

*All times are Central Daylight Time (UTC-5)*

## THURSDAY, OCTOBER 29

5:00 pm to 7:30 pm	Virtual Event Launches; Virtual Exhibit Hall Open
6:00 pm to 7:30 pm	<p><b>Symposium 1: Young Surgeon Session</b></p> <p>Moderator: Khoi Than, MD</p> <p>Panelists: Drs. Derman, Iyer, Kumar, Malone, Steinberger</p>
6:00 pm	Welcome – <i>Khoi Than, MD</i>
6:05 pm	<p>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</p> <p><i>Kyle Mueller, MD; <u>Coleman Garrett, MS</u>; Stephen Kane, MS, BS; Faheem Sandhu, MD, PhD; and Jean-Marc Voyadzis, MD</i></p>
6:10 pm	<p>Best Young Surgeon Paper 2: Single-Position Prone-Lateral Approach: Cadaveric Feasibility and Early Surgical Clinical Experience</p> <p><i><u>Jakub Godzik, MD</u>; Ifije Ohiorhenuan, MD, PhD; Bernardo De Andrada, MD; David Xu, MD; Corey Walker, MD; Alex Whiting, MD; Jay Turner, MD, PhD; and Juan Uribe, MD</i></p>
6:15 pm	<p>Best Young Surgeon Paper 3: Assessing Vertebral Body Rotation in Minimally Invasive Spine Surgery</p> <p><i>Abhishek Kumar, MD; <u>Patrik Suwak, DO</u>; Peter D'Amore, MD; Matthew Darlow, MD; Kirby Bonvillain, MS; and Claudia Leonardi, PhD</i></p>
6:20 pm	Q & A
6:25 pm	<p>Non-CME Webinar Workshop: The Race from Fixation to Fusion: Why Implant and Bone Graft Selection Matters</p> <p><i>Ron Lehman, MD</i></p> <p>Supported by Medtronic</p>
6:40 pm	Keynote Lecture: How to Become a Master MIS Surgeon - <i>Michael Y. 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	Virtual Exhibit Hall Open
3:00 pm to 4:30 pm	<b>Symposium 2: MISS for the Lumbar Spine</b> Moderator: Frank Phillips, MD Panelists: Drs. Härtl, Moss, Mundis, Uribe, Qureshi
3:00 pm	Welcome – Program Chairs
3:05 pm	The Challenges We Face with Lumbar Spine MISS Surgery – <i>Juan Uribe, MD</i>
3:15 pm	Progression from Open to Less-Invasive Techniques to Achieve Lumbar Lordosis – <i>Greg Mundis, MD</i>
3:25 pm	Q & A  If These Cases Are So Easy, Why Can't We Agree on What to Do?
3:35 pm	Case 1: L4-5 Spondylolisthesis with Stenosis: MIS TLIF, Lateral, Prone Lateral, Decompression without Fusion, etc.
3:45 pm	Case 2: Multi-level Stenosis, including L5-S1, with Instability
3:57 pm	Non-CME Tech Presentation: Optimizing Spinopelvic Fixation in Adult Spinal Deformity <i>Isador Lieberman, MD</i> Supported by: SI-BONE
4:02 pm	Case 3: Adult Degenerative Scoliosis
4:15 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

FRIDAY, OCTOBER 30 CONTINUED

4:20 pm	Non-CME Tech Presentation: MagnetOs Bone Graft <i>Bill Taylor, MD</i> Supported by Kuros Biosciences
4:25 pm	Q & A
4:30 pm to 5:00 pm	Virtual Exhibit Break
5:00 pm to 6:28 pm	<b>Symposium 3: MISS for Trauma</b> Moderator: Bill Taylor, MD Panelists: Drs. Anderson, Ludwig, Oskouian, O'Toole, Park
5:00 pm	Welcome – <i>Bill Taylor, MD</i>
5:05 pm	The Challenges Faced with MISS for Trauma – <i>John O'Toole, MD</i>
5:17 pm	Q & A
5:22 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 Puya Alikhani, MD & Chi Lim, MD 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 Hyun Bae, MD Supported by DePuy Synthes
6:23 pm	Q & A
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>Symposium 4: Endoscopy</b> Moderator: Isaac Moss, MD Panelists: Drs. Golan, Hofstetter, JS Kim, Shen, Telfeian, Wang
8:00 am	Welcome – <i>Isaac Moss, MD</i>
8:05 am	My Transition to Endoscopic Spine Surgery – From Idea to My First Case – <i>Jeff Golan, MD</i>
8:15 am	Ideal Cases for Beginner Endoscopic Spine Surgeons – <i>Jian Shen, MD</i>
8:25 am	Q & A
8:40 am	Non-CME Webinar Workshop: How Advanced Materials Science (AMS) Technologies Helped Improve Clinical and Financial Outcomes at Nebraska Spine Hospital <i>Brian Gill, MD, MBA</i> Supported by NuVasive
8:55 am	Anesthesia / Analgesia for Awake Endoscopic Surgery – <i>Michael Y. Wang, MD</i>
9:05 am	Q & A
9:10 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
9:15 am	Non-CME Tech Presentation: The Missing Piece of Your Practice: The Time is NOW to Start Endoscopic Spine Surgery <i>Choll Kim, MD, PhD</i> Supported by elliquence
9:20 am	Q & A
9:25 am	Break

## SATURDAY, OCTOBER 31 CONTINUED

9:30 am to 10:20 am	<b>Symposium 5: Best Papers</b> Moderators: Ron Lehman, MD & Jun Kim, MD
9:30 am	Welcome – <i>Ron 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 Presentation: NuVasive: Pioneers in Single-Position Surgery   An Analysis of Lateral & Prone <i>Alex Thomas, MD</i> Supported by NuVasive
10:25 am to 10:55 am	Virtual Exhibit Break

## SATURDAY, OCTOBER 31 CONTINUED

11:00 am to 12:50 pm	<b>Symposium 6: Robotics, Navigation, AR, &amp; AI</b> Moderator: Ron Lehman, MD Panelists: Drs. Gum, J. Kim, Kotani, Poulter, Sciubba
11:00 am	Welcome – <i>Ron Lehman, MD</i>
11:05 am	Understanding the “Gibberish” of Artificial Intelligence/Predictive Analytics Understanding Python and Programming and How it can be Used - <i>Jun 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>Chris Ames, MD</i>
11:23 am	Capital Investment in New Technology – When is it Worth it? – <i>Jeff Gum, MD</i>
11:32 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>Dan Sciubba, MD</i>
12:04 pm	Robotic Preoperative Planning as a Predictor of Final Outcomes: The Power of Planning Tools – <i>Greg Poulter, MD</i>
12:13 pm	Q & A
12:20 pm	Non-CME Webinar Workshop: The Next Evolution of ExcelsiusGPS® Featuring Interbody Solutions <i>Sheeraz Qureshi, MD, MBA &amp; Vladimir Sinkov, MD</i> 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.*