



## 2018 Spine Across the Sea: Treatment of Elderly Patients with Spinal Disorders

July 29-August 2, 2018

Kauai Marriott Resort

Kauai, Hawaii

NASS Overall Chair: Jeffrey C. Wang, MD

NASS Chair: Jason W. Savage, MD

NASS Co-chair: Gregory D. Schroeder, MD

JSSR President and Overall Chair: Toshihiko Taguchi, MD

JSSR Chair: Hirotaka Haro, MD

JSSR Organizing Committee: Yasuaki Tokuhashi, MD, Vice-president, JSSR; Atushi Okawa, MD, Secretary, JSSR; Masashi Yamazaki, MD; Mamoru Kawakami, MD; Yoichi Shimada, MD

### **Sunday, July 29**

2:00-6:00 p.m.

*Kauai Court*

**Registration/Speaker Information Center**

6:00-7:30 p.m.

*Luau Grounds*

**Opening Reception**

### **Monday, July 30**

6:30-8:00 a.m.

*Kauai Ballroom Salon 3*

**Breakfast**

6:30 a.m.-1:00 p.m.

*Kauai Ballroom Salon 3*

**Technical Exhibition**

6:30 a.m.-1:00 p.m.

*Kauai Court*

**Registration/Speaker Information Center**

7:10-7:15 a.m.

*Kauai Ballroom Salons 1 & 2*

**Opening Remarks**

*Jason W. Savage, MD, NASS; Hirotaka Hiro, MD, JSSR*

7:15-7:30 a.m.

*Kauai Ballroom Salons 1 & 2*

**Advocacy Update**

*Moderator: John G. Finkenberg, MD*

7:30-9:00 a.m.  
Kauai Ballroom Salons 1 & 2

**Abstract Session: Adult Spinal Deformity**  
*Moderators: Daniel M. Sciubba, MD, NASS; Daisuke Togawa, MD, NASS*

9:00-9:30 a.m.  
Kauai Ballroom Salon 3

**Break/Technical Exhibition**

9:30-11:00 a.m.  
Kauai Ballroom Salons 1 & 2

**Symposium: Adult Spinal Deformity**  
*Moderators: Jason W. Savage, MD, NASS; Hiroshi Taneichi, MD, JSSR*  
The goal of this session is to review the evaluation and treatment of patients with adult spinal deformity (ASD). The session will focus on understanding radiographic parameters and alignment objectives in ASD. We will debate/discuss the role of minimally invasive surgery in ASD, as well as discuss proximal junctional kyphosis/failure.

**Upon completion of this session, participants should gain strategies to:**

- Determine radiographic parameters and alignment objectives in adult spinal deformity;
- Review the perioperative evaluation and optimization of patients undergoing deformity correction;
- Strategically plan the “right” operation for patients with adult spinal deformity (MIS versus Open);
- Discover tips and tricks in the management and avoidance of proximal junctional kyphosis;
- Develop a better understanding of “when to go big or go home.”

**Agenda**

9:30-9:45 a.m.	Understanding Radiographic Parameters and Alignment Objectives in Adult Spinal Deformity <i>Yu Yamato, MD, JSSR</i>
9:45-10:00 a.m.	Perioperative Optimization of Patients Undergoing Deformity Surgery <i>Satoshi Inami, MD, JSSR</i>
10:00-10:15 a.m.	MIS vs. Open Deformity Surgery: When, Why and How <i>John H. Shin, MD, NASS</i>
10:15-10:30 a.m.	Proximal Junctional Kyphosis: Avoidance and Management <i>Patrick A. Sugrue, MD, NASS</i>
10:30-11:00 a.m.	Case Debate with Panel: Deformity Correction vs. Selective Decompression/Fusion <i>Jason W. Savage, MD, NASS; Daniel M. Sciubba, MD, NASS</i>

11:00-11:30 a.m.  
Kauai Ballroom Salon 3

**Break/Technical Exhibition**

11:30 a.m.-1:00 p.m.  
Kauai Ballroom Salons 1 & 2

**Abstract Session: Cervical Spine**  
*Moderators: Thomas E. Mroz, MD, NASS; Masahiko Watanabe, MD, JSSR*

1:00 p.m.

**General Meeting Adjourns**

## **Tuesday, July 31**

6:30-8:00 a.m.

*Kauai Ballroom Salon 3*

### **Breakfast**

6:30 a.m.-1:00 p.m.

*Kauai Ballroom Salon 3*

### **Technical Exhibition**

6:30 a.m.-1:00 p.m.

*Kauai Court*

### **Registration/Speaker Information Center**

7:25-7:30 a.m.

*Kauai Ballroom Salons 1 & 2*

### **Opening Remarks**

7:30-9:00 a.m.

*Kauai Ballroom Salons 1 & 2*

### **Symposium: Minimally Invasive Fusion: LIF, MIS TLIF, PPS, OLIF**

*Moderators: Michael P. Steinmetz, MD, NASS; Hiroaki Nakamura, MD, JSSR*

This course will focus on the minimally invasive approaches to common degenerative pathologies. Experts in the field will present the latest technologies. The talks will focus on the indications as well as a description of the technical procedures as well as tricks, pearls and complications.

#### **Upon completion of this session, participants should gain strategies to:**

- List the indications for common minimally invasive procedures in the treatment of degenerative spine disease;
- Outline the general technical approaches to minimally invasive approaches to the degenerative spine;
- Determine the differences between different minimally invasive lateral approaches to the lumbar spine.

### **Agenda**

7:30-8:5 a.m.

Case Debate: L4-L5 Degenerative Spondylolisthesis

- Decompression Alone with MED  
*Hiroaki Nakamura, MD, JSSR*
- Decompression and PSF  
*Dominic W. Pelle, MD, NASS*
- MIS TLIF  
*Wellington K. Hsu, MD, NASS*
- Cortical Screws +/- TLIF  
*Takashi Kaito, MD, JSSR*
- Endoscopic TLIF  
*Michael P. Steinmetz, MD, NASS*
- ALIF with Percutaneous Screws  
*Thomas E. Mroz, MD, NASS*

Indications to Perform a Lateral Interbody Fusion (LIF)

*Tetsuro Ohba, MD, JSSR*

OLIF or LIF: When, Why, and How

*Takanori Saito, MD, JSSR*

8:45-9:00 a.m.

Panel Discussion

9:00-9:30 a.m.  
Kauai Ballroom Salon 3

### **Break/Technical Exhibition**

9:30-10:30 a.m.  
Kauai Ballroom Salons 1 & 2

### **Abstract Session: Motion Preservation**

*Moderators: Gregory D. Schroeder, MD, NASS; Shinichi Konno, MD, JSSR*

10:30 a.m.-12:00 p.m.  
Kauai Ballroom Salons 1 & 2

### **Symposium: Biologics, Navigation and New Technology**

*Moderators: Zorica Buser, PhD, NASS; Masaya Nakamura, MD, JSSR*

New technology in spine surgery can be exciting yet confusing at the same time. With the development of novel products, techniques and software, surgeons should have a solid understanding of the science and evidence behind these technologies. This session will review the most recent literature and provide commentary on a variety of apropos spine surgery products which have been and are being developed.

#### **Upon completion of this session, participants should gain strategies to:**

- Assess the current evidence regarding commercially available biologics and its efficacy in spine fusion;
- Evaluate the literature pertaining to biologic solutions for spinal cord injury and regeneration of the intervertebral disc;
- Discuss the aptitude of current navigation and robotics systems and predict the future capabilities of further developed technologies.

#### **Agenda**

- 10:30-10:40 a.m. An Evidence-based Approach to Biologics  
*Wellington K. Hsu, MD, NASS*
- 10:40-10:50 a.m. Regenerative Medicine for Spinal Cord Injury: Where are We Now and Where are We Going?  
*Narihito Nagoshi, MD, JSSR*
- 10:50-11:00 a.m. Stem Cell Injections for Acute Spinal Cord Injuries  
*Richard G. Fessler, MD, PhD, NASS*
- 11:00-11:15 a.m. Regenerative Medicine for Intervertebral Disc: Where are We Now and Where are We Going?  
*Daisuke Sakai, MD, JSSR*
- 11:15-11:25 a.m. The Utility of Navigation in Spine Surgery  
*Raymond J. Hah, MD, NASS*
- 11:25-11:35 a.m. Robotics: Is This the Future?  
*Kevin M. Walsh, MD, NASS*
- 11:35-11:45 a.m. New Imaging Techniques for Cervical Spondylotic Myelopathy  
*Masaya Nakamura, MD, JSSR*
- 11:45 a.m. – 12:00 p.m. Panel Discussion

12:00-12:30 p.m.  
Kauai Ballroom Salon 3

### **Break/Technical Exhibition**

12:30-1:30 p.m.  
Kauai Ballroom Salons 1 & 2

**Abstract Session: Lumbar Part I**  
*Moderators: Dominic Pelle, MD, NASS; Katsushi Takeshita, MD, JSSR*

1:30 p.m.

**General Meeting Adjourns**

**Wednesday, August 1**

6:30-8:00 a.m.  
Kauai Ballroom Salon 3

**Breakfast**

6:30-9:30 a.m.  
Kauai Ballroom Salon 3

**Technical Exhibition**

6:30 a.m.-1:00 p.m.  
Kauai Court

**Registration/Speaker Information Center**

7:25-7:30 a.m.  
Kauai Ballroom Salons 1 & 2

**Opening Remarks**

7:30-9:00 a.m.  
Kauai Ballroom Salons 1 & 2

**Symposium: Treatment of Cervical Spine Disorders**

*Moderators: Thomas E. Mroz, MD, NASS; Morio Matsumoto, MD, JSSR*

This symposium is aimed at providing a robust review and discussion of pertinent topics to cervical spine surgery. The topics include a debate on appropriate treatment for cervical radiculopathy, treatment options for multilevel cervical myelopathy, central cord syndrome, deformity correction, and the use of neural monitoring. The symposium is provided by experts in their respective subject areas, and will provide an excellent overview of all topics.

**Upon completion of this session, participants should gain strategies to:**

- Identify treatment options and supporting evidence for 1 and 2 level cervical radiculopathy;
- Determine the state of the art literature for management of Central Cord Syndrome;
- Identify the various treatment approaches for multilevel cervical myelopathy;
- Appreciate novel techniques for cervical deformity correction;
- Determine the utility of neural monitoring during cervical spine surgery.

**Agenda**

7:30-7:55 a.m.

Case Debate: 1 or 2-Level Radiculopathy

- *Anterior Cervical Discectomy and Fusion (ACDF)*  
*Gregory D. Schroeder, MD, NASS*
- *Total Disc Replacement (TDR)*  
*Alpesh A. Patel, MD, FACS, NASS*
- Foraminotomy  
*Thomas E. Mroz, MD, NASS*
- Discussion

7:55-8:05 a.m.

Central Cord Syndrome: Timing of Surgery  
*Ajit A. Krishnaney, MD, NASS*

8:05-8:30 a.m.

Treatment of Multi-level Cervical Spondylotic Myelopathy (CSM) or Ossification of the Posterior Longitudinal Ligament (OPLL)

- Multi-level Anterior Cervical Discectomy and Fusion (ACDF)

*Alpesh A. Patel, MD, FACS, NASS*

- Posterior Decompression and Posterior Spinal Fusion  
*Jeffrey C. Wang, MD, NASS*
- Laminoplasty  
*Morio Matsumoto, MD, JSSR*
- Anterior or Posterior Approach  
*Toshitaka Yoshii, MD, JSSR*
- Discussion

8:30-8:40 a.m.      New Techniques for Cervical Spine Instrumentation for Spinal Deformity  
*Hirotaaka Chikuda, MD, JSSR*

8:40-8:50 a.m.      Efficacy of Evoked Potential Monitoring During Cervical Spine Surgeries  
*Tsukasa Kanchiku, MD, JSSR*

8:50-9:00 a.m.      Discussion

9:00-9:30 a.m.  
*Kauai Ballroom Salon 3*

### **Break/Technical Exhibition**

9:30-10:30 a.m.  
*Kauai Ballroom Salons 1 & 2*

### **Abstract Session: Trauma and Tumor**

*Moderators: Ajit A. Krishnaney, MD, NASS; Ken Maeda, MD, JSSR*

10:30 a.m.-12:00 p.m.  
*Kauai Ballroom Salons 1 & 2*

### **Symposium: Osteoporosis and Sarcopenia**

*Moderators: Gregory D. Schroeder, MD, NASS; Hirotaaka Haro, MD, JSSR*

This symposium discusses how to evaluate the status of osteoporosis in patients undergoing spinal fusion surgery or suffering vertebral fracture, and decrease the complication rate.

### **Upon completion of this session, participants should gain strategies to:**

- Identify the status of osteoporosis before surgery;
- Apply appropriate pharmacological treatment pre-and postoperative surgery and surgical technique;
- Choose the appropriate treatment of vertebral fractures.

### **Agenda**

10:30-10:45 a.m.      The Relationship Between Osteoporosis and Sarcopenia  
*Naohisa Miyakoshi, MD, JSSR*

10:45-11:00 a.m.      Diagnostic Workup of Osteoporosis in Patients Undergoing Spinal Fusion Surgery  
*Gregory D. Schroeder, MD, NASS*

11:00-11:15 a.m.      Pharmacological Treatment of Osteoporosis Before and After Spinal Fusion Surgery  
*Hirotaaka Haro, MD, JSSR*

11:15-11:30 a.m. Strategies to Reduce the Incidence of Pedicle Screw Loosening, Cage Subsidence, and Pseudarthrosis after Fusion Surgery in Patients with Osteoporosis  
*Gen Inoue, MD, JSSR*

11:30-11:45 a.m. Treatment of Osteoporotic Vertebral Fractures: Nonoperative Care and Indications to Perform Surgery  
*Clinton J. Devin, MD, NASS*

11:45 a.m. – 12:00 p.m. Panel Discussion

12:00-12:15 p.m.  
*Kauai Court*

**Break**

12:15-1:15 p.m.  
*Kauai Ballroom Salons 1 & 2*

**Abstract Session: Diagnostics/Imaging**  
*Moderators: Clinton J. Devin, MD, NASS; Toshihiko Yamashita, MD, JSSR*

1:15 p.m.

**General Meeting Adjourns**

## **Thursday, August 2**

6:30-8:00 a.m.  
*Kauai Ballroom Salon 3*

**Breakfast**

6:30 a.m.-1:00 p.m.  
*Kauai Court*

**Registration/Speaker Information Center**

7:25-7:30 a.m.  
*Kauai Ballroom Salons 1 & 2*

**Opening Remarks**

7:30-9:00 a.m.  
*Kauai Ballroom Salons 1 & 2*

**Abstract Session: Complications**  
*Moderators: Wellington K. Hsu, MD, NASS; Hideki Nagashima, PhD, JSSR*

9:00-9:15 a.m.  
*Kauai Ballroom Salon 3*

**Break**

9:15-10:15 a.m.  
*Kauai Ballroom Salons 1 & 2*

**Abstract Session: Lumbar Part II**  
*Moderators: R. Douglas Orr, MD, FRCSC, NASS; Koichi Sairyo, MD, JSSR*

10:15-11:45 a.m.  
*Kauai Ballroom Salons 1 & 2*

**Symposium: Help the Professor! Case Presentations**  
*Moderators: Jason W. Savage, MD, NASS; Yukihiro Matsuyama, MD, JSSR*  
This session will focus on complex case presentations that will include adult spinal deformity, spinal oncology, and spinal infections. We will review the appropriate diagnostic work-up of these complex cases, explore surgical treatment options, and review “tips and tricks” of performing these complex operations.

**Upon completion of this session, participants should gain strategies to:**

- Determine the clinical and diagnostic work-up involved in treating complex spinal deformity, spinal infections and tumors;
- Review the “tips and tricks” of performing complex spinal reconstructions.

**Agenda**

10:30 a.m.-12:00 p.m. Case Presentations

Faculty Panel:

*R. Douglas Orr, MD, FRCSC, NASS*

*Seiji Ohtori, MD, JSSR,*

*Daniel M. Sciubba, MD, NASS*

*Yukihiro Matsuyama, MD, JSSR*

11:45 a.m.

**General Meeting Adjourns**