

All times are Central Standard Time (US)

## THURSDAY, OCTOBER 29

5:00 pm to 7:30 pm	<b>Virtual Event Launches; Virtual Exhibit Hall Open</b>
6:00 pm to 7:30 pm	<b><u>Symposium 1: Young Surgeon Session (Live Webinar)</u></b>  <b>Moderator: Khoi Than, MD</b>  <b>Panelists: Drs. Derman, Iyer, Kumar, Malone, Steinberger</b>
6:00 pm	Welcome – <i>K. Than, MD</i>
6:05 pm	Best Young Surgeon Paper 1: Incidental Durotomy Following Surgery for Degenerative Lumbar Disease: Impact of Minimally Invasive Surgical Technique on the Rate and Need for Surgical Revision  <i>Kyle Mueller, MD, <u>Coleman Garrett, MS</u>, Stephen Kane, MS, BS, Faheem Sandhu, MD, PhD, Jean-Marc Voyadzis, MD</i>
6:10 pm	Best Young Surgeon Paper 2: Single-Position Prone-Lateral Approach: Cadaveric Feasibility and Early Surgical Clinical Experience  <i>Jakub Godzik, MD, Ifije Ohiorhenuan, MD, PhD, Bernardo De Andrada, MD, David Xu, MD, Corey Walker, MD, Alex Whiting, MD, Jay Turner, MD, PhD, Juan Uribe, MD</i>
6:15 pm	Best Young Surgeon Paper 3: Assessing Vertebral Body Rotation in Minimally Invasive Spine Surgery  <i>Abhishek Kumar, MD, <u>Patrik Suwak, DO</u>, Peter D'Amore, MD, Matthew Darlow, MD, Kirby Bonvillain, M.S., Claudia Leonardi, PhD</i>
6:20 pm	Q & A
6:25 pm	Non-CME Webinar Workshop: The Race from Fixation to Fusion: Why Implant and Bone Graft Selection Matters  <i>Ron Lehman, MD</i>  Supported by Medtronic
6:40 pm	Keynote Lecture: How to Become a Master MIS Surgeon  <i>Michael W. Wang, MD</i>
7:00 pm	Q & A
7:05 pm	Panel Discussion: My Worst Complication & Learning Pearls
7:30 pm	Adjourn

FRIDAY, OCTOBER 30

2:00 pm to 6:30 pm	<b>Virtual Exhibit Hall Open</b>
3:00 pm to 4:35 pm	<b><u>Symposium 2: MISS for the Lumbar Spine (Live Webinar)</u></b> <b>Moderator: Frank Phillips, MD</b> <b>Panelists: Drs. Härtl, Moss, Mundis, Uribe, Qureshi</b>
3:00 pm	Welcome –Program Chairs
3:05 pm	Lecture: The Challenges We Face with Lumbar Spine MISS Surgery – <i>J. Uribe, MD</i>
3:15 pm	Lecture: Progression from Open to Less-Invasive Techniques to Achieve Lumbar Lordosis – <i>G. Mundis, MD</i>
3:25 pm	Q & A  <i>If these cases are so easy, why can't we agree on what to do?</i>
3:30 pm	Case 1: L4-5 Spondylolisthesis with Stenosis: MIS TLIF, Lateral, Prone Lateral, Decompression without Fusion, etc.
3:40 pm	Case 2: Multi-level Stenosis, including L5-S1, with Instability
3:52 pm	Non-CME Tech Update: Optimizing Spinopelvic Fixation in Adult Spinal Deformity <i>I. Lieberman, MD</i>  Presented by: SI-BONE
3:57	Non-CME Webinar Workshop
4:12 pm	Case 3: Adult Degenerative Scoliosis
4:25 pm	Non-CME Tech Presentation: New! Navigated Adaptix™ Interbody System with Titan nanoLOCK™ Surface Technology, and Grafton™ DBF Inject <i>Ripul Panchal, DO &amp; Charles Crawford, MD</i>  Supported by Medtronic
4:30pm	Non-CME Tech Presentation: Supported by Kuros
4:35 pm to 5:00 pm	<b>Virtual Exhibit Break</b>

## FRIDAY, OCTOBER 30 CONTINUED

5:00 pm to 6:28 pm	<b><u>Symposium 3: MISS for Trauma (Live Webinar)</u></b> <b>Moderator: Bill Taylor, MD</b> <b>Panelists: Drs. Anderson, Ludwig, Oskouian, O'Toole, Park</b>
5:00 pm	Welcome – <i>B. Taylor, MD</i>
5:05 pm	Lecture: The Challenges Faced with MISS for Trauma – <i>J. O'Toole, MD</i>
5:17 pm	Q & A
5:23 pm	Case 1: Open Technique for Multi-Level Trauma
5:34 pm	Case 2: Lateral Approach for TL Burst Fractures
5:46 pm	Non-CME Webinar Workshop: UNLEASH Your Lateral/ATP Practice with Single Position Surgery: A Degen & Deformity Perspective <i>Puya Alikhani, MD &amp; Chi Lim, MD</i>  Supported by DePuy Synthes
6:01 pm	Case 3: Complication/Revision Case
6:13 pm	Non-CME Tech Presentation: Fusion Biologics: Evolution of Biomaterials for Bone Grafting <i>Hyun Bae, MD</i>  Supported by DePuy Synthes
6:23 pm	Non-CME Tech Presentation
6:28 pm	Adjourn

SATURDAY, OCTOBER 31

7:00 am to 12:40 pm	Virtual Exhibit Hall Open
8:00 am to 9:25 am	<b><u>Symposium 4: Endoscopy (Live Webinar)</u></b> <b>Moderator: Isaac Moss, MD</b> <b>Panelists: Drs. Golan, Hofstetter, JS Kim, Shen, Telfeian, Wang</b>
8:00 am	Welcome – <i>I. Moss, MD</i>
8:05 am	My Transition to Endoscopic Spine Surgery – From Idea to My First Case – <i>J. Golan, MD</i>
8:15 am	Ideal Cases for Beginner Endoscopic Spine Surgeons – <i>J. Shen, MD</i>
8:25 am	Q & A
8:40 am	Non-CME Webinar Workshop: Supported by NuVasive
8:55 am	Anesthesia / Analgesia for Awake Endoscopic Surgery – <i>M. Wang, MD</i>
9:05 am	Q & A
9:15 am	Non-CME Tech Presentation: The Future of Spine <i>Christoph Hofstetter, MD; Michael Wang, MD; Meng Huang, MD; &amp; Saqib Hasan, MD</i> Supported by joimax
9:20 am	Non-CME Tech Presentation: Supported by elliquence
9:25 am	Break

SATURDAY, OCTOBER 31 CONTINUED

9:30 am to 10:20 am	<b><u>Symposium 5: Best Papers (Live Webinar)</u></b> <b>Moderator: Ron Lehman, MD</b>
9:30 am	Welcome – <i>R. Lehman, MD</i>
9:35 am	Best Paper 1: Spinal Alignment Comparison for Lateral Versus Supine L5-S1 ALIF in the Treatment of Patients with Degenerative Conditions of the Lumbar Spine  <i><u>Kaveh Khajavi, MD</u>; Cristiano Menezes, MD, PhD; Brett Braly, MD; and Alex Thomas, MD</i>
9:40 am	Best Paper 2: Awake Transforaminal Endoscopic Discectomy in an Ambulatory Surgery Center. Results After 100 Patients.  <i><u>Nathaniel Alexander, MD</u> and Raymond Gardocki, MD</i>
9:45 am	Best Paper 3: Validation of PROMIS Physical Function in MIS TLIF: 2 Year Follow Up  <i><u>Nathaniel Jenkins, MS</u>; Conor Lynch, MS; Elliot Cha, MS; James Parrish, MPH; Caroline Jadcak, BS; Shruthi Mohan, BS; Cara Geoghegan, BS; and Kern Singh, MD</i>
9:50 am	Q & A
10:00 am	Best Paper 4: Initial Multi-center Clinical Experience Of Lateral Interbody Fusion (LIF) Using Prone Transpsoas (PTP) Access: Feasibility And Perioperative Outcomes  <i><u>Benjamin Ditty, MD</u>; Tyler Smith, MD; Rodrigo Amaral, MD; Antoine Tohmeh, MD; William Taylor, MD; and Luiz Pimenta, MD, PhD</i>
10:05 am	Best Paper 5: Prevalence and Modes of Hardware Failure with Circumferential Minimally Invasive Surgical (CMIS) Correction of Adult Spinal Deformity (ASD)- A 13 Year Experience  <i><u>Neel Anand, MD</u>; Edward Nomoto, MD; Christopher Kong, MD; Alisa Alayan, MD; Andrew Chung, DO; Babak Khandehroo, MD; and Sheila Kahwaty, PA-C</i>
10:10 am	Q & A
10:20 am	Non-CME Tech Update: Supported by NuVasive
10:25 am to 10:55 am	<b>Virtual Exhibit Break</b>

## SATURDAY, OCTOBER 31 CONTINUED

	<b><u>Symposium 6: Robotics, Navigation, AR, &amp; AI</u></b>
11:00 am to 12:50 pm	Moderator: Ron Lehman, MD Panelists: Drs. Ames, J. Kim, Kotani, Poulter, Sciubba
11:00 am	Welcome – <i>R. Lehman, MD</i>
11:05 am	Understanding the “Gibberish” of Artificial Intelligence/Predictive Analytics Understanding Python and Programming and What How it can be Used - <i>J. Kim, MD</i>
11:14 am	Predictive Analytics for Spinal Deformity: Who Should Really Get a Major TL Reconstruction / Who May Most Benefit from the Advantages of MIS Surgery – <i>C. Ames, MD</i>
11:23 am	Capital Investment in New Technology – When is it Worth it? – <i>TBD</i>
11:31 am	Q & A
11:40 am	Non-CME Webinar Workshop: Mazor X™: The Innovation Continues <i>Ron Lehman, MD; Joseph Osorio, MD &amp; Martin Pham, MD</i> Supported by Medtronic
11:55 am	Augmented Reality: How Exactly Does it Work and How to Incorporate into our Operative Rooms – <i>D. Sciubba, MD</i>
12:04 pm	Robotic Preoperative Planning as a Predictor of Final Outcomes: The Power of Planning Tools – <i>G. Poulter, MD</i>
12:12 pm	Q & A
12:20 pm	Non-CME Webinar Workshop: Supported by Globus Medical
12:50 pm	Adjourn

*Recordings of live webinars and all On Demand content will remain available for 90 days post-event.*

*All live webinars are CME-accredited with the exception of the industry workshops noted in the program.*

*Program and faculty subject to change.*