

The Scoliosis Research Society presents

# Current Concepts in SPINE DEFORMITY

Tokyo, Japan | December 13-14, 2019

Tokyo International Exchange Center Plaza Heisei

## Final Program



[www.srs.org](http://www.srs.org) • [www.srs.org/ccsd1219](http://www.srs.org/ccsd1219)

# Corporate Support

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## Future SRS Meetings

### Worldwide Courses

#### Current Concepts in Spine Deformity

March 13-14, 2020 – Florianópolis, Brazil

December 11-12, 2020 – Warsaw, Poland

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

June 17-19, 2020 – Nijmegen, the Netherlands

November 12-14, 2020 - Singapore

#### Worldwide Courses

February 21, 2020 - Cartagena, Colombia

May 29-30, 2020 - Shenzhen, China

### International Meeting on Advanced Spine Techniques (IMAST)

#### 27<sup>th</sup> IMAST

April 1-4, 2020 – Athens, Greece

### Annual Meeting

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

September 9-12, 2020 – Phoenix, Arizona



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# Planning Committee

## SRS President 2019-2020

Paul D. Sponseller, MD, MBA

## Worldwide Course Committee Chair

Saumyajit Basu, MD

## Course Chair

Morio Matsumoto, MD, PhD

## Program Planning Faculty

Kota Watanabe, MD, PhD

Mitsuru Yagi, MD, PhD

Alpaslan Senkoylu, MD

## Faculty (in alphabetical order)

Kuniyoshi Abumi, MD

Saumyajit Basu, MD

Kenneth MC Cheung, MD

Benny T. Dahl, MD, PhD, DMSci

Marinus de Kleuver, MD, PhD

Noriaki Kawakami, MD, DMSc

Toshiaki Kotani, MD, PhD

Yukihiro Matsuyama, MD, PhD

Takachika Shimizu, MD

Chong-Suh Lee, MD, PhD

Hiroshi Taneichi, MD, PhD

Koki Uno, MD, PhD

Shu-Hua Yang, MD, PhD

Muharrem Yazici, MD

# General Meeting Information

## Venue Information

Tokyo International Exchange Center, Plaza Heisei  
2 Chome-2-1 Aomi, Koto City, Tokyo 135-0064, Japan

## Headquarter Hotel

Hilton Tokyo Odaiba (15 min walking from venue)  
135-8625, Tokyo, 1-9-1, DAIBA, Minato-Ku, Japan

## Admission To Sessions

Official name badges will be required for admission to all sessions. All course attendees will receive a name badge with their registration materials. Name badges should be worn at all time inside the Plaza Heisei meeting space, as badges will be used to control access to sessions and activities. Attendees are cautioned against wearing their name badges while away from the venue, as badges draw unwanted attention to your status as visitors to the city.

## Attire

Business casual (polo or dress shirts, sports coats) is appropriate for the meeting sessions; ties are not required.

## Cell Phone Protocol

Please ensure that cell phone ringers, pagers and electronic devices are silenced or turned off during all sessions.

## Emergency & First Aid

The Tokyo International Exchange Center, Plaza Heisei is fully prepared to handle emergency requests and first aid. Contact a SRS staff person for support. Remember to note all emergency exits within the venue.

## Evaluations

Please take time to complete the online evaluation forms. Your input and comments are essential in planning future Courses.

## Presentations

The faculty PowerPoint presentations and handouts are available to view and download from the course website. [www.srs.org/ccsd1219/presentations](http://www.srs.org/ccsd1219/presentations)

## Wireless Internet

Wireless internet access will be available throughout the entire meeting space starting at 8:00 on December 13.

## Language

English will be the official language of the SRS Current Concepts in Spine Deformity Course.

## Lost & Found

Please feel free to stop by the SRS Registration Desk if you have lost or found an item during the course.

## Registration Desk

Location: International Conference Hall Foyer  
Friday, December 13 7:30 – 19:00  
Saturday, December 14 7:00 – 14:00

## Smoking Policy

Smoking is not permitted during any meeting activity or event.

## Special Needs

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

## Video Recording Prohibited

SRS does not allow personal video recording of the presentations of any kind. SRS holds the right to confiscate any and all recordings taken of any of the presentations.

## Welcome Reception

Friday, December 13, 2019  
18:10-19:30  
Exhibit Hall in the Main Foyer at the Plaza Heisei

All registered delegates are invited to attend the Welcome Reception on Friday, December 13. The reception will be hosted in the Exhibit Hall in the Main Foyer at the Plaza Heisei, where beverages and light hors d'oeuvres will be served. There is no charge for registered delegates, though your name badge is required for entrance. Dress for the Welcome Reception is business casual.

## Electricity

Tokyo operates on 100 volts alternating current (AC) and 50 hertz as their AC frequency.

## Time Zone

Tokyo is in Japan Standard Time which is nine (9) hours ahead of Greenwich Mean Time. Tokyo does not observe daylight savings time.

# General Meeting Information

## Meeting Description

The Current Concepts in Spine Deformity Course is an international forum for the realization of the Scoliosis Research Society's mission and goals, the improvement of patient care for those with spinal deformities. Topics of the meeting include foundational knowledge of the spine and spinal deformity, basics and treatments of a variety of pathologies including adolescent idiopathic scoliosis, early onset deformity, adult spinal deformity, spondylolisthesis, cervical deformity, and deformity related to Parkinson's disease. With the cultural context of an increasing elderly population, this course will also include a spotlight on deformity related to osteoporotic vertebral fractures. Each session includes case-based discussions with the goal of better understanding treatments for each pathology. Learners will be able to dive deeper into discussion in small groups with a low attendee to faculty ratio regarding AIS and ASD.

The venue is located on Odaiba, an island in Tokyo Bay. Odaiba is one of Tokyo's most popular tourist areas with a wide selection of shopping, dining, and leisure options. Accessibility is superior from both Haneda and Narita International Airport.

## Learning Objectives

Upon completion of this course, participants should be able to:

- Describe normal growth, maturation, and alignment of the spine
- Explain the natural history and management of different deformity types including early onset, AIS, adult spinal deformity, cervical deformity, osteoporotic vertebral fracture, and Parkinson's disease
- Demonstrate practical surgical planning for AIS and basics of correction techniques
- Demonstrate practical surgical planning and selection of different osteotomy types for ASD to obtain optimal correction

## Target Audience

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

## 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 at the Current Concepts in Spine Deformity 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 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 the Current Concepts in Spine Deformity Course 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.

# Meeting Space Floor Plan

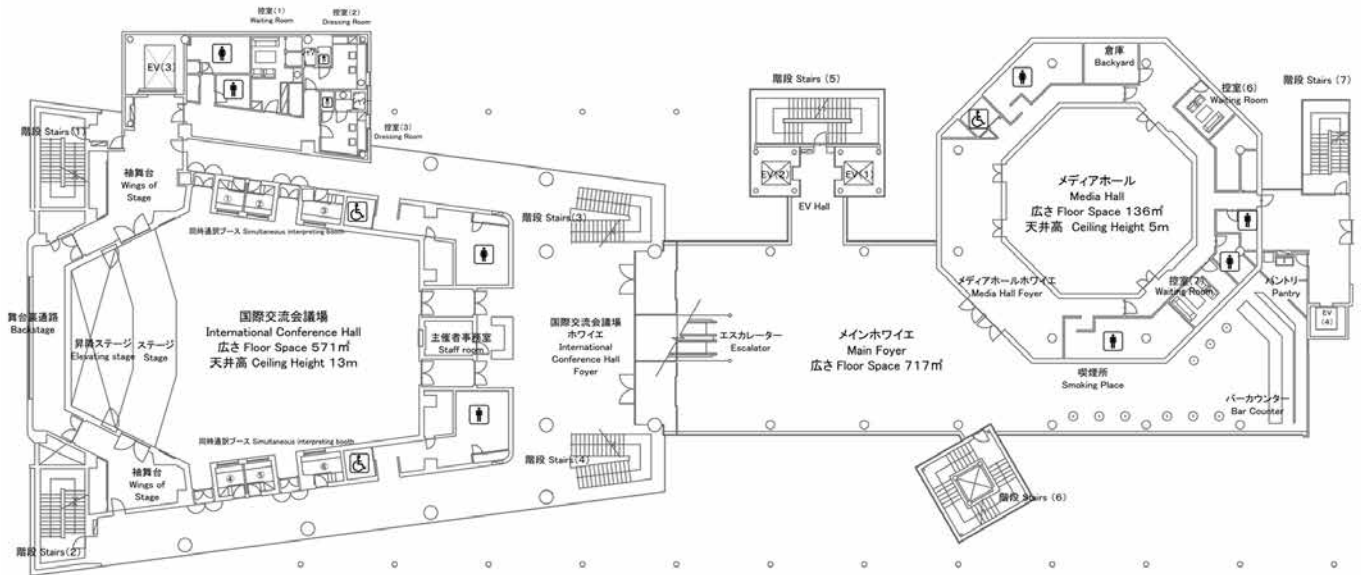
## 3rd Floor

Registration: International Conference Hall Foyer

Exhibit Hall: Main Foyer

General Session Room: International Conference Hall

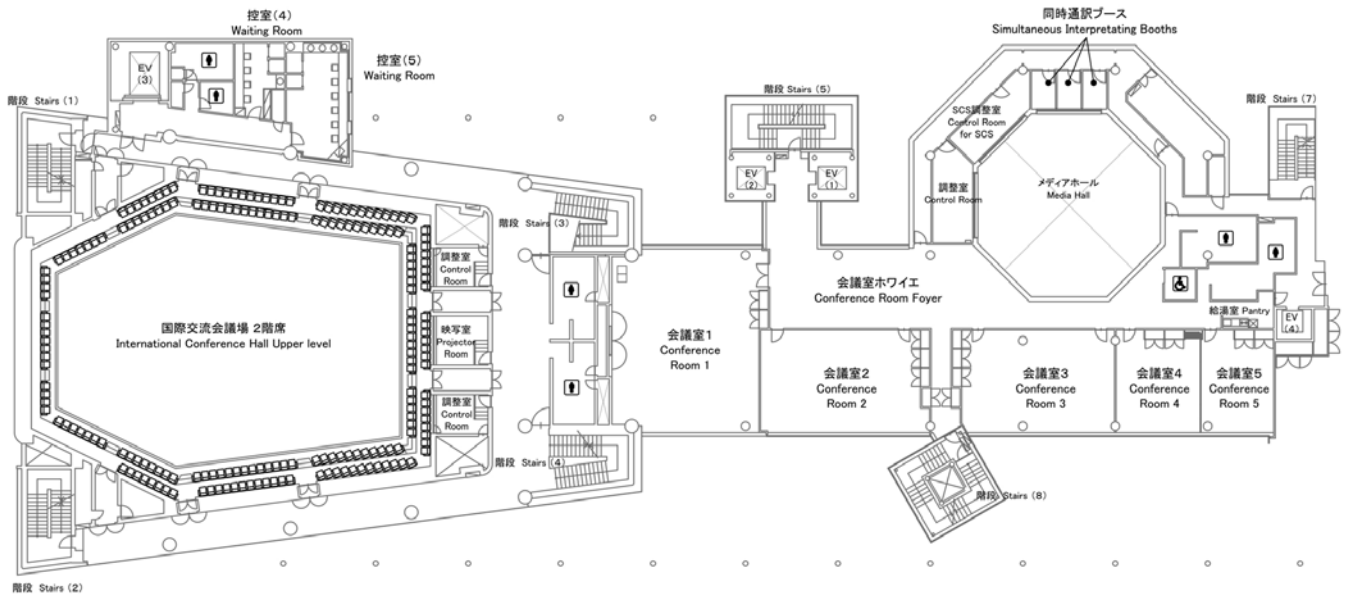
Concurrent Session/Workshop Room: Media Hall



## 4th Floor

Concurrent Session/Workshop Room: Conference Room 1

General Session Room: International Conference Hall “Upper Level”



# Friday, December 13, 2019

- 7:30-19:00 Registration Open - International Conference Hall Foyer
- 8:00-19:30 Exhibits Open - Main Foyer
- 8:25 – 8:30 **Course Welcome from Scoliosis Research Society**  
*Muharrem Yazici, MD, SRS President-Elect*
- 8:30 – 9:45 **Foundation Knowledge**  
*Moderated by Saumyajit Basu, MD and Morio Matsumoto, MD, PhD*
- 8:30 – 8:42 Growth of the Spine and Influence of Spinal Deformity  
*Saumyajit Basu, MD*
- 8:42 – 8:54 Spine Biomechanics  
*Alpaslan Senkoylu, MD*
- 8:54 – 9:01 Discussion
- 9:01 – 9:13 Bone Healing, Fusion Biology and Prerequisites on How to Achieve a Solid Fusion  
*Benny T. Dahl, MD, PhD, DMSci*
- 9:13 – 9:25 Assessment of Maturation  
*Muharrem Yazici, MD*
- 9:25 – 9:37 New Trends in Imaging to Evaluate 3D Spinal Deformity  
*Alpaslan Senkoylu, MD*
- 9:37 – 9:45 Discussion
- 9:45 – 10:05 Exhibit Viewing and Refreshment Break
- 10:05 – 11:50 **Adolescent Idiopathic Scoliosis Part 1**  
*Moderated by Alpaslan Senkoylu, MD and Kota Watanabe, MD, PhD*
- 10:05 – 10:17 Etiology and Natural History of AIS  
*Morio Matsumoto, MD, PhD*
- 10:17 – 10:29 Brace Treatment  
*Toshiaki Kotani, MD, PhD*
- 10:29 – 10:35 Discussion
- 10:35 – 10:47 Surgical Indication and Pre-operative Planning  
*Shu-Hua Yang, MD, PhD*
- 10:47 – 10:59 Adding-on in AIS  
*Noriaki Kawakami, MD, DMSc*
- 10:59 – 11:11 Shoulder Imbalance in AIS  
*Marinus de Kleuver, MD, PhD*
- 11:11 – 11:19 Discussion
- 11:19 – 11:31 Operative Correction Technique: Anterior  
*Kenneth MC Cheung, MD*
- 11:31 – 11:43 Operative Correction Technique: Posterior  
*Koki Uno, MD, PhD*
- 11:43 – 11:50 Discussion
- 11:50 – 12:00 Lunch Pickup  
*Lunch sponsored by the Japanese National Tourism Organization*
- 12:00 – 13:00 Industry Workshops
- 12:00 - 13:00 **DePuy Synthes** - Conference Room 1  
Surgical Treatment of Adult Thoracolumbar Spinal Deformity -How to Optimize the Spinal Alignment Without Increasing Implant-Related Complications  
Faculty: *Mitsuru Yagi, MD PhD*
- 12:00 - 13:00 **Medtronic** - Media Hall  
Correction Techniques for Various Types of Adolescent Idiopathic Scoliosis  
Faculty: *Kota Watanabe, MD, PhD*
- 13:00 – 13:15 Passing Break



# Friday, December 13, 2019

- 13:15 – 14:15 Adolescent Idiopathic Scoliosis Part 2: Case-Based Debates (2 Concurrent Rooms)**  
Lenke 5 Curve: ASF vs PSF  
Selection of LIV to Prevent Distal Adding On  
Selection of UIV to Prevent Shoulder Imbalance  
Conference Room 1  
*Moderated by Mitsuru Yagi, MD, PhD with Faculty-Led Roundtables*  
Cases: *Marinus de Kleuver, MD, PhD; Hiroshi Taneichi, MD, PhD; Shu-Hua Yang, MD, PhD*  
Media Hall  
*Moderated by Kota Watanabe, MD, PhD with Faculty-Led Roundtables*  
Cases: *Kenneth MC Cheung, MD; Noriaki Kawakami, MD, DMSc; Morio Matsumoto, MD, PhD*
- 14:15 – 14:25** Passing Break
- 14:25 – 16:20 Early Onset Deformity**  
*Moderated by Noriaki Kawakami, MD, DMSc and Muharrem Yazici, MD*
- 14:25 – 14:37 Definition and Classification of EOD  
*Benny T. Dahl, MD, PhD, DMSci*
- 14:37 – 14:49 Casting - Indications and Techniques  
*Marinus de Kleuver, MD, PhD*
- 14:49 – 14:56 Discussion
- 14:56 – 15:08 Congenital Scoliosis – Surgical Treatment and Indications  
*Noriaki Kawakami, MD, DMSc*
- 15:08 – 15:20 Growth Friendly Surgical Techniques – Distraction Techniques: Growing Rod and VEPTR  
*Muharrem Yazici, MD*
- 15:20 – 15:32 Growth Friendly Surgical Techniques – New Concepts: Shilla and Anterio-tether  
*Kenneth MC Cheung, MD*
- 15:32 – 15:40 Discussion
- 15:40 – 16:00 Case-Based Discussion – Growing Rod  
*Muharrem Yazici, MD*
- 16:00 – 16:20 Case-Based Discussion – Congenital Scoliosis  
*Alpaslan Senkoylu, MD*
- 16:20 – 16:40** Exhibit Viewing and Refreshment Break
- 16:40 – 18:10 Cervical Deformity**  
*Moderated by Marinus de Kleuver, MD, PhD and Kota Watanabe, MD, PhD*
- 16:40 – 16:58 Keynote Lecture: Principles and Treatment of Cervical Deformity and Cervical Alignment  
*Kuniyoshi Abumi, MD*
- 16:58 – 17:10 Decision Making and Preoperative Planning  
*Takachika Shimizu, MD*
- 17:10 – 17:22 Occipital and Cervical Instrumentation and Fusion: Indications, Surgical Techniques and Complications  
*Koki Uno, MD, PhD*
- 17:22 – 17:30 Discussion
- 17:30 – 17:50 Case-Based Discussion: Cervical Deformity and Cervical Alignment  
*Koki Uno, MD, PhD*
- 17:50 – 18:10 Case-Based Discussion: Cervical Deformity and Cervical Alignment  
*Kuniyoshi Abumi, MD*
- 18:10 – 19:30 Welcome Reception**  
*Reception sponsored, in part, by a grant from Medtronic*

# Saturday, December 14, 2019

- 7:00-14:00 Registration Open - International Conference Hall Foyer
- 7:30-14:00 Exhibits Open - Main Foyer
- 8:00 – 9:45 **Adult Spine Deformity Part 1**  
*Moderated by Chong-Suh Lee, MD, PhD and Hiroshi Taneichi, MD, PhD*
- 8:00 – 8:12 Natural History and Etiology of Degenerative Deformity  
*Shu-Hua Yang, MD, PhD*
- 8:12 – 8:24 Practical Usage of Sagittal Parameters for Preoperative Planning  
*Yukihiro Matsuyama, MD, PhD*
- 8:24 – 8:36 Osteotomy Types and their Indications in ASD  
*Hiroshi Taneichi, MD, PhD*
- 8:36 – 8:43 Discussion
- 8:43 – 8:55 Anterior Procedure  
*Hiroshi Taneichi, MD, PhD*
- 8:55 – 9:07 Minimally Invasive Surgical Solutions in Degenerative Deformity  
*Chong-Suh Lee, MD, PhD*
- 9:07 – 9:14 Discussion
- 9:14 – 9:26 How to Reduce Complication Rates, PJK and Revision Surgery  
*Yukihiro Matsuyama, MD, PhD*
- 9:26 – 9:38 How to Reduce Complication Rates, Pseudo and Revision Surgery  
*Mitsuru Yagi, MD, PhD*
- 9:38 – 9:45 Discussion
- 9:45 – 10:05 Exhibit Viewing and Refreshment Break  
*Refreshments sponsored, in part, by a grant from NuVasive*
- 10:05 – 11:15 **Adult Spine Deformity Part 2: Case Based Debates (2 Concurrent Rooms)**  
Deciding LL  
UIV – When We Go Up to T2  
LIV – When We Go Down to the Pelvis
- Conference Room 1  
*Moderated by Mitsuru Yagi, MD, PhD with Faculty-Led Roundtables*  
Cases: *Yukihiro Matsuyama, MD, PhD; Mitsuru Yagi, MD, PhD, Naobumi Hosogane, MD, PhD*
- Media Hall  
*Moderated by Kota Watanabe, MD, PhD with Faculty-Led Roundtables*  
Cases: *Benny T. Dahl, MD, PhD, DMSci; Toshiaki Kotani, MD, PhD; Kota Watanabe, MD, PhD*
- 11:15 – 11:30 Lunch Pickup
- 11:30 – 12:30 Industry Workshops
- 11:30 - 12:30 **Globus Medical, Inc.** - Conference Room 1  
The Progress of Treatment for Adult Spinal Deformity in the Past/Future Ten Years  
Faculty: *Takahiro Iida, MD, PhD*
- 11:30 - 12:30 **NuVasive** - Media Hall  
Surgical Correction of Adult Spinal Deformity with Osteotomies  
Faculty: *Naobumi Hosogane, MD, PhD*  
Correction Technique Using S-Line and Modified S-Line for Adolescent Idiopathic Scoliosis  
Faculty: *Jun Takahashi, MD, PhD*
- 12:30 – 12:40 Passing Break
- 12:40 – 13:40 **Spondylolisthesis**  
*Moderated by Benny T. Dahl, MD, PhD, DMSci and Koki Uno, MD, PhD*

\*Denotes Non-CME Session

# Saturday, December 14, 2019

- 12:40 – 12:52 Classification and Management of Spondylolisthesis  
*Saumyajit Basu, MD*
- 12:52 – 13:04 Simultaneous Presence of Spondylolisthesis and Scoliosis  
*Kota Watanabe, MD, PhD*
- 13:04 – 13:10 Discussion
- 13:10– 13:25 Case-Based Discussion: Dysplastic Spondylolisthesis  
*Saumyajit Basu, MD*
- 13:25 – 13:40 Case-Based Discussion: Spondylolisthesis and Scoliosis  
*Kota Watanabe, MD, PhD*
- 13:40 – 14:00 Exhibit Viewing and Refreshment Break
- 14:00 – 16:00 **Deformity Caused by Osteoporotic Vertebral Fractures and Parkinson’s Disease**  
*Moderated by Shu-Hua Yang, MD, PhD and Kota Watanabe, MD, PhD*
- 14:00 – 14:12 Etiology of OVF  
*Alpaslan Senkoğlu, MD*
- 14:12 – 14:24 Surgical Treatment for OVF deformity  
*Chong-Suh Lee, MD, PhD*
- 14:24 – 14:30 Discussion
- 14:30 – 14:42 Etiology of Parkinson’s Disease  
*Mitsuru Yagi, MD, PhD*
- 14:42 – 14:54 Surgical Treatment for Parkinson’s Disease  
*Saumyajit Basu, MD*
- 14:54 – 15:00 Discussion
- 15:00 – 15:20 Case-Based Discussion: OVF  
*Toshiaki Kotani, MD, PhD*
- 15:20 – 15:40 Case-Based Discussion: OVF (MIS)  
*Chong-Suh Lee, MD, PhD*
- 15:40 – 16:00 Case-Based Discussion: Parkinson’s Disease  
*Mitsuru Yagi, MD, PhD*
- 16:00 – 16:05 **Course Adjournment**

\*Denotes Non-CME Session

# Notes

## Foundation Knowledge

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What did you learn during this session? (What was your “a-ha” moment?)

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How will you include the new things you learned in your practice?

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What questions do you still have or wished you asked?

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# Notes

## Adolescent Idiopathic Scoliosis Part 1

What did you learn during this session? (What was your “a-ha” moment?)

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# Notes

## Adolescent Idiopathic Scoliosis Part 2: Case-Based Debates

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What did you learn during this session? (What was your “a-ha” moment?)

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How will you include the new things you learned in your practice?

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What questions do you still have or wished you asked?

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# Notes

## Early Onset Scoliosis

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What did you learn during this session? (What was your “a-ha” moment?)

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What questions do you still have or wished you asked?

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# Notes

## Cervical Deformity

What did you learn during this session? (What was your “a-ha” moment?)

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How will you include the new things you learned in your practice?

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What questions do you still have or wished you asked?

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# Notes

## Adult Spine Deformity Part 1

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What did you learn during this session? (What was your “a-ha” moment?)

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How will you include the new things you learned in your practice?

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What questions do you still have or wished you asked?

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# Notes

## Adult Spine Deformity Part 2: Case-Based Debates

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What did you learn during this session? (What was your “a-ha” moment?)

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What questions do you still have or wished you asked?

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# Notes

## Spondylolisthesis

What did you learn during this session? (What was your “a-ha” moment?)

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What questions do you still have or wished you asked?

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# Notes

## **Deformity Caused by Osteoporotic Vertebral Fractures and Parkinson's Disease**

What did you learn during this session? (What was your “a-ha” moment?)

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How will you include the new things you learned in your practice?

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What questions do you still have or wished you asked?

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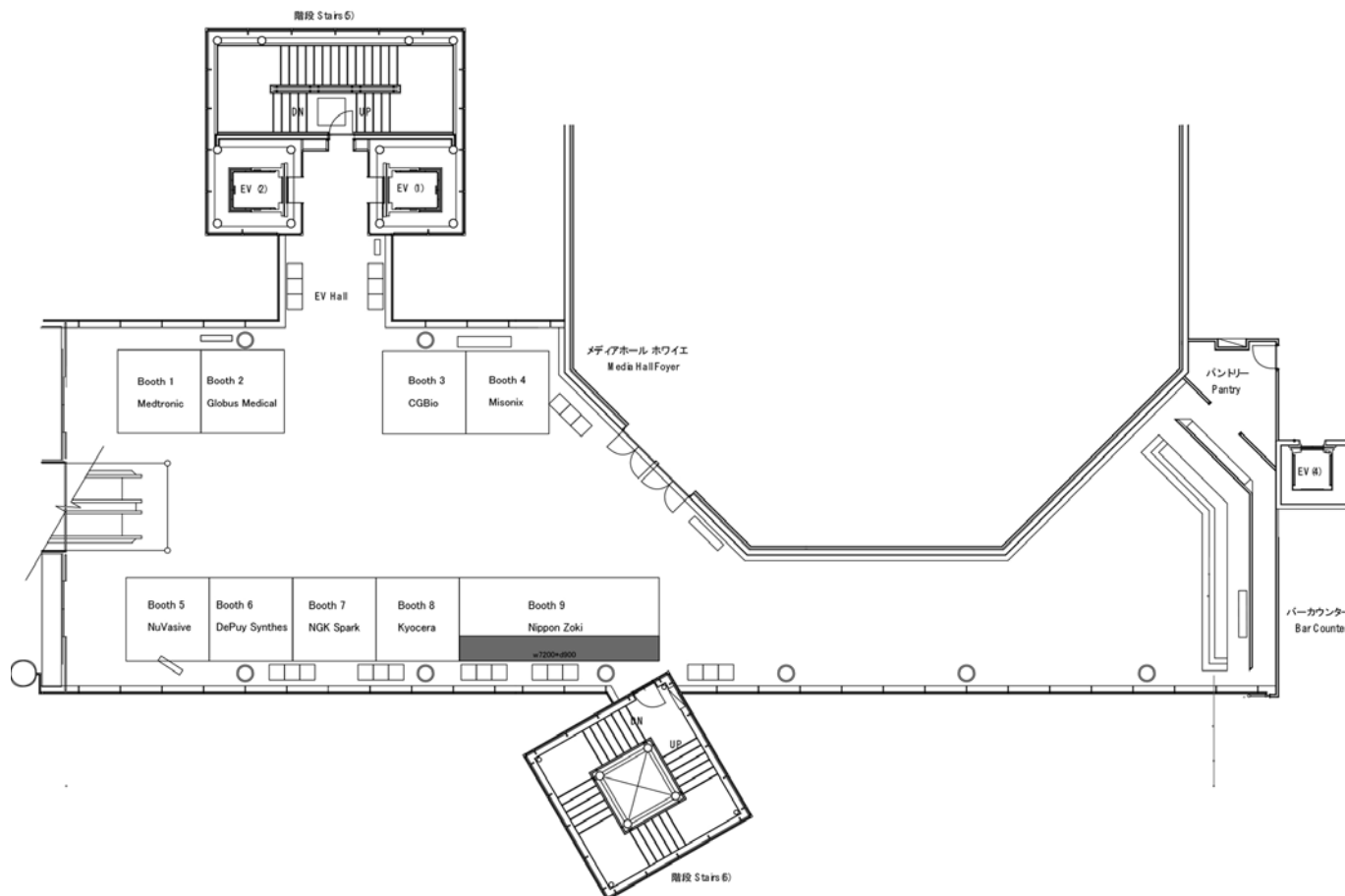
# Exhibits & Workshops

Many new spinal systems and products are on display in the Exhibit Hall. We encourage you to visit the exhibits throughout the meeting to learn more about the technological advances.

The Exhibit Hall is located on floor 3 in the Main Foyer at the Plaza Heisei.

## Exhibit Hall Hours\*

Friday, December 13 8:00 – 19:30  
 Saturday, December 14 7:30 – 14:00



## Exhibits

Booth 3 CGBio

Booth 6 DePuy Synthes

Booth 2 Globus Medical, Inc.

Booth 9 Kyocera Corporation

Booth 1 Medtronic

Booth 4 Misonix

Booth 8 Nippon Zoki Pharmaceutical Co., Ltd

Booth 7 NGK Spark Plug Co., LTD.

Booth 5 NuVasive

# Exhibitor Descriptions

**CGBio – Booth # 3**  
12, Bongea-ro 114-gil,  
Gangnam-gu, Seoul, Korea  
www.cgbio.co.kr

Only one Company in the field of Tissue Regeneration as a technology-leading company in 3 key factors: Cell, Growth Factors, and Scaffold.

CGBIO's mission is to improve the quality of life by developing and providing treatment solutions for diseased or aged musculoskeletal tissue systems. Recently, CGBIO is expanding to the field of aesthetics and plastic surgery.

CGBIO provides essential and convenient products for use in clinics through its excellent biomaterial-based technology and variety of Co-work with clinical experts.

CGBIO will contribute to patients and medical practitioners around the world through sustained R&D investment to develop leading-edge bioproducts and solutions for improved efficacy and reduced treatment cost.

Our door is open to anyone or any University, Research lab or Company interested in the reconstruction of damaged human tissue.

CGBIO will contribute all the resources and passions to lead to improving quality of life and will become a company loved and trusted by the people.

**DePuy Synthes – Booth # 6**  
325 Paramount Drive  
Raynham, MA 02767 USA  
www.depuysynthes.com

DePuy Synthes Spine is the second largest spine company in the world, with one of the most comprehensive portfolios of spinal care solutions that address key areas including thoracolumbar, cervical, aging spine, interbody fusion and minimally invasive surgery. The company's leading solutions include comprehensive systems like the EXPEDIUM® Spine System to treat spinal conditions ranging from scoliosis to degenerative disc disease; the VIPER® PRIME System and CONCORDE® Clear MIS Discectomy Device for minimally invasive spine surgery; CONDUIT™ Interbody Platform (EIT™ Cellular Titanium); and complete systems for treating cervical spine disease.

**Globus Medical, Inc. – Booth # 2**  
2560 General Armistead Avenue  
Audubon, PA 19403 USA  
www.globusmedical.com

Globus Medical, Inc. is a leading musculoskeletal solutions company and is driving significant technological advancements across a complete suite of products ranging from spinal and trauma therapies to regenerative solutions, to robotics, navigation and imaging. Founded in 2003, Globus' single-minded focus on advancing spinal surgery has made it the fastest growing company in the history of orthopedics. Globus is driven to utilize superior engineering and technology to achieve pain free, active lives for all patients with musculoskeletal disorders.

**Kyocera Corporation – Booth # 9**  
6 Takeda Tobadono-cho Fushimi-ku Kyoto-shi  
Kyoto 612-8501 Japan  
<https://global.kyocera.com/prdct/medical/>

The KYOCERA Group operates a broad range of businesses globally, from materials, components, devices and equipment to services and networks. Among them, Medical Division has a leading role in medical-related business of the KYOCERA Group since 1973.

Utilizing the highly biocompatible characteristics of fine ceramics and titanium alloy, we have provided various artificial joints, dental implants and spine products in the field of medicine to contribute for the improvement of QOL.

These products are designed, evaluated and manufactured in house with strict quality control.

In addition, we established a company in the U.S. this year to contribute for the improvement of QOL in all over the world and aiming for further global expansion.

KYOCERA is committed to providing innovative products that help surgeons meet demanding patient needs. By combining advanced materials and innovative design features with tried-and-true design principles, KYOCERA aims to enhance device performance and longevity.

**Medtronic – Booth # 1**  
2600 Sofamor Danek Drive  
Memphis, TN 38132 USA  
www.medtronic.com

Making healthcare better is our priority, and we believe medical technology can play an even greater role in improving people's lives. With challenges facing families and healthcare systems - such as rising costs, aging populations, and the burden of chronic disease - we are using the power of technology to take healthcare Further, Together.

Innovation and collaboration are central to who we are. Since the late 1940s, we have been working with others to alleviate pain, restore health, and extend life. Today, we are a medical technology leader, employing more than 84,000 people worldwide, and offering therapies and solutions that enable greater efficiency, access, and value - for healthcare systems, providers, and the people they serve. Learn more at Medtronic.com.

**Misonix – Booth # 4**  
1938 New HWY  
Farmingdale, NY 11735 USA  
www.misonix.com

Misonix recognized leader in developing ultrasonic surgical devices for hard and soft tissue removal. The BoneScalpel is a unique tissue-selective ultrasonic osteotome allowing for en-bloc bone removal and refined osteotomies while sparing soft tissue structures. Many surgeons have noted the BoneScalpel as one of the greatest advancements in spine surgery.

# Exhibitor Descriptions

**Nippon Zoki Pharmaceutical Co., Ltd – Booth # 8**  
1-2 Hiranomachi Nichome, Chuo-ku,  
Osaka 541-0046 Japan  
[www.nippon-zoki.co.jp](http://www.nippon-zoki.co.jp)

Nippon Zoki is a specialty pharmaceutical company mainly focused on therapeutic areas of pain and orthopedics. We develop, manufacture, market and distribute high-quality branded and generic pharmaceutical products as well as medical devices and over-the-counter medications. We export and market ethical drug products in China and manufacture the intermediate of those products in both China and Vietnam, as well as export of biological API to Korea. Company headquarter is located in Osaka, Japan.

Our flagship product Neurotropin, which is a biological drug to treat chronic pain and neuropathic pain, has achieved the considerable market position through both the extensive human experience for decades in Japan. In the US, a randomized double-blind placebo-controlled clinical study of this drug has been conducted for the treatment of chronic pain at the National Institute of Health.

Recently, we started the development of medical devices for diagnosis and therapy of spinal deformity and pain in digital health field. In the exhibition of this conference, the 3D scanner system examining scoliosis will be presented.

**NGK Spark Plug Co., LTD. – Booth # 7**  
14-18, Takatsuji-cho, Mizuho-ku, Nagoya, Aichi, Japan 467-8525  
<https://www.ngkntk.co.jp/english/>

NGK SPARK PLUG CO., LTD., headquartered in Nagoya, Japan, is a comprehensive ceramics processing manufacturer which hold a world leading share of spark plugs and automotive sensors for internal combustion engines.

We applied our ceramic technologies in developing and producing a line of bone graft substitute designed to compensate for bone defects.

Main products in this line include CERATITE™, a sintered bone material produced by sintering raw material closely resembling bone's inorganic component, CERAPASTE™, a prosthetic bone material that can be freely formed in the shape of the bone defect which then hardens within the body, and CERAREBONE™, a substitute bone material that is absorbed within the body to replace bone.

Use in the medical field of each product is based on the bone defect and symptoms.

**NuVasive – Booth # 5**  
7475 Lusk Blvd  
San Diego, CA 92121 USA  
[www.nuvasive.com](http://www.nuvasive.com)

NuVasive is the leader in spine technology innovation, focused on transforming spine surgery and beyond with minimally disruptive, procedurally integrated solutions designed to deliver reproducible and clinically-proven surgical outcomes. The Company's portfolio includes access instruments, implantable hardware, biologics, and software systems for surgical planning, navigation and imaging solutions, magnetically adjustable implant systems for spine and orthopedics, and intraoperative monitoring service offerings.

# Industry Workshops

Meeting delegates are encouraged to attend the Industry Workshops during lunch on Friday and Saturday. Each workshop is programmed by a single- supporting company and will feature presentations on topics and technologies selected by the company.

## **Friday, December 13 - 12:00-13:00**

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### **DePuy Synthes**

Room: Conference Room 1

Title: Surgical Treatment of Adult Thoracolumbar Spinal Deformity -How to Optimize the Spinal Alignment Without Increasing Implant-Related Complications

Faculty: *Mitsuru Yagi, MD PhD*

### **Medtronic**

Room: Media Hall

Title: Correction Techniques for Various Types of Adolescent Idiopathic Scoliosis

Faculty: *Kota Watanabe, MD, PhD*

## **Saturday, December 14 - 11:30-12:30**

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### **Globus Medical, Inc.**

Room: Conference Room 1

Title: The Progress of Treatment for Adult Spinal Deformity in the Past/Future Ten Years

Faculty: *Takahiro Iida, MD, PhD*

### **NuVasive**

Room: Media Hall

Title: Surgical Correction of Adult Spinal Deformity with Osteotomies (30 min.)

Faculty: *Naobumi Hosogane, MD, PhD*

Title: Correction Technique Using S-Line and Modified S-Line for Adolescent Idiopathic Scoliosis (30 min.)

Faculty: *Jun Takahashi, MD, PhD*



# About SRS

Founded in 1966, the Scoliosis Research Society is an organization of medical professionals and researchers dedicated to improving care for patients with spinal deformities. Over the years, it has grown from a group of 37 orthopaedic surgeons to an international organization of more than 1,300 health care professionals.

## Mission Statement

The purpose of the Scoliosis Research Society is to foster the optimal care of all patients with spinal deformities.

## Membership

SRS is open to orthopaedic surgeons, neurosurgeons, researchers and allied health professionals who have a practice that focuses on spinal deformity.

*Active Fellowship (membership)* requires the applicant to have fulfilled a minimum three year Candidate Fellowship and have a practice that is 20% or more in spinal deformity. Only Active Fellows may vote and hold elected offices within the Society.

*Candidate Fellowship (membership)* is open to orthopaedic surgeons, neurosurgeons and to researchers in all geographic locations who are willing to commit to a clinical practice which includes at least 20% spinal deformity. Candidate Fellows stay in that category for three- five years, during which time they must demonstrate their interest in spinal deformity and in the goals of the Scoliosis Research Society. Candidate Fellows may serve on SRS committees. After a minimum three years, those who complete all requirements are eligible to apply for Active Fellowship in the Society. Candidate Fellowship does not include the right to vote or hold office.

*Associate Fellowship (membership)* is for distinguished members of the medical profession including nurses, physician assistants, as well as orthopaedic surgeons, neurosurgeons, scientists, engineers and specialists who have made a significant contribution to scoliosis or related spinal deformities who do not wish to assume the full responsibilities of Active Fellowship. Associate Fellows may not vote or hold office, but may serve on committees.

*Senior Candidate Fellowship (membership)* is limited to senior surgeons, neurosurgeons and to non-physicians members of allied specialties. This candidacy is a path to SRS Active Fellowship. Senior surgeons have the opportunity to become Active Fellows of SRS in two years and not 5 years like the regular Candidate Fellowship track. They must have 20 years of experience (time spent with fellowship and training does not count), be a full professor, head of spine unit or chief of spine division, and clinical practice which includes 20% spinal deformity. After two years, those who complete all requirements are eligible to apply for Active Fellowship in the Society. Senior Candidate Fellowship does not include the right to vote or hold office.

Visit [www.srs.org/professionals/membership](http://www.srs.org/professionals/membership) for membership requirement details.

## Programs And Activities

SRS is focused primarily on education and research that include the Annual Meeting, the International Meeting on Advanced Spine Techniques (IMAST), Worldwide Conferences, a Global Outreach Program, the Research Education Outreach (REO) Fund which provides grants for spine deformity research, and development of patient education materials.

## Website Information

For the latest information on SRS meetings, programs, activities, and membership please visit [www.srs.org](http://www.srs.org). The SRS Website Committee works to ensure that the website information is accurate, accessible, and tailored for target audiences. Site content is varied and frequently uses graphics to stimulate ideas and interest. Content categories include information for medical professionals, patients/public, and SRS members. For more information, please visit the SRS website at [www.srs.org](http://www.srs.org).

## Society Office Staff

Tressa Goulding, CAE – Executive Director  
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## Social Media

Twitter: [@srs\\_org](https://twitter.com/srs_org)  
Facebook: Scoliosis Research Society  
Instagram: [@srs\\_org](https://www.instagram.com/srs_org)  
LinkedIn: Scoliosis Research Society

## Scoliosis Research Society

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[www.srs.org](http://www.srs.org)

# MEETING OUTLINE

<b>Friday, December 13, 2019</b>		
07:30 – 19:00	Registration Open	International Conference Hall Foyer
08:00 – 19:30	Exhibits Open	Main Foyer
08:25 – 08:30	Introduction of SRS	International Conference Hall
08:30 – 09:45	Foundation Knowledge	International Conference Hall
09:45 – 10:05	Exhibit Viewing and Refreshment Break	Exhibit Hall
10:05 – 11:50	Adolescent Idiopathic Scoliosis Part 1	International Conference Hall
11:50 – 12:00	Lunch Pickup	Exhibit Hall
12:00 – 13:00	Industry Hands-On Workshop	Conference Room 1 and Media Hall
13:15 – 14:15	Adolescent Idiopathic Scoliosis Part 2: Case-Based Debates	Conference Room 1 and Media Hall
14:25 – 16:20	Early Onset Deformity	International Conference Hall
16:20 – 16:40	Exhibit Viewing and Refreshment Break	Exhibit Hall
16:40 – 18:10	Cervical Deformity	International Conference Hall
18:10 – 19:30	Welcome Reception	Exhibit Hall
<b>Saturday, December 14, 2019</b>		
07:00 – 14:00	Registration Open	International Conference Hall Foyer
07:30 – 14:00	Exhibits Open	Main Foyer
08:00 – 09:45	Adult Spine Deformity Part 1	International Conference Hall
09:45 – 10:05	Exhibit Viewing and Refreshment Break	Exhibit Hall
10:05 – 11:15	Adult Spine Deformity Part 2: Case-Based Debates	Conference Room 1 and Media Hall
11:15 – 11:30	Lunch Pickup	Exhibit Hall
11:30 – 12:30	Industry Hands-On Workshops	Conference Room 1 and Media Hall
12:40 – 13:40	Spondylolisthesis	International Conference Hall
13:40 – 14:00	Exhibit Viewing and Refreshment Break	Exhibit Hall
14:00 – 16:00	Deformity Caused by Osteoporotic Vertebral Fractures and Parkinson's Disease	International Conference Hall
16:00	Course Adjournment	International Conference Hall