Group Report for the 2015
APSS Depuy Synthes Spine Travelling Fellowship
18 May to 7 June 2015

Group 2 Fellows

1. Dr. Zaw Min Han (Myanmar)
   Associate Professor, University of Medicine
   Mandalay Myanmar

2. Dr. Md. Shahidul Islam Akon (Bangladesh)
   Assistant Professor (Spine Surgery)
   Department of Orthopaedic Surgery
   Dhaka Medical College Hospital
   Dhaka, Bangladesh

3. Dr. Vincent Hau (Hong Kong)
   Resident Specialist
   Pamela Youde Nethersole Eastern Hospital
   Hong Kong

4. Dr. G Vijayaraghavan (India)
   Spine Fellow, All India Institute of Medical Science, New Delhi

The Asia Pacific Orthopaedic Association (APOA), Asia Pacific Spine Society (APSS) travelling fellowship comprised of visiting of spine centre of excellence in three cities (Seoul, Sendai and Beijing).
On 18th May, we were picked up from hotel at 6:45am and walk to St. Mary's Hospital, just across the road. In the meeting room, presentation of "Development of Spine Surgery in Mandalay, Myanmar" by Dr. Zaw Min Han and "Use of BMP-2 in Lumbar spinal fusion procedure" by Dr. Vincent Hau. Then we joined the surgeries in the operation theatre. The secretary gave some information and explanations to our group and we had to sign some agreement for clinical study. St. Mary's hospital is large, clean and well organized like smart hotel.

The operation complex was very impressive with 28 operation theatres and well equipped. Our First operation is PLIF L4-5 for degeneration case. AP Dr. Kim was the Surgeon and Group leader (Dr Zaw Min Han) got the chance to assist him. We made one new friend, Dr. Kim (fellow Kim) as spine fellow on the first day. After the Lunch, we joined the two operations of Prof. Ha, PLIF L4-5 with PLF form iliac crest for graft. He performed the exploration of spine with care of the facet joints. Second case was 71 years old male, anterior clearance of the L4-L5 lumbar for infection and insertion of autogenous iliac bone graft. Dr Akon got the chance to be the assistant.

At night, we enjoyed the welcome dinner at Barbeque House with Prof. Ha and team.

May 19th was our second day for St. Mary's Hospital, CMC. In the morning, there was a presentation made by the orthopaedic department, highlighting of papers regarding Multiple Myeloma, Bipolar Hemi-arthroplasty, Steroids in RCT and discussion of spine surgery procedures. There was an active discussion between the fellows and respective professors.

Just before the lunch, we visited to CMC institute of biomedical technology and research lab. We discussed about the effect of ESWD (Extracorporeal shock wave diathermy) for spinal cord regeneration.
Then, we had lunch at the hospital restaurant room.

After lunch, two cases of operation on MIS, TLIF and percutaneous pedicle screw and rod by Sextent technique were done. This was the group leader, Dr Zaw Min Han's second time experience for this device. Then, we observed the decompression of L4-L5 level for spinal stenosis by using Microscope. At that night, we had a memorable dinner at three island restaurant in “Han” River.

On 20th May morning, there was a presentation made by Dr. Md Shahidul Islam Akon, “Results of anterior decompression through posterior approach and trans pedicular fixation of thoracolumbar spinal tuberculosis.”

At the OT, we participated in two cases of DLIF for L2-3, 3-4 spinal stenosis cases. Both were very nice operations through direct lateral approach under C-arm and we learnt for careful avoidance of segmental artery injury regarding this approach. Next cases were (another) DLIF and posterior decompression and PLIF L4-5, L5-S1 level cases. We had a chance to have vegetarian buffet dinner at “Loving hut restaurant” at Seoul.

On day 4, we attended the Spine seminar in the morning. We discussed about the correction of deformity of achondroplasia case and the metastasis cases to be operated. In the afternoon, we had a chance to go for sightseeing at the Seoul Tower. Having lunch at tower with very beautiful view of Seoul from different corners was a memorable time in Seoul for all of us.

Day 5 (22 May) was the major operation day for Spine department at OR 11 and OR 13. There were 6 cases already planned. First, PLIF L3,4,5 and PLF in 77 years old male with spinal stenosis, debridement and bone graft for infection in T11 after deformity correction of 53 years old male, with achondroplasia. Third case was posterior instrumentation with sextant and anterior lumbar interbody fusion for L4-5 level in post infective vertebral osteomyelitis case. There were two cases of metastatis (carcinoma) in Thoracic and Thoracolumbar Junction. We learnt a lot for vertebral resection procedures and
posterior instrumentation with the help of microscope.

The last case was vertebroplasty case. Almost for the whole day, we enjoyed learning a lot in the operation theatre. The other rooms are performing orthopaedic surgery, such as THA, metatarsal osteotomy, impingement syndrome, shoulder and ankle operations.

During the interval for lunch, Prof. Kim presented the certificates of attendance to us at St. Mary Hospital, behalf of Prof. Ha. After that, we took group photograph.

May 23rd was Saturday and it was the last day in St. Mary’s Hospital. In the morning 8:00am Prof. Ha gave a lecture entitled "What's New in Spine Surgery at Seoul St. May's Hospital in 2012-14". Then, he shared the experience of research in basic science and biomechanics. We had a fruitful discussion with Prof. Ha. After that, we went to palace and secret garden in the old city. We also experienced seeing Seoul national cemetery.

On 24th May, our group transfer to Japan, Sendai City.

Second Centre: Japan
NHO Nishitaga Hospital, Sendai
Duration - 24 May- 31 May 2015
Host - Prof. Shoichi Kokubun

Hospitals Visited:
- Tohoku University Hospital
- Tohoku Rosai Hospital
- Sendai Nishitaga Hospital
- Sendai Orthopaedic Hospital
- Tohoku Central Hospital (Yamagata)

On arrival to Sendai, it was 12:30pm on 24th May 2015. Prof. Kokubun waited for us at Sendai airport. He arrived back from Kobe JOA meeting an hour ahead of our group. He shared with us the condition of Sendai airport during March-11, 2011 and showed the tsunami shelters. Then, we moved to Sendai Station.

At Sendai Station, we had coffee and cakes and discussed about his philosophy of "Less invasive, less fusion, less complicated, less instrumentation, less expensive" hypothesis.

During night time, this great professor offered us the traditional Japanese dinner, Sushi, Sashimi and many other items.
On 25th May 2015, Dr. Chikashi came and brought us to Tohoku University Hospital. There was a morning conference and we met Prof. Ito. Then, we followed Prof. Ozawa to see the patients in the ward and after, we discussed about the difficult and complicated cases in the hospital.

Some of the cases discussed were of Non-union of the VKP osteoporotic fracture, sacral chordoma, retroperitoneal tumor and others.

Later, we were brought to Tohoku Rosai Hospital to observe the operations of cervical Myelopathy (Laminoplasty), LSCS (decompression), PLIF (fusion L3-4 level) led by Prof. Sakama, Dr. Kanabuchi & Dr. Kusakabe (Chief Spine Surgery).

On 26th May, we took a taxi to Nishitaga Hospital by Route that passed by the Aoba (Sendi) Castle. Upon arriving at the doctors room, we met Dr. Morozumi, Dr. Koizumi and Dr. Chikashi. We signed the visitors’ record and joined the OT with Prof. Koizumi for Laminoplasty for Cervical Myelopathy and decompression of L1-2, L2-3, L3-4, L4-5 for spinal stenosis. Dr. Koizumi is very patient in controlling the bleeding and decompression procedures. He has done step by step and followed the Prof. Kokubun’s principle.

In the evening 5:00pm, we had a lecture by Prof Kokubun regarding spine surgery development at Tohoku region. He also discussed “New concept to myofacial pain, its role, examination and self treatments”. Thanks to Prof. Kokubun, we got new idea of pain management. We were invited to join his OPD on Friday.

On 27th May, Wednesday, we went to Sendai Orthopaedic Hospital. Prof. Tetsuro Sato welcomed us warmly. We witnessed the step by step operation of the recurrent disk Herniation case at L4-L5 level. The procedure is decompression, pedicle screw insertion and TLIF. We learnt para-spinal approach insertion of pedicle screw from Dr. Hyodo and Dr. Nakagawa. In the evening, Dr. Sato showed us the tsunami area near his hospital, bay side and recorded video during the earthquake.

In the evening, he taught us about Ossification of yellow ligament (OYL) and
its treatment. We had a lot of discussion and enjoyed the sharing of his experience. He held a small party at night and we enjoyed with him some Japanese traditional food. Dr. Akon and Dr. Vijay were learning how to use chopsticks.

On 28th May, we had an operation day at Sendai Nishitaga Hospital. We and another international fellow of Prof Kokubun, Dr. Thein Aung Kyaw from Myanmar, learnt a lot during the operations. There were two cases of decompression at L3-4, L4-5 level for degenerative disease and we discussed about fusion rates for unstable cases found at long term follow up. Operations were done by Dr. Morozumi and Dr. Chikashi.

On 29th May, Friday, Dr Zaw Min Han and Dr. Hau, joined Prof. Kokubun’s OPD. He taught K point muscles and individual muscles for diagnosis and treatments. Two other fellows; Dr. Akon and Dr. Vijay went to Yamagata Tohoku Central Hospital and met with Prof. Tanaka.

At night, dinner was held and certificates were given for the one week fellowship. All the surgeons from the different visited hospital came and joined the dinner. We enjoyed tremendously in Japan and felt that the friendship grew stronger.

May 30th was our last day in Sendai and free day. So, we went to Shiogama bay with JR and then to Matsushima by boat. We saw the different islands and enjoyed the day trip.

On the last day when we had to leave to Beijing, we took the time and prepared for APOA presentation.
On arrival in Beijing, China on 31st May, 10:30pm, Miss Breeze, PA of Prof. Wang Yan, picked us up from the airport and brought us to a very nice hotel Park Plaza in Beijing West.

The first day, 1st June 2015, we arrived to 301 PLAGH. The high building of the OPD surprised our fellowship team. There were 10 spine surgeons, 15-20 cases of operation everyday and 10 OT rooms for spine and extremity surgery. Associate Professor Zheng Guoquan explained about the 3 days program and took us to Prof. Yan Wang’s office. Professor is very polite, kind and smart person. He explained about the hospital, which has medical and surgical branches and 4000 in patients and 20,000 OPD patients everyday. There are 2 spine surgery units and 6 orthopaedic and trauma units. He also introduced his new book on "Spinal Osteotomies".

We visited the OT complex and saw all the rooms, which were clean and wide. Most of the rooms were fully equipped. According to data, there are 16 OT cases on this Monday.

We managed to observe the following cases:

1. 57 years old female; a case of Ankylosing Spondylitis. Thoracic to Lumbar for VCD (Vertebral Column Decancellation) osteotomy and correction with pedicle screws and rods. We also learnt the degree for corrective regarding SS, PT and PI.

2. 15 years old female; a case of thoracic scoliosis for correction with pedicle screws and rods.

3. 60 years old female; a case of osteoporotic compressed fracture of T12 and L1 for vertebroplasty and posterior instrumentation.

4. 42 years old female; Spondylolisthesis L5 on S1. Meyerding’s Grade III for reduction and PLIF. We learnt about the reduction by lever arm method though the L5-S1 disk space.

5. 47 years old male; OYL at T9-10 and T10-11 level for decompression.

6. 72 years old male; PID L4-L5 level for percutaneous disectomy under
LA though lat: approach and using Endoscope (PLD).

7. 67 years male; PID L3-4 level for (PLD).

8. 52 years old male; a case of tuberculosis C3-4 level with abscess formation and spinal cord compression. Operated by decompression and ACCF with plate and screws.

9. 31 years old male; PID L4-5 region with nerve root compression for PLD.

At that night, we had the famous Beijing duck for dinner at hospital restaurant.

During the second day in the morning, there was a spine meeting at the general meeting room. Presentation about 301 peoples Liberation Army General Hospital (PLAGH), there were Prof. Wang’s presentation about VCD followed by presentation of Prof. Jeffery FISCHGRUND from William Beaumont Hospital, Royal Oak, Michigan United States.

We also had the honoured to present our respective presentations. After, we had active discussions about deformity surgery and learnt about set up designs used at different spine centres.

In the afternoon, we visited Tiananmen Square and enjoyed 3 hours of walking and learning about the history at the Forbidden City and Old Royal Palace.

June 3rd, Wednesday was our last day in Beijing and we had to leave to Hong Kong in the evening. Before we left, we visited and enjoyed climbing the Great Wall.
Attending the APSS and APPOS Combined Congress in Hong Kong

Venue: Hong Kong Convention and Exhibition Centre

Hong Kong is a beautiful place and we were invited to attend the conference at the Hong Kong Convention and Exhibition Centre, where we can see beautiful bay.

In the conferences, we attended all spine sections and learnt a great deal from the experts around the region and worldwide.

**Day 1, 4th June, 2015**
SRS WWC degenerative Scoliosis.
Adolescent Idiopathic Scoliosis.

**Day 2, 5th June, 2015, Friday**
APSS Fellowship Experience Presentation (Represented by our Group Leader, Dr Zaw Min Han)

SRS WWC Post infection Spinal deformities
APSS Cervical degeneration Symposium
APSS Spinal infection Symposium
APSS Spinal tumors

**Day 3, 6th June, 2015, Saturday**
APSS Lumbar degeneration Symposium
Opening Ceremony
Visiting Professor Lectures
AO Spine Advance Symposium
Spinal fracture

At night, there was a banquet dinner at the Run Run Shaw Hall, Hong Kong Academy of Medicine and we received the certificates of Travelling Fellowship 2015.

**Day 4, 7th June, 2015, Sunday**

We attended the free paper presentation, APSS operative video sessions and APSS case discussion with global panel.

In the evening, all the fellowship members went back to their own countries.

We would like to say thanks to Asia Pacific Spine Society for giving us that great opportunity. The fellowship committee chose the right centers for the fellows, coordinated the program and making plans for the convenience of individuals. We realized it is difficult job and tiring effort. We would like to thanks Prof. Arvind Jayaswal (President), Dr. Kuniyoshi Abumi (Vice President and President Elect) and Dr. Mun-Keong Kwan (Honorary Secretary) for giving us the chance and helping us throughout the fellowship program in various countries. We have to say special thanks to Jenny Wong for managing the all trip plan and she was always keeping in touch throughout the fellowship.
Our team; Dr Zaw Min Han, Dr. Akon, Dr. Vijay and Dr. Vincent had consistent active planning, discussions and co-operation throughout the fellowship. We will remember each other and special thanks to APSS Committee for this active and lively fellowship program.

Attached Below is our log book.
Logbook Entries:

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Age</th>
<th>Sex</th>
<th>Diagnosis</th>
<th>Procedure</th>
<th>Surgeon</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18-5-2015</td>
<td>66</td>
<td>F</td>
<td>Spinal Stenosis L4-L5</td>
<td>PLIF L4-5</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PLF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>18-5-2015</td>
<td>71</td>
<td>M</td>
<td>Pyogenic Spondylitis L4-L5</td>
<td>PIF L4-5</td>
<td>Prof. Ha</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AC Bone graft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>19-5-2015</td>
<td>79</td>
<td>F</td>
<td>Degenerative Stenosis</td>
<td>MIS – TLIF ³(Sextant)</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>4</td>
<td>19-5-2015</td>
<td>49</td>
<td>M</td>
<td>Spinal Stenosis L2-3, L3-4, L4-5</td>
<td>Decompression L4-L5</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>5</td>
<td>20-5-2015</td>
<td>62</td>
<td>M</td>
<td>Degenerative Scoliosis</td>
<td>DLIF L2-3, L3-4 (1st stage procedure)</td>
<td>Prof. Ha</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>6</td>
<td>20-5-2015</td>
<td>75</td>
<td>F</td>
<td>Degenerative scoliosis post traumatic Kyphosis</td>
<td>DLIF L2-3 L3-4</td>
<td>Prof. Ha</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>7</td>
<td>20-5-2015</td>
<td>72</td>
<td>F</td>
<td>Spondylolisthesis L4-L5</td>
<td>DLIF L2-3 L3-4 post decompression</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>8</td>
<td>22-5-2015</td>
<td>77</td>
<td>M</td>
<td>Spinal stenosis L3-L5 (Degenerative Scoliosis)</td>
<td>PLIF L3-4-5</td>
<td>Prof. Ha</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>9</td>
<td>22-5-2015</td>
<td>53</td>
<td>F</td>
<td>Operated Case of Achochoplasia</td>
<td>Bone graft (Auto + Allo)</td>
<td>Prof. Ha</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>10</td>
<td>22-5-2015</td>
<td>75</td>
<td>M</td>
<td>Pyogenic Spondylitis L4-5</td>
<td>PI and AIF (Anterior Lumbar interbody fusion)</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>11</td>
<td>22-5-2015</td>
<td>76</td>
<td>F</td>
<td>Metastatic Carcinoma D3-6 Cord compression D5 (Metastasis)</td>
<td>Laminctomy D5 and PI</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>12</td>
<td>22-5-2015</td>
<td>70</td>
<td>M</td>
<td>Pathological compressed fracture T2-L2 carcinoma of Long</td>
<td>Microscopy assisted D2 corpectomy and PI D1-3</td>
<td>Prof. Kim</td>
<td>Seoul St, Mary’s Hospital</td>
</tr>
<tr>
<td>13</td>
<td>25-5-2015</td>
<td>85</td>
<td>F</td>
<td>Spinal Stenosis L3-4-5</td>
<td>Decompression L3-4, L4-5</td>
<td>Prof. Kusakabe</td>
<td>Tohoku Rosai Hospital</td>
</tr>
<tr>
<td>14</td>
<td>25-5-2015</td>
<td>77</td>
<td>F</td>
<td>Spinal Stenosis with Instability</td>
<td>PLIF and PLF</td>
<td>Prof. Kusakabe</td>
<td>Tohoku Rosai Hospital</td>
</tr>
<tr>
<td>15</td>
<td>26-5-2015</td>
<td>62</td>
<td>M</td>
<td>Cervical Myelopathy</td>
<td>Laminoplasty</td>
<td>Prof. Koizumi</td>
<td>Sendai Nishitaga Hospital</td>
</tr>
<tr>
<td>16</td>
<td>26-5-2015</td>
<td>62</td>
<td>F</td>
<td>Lumbar Spinal canal Stenosis (LSCS)</td>
<td>Decompression L1-2, L2-3, L3-4, L4-5</td>
<td>Prof. Koizumi</td>
<td>Sendai Nishitaga Hospital</td>
</tr>
<tr>
<td></td>
<td>Date</td>
<td>Age</td>
<td>Gender</td>
<td>Diagnosis</td>
<td>Procedure</td>
<td>Surgeons</td>
<td>Hospital</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>-----</td>
<td>--------</td>
<td>------------------------------------</td>
<td>-----------------------------------</td>
<td>--------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>17</td>
<td>27-5-2015</td>
<td>66</td>
<td>F</td>
<td>Recurrent disk Herniation L4-L5 level</td>
<td>Decompression TLIF</td>
<td>Dr. Hyodo Dr. Sato</td>
<td>Sendai Orthopaedic Hospital</td>
</tr>
<tr>
<td>18</td>
<td>28-5-2015</td>
<td>71</td>
<td>M</td>
<td>Degenerative Spinal Stenosis</td>
<td>Decompression L3-4 L4-L5</td>
<td>Dr. Nlorozumi Dr. Chikashi</td>
<td>Sendai Orthopaedic Hospital</td>
</tr>
<tr>
<td>19</td>
<td>1-6-2015</td>
<td>57</td>
<td>F</td>
<td>A.S (Thoracic to Lumbar)</td>
<td>VCD and Deformity Correction, PI</td>
<td>Prof. Wang Yan</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>20</td>
<td>1-6-2015</td>
<td>16</td>
<td>F</td>
<td>Thoracic scoliosis (AIS)</td>
<td>Deformity Correction</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>21</td>
<td>1-6-2015</td>
<td>60</td>
<td>F</td>
<td>Osteoporotic compressed # T12 – L1</td>
<td>PI and Vertebroplasty</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>22</td>
<td>1-6-2015</td>
<td>42</td>
<td>F</td>
<td>Spondylolisthesis L5-S1 G III</td>
<td>Reduction PLIF</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>23</td>
<td>1-6-2015</td>
<td>47</td>
<td>M</td>
<td>OYL T9-10, T10-11</td>
<td>Decompression</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>24</td>
<td>1-6-2015</td>
<td>72</td>
<td>M</td>
<td>PID L4-L5</td>
<td>PID (Percutaneous)</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>25</td>
<td>1-6-2015</td>
<td>67</td>
<td>M</td>
<td>PID L3-4 level</td>
<td>PID</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>26</td>
<td>1-6-2015</td>
<td>52</td>
<td>M</td>
<td>Pott’s Spine C3-4</td>
<td>ACCF with plate &amp; screw</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
<tr>
<td>27</td>
<td>1-6-2015</td>
<td>31</td>
<td>M</td>
<td>PID L4-5 with nerve root compression</td>
<td>PID</td>
<td>Surgical team</td>
<td>301 PLA General Hospital</td>
</tr>
</tbody>
</table>