President’s Message

Dear Members,

The first half of this year has been rich in events with the APSS Operative Course in Nha Trang, Outreach Scoliosis Screening Programme in Cambodia, Basic Spine Courses in Hong Kong and Tokyo, and APSS-APPOS Combined Meeting in Incheon. The change of office bearers of APSS took place in Incheon in April. The Society is immensely grateful to Dr K S Sivananthan, Immediate Past President, for his contribution, guidance and commitment towards the APSS. We also welcome Dr S Rajasekaran as the new President-Elect (2019-2021). Visit our website for more information about the APSS Executive Committee (EXCO).

In this issue, I wish to update you on some of the important developments of the Society. We are completing the registration of APSS as a Limited Company and opening our own APSS bank account in Hong Kong. APSS is continuing to grow in size as we have reached a record high of 411 active paid up members. APSS thrives on the efforts and support of its members since its inception in 1979. I am pleased to inform that the time has come to involve and engage more members, especially the younger generation, in the management of the Society. As soon as we have completed restructuring the organisational chart, amending the Bylaws and the PP&M (Procedure and Policy Menu), the EXCO will be openly inviting volunteers to serve on the various Committees. This will provide more opportunities for younger surgeons to take a more active part in the Society. It will also create a career path for those who aspire to take up leadership roles of this renowned spine society of the Asia Pacific.

The APSS will continue to offer more educational activities throughout the year. On an annual basis, APSS organises 4 to 5 operative, basic and cadaveric spine courses in different cities in the region and awards abundant fellowship opportunities to its members. In the coming November, the APSS Spine Cadaveric Course will be held by the Tzu Chi University in collaboration with the Taiwan Spine Society. Their generous sponsorship of the cadavers and the laboratory facilities is deeply appreciated. The course is only limited to 20 participants, and the good news is a special registration rate will be offered exclusively to our members.

In the second half of the year, young spine surgeons from different Asian countries will be taking up the many Fellowships including the APSS DePuy Synthes Clinical Fellowship, APSS Medtronic Fellowship, APSS-SICOT Spine Fellowship or APSS-Ganga Hospital Fellowship. They will undoubtedly benefit from this experience through exchanging knowledge with their hosts, experiencing different cultures and work environment, and network building. Look out for more new fellowship opportunities as the Finance Committee, led by Dr Sivananthan, is working diligently to make this happen.

The Annual Meeting held in Incheon in Spring was a successful, warm gathering of distinguished experts, young clinicians, researchers, surgeons, and medical students. I hope to see more members attending the APSS scientific meetings in 2020. Be sure to mark your calendars and submit abstracts to the APSS 2020 Annual Meeting in Shanghai, APSS Sessions at the SpineWeek 2020 in Melbourne, and APOA 2020 Annual Meeting in Kuala Lumpur.

Yours sincerely,
EMERITUS PROFESSOR KEITH DIP KEI LUK
The APSS, Spine Society of Ho Chi Minh City, Vietnam (SSHV) and Khanh Hoa General Hospital (KHGH) collaboratively hosted the APSS Nha Trang Operative Course combined with the 25th Annual Meeting of SSHV and the 9th International Spine Symposium of the KHGH in Vietnam from March 25 to 27, 2019. This course witnessed attendance of 50 international faculty and course delegates from Egypt, Hong Kong, Japan, Malaysia, and Vietnam.

The saw bone workshops held on Day 1 were supported by Medtronic and DePuy Synthes. The demonstrations were conducted by Dr K S Sivananthan, Dr Kuniyoshi Abumi, Dr Chung-Chek Wong, and Dr Chris Yin Wei Chan. Spinal lectures were delivered, and live surgeries demonstration was broadcasted in the seminar hall on Day 2. During the transmission, international faculty stimulated questions and discussions among the delegates in the auditorium with the respective surgeons performing the surgeries. The procedures demonstrated during the live surgeries included revision C1/C2 fusion, AIS for PSF, CSM due to C3/C4 and C4/C5 Stenosis for ACDF as well as Spondylolisthesis L4/L5 for PLIF. All the patients fared well post operations and were discharged.

On the May 25, 2019, the APSS-HKU Basic Spine Course was held in Hong Kong in collaboration with the University of Hong Kong and the Spine Chapter of the Hong Kong Orthopaedic Association. The focus of the course was to teach young surgeons basic skills in spine surgery and to promote APSS within the region. Dr Reuben Soh from Singapore and Dr Shinji Takahashi from Japan were invited as the APSS International Faculty for the course. The course gathered a total of 38 participants from Hong Kong and China.

The course rundown included nine (9) lectures covering materials including lumbar discectomy and laminectomy, lumbar fusion methods, lumbar and thoracic pedicle screw insertion, cervical anterior discectomy and fusion, lateral mass screw insertions, laminoplasty and C1/2 fixation techniques. Additionally, the course featured four (4) interactive case discussions and two (2) saw bone workshops to reinforce the knowledge learned from the lectures. Each participant was engaged and had ample opportunities for discussions and saw bone hands-on practice including pedicle screw and TLIF insertion, laminoplasty, and C1/2 and subaxial screw insertion.
Dr Kiran Gurung and Dr Md Abdul Awal had completed the APSS Medtronic Fellowship between April 1 to June 29, 2018, and February 1 to April 30, 2019, respectively at the Spine Section of the Department of Orthopedics Surgery, Catholic University of Korea, Seoul St. Mary’s Hospital, Seoul, Korea.

They are pleased to share their experiences as follows:

Dr Kiran Gurung

Currently the Senior Resident/Registrar from Dept. of Orthopedics, Western Hospital & Research Centre, Nepalgunj, Nepal

“The fellowship is extremely rewarding because I had the privilege to learn from a group of dynamic, skillful and motivated spine surgeons. Besides traumatic spine injury cervical, thoracolumbar and degenerative diseases which are common in my current practice, I had the opportunity to observe other spine cases such as staged DLIF, PLIF, 360 Fusion, Column Osteotomy (SPO and Ponte), microscopic tumour resection, dynamic correction of scoliosis, among the many cases. I had acquired the understanding of basic principles of global spinal balance and spino-pelvic alignment and been given the opportunity to see the Global Spine Fixation System, custom developed by Dr Kee-Yong Ha.

I would like to extend my gratitude to my host who willingly shared his advice about long-lasting impact of a spine surgeon and the encouragement given the status of evolution of spine surgery in Nepal.”

Dr Md Abdul Awal

Currently the Registrar from the Dept. of Orthopaedic Surgery, Rajshahi Medical College Hospital, Rajshahi, Bangladesh.

“The fellowship was a great opportunity for a junior doctor to learn spine surgeons from one of the esteemed institutes in the region. I was impressed by the great numbers and varieties of spinal operations held in the hospital. On a weekly basis, I spent four (4) days observing and assisting spine surgeries, as well as attended the morning conferences, out-patient spine clinic and morning rounds. During the fellowship, I learned about pre-operative decision making, pre-operative planning and up-to-date principles of conservative and operative treatments of adult spine deformity and other various spinal conditions.

I would like to extend my gratitude to my mentor Dr Young-Hoon Kim from Department of Orthopaedic Surgery (Deformity Correction & Degenerative Spine) for his guidance, support and academic inspiration.”

Visit www.apssonline.org to read the complete fellowship reports of the APSS Medtronic Fellows 2017 and 2018.
APSS Adolescent Idiopathic Scoliosis (AIS) Screening Programme in Cambodia

APSS organised an AIS screening outreach programme in Phnom Penh, Cambodia, from April 26 to 27, 2019. This project was conceived following the operative course held in Phnom Penh in 2016 and first outreach programme held in Phnom Penh in July 2017. Cambodia was chosen due to its infancy stage in spine surgery development and lack of expertise in the country to treat AIS. Since then, the APSS has been working closely with the Cambodian surgeons to develop the surgeons’ knowledge and skills in spine healthcare.

With the focus on local community development, this project was designed to train local medical teams and give them guidance on scoliosis detection and management. Early detection enables the patients to seek treatment before scoliosis progresses further, which could lead to severe spine deformity, low self-esteem, social discrimination, even handicap for severe cases and shorter life expectancy. The project was made possible following a meeting with Medtronic in May 2018 during the Global Spine Congress and refined with additional site visits and meetings throughout the year.

With the support of Medtronic, the Cambodian Government, and the involvement of Dr Vuthy Chhoeurn from the local orthopaedic and traumatology association, the APSS team led by Dr Gabriel Liu, Dr K S Sivananthan, and Dr Hee Kit Wong proceeded to a scoliosis screening mission in two secondary schools of the capital. The screening programme enabled early detection of AIS and early intervention where spinal bracing can be applied, and major extensive costly spine fusion surgery will be prevented for the most.

The next step of the programme is to develop a mobile application that will come handy to the local medical professionals in the screening of scoliosis and hand over the project to the Cambodian team to continue running it locally.

2018 APSS-SICOT Spine Fellowship

The APSS-SICOT Spine Fellowship has been held annually as a collaboration between APSS and SICOT since 2016. It is an exchange programme whereby top two (2) APSS applicants are offered the opportunity to exchange with two fellows from SICOT, who join the APSS Travelling Fellowship. Each fellow spends three (3) weeks in a spine centre of excellence of SICOT in Europe. This is a unique opportunity to interact with and learn from renowned spine surgeons beyond the region as well as to widen their network and experience new working culture.

Dr Tetsuo Hayashi, who is one of the fellowship recipients in 2018, works at the Department of Orthopaedic Surgery of the Japan Organisation of Occupational Health and Safety, Spinal Injuries Centre in Fukuoka, Japan. He was inspired by the character, charisma and professionalism of his supervisor who had departed two years ago.

Dr Hayashi was encouraged to submit the application for the fellowship by his fellow spine surgeon from Vietnam. Having completed the fellowship between September 20 to October 10, 2018, he is pleased to share with us his experience in Aarhus University Hospital and Spinal Injury Centre of Western Denmark.

I was able to participate in 17 surgeries as an assistant during my fellowship in Aarhus University Hospital. Although each surgery was so exciting, three of the cases were particularly impressive.

The first case was a deformity surgery of hemivertebrae at S1. The senior consultant used O-arm to insert pedicle screws. The second case was spinal decompression and fusion using PEEK rod for a patient with metastatic tumour. It is said that PEEK rod can avoid reducing effect of radiation. The last case was pedicle screw fixation with cement for an osteoporotic patient. We learnt the complication of cement leakage.

Furthermore, I was able to visit one of two spinal injury centres in Denmark, which is at Viborg. Patients can be hospitalised from a month to a year for rehabilitation. They have two types of walk assist robots (Locomat and Ekso) for paralysed patients. Also, they have a FES cycling and a rehabilitation robot for upper extremities.
ASIA PACIFIC SPINE SOCIETY 2020
ANNUAL MEETING
亚太脊柱学会年会

COMBINED WITH THE 4TH ANNUAL MEETING OF CSSME

Honorary Advisors: K S Sivananthan, Keith Dip Kei Luk
Honorary Chairmen: Guixing Qiu, Yingze Zhang, Yan Wang, Yong Qiu, Wen Yuan
Chairman: Jiangang Shi
Co-Chairmen: Zhaomin Zheng, Zhuojing Luo, Yat Wa Wong
Director of Scientific Program: Bangping Qian
Co-Directors of Scientific Program: Yong Hai, Jianxiong Shen, Qiang Qi, Jason Pui Yin Cheung
General Secretaries: Xuhua Lu, Beier Luo
The 12th Combined Meeting of Asia Pacific Spine Society & Asia Pacific Paediatric Orthopaedic Society (APSS-APPOS 2019) held from April 4 to 6, 2019 at Songdo ConvensiA in Incheon, Korea was one of the largest Spine and Paediatric Orthopaedic meetings in Asia Pacific.

The Meeting was considered a truly commendable and remarkably well organised event that was filled with comprehensive and educational scientific extravaganza. The conference attracted 45 industry partners and 555 professionals from 23 countries, of which 376 of them were registered for the APSS 2nd Annual Meeting. With the large turnout at the meeting, APSS-APPOS 2019 has been an unrivalled success, giving tangible shape to the aspirations of the spine and paediatric orthopaedic societies in the region.

The APSS held concurrent sessions during the Meeting to offer unique avenues tailored to young specialists and aspiring leaders who are interested in the different sub-specialties of spine surgery to share knowledge and experience as well as to interact and network among themselves. The two and a half-day excellent scientific programmes brought together some of the most highly respected experts in the areas of spinal surgery and paediatric orthopaedic across Asia and United States of America. The APSS symposia, plenary lectures and oration were delivered by renowned 163 international and national faculty members from 14 countries.

Dr Charoen Chotigavanich, Past President of APSS (1999-2002) was invited to deliver an oration at the Meeting. A brief article on his edifying speech on degenerative lumbar scoliosis management can be read on page 8 and 9.
Aside from the educational scientific programme, the delegates were hosted by the local committee who showcased the convivial hospitality of Korean through multiple dinners and social programmes. It was a rewarding experience for everyone at the Meeting.

We would like to congratulate and express our deepest appreciation to the winners of APSS Best Paper Awards for both Congress and Asian Spine Journal (ASJ) Awards.

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The APSS Executives, Board and Committees gathered for the business meetings, a day prior to Scientific Meeting.

The delegates witnessed the change of Presidency of APSS. Dato’ Dr K S Sivananthan presented the Presidential Medallion to Dr Keith DK Luk. The incumbent President presented a medal of honour to the Immediate Past President as a gesture for recognising Dr Sivananthan’s contributions and support.

APSS presented the tokens of appreciation to APSS Central Sponsors, DePuy Synthes Johnson & Johnson (left) and Medtronic (right) which are APSS’ strategic partners in supporting the mission of APSS.

Deepest appreciation to the Local Organising Committee for their time and efforts in making the APSS-APPOS 2019 a grand success.

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My Experience in the Surgical Management of Degenerative Lumbar Scoliosis

Dr Charoen Chotigavanich, who is a Professor Emeritus teaching at the Siriraj Hospital, and the Director of Orthopaedic and Spine Centres of two private hospitals in Thailand, as well as a former President of APSS, was invited to deliver an oration at the 12th Combined Meeting of APSS and APPOS in Incheon. Dr Chotigavanich, who has vast experience in treating degenerative lumbar scoliosis, shared his surgical experience in managing this disorder as he reported the findings from 150 cases of degenerative lumbar scoliosis.

As an expert in orthopaedic and spine surgery, Dr Charoen also disclosed his way of thinking, which is about becoming a good, better of best surgeon. He said that he often advised his residents, “to be a good surgeon is to know how to do the operation, the better surgeon knows when to do the operation, but the best surgeon knows when not to do the operation. He quoted a great philosopher that “the good physician is to know how to treat the diseases, but the best physician is to know how to treat the patient who has the disease”.

Below is the summary of his oration on Surgical Management of Degenerative Lumbar Scoliosis.

There are two types of adult lumbar scoliosis namely, arising from idiopathic scoliosis and “de novo” degenerative lumbar scoliosis, which means there was no existing scoliosis before, but it developed into deformity later in adult life.

Patient with lumbar scoliosis who is not been treated will develop painful spine, and the spinal curve will progress further resulting in trunk imbalance with possibility of developing radiculopathy, neurological dysfunction, and in some cases, patient suffers from psychiatric problem due to the development of the spinal deformity.

According to Dr Chotigavanich, the overall incidence of adult scoliosis is around 3-4 % among the adults who are over 50 years of age. The incidence of adult scoliosis in Thailand is becoming more prevalent during the past decades, likely due to longer life expectancy and incorrect sitting posture, i.e. crossing the legs which leads to lumbar bending sideways.

Clinical manifestations of untreated degenerative lumbar scoliosis include:
1. Back pain due to spinal instability, lateral subluxation of the spine, spondylolisthesis, retro spondylolisthesis, degenerative disc disease, disc collapsed and herniation.
2. Clinical symptom of intermittent claudication due to stenosis affecting central canal, lateral canal and foraminal canal
3. Development of neurological deficit.
4. Deformity of the spine with the trunk imbalance causing the back to lean forward and leading to cosmesis and body image issues.
5. Deterioration of physical and mental health

The recommended treatments available for this condition including non-operative and surgical treatments as follows:

(A) Nonoperative treatment
1. Medication, such as NSAIDs analgesic and muscle relaxant. Medication for numbness might be helpful when the patient is neurologically compromised.
2. Physical therapies including back muscle exercise, spinal traction, and applying physical agents to the back.
3. Orthoses for pain control, but not prolonged.

(B) Surgical treatment when there is presence of indication for surgery
1. Lumbar curve associated with back pain.
2. Lumbar curve with progression and greater scoliosis deformity.
3. Rotatory subluxation and producing increase decompensation.
4. No contraindication for major operation.

When surgery is required, the aims are for: 
1. Decompression of neural tissue.
2. Stabilization of the spinal column.
3. Correction of scoliosis deformity.
SAMPLE
(1) Sample size: 150 patients
(2) Demographics:
  • Gender: 135 female and 15 male patients
  • Age: 55 to 78 years old

(3) Associated medical conditions of comorbidities:
  • Hypertension
  • Diabetes mellitus (DM)
  • Coronary heart disease
  • DM and coronary heart disease
  • DM and hypertension

CLINICAL RESULTS
(1) All patients were hospitalized for 5-7 days, and total stitches off was performed two weeks following the operation.

(2) Degree of scoliosis correction performed:
  • 10-20 degree deformity (41 cases) with 100 % correction,
  • 21-30 degree deformity (56 cases) with 44 % correction,
  • 31-40 degree deformity (29 cases) with 55 % correction,
  • 41-50 degree deformity (16 cases) with 66 % correction,
  • 51-55 degree deformity (8 cases) with 66 % correction.

(3) Neurological recovery: All patients with neurological symptom improved quite satisfactorily.
  • Neurological recovery from neurogenic claudication:
    • 130 cases with complete disappearance
    • 7 cases with improvement.
  • Neurological recovery from motor and sensory deficit:
    • Full recovery in 9 cases
    • Partial recovery in 4 cases

(4) Clinical results following patients’ evaluation showed:
  • Excellent; 30 cases (20%) where patients returned to normal activity with little or no complaint.
  • Good; 99 cases (66%) where patients returned to normal activity with some restriction.
  • Fair; 21 cases (14%) where patients had to reduce their daily activities.
  • No patient was unable to return to previous normal activities.

COMPLICATIONS
There were complications including intraoperatively and postoperatively namely:
  • Paresthesia of the leg - 10 cases (8.3%)
  • Wound infection
    • Superficial wound infection - 3 cases (2.5%)
    • Deep wound infection - 1 case (0.8%)
  • Dural tear - 4 cases (3.3%). All was repaired completely without leakage of the CSF.
  • Screw broken - 2 cases (1.7%)

All complications were resolved well without permanent consequences.

CONCLUSION
(1) Degenerative lumbar scoliosis is a distinct clinical entity with a clinical presentation that is strongly associated with spinal stenosis.

(2) Nonsurgical treatment is highly successful in most cases.

(3) Surgery is indicated in the patients with severe stenosis or with neurological compromise.

(4) Early surgical intervention might be instituted in the patients with definite symptom of spinal stenosis even with less spinal deformity.

(5) Surgery is directed toward adequate decompression of neural elements. Restoration of trunk balance is probably the second goal.
APSS DePuy Synthes Clinical & Travelling Fellowship 2019

The APSS DePuy Synthes Clinical and Travelling Fellowships open the call for application every year and it is highly sought after by young surgeons from the Asia Pacific region. Fellows have the invaluable opportunities to interact with and learn from established and renowned senior surgeons who openly and enthusiastically share their knowledge, experience and resources. Eleven successful fellows participated in the fellowship this year. Their three-week fellowships began on March 13, and ended at the 12th APSS-APPoS 2019 Combined Meeting in Incheon, where the fellows shared their experiences in a dedicated slot during the scientific meeting.

The fellows benefited tremendously from these programmes and the scientific meeting. APSS records thanks to the hosts who offered their spine centres of excellence for the fellowships and extends gratitude for the contributions made by DePuy Synthes and APSS Education Committee.

APSS DePuy Synthes Clinical Fellowship 2019

Two fellows from Nepal and Bangladesh were attached to a spine centre of excellence respectively before they flew and met in Incheon, Korea. A third fellow from India will complete his fellowship at the University of Hong Kong this August and will present his experience during APSS Annual Meeting in Shanghai next year.

Dr Chitta Ranjan Roy hosted by Dr Gabriel Liu at National University of Singapore, Singapore

During his stint, Dr Roy participated in spine operations from Monday to Wednesday, clinical case presentation and discussion on pre- and post-operative cases on Thursday, and outpatient clinic on Friday. He observed and assisted in several cases of scoliosis surgery and revision surgeries. Through the fellowship, he had the chance to understand better about MIS fixation, SPOS, PSOS, PONTE OSTEOTOMY and VCRS. He had the immense pleasure to see some fine piece of masterly work of spine surgery. He took part in spine rounds and made a presentation on spine tuberculosis management in his home hospital.

Dr Nischal Ghimire hosted by Dr Yukihiro Matsuyama at Hamamatsu University School of Medicine, Japan

Dr Ghimire was highly impressed by the complex deformity and tumour cases operated by the Spine team in his host centre. He observed an operation on intradural extramedullary and intramedullary spine tumours which was quite new to him. The host and his team were welcoming, and they encouraged him to scrub in and assist as much surgical cases as possible. He also took part in assisting the team in the satellite hospitals of Hamamatsu University including the Red Cross Hospital. During his fellowship, he had the chance to attend the 7th International Spine Symposium of Four Universities organised by Keio University in Tokyo on March 30. The symposium was very impressive and educational.

APSS DePuy Synthes Travelling Fellowship 2019

The Travelling Fellows in Group 1 and Group 2 visited the following spine centres of excellence where they spent one week with each host and his respective team.

Group 1: Dr Khizer Ghalib (Pakistan), Dr Kondety Sri Krishna Chaitanya (India), Dr Mirza Osman Beg (Bangladesh), and Dr Efe Levent Aras (Denmark)

Group 1 Travelling Fellows with their hosts, Dr Chung-Chek Wong, Dr Morio Matsumoto, and Dr Chi-Chien Niu (from left to right).
The fellows started off their fellowship programme with an invitation to participate in an operative spine course held in Sarawak General Hospital. During the course, the fellows observed the live surgeries: AIS and adjacent segment degeneration. Other cases observed by the fellows throughout the fellowship included C1/C2 TB spine addressed by occipito-cervical fusion, neglected AIS operated by VCR and deformity correction (PSF), lumbar canal stenosis operated by L3 to sacrum fusion and decompression, and L4/L5 HIVD operated by microdiscectomy. Dr Wong was very illustrative in explaining each and every step of the surgeries. Other that these, the fellows were involved in ward rounds and academic discussion with Dr Wong and his team.

**Centre 2: Dr Morio Matsumoto, Keio University, Tokyo, Japan**

The fellows were hosted by Dr Matsumoto and Dr Kota Watanabe at the Keio University in Tokyo, Japan in the second week. They were invited to observe various surgeries including PSF for AIS, Posterior decompression for lumbar metastasis, PSF with multiple Ponte osteotomies and VCR, Baloon Kyphoplasty, many AIS cases and a resection of recurrent schwannoma and expansive laminoplasty for cervical myelopathy case. They participated in the illustrative and academic case discussions, and explored possible solutions for intraoperative problems. Dr Ghalib and Dr Alam stayed on for another week in Japan and had a chance to attend the International Spine Symposium of Four Universities, which featured symposium lectures from local experts and international faculty from USA, Korea and China. During this week, they also observed selective cases of deformity and degenerative diseases.

**Centre 3: Dr Chi-Chien Niu, Chang Gung Memorial Hospital, Taiwan**

In the last week, the fellows were hosted by Dr Niu at Chang Gung Memorial Hospital, Taipei. They joined the weekly clinical conference, which discussed the previous week’s cases including an excellent video presentation of endoscopic transforaminal discectomy. During the fellowship, they observed navigation guided TLIF, lumbar fusion and vertebroplasty, kyphoplasty, and endoscopic transforaminal discectomy cases. During many of the surgeries, Dr Niu and his team explained all the key techniques of the procedures in details. The fellows also participated in a metastasis case discussion during their stint in Taiwan.

**Group 2 Travelling Fellows with their hosts, Dr Zhuojing Luo, Dr Shu-Hua Yang and Dr Ki-Tack Kim (from left to right).**

**Centre 1: Dr Zhuojing Luo, Xijing Orthopaedic Hospital of the Fourth Military Medical University, China**

The fellows started the fellowship in Xi’an, China. At this centre, they saw a variety of cases such as anterolisthesis of L4–L5 with bilateral lower limb radiculopathy managed by open TLIF, PIVD L3–L4 level managed by ACFD, kyphoscoliosis deformity at thoracolumbar junction managed by deformity correction and fixation from T9 to L3 level and C4–C6 cervical disc disease managed by laminoplasty. They also assisted in surgeries such as PIVD C4–C5 where Dr Luo explained every step while performing the surgery. Apart from joining the outpatient clinic, they joined the grand round session, which was very interesting as they discussed a lot of cases including pre- and post-operative management as well as treatment options for each patient.

**Centre 2: Dr Shu-Hua Yang, National Taiwan University Hospital, Taipei, Taiwan**

The fellows were hosted by Dr Yang in Taiwan who arranged for them to visit several hospitals including National Taiwan University Hospital, Taipei Veteran Hospital and Taipei Medical University, which are located in Taipei, and China Medical University in Taichung. The fellows assisted in several operations: anterior cervical discectomy case of C4–C5 level and navigation guided L4–L5 TLIF. They also observed an O-arm navigated MIS TLIF at L4–L5 in a anterolisthesis L4–L5 and lumbar disc disease L4–L5 cases, D12 Corpectomy with extension of posterior fixation and cement augmentation in a non–union fracture D12 vertebra with implant failure , Posterior Endoscopic Lumbar Discectomy by L3-L4 in a PIVD L3–L4 , and L5–S1 TLIF in a PIVD L5–S1. To enrich their fellowship experience in Taiwan, Dr Yang invited the fellows to attend the 2019 Annual Meeting of Taiwan Spine Society.

**Centre 3: Dr Ki-Tack Kim, Kyung Hee University Hospital, Korea**

In the last week, the fellows were hosted by Dr Ki-Tack Kim and Dr Yong-Chan Kim in Seoul. They observed many cases such as lumbar canal stenosis L4–L5, L5–S1 with bilateral lower limb radiculopathy, ankylosing spondylitis with kyphosis deformity, fracture L1 vertebra with implant failure and PIVD L3-L4 vertebra with adjacent level degeneration at L4-L5. In a specific case of lumbar canal stenosis of L4 –L5, the fellows observed how this case was managed in 2 stages, i.e. decompression and posterior screw insertion, and followed by anterolateral decompression and cage placement before the posterior rod placement was done. The group had the chance to scrub in and assist their mentors while learning numerous new tricks and techniques including deformity correction and the importance of sagittal balance.

Visit [www.apssonline.org](http://www.apssonline.org) to read the complete fellowship reports of the APSS DePuy Synthes Clinical & Travelling Fellows 2019.
# 2019—2021 Diary of Events

<table>
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<th>Activity</th>
<th>Date</th>
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<tr>
<td></td>
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<td>Aarhus University Hospital, Aarhus, Denmark</td>
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<td>APSS-Ganga Hospital Fellowship 2019</td>
<td>14 Oct – 1 Nov 2019</td>
<td>Spine Surgery Unit of Ganga Hospital, Coimbatore, India</td>
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<td>Peking Union Medical College Hospital, Beijing, China</td>
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<td>Sapporo Orthopaedic Hospital - Center for Spinal Disorders, Japan</td>
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<td>The University of Hong Kong, Hong Kong</td>
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<td>Doctors Hospital &amp; Medical Centre, Lahore, Pakistan</td>
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<td>Medical Simulation Centre, Tzu Chi University, Hualien, Taiwan</td>
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<tr>
<td>APSS Mumbai Operative Course 2020</td>
<td>13 Feb – 15 Feb 2020</td>
<td>Bombay Hospital and Medical Research Centre (BHMRC), Mumbai, India</td>
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<tr>
<td>SpineWeek 2020</td>
<td>27 Apr – 1 May 2020</td>
<td>Melbourne Convention and Exhibition Center, Melbourne, Australia</td>
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<tr>
<td>APSS 2020 Annual Meeting in China</td>
<td>5 Jun – 7 Jun 2020</td>
<td>Shanghai International Convention Centre, Shanghai, China</td>
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<tr>
<td>21st Asia Pacific Orthopaedic Association</td>
<td>23 Sep – 26 Sep 2020</td>
<td>Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia</td>
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<tr>
<td>Congress</td>
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<tr>
<td>13th Combined Meeting of APSS and APPOS 2021</td>
<td>9 Jun – 12 Jun 2021</td>
<td>Kobe International Conference Centre, Kobe City, Japan</td>
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**EXCLUSIVE MEMBER’S REGISTRATION RATE & LIMITED SEATS AVAILABLE!**

**APSS Spine Cadaver Course**

With free cadavers and facilities provided by Tzu-Chi University, Taiwan

**NOV 12-13, 2019**

Medical Simulation Center, Tzu Chi University

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**Asia Pacific Spine Society**

The APSS started with the Western Pacific Orthopaedic Association - Spine Section in 1979 as an educational and scientific forum for the advancement of knowledge in the field of spine surgery. Our mission is to advance knowledge in the field of spine surgery and promulgate the maintenance of professional standards in order to provide the best professional care to patients with spinal problems.

**APSS News**

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