

# SCOLIOSIS RESEARCH SOCIETY

## Spine Deformity Solutions: A Hands-On Course

November 14-16, 2024  
Siriraj Hospital, Bangkok, THAILAND

### FINAL PROGRAM

#### MEETING OVERVIEW

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##### Meeting 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 deformity surgeons from around the world. Registration is limited to ensure that every participant can closely interact with faculty, small group interaction for better learning, and opportunities for hands-on work. **Eleven hours** of the course will be devoted to LAB work. Topics and lab sessions will cover all anatomic areas of the spine with focus on instrumentation and complex corrective procedures. There will be 4 half day modules including posterior cervical spine.

##### Learning Outcomes/Objectives

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

- Identify appropriate options for cervical and adult deformity reconstruction
- Employ techniques to avoid complications in spinal deformity surgery
- Develop skills in complex cervical deformity correction
- Identify the appropriate indications for the use of spinopelvic instrumentation
- Demonstrate skills for the correct placement of spinopelvic instrumentation
- Integrate techniques for posterior and anterior lumbo-sacral deformity corrections
- Demonstrate knowledge and skills for performing basic and complex spinal osteotomies

##### Course Overview

###### Pre-Recorded Lectures (SRS BrightSpace system)

- Fixation of Thoracic, Lumbar, Sacrum, and Pelvis (Hooks, Pedicle Screws, Iliac Screws, and S2Ala-Ilium Screws Fixation)
- How to Reduce Complication Rates: PJK and Revision Surgery
- How to Reduce Complication Rates: Pseudo and Revision surgery
- Osteotomies, three column osteotomy, Ponte, Smith-Peterson-osteotomy: Indications and Technique
- Pelvic fixation
- Occipital and Cervical Fixation with Cervical Pedicle Screws and Lateral Mass Screws
- Principles and Treatment of Cervical Deformity and Cervical Alignment

###### Thursday evening – Saturday afternoon:

- Thoracolumbar Open Posterior Techniques
- Lateral Lumbar Approach and Interbody Fusion
- Anterior Thoracic, Thoracolumbar and Lumbo-sacral Approaches
- Posterior Thoracolumbar Spinal Osteotomies
- Posterior Cervical Reconstruction from Occipital to T2

## GENERAL MEETING INFORMATION

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### Target Audience

Residents, fellows and orthopaedic and neurosurgeons who have an interest in and are involved in spinal deformity management and treatment.

### Language

English is the official language of the course, and all presentations and course materials will be provided in English.

### Attire

Business casual attire is appropriate for the Fireside Chats. Casual attire and scrubs are appropriate for the lecture and lab sessions. Disposables, and lead aprons will be provided at the lab. **Scrubs and thyroid protection will not be provided at the lab. Participants will need to provide their own scrubs and thyroid shields if they need or want them.**

### Special Needs

If you have health issues for which you may require special accommodations, please notify the SRS staff onsite. We will make every effort to accommodate any special needs.

### FDA Statement (United States)

Some drugs and medical devices demonstrated during this course have limited FDA labeling and marketing clearance. It is the responsibility of the physician to be aware of drug or device FDA labeling and marketing status.

### Insurance/Liabilities and Disclaimer

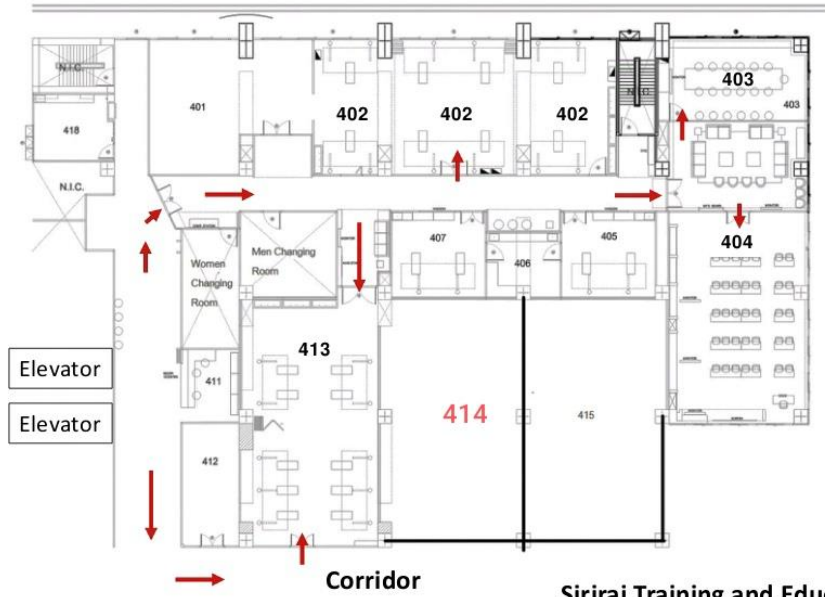
SRS will not be held liable for personal injuries or for loss or damage to property incurred by participants. Course participants are encouraged to take out insurance to cover loss incurred in the event of cancellation, medical expenses or damage to or loss of personal effects when traveling outside of their own countries. SRS 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.

SRS 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.



**Course Maps**



**413 = Lab A**  
5 stations + fluoroscopy

**402 = Lab B**  
5 stations, no fluoroscopy

**404 = lecture room**

**403 = satellite lecture room**  
or Faculty room

**Hallway**

**Corridor**

**Siriraj Training and Education Centre for clinical skills (SiTEC)**  
4<sup>th</sup> floor Srisavarintira building  
Faculty of Medicine Siriraj Hospital  
Mahidol University



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November 14-16, 2024 | Siriraj Hospital, Bangkok, Thailand

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www.srs.org/sds

## Course Faculty

### Course chairs

**Surin Thanapipatsiri, MD**  
Bangkok, Thailand

**Monchai Ruangchainikom, MD**  
Bangkok, Thailand

**Kenny Kwan, BMBCh(Oxon), FRCSEd**  
Hong Kong

### Course faculty

**Kuniyoshi Abumi, MD**  
Sapporo, Japan

**Saumyajit Basu, MD**  
Kolkata, India

**Torphong, Bunmaprasert, MD**  
Chiang Mai, Thailand

**Kenneth MC Cheung, MD**  
Hong Kong

**Yong Hai, MD**  
Beijing, China

**Brian Hsu, MD**  
Greenwich, Australia

**Seung Jae Hyun, MD, PhD**  
Seongnam, Korea

**MK Kwan, MBBS, MS Orth**  
Kuala Lumpur, Malaysia

**Worawat Limthongkul, MD**  
Bangkok, Thailand

**Gabriel Liu, FRCS(Orth), MSC**  
Singapore

**Athikom Methathien, MD**  
Bangkok, Thailand

**Sirichai Wilartratsami, MD**  
Bangkok, Thailand

**WELCOME RECEPTION and FIRESIDE CHAT CASE DISCUSSIONS**

Venue: Thonburi Hall, 1<sup>st</sup> floor of Siriraj Surgery Museum Building, Siriraj Hospital

Location: <https://maps.app.goo.gl/NnufPzwJRQH3scnu5>

**16:15****Faculty Boat Shuttle**

Faculty pick-up at the Peninsula Hotel Pier

**16:45-17:15****Faculty Pre-Course Meeting**

At Thonburi Hall, 1<sup>st</sup> floor of Siriraj Museum Building, Siriraj Hospital

**17:00-18:00****Welcome Reception & Participant Registration**

Dinner and beverages will be available inside Thonburi Hall (from 17.00-20.00).

Attendees will be directed to their designated fireside chat rooms for small group case discussions.

**18:00-18:30****Session 1: Thoracolumbar Open Posterior Techniques**

*Moderator: Kenny Kwan, BMBCh(Oxon), FRCSEd*

18:00-18:10 **Posterior Spinal Surgery for Scoliosis: Overview**

*Kenneth MC Cheung, MD*

18:10-18:20 **Indications and techniques for fixation to Sacrum and Pelvis**

*MK Kwan, MBBS, MS Orth*

18:20-18:30 **Lateral approaches for lumbar spine (XLIF/DLIF and OLIF): indication and techniques**

*Worawat Limthongkul, MD*

**18:30-20:40****Fireside Chat Case Discussions: Pediatric & Adult Spine Deformity )2 Concurrent Sessions(**

*Theme: Radiographic Evaluation and Planning for Correction of Spinal Deformity*

18:30-20:00 **1. Pediatric & Adult Spine Deformity – Group 1 (4-5 cases)**

*Moderator: Kenny Kwan, BMBCh(Oxon), FRCSEd*

*Presenters: Kuniyoshi Abumi, MD, MK Kwan, MBBS, MS Orth, Brian Hsu, MD, Worawat Limthongkul, MD, Sirichai Wilartratsami, MD, Torphong Bunmaprasert, MD*

18:30-20:00 **2. Pediatric & Adult Spine Deformity – Group 2 (4-5 cases)**

*Moderator: Kenneth MC Cheung, MD*

*Presenters: Yong Hai, MD, Saumyajit Basu, MD, Seung Jae Hyun, MD, PhD, Monchai Ruangchainikom, MD, Athikom Methathien, MD, Surin Thanapipatsiri, MD*

20:00-20:40 **Combined Group 1 and Group 2 Case Presentation (3-4 cases from each group)**

**20:40-21:00**

**Faculty Boat Shuttle Provided to Hotel**

Venue: SiTEC-Siriraj Training and Education Center for Clinical Skills  
4th floor, Srisavarindhira building, Siriraj Hospital  
<https://maps.app.goo.gl/YUGj7PpiF7PABo5d6>

7:00

Faculty Boat Shuttle to Lab

7:30-8:00

Changing Rooms Available )change from civilian clothes to surgical scrubs(

7:50-8:00

Course Welcome, explanation of course program, &amp; Introduction of the Team

*Kenny Kwan*

8:00-10:00

Practical Exercise 1A-B, Rotation 1 | Stations 1-3 &amp; 6-8 Room 413, Stations 4-5 &amp; 9-10 Room 402

Lab Room A: (Stations 1-5 with image intensifier) - **Cadavers 1-5** in lateral decubitus position, **left** side up

Station 1-5 XLIF/OLIF left sided approach L1-2-3 plus image intensifier

Lab Room B: (Stations 6-10) - **Cadavers 6-10** prone position

Station 6-10: posterior Th10—sacrum exposure and placing anchors, no image intensifier

10:00-10:30

Refreshment Break

10:00-10:30

Group Photo and Break

*(Lab staff to move Cadavers 1-5 to Room B: **prone** position; and Cadavers 6-10 to Room A: lateral decubitus position, **left** side up)*

10:30-12:30

Practical Exercise 1A-B, Rotation 2 | Stations 1-3 &amp; 6-8 Room 413, Stations 4-5 &amp; 9-10 Room 402

Lab Room A: (Stations 6-10, with image intensifier) - **Cadavers 6-10** in lateral decubitus position, **left** side up

Station 6-10 XLIF/OLIF left sided approach L1-2-3 plus image intensifier

Lab Room B: (Stations 1-5) **Cadavers 1-5** prone position

Station 1-5: posterior Th10—sacrum exposure and placing anchors, no image intensifier

12:30-13:30

**(Lab staff to turn ALL cadavers to Lateral Decubitus Position, Left Side Up)**

12:30-13:15

Lunch

13:15-13.30

Introduction to SRS &amp; How to become a Member

*Kenny Kwan, BMBCh(Oxon), FRCSEd*

13:30-14:00

Session 2: Anterior Thoracic, Thoracolumbar and Lumbosacral Approaches | Room 404

Moderator: Brian Hsu, MD

13:30-13:40

Anterior Transpleural Thoracic Approaches and Thoracolumbar Approaches

*Kenneth MC Cheung, MD*

13:40 -13:50 **Anterior Techniques with Anterior Lumbar Interbody Fusion, Retroperitoneal Anterior Approach to L5-S1, L4-L5 and L3-L4**  
*Brian Hsu, MD*

13:50 -14:00 **Discussion**

**1400-16:00 Refreshment Available in Lounge**

**14:00-15:00**

**Practical Exercise 2A-B Rotation 1 | Stations 1-3 & 6-8 Room 413, Stations 4-5 & 9-10 Room 402**

**Anterior Thoracic, Thoracolumbar and Lumbosacral Approaches**

**(Station 6-10 Cadavers Lateral Decubitus Position, Left Side Up. Station 1-5 Cadavers in Supine Position)**

**Part 1 (Stations 6-10):** Anterior Thoracic Transpleural Approach )Mid-Thoracic(. Cadavers in lateral decubitus position, left side up

**Part 2 (Stations 1-5):** Anterior Lumbosacral Retroperitoneal Approach + ALIF L5-S1 & Exposure L4-L5.

**15:00-16:00**

**Practical Exercise 2A-B, Rotation 2 | Stations 1-3 & 6-8 Room 413, Stations 4-5 & 9-10 Room 402**

**Anterior Thoracic, Thoracolumbar and Lumbosacral Approaches**

**(Station 1-5 Cadavers Lateral Decubitus Position, Left Side Up. Station 6-10 Cadavers in Supine Position)**

**Part 1 (Stations 1-5):** Anterior Thoracic Transpleural Approach )Mid-Thoracic(. Cadavers in lateral decubitus position, left side up

**Part 2 (Stations 6-10):** Anterior Lumbosacral Retroperitoneal Approach + ALIF L5-S1 & Exposure L4-L5.

**16:00-17:00**

**Session 3: Spinal Osteotomies (lecture with case-based discussion) | Room 404**

*Moderator: Saumyajit Basu, MD*

16:00-16:10 **Overview of Posterior Spinal Osteotomies**

*Seung Jae Hyun, MD, PhD*

16:10-16:20 **Pedicle Subtraction Osteotomy )PSO(**

*Saumyajit Basu, MD*

16:20-16:30 **Vertebral Column Resection )VCR(**

*Yong Hai, MD*

16:30-17:00 **Discussion**

**17:00**

**Change Clothes**

**(Lab staff to turn ALL cadavers to Prone Position for tomorrow practical exercise)**

**18:00-20:00**

**Faculty and Industry Dinner (by invitation only). | *Tiny Elephant Coffee and Restaurant* 2nd floor, Siriraj Museum Building**

**Participant free night out**

**20:30**

**Faculty Boat Shuttle Provided to Hotel**



7:00

Faculty Boat Shuttle to Lab

7:30-8:00

Changing Rooms Available )change from civilian clothes to surgical scrubs(

8:00-10:30

Practical Exercise 3 &amp; 4, Rotation 1 | Stations 1-3 &amp; 6-8 Room 413, Stations 4-5 &amp; 9-10 Room 402

**Practical Exercise 3 (Stations 1-5): Posterior Spinal Osteotomies )All Cadavers Prone Position( | Lab Room A and B**  
 Posterior Column Osteotomies, Ponte multiple levels between L1-L5, Smith-Peterson Osteotomy )SPO(, Pedicle Subtraction Osteotomy )PSO( in the Lumbar Spine )Osteotomy at L3( and Vertebral Column Resection )VCR( of the Thoracic Spine )at T9(. Participants share left/right side.

**Practical Exercise 4 (stations 6-10): Posterior Cervical Reconstruction from Occipital to T2 )All Cadavers Prone Position( | Lab Room A and B**  
 Posterior Instrumentation: Occipital Plate, C2 Pedicle Screws, C3-C7 Pedicle Screws, C7 Osteotomy. Open Anatomy Based.

10:30-11:00

Refreshment Available in Lounge

11:00-11:30

Session 4: Cervical Deformity (lecture with case-based discussion): Indications, Approach, and Execution | Room 404

Moderator: Gabriel Liu, FRCS(Orth), MSC

11:00-11:10 **Anterior Procedures for Cervical and Cervicothoracic Junction***Gabriel Liu, FRCS(Orth), MSC*11:10-11:20 **Posterior Procedures for Cervical Spine Deformity***Kuniyoshi Abumi, MD*11:20-11:30 **Upper Cervical Spine Deformity***Torphong Bunmaprasert, MD*

11:30-12:30

Case Discussions | **Participants Bring your case for discussion** | Room 404

Moderator: Yong Hai, MD

12:30-13:00

Lunch



**13:00-15:30**

**Practical Exercise 3 &4, Rotation 1** | Stations 1-3 & 6-8 Room 413, Stations 4-5 & 9-10 Room 402

**Practical Exercise 3 (Stations 6-10): Posterior Spinal Osteotomies )All Cadavers Prone Position(** | Lab Room A and B  
Posterior Column Osteotomies, Ponte multiple levels between L1-L5, Smith-Peterson Osteotomy )SPO(, Pedicle Subtraction Osteotomy )PSO( in the Lumbar Spine )Osteotomy at L3( and Vertebral Column Resection )VCR( of the Thoracic Spine )at T9(. Participants share left/right side.

**Practical Exercise 4 (Stations 1-5): Posterior Cervical Reconstruction from Occipital to T2 )All Cadavers Prone Position(** | Lab Room A and B

Posterior Instrumentation: Occipital Plate, C2 Pedicle Screws, C3-C7 Pedicle Screws, C7 Osteotomy. Open Anatomy Based.

**15:30-16:00**

**Refreshment Break**

**16:00-17:00**

**Open Question & Answer** | Room 404

**Wrap-up Session and course evaluation**

**17:00**

**Change Clothes and Adjourn**

**17:00**

**Faculty Boat Shuttle Provided to Hotel**



## CORPORATE SUPPORT

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We are pleased to acknowledge and thank the companies that provided financial and in-kind support to SRS 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.

Beijing Fule  
Globus Medical, Inc.  
Johnson & Johnson MedTech  
Medtronic  
Orthopaesia

## FUTURE SRS MEETINGS

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### 32<sup>nd</sup> IMAST

April 2- 5, 2025 – Glasgow, Scotland

### 60<sup>th</sup> Annual Meeting

September 16-10, 2025 – Charlotte, North Carolina, USA

### Spine Deformity Solutions: A Hands-On Course

June 18- 20 2025 – Nijmegen, the Netherlands

### Spine Deformity Solutions: A Hands-On Course

October 10 - 12, 2025 – Hong Kong

### Scoliosis Research Society

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