

9:59	10:15		Discussion			9:59	10:15		Discussion		
10:15	10:35				Coffee Break						
10:35	11:20		Symposium I: Intraoperative neuromonitoring for cervical surgery	Moderator: Heui-Jeon Park/Jong-Beom Park							
10:35	10:40		Introduction	Jong-Beom Park	Uijeongbu St. Mary's Hosp., College of Medicine, The Catholic Univ. of Korea Dept. of Orthop. Surg.						
10:40	10:50		General concepts and physiology	Je-Min Yi	Dankook Univ. Hosp.						
10:50	11:00		How to detect cord injury and how to handle it	Gun Woo Lee	Yeungnam Univ. Hosp. Orthop. Surg.						
11:00	11:10		Is it also helpful to detect root injury?	Kyung-Chung Kang	Kyung Hee Univ. Hosp. Orthop. Surg.						
11:10	11:20		Discussion								
11:20	11:50		Business meeting								
11:50	12:50		Luncheon symposium			11:50	12:50		Luncheon symposium		
12:50	13:35		Symposium II: Biportal Endoscopic Spine Surgery, where are we?	Moderator: Keun-Ho Park/Kee-Won Rhyu							
12:50	12:55		Introduction								
12:55	13:05		All about Interlaminar Approach	Ju-Eun Kim	An-Dong Hosp. Dept. of Orthop.						
13:05	13:15		All about Extraforaminal Approach	Ho-Jin Lee	Chungnam National Univ. School of Medicine Dept. of Orthop. Surg.						
13:15	13:25		Intraoperative Complications; Pitfalls and Tips	Dae-Jung Choi	Barun Hosp., Jin Ju Dept. of Spine surgery						
13:25	13:35		Discussion								
13:35	14:25		Invited lecture 1 Howard S. An	Moderator: Whoan-Jeang Kim	President of KSSS						
13:35	13:55		Lumbar disc disorders: current treatment and basic science research	Howard S. An	Rush Univ. Medical Center,USA						
13:55	14:15		Surgical Treatment of Cervical Spondylotic Myelopathy	Howard S. An	Rush Univ. Medical Center,USA						
14:15	14:25		Discussion								
14:25	14:45				Coffee Break						
14:45	15:21	Abstract#	Deformity I	Moderator: Hak-Sun Kim/ Jung-Hee Lee	Institute	14:45	15:21	Abstract#	Lumbar spine IV	Moderator: Byung-Joon Shin / Hong-Moon Sohn	Institute
14:45	14:50	17S-046	Adult Spinal Deformity Patient has Different Age-Dependent Sagittal Parameters to Predict Patient-Reported Outcomes after Surgical Correction.	Hyung-Suk Juh ¹ , Yong-Chan Kim ¹ , Ki-Tack Kim ¹ , Cheung-Kue Kim ¹ , Jae-Woo Yang ¹ , Jung-Hee Lee ² , Kyung-Chung Kang ²	Kyung Hee Univ. Hosp. at Gangdong Orthop. Surg.1, Kyung Hee Univ. Hosp. Orthop. Surg.2	14:45	14:50	17S-028	Risk of left common iliac vein injury in oblique lateral interbody fusion at L5-S1	Chang-Hoon Jeon, Nam-Su Chung, Han-Dong Lee, Hie-Won Bae	Ajou Univ. Medical Center Dept. of Orthop. Surg.
14:50	14:55	17S-104	Incidence and risk factors for early postoperative mortality and complications following adult spinal deformity surgery: data from the National Surgical Quality Improvement Program from 2011 to 2013	Ho-Joong Kim ¹ , Jin Sup Yeom ¹ , Bong-Soon Chang ² , Choon-Ki Lee ²	Seoul National Univ. Bundang Hosp. Orthop. Surg.1, Seoul National Univ. Hosp. Orthop. Surg.2	14:50	14:55	17S-013	Comparative Study of Two Surgical Techniques for Proximal Adjacent Segment Pathology after Posterior Lumbar Interbody Fusion with Pedicle Screw: Conventional Pedicle Screw vs Cortical Bone Trajectory-Pedicle Screw (Cortical Screw)	Gun Woo Lee ³ , Ji-Hoon Shin ² , Myun-Whan Ahn ¹ , Jung-Jae Moon ¹	Yeungnam Univ. Hosp. Orthop. Surg.1, Pohang Semyeng Christianity Hosp. Orthop. Surg.2
14:55	15:00	17S-094	The evaluation of patient-reported specific disability after the long-segment fusion for the adult spinal deformity	Chong-Suh Lee ¹ , Sung-Soo Chung ¹ , Se-Jun Park ¹ , Kyung-Jun Lee ¹ , Chan-Duk Park ¹ , Dong-Uk Kim ¹ , Jin-Sung Park ²	Sungkyunkwan Univ., Samsung medical center Orthop. Surg.1, Hanyang Univ. Guri Hosp. Orthop. Surg.2	14:55	15:00	17S-004	Effect of osteoporosis on clinical and radiological outcomes following one-level posterior lumbar fusion surgery	Youn-Suk Joo ¹ , Jae Hwan Cho ² , Cheongsu Lim ² , Jong-Min Bak ² , Nam ik Cho ² , Chang Ju Hwang ² , Dong-Ho Lee ² , Choon Sung Lee ²	Nanuri Hosp. Orthop. Surg.1, Asan Medical Center Orthop. Surg.2
15:00	15:05	17S-040	Catastrophic Proximal Junctional Failure Following Surgical Treatment of Adult Spinal Deformity	Kim Sang-H ¹ , Ha Kee-Yong ¹ , Kim Young-Hoon ¹ , Park Hyeong-Youl ¹ , Ahn Joo-Hyun ¹	Seoul St. Mary's Hosp., College of Medicine, The Catholic Univ. of Korea Dept. of Orthop. Surg.	15:00	15:05	17S-010	The efficacy and safety of E.coli-derived rhBMP-2 in posterolateral lumbar fusion: an open, active-controlled, randomized, multi-center trial	Jae Hwan Cho ¹ , Jin Sup Yeom ¹ , Bong-Soo Chang ³ , Jae Jun Yang ⁴ , Ki Hyung Koo ⁴ , Kwang Bok Lee ⁵ , Choon-Ki Lee ³ , Kyung-Soo Suk ⁶	Asan Medical Center Orthop. Surg.1, Seoul National Univ. Bundang Hosp. Orthop. Surg.2, Seoul National Univ. Hosp. Orthop. Surg.3, Dongguk Univ. Ilsan Hosp. Orthop. Surg.4, Chonbuk
15:05	15:21		Discussion			15:05	15:21		Discussion		
15:21	15:57	Abstract#	Deformity II	Moderator: Kyu-Jung Cho / Seung Woo Suh	Institute	15:21	15:57	Abstract#	Lumbar spine V	Moderator: Ho-Keun Chang / Si Young Park	Institute
15:21	15:26	17S-023	The Change of Cervical Kyphosis with Negative Sagittal balance following Surgical Correction of Adult Spinal Deformity : Is it permanent when seen after surgical correction of sagittal malalignment?	Jung-Hee Lee, Kyung-Chung Kang, Ki-Tack Kim, Yong-Chan Kim, Sung Joon Shin, Tae-Jin Kim, Sang-Jun Kim	Kyung Hee Univ. Orthop. Dept.	15:21	15:26	17S-106	Can Single level Minimally Invasive Transforminal Lumbar Interbody fusion restore the lumbar lordosis ? Comparison with open Open posterior lumbar Interbody Fusion in L4-5	Ki-Hyoung Koo, Dongmo-Kang, Jaejun Yang	College of Medicine, Dongguk Univ. Dongguk Univ. Ilsan Hosp. Dept. of Orthop. Surg.
15:26	15:31	17S-076	Does Arthrodesis Stopping at L5 Cause Sagittal Decompensation after Long Lumbar Fusion for Degenerative Sagittal Imbalance?	Kim Sang-H ¹ , Ha Kee-Yong ¹ , Kim Young-Hoon ¹ , Oh In-Soo ² , Lee Jae-Won ³ , Park Hyeong-Youl ¹ , Ahn Joo-Hyun ¹	Seoul St. Mary's Hosp., College of Medicine, The Catholic Univ. of Korea Dept. of Orthop. Surg.1, Incheon St. Mary's Hosp. Dept. of Orthop. Surg.2, Hanil General Hosp. Dept. of Orthop. Surg.3	15:26	15:31	17S-088	The fate and clinical impact of early cage subsidence after DLIF/OLIF surgery	Se-Jun Park ¹ , Chong-Suh Lee ¹ , Sung-Soo Chung ¹ , Kyung-Jun Lee ¹ , Chan-Deok Park ¹ , Dong-Uk Kim ¹ , Hyun-Jin Park ²	Sungkyunkwan Univ., Samsung medical center Orthop. Surg.1, Hallym Univ., Kangnam Sacred Heart Hosp. Orthop. Surg.2

