Wednesday, July 26, 2023				
2:00pm	Registration / Exhibitors			
2:45	Welcome and Introductions	Lionel N. Metz, MD Lee A. Tan, MD Kyle A. Mitsunaga, MD		
2:50	Implant Density in Adolescent Idiopathic Scoliosis Deformity Correction: The Goldilocks Zone	Matthew Cage, MD		
3:10	Operative and Non-operative Strategies for Early Onset Scoliosis: Casting, Traction, and Growth Friendly Instrumentation	Graham Fedorak, MD		
3:30	Honored Speaker Introduction	Lionel N. Metz, MD		
3:35	Vertebral Body Tethering: Indications, Results, and Application to the Older Child	Baron S. Lonner, MD		
3:55	Cervical Disc Replacement: Indications, Pearls, and Pitfalls	Bobby Tay, MD		
4:15	Honored Speaker Introduction	Lee A. Tan, MD		
4:20	Management of OPLL in the Cervical Spine	Yoon Ha, MD		
4:50	Navigated Lateral Corpectomy for Thoracolumbar Burst Fractures	Anthony DiGiorgio, DO, MHA		
5:10	Evaluation and Treatment of the Pediatric Spine Trauma Patient	Ashraf El Naga, MD		
5:30	Question & Answer			
6:00pm	Adjourn: Luau Reception, Exhibitors Welcome			

## Thursday, July 27, 2023

7:00am	Continental Breakfast at Moana Surfrider Hotel	
8:00	Welcome and Introductions	Lionel N. Metz, MD Lee A. Tan, MD Kyle A. Mitsunaga, MD
8:05	Contemporary Management of Spinal Osteomyelitis and Epidural Abscess	Sina Pourtaheri, MD
8:25	Case Discussion	Lee A. Tan, MD
8:45	From Predictive Models to Biomarkers and Spine Tissue Banking	Christopher P. Ames, MD
9:05	Surgical Navigation Present and Future Use in Complex Spine and Deformity Surgery	Shane Burch, MD
9:25	Honored Speaker Introduction	Lionel N. Metz, MD
9:30	Operative Management of Thoracolumbar Scoliosis: Achieving Optimal Results with Lenke 5 and 6 Curve Types	Baron S. Lonner, MD
10:00	Utilization of Enabling Technology in Pediatric Spinal Deformity	Stephen George, MD
10:20	Break	
10:40	Surgical Case Presentation	
11:40	Question and Answer	
12:00pm	Lunch	
1:00	Honored Speaker Introduction	Kyle A. Mitsunaga, MD
1:05	Treatment of Complex Pediatric Deformities	Christopher I. Shaffrey, MD
1:35	Surgical Case Presentation	
2:55	Question and Answer	
3:15pm	Adjourn	

Friday, July 28, 2023				
8:00am	Continental Breakfast at Moana Surfrider Hotel			
8:30	Adolescent Idiopathic Scoliosis: 3-D Correction of Thoracic Scoliosis	Yashar Javidan, MD		
8:50	Utility of New Technologies in the Treatment of Pediatric Spinal Deformities	Jamal McClendon, MD		
9:10	Nuances of C1 to C2 Fixation	Praveen Mummaneni, MD		
9:35	Management of Metastatic Tumors	Irene Say, MD		
9:55	Coffee Break			
10:15	Honored Speaker Introduction	Kyle A. Mitsunaga, MD		
10:20	An Approach for Treatment of Complex Pediatric Spinal Deformity	Christopher I. Shaffrey, MD		
10:40	Case Presentations			
11:40	Question and Answer			
12:00pm	Lunch			
1:00	Honored Speaker Introduction	Lee A. Tan, MD		
1:05	Surgical Management of Cervical Deformity	Yoon Ha, MD		
1:35	Case Presentations			
2:35	Question and Answer			
2:55pm	Adjourn			

## Saturday, July 29, 2023 8:00am Continental Breakfast at Moana Surfrider Hotel 8:30 **Perioperative Management of Blood Loss in Complex** Nima Alan, MD **Spinal Surgery** 8:50 **Resection and Reconstructive Principles for Primary** Alekos Theologis, MD **Tumors of the Thoracolumbar Spine** 9:10 Less Invasive Lumbar Interbody Fusion LLIF, Lateral Aaron Clark, MD, PHD ALIF 9:30 The Modern Treatment of High-Grade Spondylolisthesis Sigurd Berven, MD Coffee Break 9:50 10:10 **Honored Speaker Introduction** Lionel N. Metz, MD Outcomes of Adult Deformity Surgery: What We Do Well Christopher I. Shaffrey, MD 10:15 and Where We Need Improvement 10:45 **Question and Answer** Posterior Base Osteotomy Techniques for the Correction 11:05 Alexander Tuchman, MD

of Spinal Deformity11:25Case Presentations12:30pmCourse Adjourns