

# Hands-on Cadaveric Dissection & Instructional Course

## Endoscopy, Anterior Access, MIS and Open Procedures

### Hosted by the Asia Pacific Spine Society

June 13-14, 2024 (Thu-Fri)

Hong Kong Surgical Skills Centre

10/F Laboratory Block, Li Ka Shing Faculty of Medicine

21 Sassoon Road, Pokfulam, Hong Kong

### Program

#### **Program Times**

Day 1 - 13 June (Thu), 7:45-17:30

Day 2 - 14 June (Fri), 7:55-17:10

#### **Course Chairs**

*Jason Pui Yin Cheung*

*The University of Hong Kong, Hong Kong*

*Daisuke Sakai*

*Tokai University School of Medicine, Japan*

#### **Course Faculty**

##### **Day 1: Endoscopy (Uniportal and biportal)**

*Hwee Weng Dennis Hey*

*National University of Singapore, Singapore*

*Ho-Jin Lee*

*Chungnam National University College of Medicine, Korea*

*Cheng-Li Lin*

*National Cheng Kung University, Taiwan*

*Max Meng-Huang Wu*

*Taipei Medical University, Taiwan*

*Pang Hung Wu*

*Achieve Spine and Orthopaedic Centre, Mount Elizabeth Hospital, Singapore*

*Takaki Yoshimizu*

*Seirei Hamamatsu Hospital, Japan*

*Cho Yau Lo*

*North District Hospital, Hong Kong*

*YiLun Huang*

*Sengkang General Hospital, Singapore*

**Day 2: Lateral Access, Osteotomies (Cervical and thoracolumbar)**

*Chris Yin Wei Chan*  
University of Malaya, Malaysia

*Kam Kwong Wong*  
Kwong Wah Hospital, Hong Kong

*Hwee Weng Dennis Hey*  
National University of Singapore, Singapore

*Pankaj Kandwal*  
All India Institute of Medical Sciences (AIIMS) Rishikesh, India

*Yoshiharu Kawaguchi*  
Toyama University, Japan

*Ka Kin Li*  
Queen Elizabeth Hospital, Hong Kong

*Keith Dip Kei Luk*  
Hong Kong Sanatorium & Hospital, Hong Kong

*Jacob Oh*  
Tan Tock Seng Hospital, Singapore

*Shanmuganathan Rajasekaran*  
Ganga Hospital, India

*Daisuke Sakai*  
Tokai University School of Medicine, Japan

*Reuben Soh*  
Singapore General Hospital, Singapore

*Kota Watanabe*  
Keio University, Japan

*Chung Chek Wong*  
ALTY Orthopaedic Hospital, Malaysia

*Raymond Nang Man Wong*  
United Christian Hospital, Hong Kong

*Yat Wa Wong*  
Queen Mary Hospital, Hong Kong

### **Meeting Overview/Description**

The Hands-On Course will provide an opportunity for participants to expand their knowledge and improve their skills through training and discussions with leading spinal endoscopic and deformity surgeons from Asia-pacific region. Registration will be limited to ensure access to faculty, small group interaction for better learning, and opportunities for hands-on work. Nine hours of the course will be devoted to lab work. Topics and lab sessions will cover all areas of the spine and a variety of conditions and techniques.

### **Learning Outcomes/Objectives**

As a result of participating in this activity, participants should be able to:

- Identify appropriate options for both uniportal and biportal endoscopy procedures including decompression and MIS fusion surgeries.
- Understand approach for various anterior access surgery.
- Employ techniques to avoid complications in spinal deformity surgery.
- Compare and contrast open and less invasive treatment options for cervical and thoracolumbar spinal deformity.
- Demonstrate skills for performing basic and complex spinal osteotomies for spinal deformity correction.

### **Target Audience**

Spine surgeons (orthopaedic and neurological surgeons), residents and fellows.

### **Disclosure of Conflict of Interest**

It is the policy of APSS to insure balance, independence, objectivity and scientific rigor in all of their educational activities. In accordance with this policy, APSS identifies conflicts of interest with instructors, content managers and other individuals who are in a position to control the content of an activity. Conflicts are resolved by APSS to ensure that all scientific research referred to, reported, or used in a CME activity conforms to the generally accepted standards of experimental design, data collection and analysis.

### **Insurance/Liabilities and Disclaimer**

APSS will not be held liable for personal injuries or for loss or damage to property incurred by participants.

Course participants are encouraged to take out insurance to cover loss incurred in the event of cancellation, medical expenses or damage to or loss of personal effects when traveling outside of their own countries.

APSS cannot be held liable for any hindrance or disruption of course proceedings arising from natural, political, social or economic events or other unforeseen incidents beyond its control. Registration of a participant or guest implies acceptance of this condition.

The materials presented at this activity are made available for educational purposes only. The material is not intended to represent the only, nor necessarily best, methods or procedures appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement or opinion of the faculty that may be helpful to others who face similar situations.

APSS disclaims any and all liability for injury or other damages resulting to any individual attending a scientific meeting and for all claims that may arise out of the use of techniques demonstrated therein by such individuals, whether these claims shall be asserted by a physician or any other person.

### **Language**

Presentations and course materials will be provided in English.

**No Smoking Policy**

Hong Kong University is a smoke-free facility. Smoking is not allowed in either building at any time.

**Attire**

Casual attire and scrubs are appropriate for the course. Scrubs and disposables will be provided at the lab.

**Corporate Supporters**

We are pleased to acknowledge and thank those companies that provided financial and in-kind support to APSS for this hands-on course. These companies provided educational grants to support costs for facility rental, Cadavers, and other course expenses as well as necessary instrumentation and implants for the hands-on lab sessions.

**Bonss**  
**CGBIO**  
**DePuy Synthes**  
**Globus**  
**NuVasive**  
**Medtronic**  
**Joimax**  
**Smith&Nephew**  
**Solendos**  
**Vantage Biotech**  
**Techcord**

## Program Agenda

| Day 1 – June 13, 2024 (Thursday)  |  | Venue        |
|---|--|--------------|
| 07:40   | Registration & Welcome   | RM L953, 9/F |
| <b>SESSION 1: Endoscopic Surgery: UNIORTAL AND BIORTAL TECHNIQUES</b><br>Moderator: <i>Jason Pui Yin Cheung</i> |  |              |
| 0:800   | #1 - Introduction to Spine Endoscopy - Origins and Evidence based motivation to evolve, Indications, contraindications, complications - <i>Max Meng-Huang Wu</i>                             | RM L953, 9/F |
| 08:15   | #2 - Technical overview - Uniportal endoscopy (relevant anatomy and surgical techniques)<br><i>Cheng-Li Lin</i>  |              |
| 08:30   | #3 - Technical overview - Biportal endoscopy (relevant anatomy and surgical techniques)<br><i>Takaki Yoshimizu</i>   |              |
| 08:45   | #4- Technical overview - Cervical endoscopy (relevant anatomy and surgical techniques)<br><i>Pang Hung Wu</i>  |              |
| 9:00-9:15   | Break & Photo then Proceed to Lab & change of clothing   |              |
| 9:15-10:30  | <b>Lab 1</b>   | Lab, 10/F    |
|   | <i>Group1: Station 1- Uniportal Lumbar (transforaminal and K-LIF)</i><br><i>Cheng-Li Lin (Vantage)</i>   |              |
|   | <i>Group2: Station 2- Uniportal Lumbar (transforaminal and K-LIF)</i><br><i>Max Meng-Huang Wu (Techcord)</i>   |              |
|   | <i>Group3: Station 3 - Biportal Lumbar (Decompression and Fusion)</i><br><i>Takaki Yoshimizu (S+N)</i>   |              |
|   | <i>Group4: Station 4 - Uniportal Lumbar (Interlaminar Decompression and Fusion)</i><br><i>Hwee Weng Dennis Hey (Joimax)</i>  |              |
|   | <i>Group5: Station 5 - Biportal cervical decompression and discectomy</i><br><i>Pang Hung Wu (Bonss)</i>   |              |
|   | <i>Group6: Station 6 - Biportal cervical decompression and discectomy –</i><br><i>Ho-Jin Lee (CGBIO)</i>   |              |
|   | <i>Group7: Station 7- Biportal Lumbar (Interlaminar Decompression) –</i><br><i>Yilun Huang (Joimax)</i>  |              |
|   | <i>Group8: Station 8- Biportal Lumbar (Interlaminar Decompression) –</i><br><i>Cho Yau Lo (Solendos)</i>   |              |
| 10:30-12:15   | <b>Lab 2</b><br>Group 1: Station 3<br>Group 2: Station 4<br>Group 3: Station 1<br>Group 4: Station 2<br>Group 5: Station 7<br>Group 6: Station 8<br>Group 7: Station 5<br>Group 8: Station 6 |              |
| 12:15-12:45   | Lunch & Introduction to APSS – <i>Mun-Keong Kwan</i>   | RM L953, 9/F |

**SESSION 2: How to deal with complications in Endoscopic surgery and MIS**Moderator: *Jason Pui Yin Cheung*

|             |  |                 |
|-------------|--|-----------------|
| 12:45       | #5 - My techniques dealing with bleeding - <i>Cho Yau Lo</i>   | RM L953,<br>9/F |
| 12:55       | #6 – How I increase my efficiency - <i>Hwee Weng Dennis Hey</i>  |                 |
| 13:05       | #7 – UBE in revision cases: things I do to prevent complications - <i>Yilun Huang</i>  |                 |
| 13:15       | #8 – Precautions to avoid the nastiest complications - <i>Ho-Jin Lee</i>   |                 |
| 13:25       | Proceed to Cadaver Lab   | Lab,<br>10/F    |
| 13:30-15:00 | <b>Lab 3</b><br>Group 1: Station 7<br>Group 2: Station 8<br>Group 3: Station 5<br>Group 4: Station 6<br>Group 5: Station 1<br>Group 6: Station 2<br>Group 7: Station 3<br>Group 8: Station 4 |                 |
| 15:00-17:15 | <b>Lab 4</b><br>Group 1: Station 5<br>Group 2: Station 6<br>Group 3: Station 7<br>Group 4: Station 8<br>Group 5: Station 3<br>Group 6: Station 4<br>Group 7: Station 1<br>Group 8: Station 2 |                 |
| 17:15-17:30 | Closing Instructions & Wrap up   |                 |

**Venue****RM L953:** 9/F, Laboratory Block, Faculty of Medicine Building, 21 Sassoon Road, Pokfulam**Lab:** 10/F, Laboratory Block, Faculty of Medicine Building, 21 Sassoon Road, Pokfulam**-End of Day 1-**

| Day 2 – June 14, 2024 (Friday)  |   | Venue        |
|---|---|--------------|
| 07:55   | Welcome   | RM L953, 9/F |
| <b>SESSION 3: Cervical Fixation, PSO, VCR</b><br>Moderator: <i>Daisuke Sakai</i>                                    |   |              |
| 08:00   | #9 -Instrumentation at C1-C2 region: Pre-operative planning and intraoperative complication avoidance<br><i>Kam Kwong Wong</i>  | RM L953, 9/F |
| 08:15   | #10- Pedicle Subtraction Osteotomy: Indications, level selection and technique<br><i>Kota Watanabe</i>  |              |
| 08:30   | #11 - Posterior Vertebral Column Resection: Indications, technical considerations, tips and tricks<br><i>Shanmuganathan Rajasekaran</i>   |              |
| 08:45-09:00   | Break, Proceed to Cadaver Lab & Change of Clothing  |              |
| 9:15-12:00  | <b>Lab 5</b><br>Cervical & Posterior Surgery  | Lab, 10/F    |
|   | <i>Group 1: Station 1- Occipitocervical Fusion, C1-C2 Fusion, Subaxial Instrumentation and C7 Pedicle Subtraction Osteotomy - Kam Kwong Wong (Medtronic)</i>                        |              |
|   | <i>Group 2: Station 2- Occipitocervical Fusion, C1-C2 Fusion, Subaxial Instrumentation and C7 Pedicle Subtraction Osteotomy - Yoshiharu Kawaguchi (Globus)</i>                      |              |
|   | <i>Group 3: Station 3 - Occipitocervical Fusion, C1-C2 Fusion, Subaxial Instrumentation and C7 Pedicle Subtraction Osteotomy - Daisuke Sakai (Medtronic)</i>                        |              |
|   | <i>Group 4: Station 4 - Occipitocervical Fusion, C1-C2 Fusion, Subaxial Instrumentation and C7 Pedicle Subtraction Osteotomy - Raymond Nang Man Wong (DePuy Synthes)</i>            |              |
|   | <i>Group 5: Station 5 - Upper, Mid and Lower Thoracic Spine Instrumentation, Ponte Osteotomy, and VCR at T8 - Keith Dip Kei Luk (Medtronic)</i>                                     |              |
|   | <i>Group 6: Station 6 - Upper, Mid and Lower Thoracic Spine Instrumentation, Ponte Osteotomy, and VCR at T8 - Shanmuganathan Rajasekaran (Nuvasive)</i>                             |              |
|   | <i>Group 7: Station 7 - Upper, Mid and Lower Thoracic Spine Instrumentation, Ponte Osteotomy, and VCR at T8 - Kota Watanabe (Medtronic)</i>   |              |
|   | <i>Group 8: Station 8 - Upper, Mid and Lower Thoracic Spine Instrumentation, Ponte Osteotomy, and VCR at T8 - Yat Wa Wong (DePuy Synthes)</i>                                       |              |
| 12:10-13:00   | Lunch   | RM L953, 9/F |
| <b>SESSION 4: Spinal Deformity (Sacro-Pelvic Anchors, MIS, Osteotomies)</b><br>Moderator: <i>Chris Yin Wei Chan</i> |   |              |
| 13:00   | #13-Sacro-pelvic anchors in adult spinal deformity: the strengths and weaknesses of each option<br><i>Keith Dip Kei Luk</i>   | RM L953, 9/F |
| 13:15   | #14 - Technical overview of MIS approach from L2 to S1 (including antepsoas and L5/S1 ALIF)<br><i>Reuben Soh</i>  |              |
| 13:30   | #15 - Optimizing the lumbar lordosis: spinal osteotomies vs Interbody releases and fusions<br><i>Yat Wa Wong</i>  |              |
| 13:45-14:00   | Proceed to Cadaver Lab  | Lab, 10/F    |
| 14:00-17:00   | <b>Lab 6</b><br>Anterior & Open Deformity Procedures  |              |
|   | <i>Group 1: Station 1- MIS Antepsoas or Transpsoas Approach L2-5, L5/S1 approach, and Anterior Approach to the Lumbar Spine and Lumbosacral Spine - Chung Chek Wong (Medtronic)</i> |              |

|       |   |  |
|-------|---|--|
|       | <i>Group 2: Station 2- MIS Antepsoas or Transpsoas Approach L2-5, L5/S1 approach, and Anterior Approach to the Lumbar Spine and Lumbosacral Spine – <b>Reuben Soh (Nuvasive)</b></i>                |  |
|       | <i>Group 3: Station 3 - MIS Antepsoas or Transpsoas Approach L2-5, L5/S1 approach, and Anterior Approach to the Lumbar Spine and Lumbosacral Spine – <b>Jacob Oh (Medtronic)</b></i>                |  |
|       | <i>Group 4: Station 4 -MIS Antepsoas or Transpsoas Approach L2-5, L5/S1 approach, and Anterior Approach to the Lumbar Spine and Lumbosacral Spine – <b>Hwee Weng Dennis Hey (DePuy Synthes)</b></i> |  |
|       | <i>Group 5: Station 5 - Lumbar Instrumentation, S1 Screw, S2-AI/ Subcrestal / Iliac instrumentation / Pedicle Subtraction Osteotomy (PSO) at L3 - <b>Kota Watanabe (Medtronic)</b></i>              |  |
|       | <i>Group 6: Station 6 - Lumbar Instrumentation, S1 Screw, S2-AI/ Subcrestal / Iliac instrumentation / Pedicle Subtraction Osteotomy (PSO) at L3 - <b>Pankaj Kandwal (Globus)</b></i>                |  |
|       | <i>Group 7: Station 7- Lumbar Instrumentation, S1 Screw, S2-AI/ Subcrestal / Iliac instrumentation / Pedicle Subtraction Osteotomy (PSO) at L3 – <b>Chris Yin Wei Chan (Medtronic)</b></i>          |  |
|       | <i>Group 8: Station 8- Lumbar Instrumentation, S1 Screw, S2-AI/ Subcrestal / Iliac instrumentation / Pedicle Subtraction Osteotomy (PSO) at L3 – <b>Ka Kin Li (DePuy Synthes)</b></i>               |  |
| 17:10 | Open Question & Answer Wrap Up Session<br>Adjourn   |  |

**Venue**

**RM L953:** 9/F, Laboratory Block, Faculty of Medicine Building, 21 Sassoon Road, Pokfulam

**Lab:** 10/F, Laboratory Block, Faculty of Medicine Building, 21 Sassoon

Road, Pokfulam

**-End of Day 2-**