THURSDAY, JULY 13

1:00 PM	Registration Opens	KOKOPELLI FOYER
3:30	Beer and Appetizers with Exhibit Viewing	KOKOPELLI FOYER
Session	1: Cervical Degenerative	KOKOPELLI 2-3
Moderator	s: D. Riew & H. Bae	
4:00	Welcome Part 1 Stump the Chumps Panel: N. Anand, N. Bhamb, J. Lin, J. Osorio, A. Simela, R. Watkins	L. Lenke & D. Skaggs
4:10	CASE #1 Case Introduction: Och Presents the Case	
4:12	Case Discussion: Cedars Discusses the Case	
4:20	Case Resolution by Presenter	
4:22	Q&A	
4:26	CASE #2 Case Introduction: Cedars Presents the Case	
4:28	Case Discussion: Och Discusses the Case	
4:36	Case Resolution by Presenter	
4:38	Q&A	
4:42	Part 2 My Most Difficult Case CASE #3 Case Introduction: Cedars Presents the Case	H. Bae
4:44	Case Discussion: Och Discusses the Case	Och Panel: J. Li, A. Vivas
4:52	Case Resolution by Presenter	
4:54	Q&A	
	CASE #4	
4:58	Case Introduction: Och Presents the Case	D. Riew
5:00	Case Discussion: Cedars Discusses the Case	Cedars Panel: Z. Sardar, C. Kong
5:08	Case Resolution by Presenter	
5:10	Q&A	

Session 2: Trauma Management **KOKOPELLI 2-3** Moderators: E. Baron, J. Lombardi Panel: J. Kim, G. Baum, A. Jada, A. Villavicencio CASE #1 | L2 Unstable Burst/Whole Canal Compromise Toe Flicker 5:15 pm Debates 1. Posterior vs. anterior vs. combined approach: What drives the surgical decision-making process? 2. Role for ligamentotaxis (would it be useful or not?) 3. MIS vs. open? 5:35 CASE #2 | C6 Quad, Cyclist with Fracture Dislocation **Debates** 1. High grade cervical fracture: best way to obtain reduction a. Closed b. Operative—Anterior vs. posterior: Which for reduction? 2. Anterior vs. Posterior: Advantages and disadvantages of either and how doing one or the other first changes the nature of construct length and alignment 5:55 CASE #3 | Delayed Treatment of SCI: Patient Transferred to the Hospital One Week Post Injury **Debates** 1. Timing of surgery (early vs. late) 2. Surgical expectations 3. Role of pharmacology/MAP therapy (yes vs. no) 4. Role of neuromonitoring (what should be monitored) 5. Medicolegal aspects 6:15 Adjourn 6:30 Shuttles Depart for Och Spine Hospital Fellows Reunion Dinner MAIN ENTRANCE By Invitation Only | See Page 12 for details. 6:30 Ski Lifts Depart for Cedars-Sinai Fellows Reunion Dinner HERITAGE LEVEL By Invitation Only | See Page 12 for details.

FRIDAY, JULY 14

6:45 am	Registration Opens	KOKOPELLI FOYER
6:45	Breakfast with Exhibit Viewing	KOKOPELLI 1 & KOKOPELLI FOYER
Session	3: Lumbar Degenerative	KOKOPELLI 2-3
Moderator	s: R. Lehman & T. Perry	
7:15 am	Welcome	D. Skaggs
7.00	CASE DEBATE #1 MIS TLIF with Perc Screws vs. Mini-open TLIF Comparis	
7:20	Case Introduction	R. Lehman
7:23	Audience vote: What is your preferred treatment option?	
7:26	■ Mini open	K. Kwan
7:29	■ MIS	C. Mikhail
7:32	Discussion	
7:38	Audience vote: Who convinced you?	
	CASE DEBATE #2 L5-S1 Lumbar Degenerative Disease with Radiculopathy	y: TDR vs. ALIF vs. TLIF
7:40	Case Introduction	T. Perry
7:42	Audience vote: What is your preferred treatment option?	
7:43	■ TDR	H. Bae
7:46	■ ALIF	R. Desai
7:49	■ TLIF	S. Khairi
7:52	Discussion	
7:58	Audience vote: Who convinced you?	
	CASE DEBATE #3 L4-5 Spondy is My Wheelhouse: The Best Approach Is.	••
8:00	Case Introduction	T. Perry
8:03	Audience vote: What is your preferred treatment option?	
8:06	■ TLIF	E. Baron
8:09	■ LLIF/OLIF	N. Anand
8:12	Discussion	
8:18	Audience vote: Who convinced you?	
	CASE DEBATE #4 Multilevel Degenerative Spondylosis and Stenosis	
8:20	Case Introduction	R. Lehman

8:33	Audience vote: What is your preferred treatment option?	
8:26	■ Open Posterior with direct decompression	M. Pham
8:29	■ Anterio/lateral with indirect decompression	N. Anand
8:32	■ When I need indirect and direct decompression	J. Kim
8:35	Discussion	
8:41	Audience vote: Who convinced you?	
8:45	Refreshment Break with Exhibit Viewing	KOKOPELLI FOYER
Session	4: Controversies in Degenerative Scoliosis	KOKOPELLI 2–3
Moderator	s: D. Chou & S. Kim	
9:00 am	Introduction	D. Chou
	CASE DEBATE #1 Degen Lumbar Scoliosis with Stenosis	
9:02	Case Introduction	D. Chou
9:05	Audience vote: What is your preferred treatment option?	
9:09	■ T10 to pelvis, just get it over with	K. Kwan
9:13	■ Even T10 to the pelvis results in T3 to the pelvis; it never ends so why go big?	S. Kim
9:17	■ Limited fusion is best, treat the Cobb angle L2-L5	D. Chou
9:21	The fractional curve causes most of the problems, just fuse L4-S1, and you've solved most problems.	V. Nemani
9:25	 Decompression alone is the best first step, even if it eventually fails. You can sometimes hit a home run without metal 	R. Härtl
9:29	 Interbodies are critical in adult scoliosis to alleviate up-down stenosis and improve fusion 	N. Anand
9:33	■ Posterior-only surgery is all that is needed	L. Tan
7:32	Discussion	
7:38	Audience vote: Who convinced you?	
	CASE DEBATE #2 Previous L4-5 Fusion Now with Flat Back Syndrome	
9:50	Case Introduction	S. Kim
9:53	Audience vote: What is your preferred treatment option?	
9:57	■ PSO gets you the best lordosis	Z. Sardar
10:01	■ Interbodies and PCOs do just as well with much less morbidity	S. Kim
10:05	Discussion	
10.03	DISCUSSIUIT	

10:12	Audience vote: Who convinced you?	
10:15	Adjourn	
10:25 am	Summer Spine Symposium Challenge Cup: Golf Tournament Begins By advanced signup only. Inquire at the Registration Desk for directions and details about the golf tournament.	YONS GOLF CLUBHOUSE
10:50 am	Trap Shooting Excursion: Meet Shuttles By advanced signup only. Inquire at the Registration Desk for directions and details.	MAIN ENTRANCE
3:30 pm	Beer and Appetizers with Exhibit Viewing	KOKOPELLI FOYER
Session	5: Peds/Pre-Op/Pain	KOKOPELLI 2-3
Moderator	s: K. Illingworth & M. Weidenbaum	
4:15 pm	Advances in Teenage Scoliosis and Kyphosis	K. Illingworth
4:20	Discussion	
4:23	Merits and challenges of a preoperative adult spine patient evaluation and optimization	n M. Weidenbaum
4:30	Pathways to best manage the opioid-addicted patient going through and recovering from spine surgery	K. Wittnebel
4:37	Q&A	
4:40	Keynote Lecture: Defining the Frailty Phenotype for Better Prediction: Physical Metrics, Radiomics and Epigenetics	Christopher Ames
4:58	Technology Updates Non-CME Tech Update #1 Supported by Medtronic Data and Patient-Specific Implants: How Technology is Changing my Practice	R. Lehman
5:23	Non-CME Tech Update #2 Supported by Acuity Surgical AcuPac—What It Is and Why I Use It	L. Lenke
Session	6: My Coolest Advanced Tech Case	KOKOPELLI 2-3
Moderator	s: R. Härtl & P. Johnson	
5:48 pm	Case # 1: Cedars	D. Skaggs
5:53	Case # 2: Och	P. Park
5:58	Case # 3: Cedars	T. Kim
6:03	Case # 4: Och	R. lyer
6:08	Discussion	
6:15	Adjourn	
6:20 pm	Course Reception in Exhibit Hall Enjoy the company of colleagues and our supporters with drinks, hors d'oeuvres, and a chance to win the Longest Lasso competition!	LLI 1 & KOKOPELLI FOYER

SATURDAY, JULY 15

6:45 am	Registration Opens	KOKOPELLI FOYER	
6:45	Breakfast with Exhibit Viewing	KOKOPELLI 1 & KOKOPELLI FOYER	
Session	7: Cervical Degenerative	KOKOPELLI 2-3	
Moderator	rs: T. Kim & C. Mandigo		
7:15 am	Welcome	L. Lenke	
	CASE DEBATE #1 Cervical Radiculopathy from Neuroforaminal Stenosis or HNP		
7:18	Case Introduction: Single Level	C. Mandigo	
7:21	■ ACDF	A. Pugely	
7:27	■ Foraminotomy	C. Kong	
7:33	■ Cervical disc replacement	P. Park	
7:39	Discussion		
7:44	Audience vote		
	CASE DEBATE #2 Multilevel DDD, Spondylolisthesis and Deformity		
7:47	Case Introduction: C4-7 DDD, C4-5 Spondylolisthesis, Stenosis	T. Kim	
7:50	Anterior only	K. Woods	
7:56	Posterior only	A. Jada	
8:02	Anterior and Posterior	M. Pham	
8:08	Discussion	J.P. Johnson	
7:58	Audience vote		
Session	8: When Enabling Technology Falters	KOKOPELLI 2-3	
Moderator	rs: T. Kim & J. Lombardi		
8:17	Cedars Experience with Robotic Technology	T. Kim	
8:23	Och Experience with Robotic Technology	J. Lombardi	
8:29	Discussion Panel: E. Nomoto, M. Pham, Z. Sardar, R. Hartl, J. P. Johnson, A. Villaviencio		
8:44	Vote		
8:45	Refreshment Break with Exhibit Viewing	KOKOPELLI FOYER	

Session	9: Lumbar Degenerative	KOKOPELLI 2-3
Moderator	s: Z. Sardar & A. Tuchman	
9:00 am	Introduction	
	CASE DEBATE #1 Deg L4-5 Grade 1 Spondylolisthesis with Leg>Back Pain	
9:00	Case Introduction	A. Tuchman
9:05	Audience vote: What is your preferred treatment option?	
9:06	■ Lumbar Decompression	J. Lin
9:10	Lumbar Decompression and Posterolateral Fusion	Z. Sardar
9:14	■ TLIF	P. Angevine
9:18	■ ALIF/LLIF/OLIF	A. Tuchman
9:22	Discussion	
9:32	Audience vote: Who convinced you?	
	CASE DEBATE #2 Previous L4-5 Fusion Now with Flat Back Syndrome	
9:35	Case Introduction	Z. Sardar
9:38	Audience vote: What is your preferred treatment option?	
9:41	■ Revision Microdiscectomy	J. Li
9:45	■ Endoscopic Discectomy	G. Blumstein
9:49	■ Disc Replacement	E. Nomoto
9:53	■ Fusion (ALIF or TLIF)	E. Beauchamp
9:57	Discussion	
10:07	Audience vote: Who convinced you?	
10:10	Adjourn	
10:35 am	Whitewater Rafting Adventure: Meet Shuttles By advanced signup only. Inquire at the Registration Desk for directions and details.	MAIN ENTRANCE
12:20 pm	Horseback Mountain Trail Ride: Meet Shuttles By advanced signup only. Inquire at the Registration Desk for directions and details.	MAIN ENTRANCE

		
3:30 pm	Beer and Appetizers with Exhibit Viewing	KOKOPELLI FOYER
Session	10: The Future of Spine Surgery	KOKOPELLI 2-3
Moderator	s: L. Lenke & D. Skaggs	
4:15 pm	Welcome & Introduction	
	Part 1 ASC's and Ambulatory Spine Surgery	
4:18	Surgeon #1: Och	R. Härtl
4:21	Surgeon #2: Cedars Outpatient robots	E. Nomoto
4:24	Surgeon #3: Och	J. Lombardi
4:27	Surgeon #4: Cedars Reoperative anterior spine surgery	R. Rao
4:30	Discussion	
4:35	Panel Discussion Pros and Cons of Ambulatory Cases Panel: G. Baum, J. Kim, R. Rao, J. P. Johnson, E. Nomoto	
	■ Risks (e.g. multilevel ACDFs)	
	What are the financial benefits for surgeons and patients?	
	■ What are future cases we will be doing in ASCs?	
	Part 2 IONM—State of the Art with Lumbar Nerve Root Monitoring: How Acc	urate Are We Now?
4:40	Och	E. Thuet
4:48	Cedars	A. Nguyen
4:56	Panel Discussion How accurate is your current IONM team and how can we imp Root Monitoring sensitivity and specificity? Any reason NOT to stimulate all TL Pec Panel: J. Lin, J. Osorio, L. Ross, K. Illingworth	
	Technology Updates	
5:08	Non-CME Tech Update #1 Supported by Globus Medical	
	Advancing Technology in the Field of Spine Surgery	J. P. Johnson
5:33	Non-CME Tech Update #2 Supported by Playback Health Playback Health: Giving Clinicians More Time to Care, Build their Networks,	
	and Grow Revenues	G. Baum
Session	11	KOKOPELLI 2-3
Moderator	s: L. Lenke & D. Skaggs	
6:00	Spine Injuries in High Level Athletes	R. Watkins
6:10	Debate: The Future of MIS Deformity	N. Anand vs. L. Lenke
6:30	Meeting Adjourns	
6:30	Meeting Adjourns	