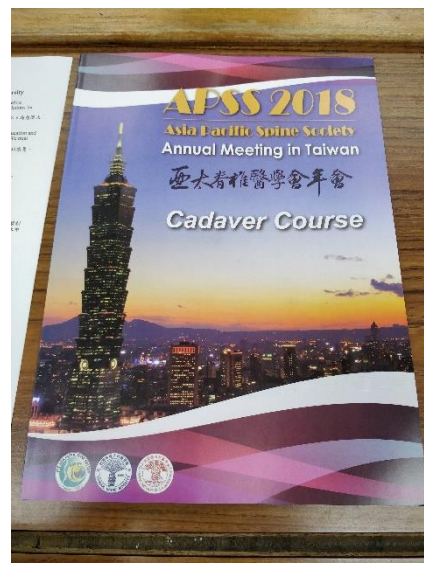
## Day 22 (7/6/2018)

During this visit, we had an opportunity to join the cadaver workshop held in Hualien. The organizing committee was so thoughtful as they had already arranged a train to take us all from Taipei station to Hualien. We needed to gather at the station at 5:30am. After 2 hours, we finally arrived Tzu Chi University where the cadaver course took place.



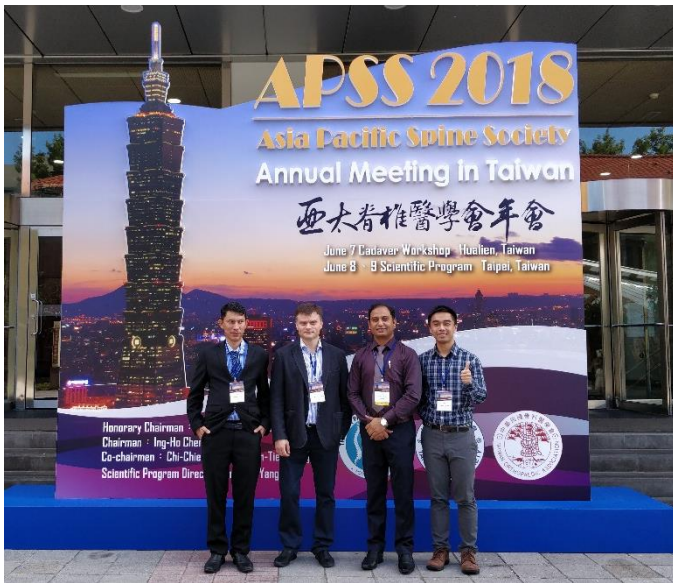
The schedule was really tight as we needed to finish a long lists of practice including OC fusion, C7 pedicle subtraction osteotomy, subaxial spine pedicle screws insertion, L3 pedicle subtraction osteotomy, vertebrectomy, S2AI screw, etc. Each table had one local and one foreign instructor teaching around 5 participants, so we had a lot of chance to practice.

Finally, we finished at around 5pm. Although it was tired, we all learnt a lot from this course!



## Day 23-24 (8-9/6/2018)

It was the last activities in our fellowship program – APSS annual meeting 2018!



In these 2 days of meeting, we had the opportunities to meet the giants in spine surgeries across the world, listen to the expert opinions and learn new technologies in different aspects of spine surgery. In the Gala dinner, we met our mentors and had a good chat with experts in different countries. At last, we presented our experience and what we had learnt during the fellowship program on the second day of congress.







It was really a memorable journey! We made a lot of friends and especially the fellows in our group!





## Surgical logbook

Number	Date	Diagnosis	Operation	Location
1.	17/5/2018	Degenerative scoliosis	T10-S1 PSF	Austin Hospital
2.	21/5/2018	14/F AIS	PSF	Royal Children's Hospital
3.	22/5/2018	Thoracic kyphosis	Anterior release, 2 <sup>nd</sup> stage T4-L2 PSF	Melbourne Hospital
4.	23/5/2018	AIS	T5-L2 PSF	Kuching Sarawak General Hospital
5.	23/5/2018	T11/12 TB spine	T9-L2 PSF, T12 PSO	Kuching Sarawak General Hospital
6.	24/5/2018	Congenital lumbar kyphosis	PSF	Kuching Sarawak General Hospital
7.	24/5/2018	Renal failure, pathological c1/2 fracture	C1/2 fusion O-C3 instrumentation	Kuching Sarawak General Hospital
8.	24/5/2018	T1 Ca thyroid met	T1 vertebrectomy, PSF	Kuching Sarawak General Hospital
9.	28/5/2018	T12-L3 kyphosis	PSO + TLIF L5/S1	Kuching Sarawak General Hospital
10.	30/5/2018	Old traumatic L spine deformity (old L2 type C #)	T11-L5 posterior instrumentation, L3-5 TLIF	Sibu Hospital
11.	1/6/2018	L4/5 stenosis	PELD (interlaminar approach)	Taichung Veteran General Hospital
12.	1/6/2018	L5 HCC bone met	En bloc L5 vertebrectomy	Taichung Veteran General Hospital
13.	1/6/2018	L3/4 stenosis	PELD (transforaminal approach)	Taichung Veteran General Hospital
14.	1/6/2018	L2/3/4 stenosis, old L4/5 PLIF	OLIF L2/3/4	Taichung Veteran General Hospital
15.	1/6/2018	Spinal stenosis	TLIF	Taichung Veteran General Hospital
16.	1/6/2018	Spinal stenosis	Posterior decompression	Taichung Veteran General Hospital
17.	2/6/2018	Spondylolisthesis L4/5	TLIF L4/5	China Medical Center University Hospital
18.	2/6/2018	Osteoporotic collapse L2	Vertebroplasty	China Medical Center University Hospital
19.	2/6/2018	L5/S1 PID	PELD (interlaminar approach)	China Medical Center University Hospital
20.	2/6/2018	Pathological fracture L3	Bone biopsy + posterior instrumentation	China Medical Center University Hospital

21.	2/6/2018	Osteoporotic collapse L1	Posterior decompression + vertebroplasty + posterior instrumentation with cement augmentation	China Medical Center University Hospital
22.	4/6/2018	Spondylolisthesis L4/5	Mini-open TLIF	National University Hospital
23.	5/6/2018	Spinal stenosis	Posterior decompression + Dynesys	Taipei Veteran General Hospital
24.	5/6/2018	Spondylolisthesis L4/5	Posterior decompression + 3D C-arm navigation TLIF	Taipei Veteran General Hospital
25.	5/6/2018	Cervical myelopathy	ACDF C3/4/5/6	Taipei Veteran General Hospital
26.	5/6/2018	Cervical myelopathy	ACDF C3/4/5	Taipei Veteran General Hospital
27.	5/6/2018	L4/5 disc prolapse	PELD (transforaminal approach)	Taipei Veteran General Hospital
28.	6/6/2018	L2 osteoporotic collapse	Vertebroplasty	Taipei Veteran General Hospital
29.	6/6/2018	L2/3/4/5 spinal stenosis	Posterior decompression + Dynesys	Taipei Veteran General Hospital