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. Registration/Speaker Information Center
Kauai Court

6:00-7:30 p.m. Opening Reception
Luau Grounds

Monday, July 30
6:30-8:00 a.m. Breakfast
Kauai Ballroom Salon 3

6:30 a.m.-1:00 p.m. Technical Exhibition
Kauai Ballroom Salon 3

6:30 a.m.-1:00 p.m. Registration/Speaker Information Center
Kauai Court

7:10-7:15 a.m. Opening Remarks
Kauai Ballroom Salons 1 & 2
Moderator: John G. Finkenberg, MD

7:15-7:30 a.m. Advocacy Update
Kauai Ballroom Salons 1 & 2
Abstract Session: Adult Spinal Deformity  
Moderators: Daniel M. Sciubba, MD, NASS; Daisuke Togawa, MD, NASS

Break/Technical Exhibition

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  
Yu Yamato, MD, JSSR

9:45-10:00 a.m. Perioperative Optimization of Patients Undergoing Deformity Surgery  
Satoshi Inami, MD, JSSR

10:00-10:15 a.m. MIS vs. Open Deformity Surgery: When, Why and How  
John H. Shin, MD, NASS

10:15-10:30 a.m. Proximal Junctional Kyphosis: Avoidance and Management  
Patrick A. Sugrue, MD, NASS

10:30-11:00 a.m. Case Debate with Panel: Deformity Correction vs. Selective Decompression/Fusion  
Jason W. Savage, MD, NASS; Daniel M. Sciubba, MD, NASS

11:00-11:30 a.m. Break/Technical Exhibition

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

General Meeting Adjourns
**Tuesday, July 31**

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

6:30 a.m.-1:00 p.m.  
*Technical Exhibition*  
*Kauai Ballroom Salon 3*

6:30 a.m.-1:00 p.m.  
*Registration/Speaker Information Center*  
*Kauai Court*

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

7:30-9:00 a.m.  
*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**  
7:30-8:05 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*

8:45-9:00 a.m.  
*Panel Discussion*
Break/Technical Exhibition
Kauai Ballroom Salon 3

Abstract Session: Motion Preservation
Moderators: Gregory D. Schroeder, MD, NASS; Shinichi Konno, MD, JSSR

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

Break/Technical Exhibition
Kauai Ballroom Salon 3
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.
Breakfast
Kauai Ballroom Salon 3

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

6:30 a.m.-1:00 p.m.
Registration/Speaker Information Center
Kauai Court

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

7:30-9:00 a.m.
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 Disectomy 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 Disectomy 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
Hirotaka 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. Break/Technical Exhibition
Kauai Ballroom Salon 3

9:30-10:30 a.m. Abstract Session: Trauma and Tumor
  Moderators: Ajit A. Krishnaney, MD, NASS; Ken Maeda, MD, JSSR
  Kauai Ballroom Salons 1 & 2

10:30 a.m.-12:00 p.m. Symposium: Osteoporosis and Sarcopenia
  Moderators: Gregory D. Schroeder, MD, NASS; Hirotaka Haro, MD, JSSR
  Kauai Ballroom Salons 1 & 2
  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
Hirotaka Haro, MD, JSSR
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| 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* |

### Thursday, August 2

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<td>12:00-12:15 p.m.</td>
<td>Break</td>
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| 12:15-1:15 p.m. | **Abstract Session: Diagnostics/Imaging**  
*Moderators: Clinton J. Devin, MD, NASS; Toshihiko Yamashita, MD, JSSR* |
| 1:15 p.m.     | **General Meeting Adjourns**                                                                 |

### Wednesday, August 1

#### Abstract Session: Lumbar Part II

**Moderators: R. Douglas Orr, MD, FRCSC, NASS; Koichi Sairyo, 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.

### Agenda

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.
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