



2018 제19차 세계흉벽학회 및 대한흉부심장혈관외과학회 제32차 춘계통합학술대회

19th CWIG Annual Meeting

in conjunction with

32nd Spring Congress of Korean Society for Thoracic & Cardiovascular Surgery (KTCVS)

June 13 (Wed)-15 (Fri), 2018

DAY 1 SEOUL ST. MARY'S HOSPITAL, SEOUL, KOREA

DAY 2~3 PARADISE CITY HOTEL & RESORT, INCHEON, KOREA

Program Book



***Half-Century for Patients
Half-Century for Future***

Organized by

The Korean Society for Thoracic & Cardiovascular Surgery
Chest Wall International Group Korea
Seoul St. Mary's Hospital (Live Surgery)



CWIG

Chest Wall
International
Group





Half-Century for Patients
Half-Century for Future



19th CWIG Annual Meeting

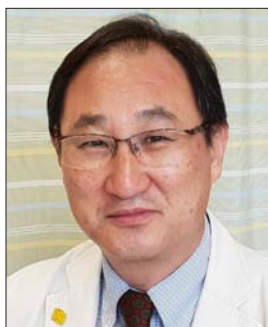
in conjunction with

32nd Spring Congress of Korean Society for Thoracic & Cardiovascular Surgery (KTCVS)

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• Welcome Message



Dear CWIG Colleagues and Guests:

We are greatly honored to invite you to the 19th Annual Congress of Chest Wall International Group, June 13-15, 2018 in Seoul, Korea.

The CWIG 2018-Seoul meeting is in succession of our heritage started from 2008 with our pioneering Odyssey, Mustafa Yuksel. The first CWIG meeting was established with the founding members including Jose Ribas De Campos and Ivan Schewitz.

Dr. Donald Nuss has been our honorary president since the 2013 Seoul meeting and CWIG became truly global. With the passion of the past presidents, Mustafa Yuksel, Hans Pilegaard, and Robert Kelly, we are now enjoying the Renaissance in chest wall surgery with 350 members from 60 nations across the continents.

In CWIG 2018-Seoul meeting, we are trying to make another epoch-breaking revolution of our society. Now is the time to make a metamorphosis of our congress from private-invitation-based lectures to an open festival that is overflowing with the glittering innovations and cutting-edge technologies. As a global academic society, our scientific sessions will be filled with novel researches from all the members' submitted abstracts.

To make the Congress a pleasant in a cozy atmosphere, we selected the venue located right next to the airport (ICN), where not only the convention but also the accommodation and leisure for the participating family will be conjoined in the same complex.

We are having live surgery demonstrations in the first day of the convention, June 13, Wednesday, at the operating theater of Seoul St. Mary's Hospital in the city center of Seoul (Gangnam district). And that evening, we are going to have a sheer fun in the welcome reception in the Lotte World Tower, the famous world No. 5 highest building.

The next day, June 14, Thursday, a full day program of oral presentations and posters will be taking place at the main ballrooms of the Paradise City Hotel and Convention Center. In the evening, the Gala dinner and Concert would be the highlight of the amusement with an exquisite Korean dining and topnotch classical music event.

The final day, June 15, Friday, we will continue original paper sessions, posters, and video sessions all day long. In the evening, at a small island close to the the convention venue, a hilarious barbecue party will be bestowed to promote our friendships upon wrapping up the convention.

We look forward very much to meeting you in CWIG 2018-Seoul!

With enormous respect,

Hyung Joo Park

Local Organizing Committee
CWIG 2018-Seoul

• Organizing Committee

Local Organizing Committee

Congress Chairman	Hyung Joo Park, Seoul
Secretary General	Sungsoo Lee, Seoul
Program Committee	Hoseok I, Busan
Financial Committee	Sukki Cho, Seongnam
Advertising Committee	Hyun Koo Kim, Seoul
International Committee	Jong Ho Cho, Seoul
General Affair Committee	Jin Wook Hwang, Ansan
	Kyung Soo Kim, Seoul
	Geun Dong Lee, Seoul
	Jae Ho Chung, Seoul
	Mi Hyoung Moon, Seoul
	Hyo Chan An, Seoul
	Samina Park, Seoul
Live Surgery Committee	Young Gyu Moon, Seoul
	Kwan Yong Hyun, Seoul
	Soo Whan Choi, Seoul
Advisory Board	Tae Yun Oh, Seoul
	Byung Ho Kim, Daegu
	Jin Yong Jeong, Incheon
	Deog Gon Cho, Suwon
	Hyo Chul Youn, Seoul

CWIG Executive Committee

Honorary President	Donald Nuss, Norfolk, USA
President	Hyung Joo Park, Seoul, Korea
President-elect	Frank-Martin Haecker, Gallen, Switzerland
Secretary	Manuel Lopez, Barcelona, Spain
Past President	Mustafa Yuksel, Istanbul, Turkey
	Hans K. Pilegaard, Aarhus, Denmark
	Robert E. Kelly, Norfolk, USA
Executive Members	Jose Ribas Milanez De Campos, Sao Paulo, Brazil
	Ivan Schewitz, Waterfall City, South Africa
	Horacio Abramson, Buenos Aires, Argentina
	Jean-Marie Wihlm, Strasbourg, France
	Andre Hebra, Orlando, USA
	Marcelo Martinez-Ferro, Buenos Aires, Argentina
	Vladimir Kuzmichev, Moscow, Russia
	Dawn E. Jaroszewski, Phoenix, USA
	Antonio Messineo, Florence, Italy
	Sadashige Uemura, Kurashiki, Japan
	Claus Petersen, Hannover, Germany
	Qi Zeng, Beijing, China
	Amir Z. Khan, India
	Chih-Chun Chu, Taipei, Taiwan

• Faculty

World



Horacio Abramson
Cetrangolo Hospital
Buenos Aires, Argentina



Jose Ribas Milanez De Campos
University of Sao Paulo
Sao Paulo, Brazil



Frank-Martin Haecker
University of Basel
Gallen, Switzerland



Andre Hebra
Nemours Children's Hospital
Orlando, USA



Dawn E. Jaroszewski
Mayo Clinic
Phoenix, USA



Robert E. Kelly
Old Dominion University
Norfolk, USA



Sunghoon Kim
UCSF Benioff Children's Hospitals
Oakland, USA



Vladimir Kuzmichev
MSU Medical Center
Moscow, Russia



Ana Lain
Vall d'Hebron Hospital
Barcelona, Spain



Cosimo Lequaglie
IRCCS CROB Referral Oncologic Center
Rionero in Vulture, Italy



Manuel Lopez
CWIG Secretariat
Barcelona, Spain



Antonio Messineo
University of Florence
Florence, Italy



Donald Nuss
Children's Hospital for King's Daughter
Norfolk, USA



Claus Petersen
Hannover Medical School
Hannover, Germany



Hans K. Pilegaard
Aarhus University Hospital
Aarhus, Denmark



Ivan Schewitz
University of Pretoria
Waterfall City, South Africa



Sergio Sesia
Bern University Hospital
Bern, Switzerland



Sadashige Uemura
Kawasaki Medical School
Kurashiki, Japan



Mustafa Yuksel
Marmara University
Istanbul, Turkey



Qi Zeng
Capital Medical University
Beijing, China

Local



Deog Gon Cho
The Catholic University
of Korea
Suwon, Korea



Jong Ho Cho
Sungkyunkwan
University
Seoul, Korea



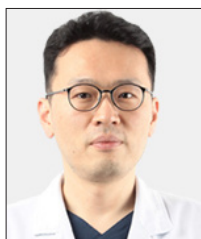
Sukki Cho
Seoul National
University
Seongnam, Korea



Jae Ho Chung
Korea University
Seoul, Korea



Kook Nam Han
Korea University
Seoul, Korea



Jin Wook Hwang
Korea University
Ansan, Korea



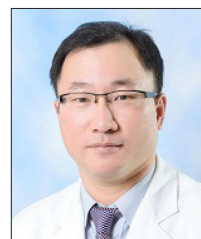
Hoseok I
Pusan National
University
Busan, Korea



Jin Yong Jeong
The Catholic
University of Korea
Incheon, Korea



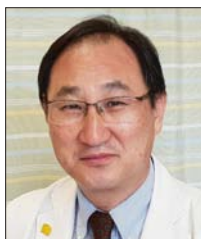
Hyun Koo Kim
Korea University
Seoul, Korea



Sungsoo Lee
Yonsei University
Seoul, Korea



Samina Park
Seoul National
University
Seoul, Korea



Hyung Joo Park
The Catholic
University of Korea
Seoul, Korea

• Scientific Program

Program at Glance

DAY 1 (JUNE 13)

Seoul St. Mary's Hospital
Auditorium, B1
Operating Theater, 5F

10:00-11:30	CWIG Executive Committee Meeting	
12:00-18:00	Live Surgery Demonstrations: 3 Cases with Totally Craned Entire Chest Wall Reconstruction	Seoul St. Mary's Hospital
12:00-13:00	Live Surgery Case 1	
	Pectus Excavatum, M/3, Type 1A	
13:00-13:50	Cine Salon 1	
14:10-15:30	Live Surgery Case 2	
	Pectus Excavatum, M/13, Type 2A3R, Grand Canyon	
15:30-16:20	Cine Salon 2	
16:40-18:00	Live Surgery Case 3	
	Pectus Carinatum, M/14, Type 2A1R	
19:00-22:00	Welcome Reception	Lotte World Tower Bus departs on 18:20 at St. Mary's Hospital

DAY 2 (JUNE 14)

Paradise City Convention Center
Sapphire Ballroom

07:30-08:20	Registration & Continental Breakfast	Pardise City Hotel & Resort
08:30-09:40	Session 1: Pectus Excavatum : Diagnostic Tools & Function Studies	
09:40-10:20	Session 2: 3D Scanning	
10:20-10:50	Break	
10:50-11:20	Honorary Presidential Address	
	Donald Nuss	
11:20-12:40	Session 3: Oncology/Resection & Reconstruction	
12:40-13:40	Lunch	
13:00-13:30	Luncheon Seminar : CAD and Finite Element Analysis Technique	
13:40-15:20	Session 4: Risk-free Pectus Surgery	
15:20-15:50	Break	
15:50-17:00	Grand Rounds: Fact Sheets on Crossbar Technique-To Cross, Or Not to Cross?	
17:00-18:00	Session 5: Innovations	
19:00-22:00	Gala Night	Pardise City Hotel & Resort

DAY 3 (JUNE 15)

Paradise City Convention Center
Sapphire Ballroom

07:30-08:20	Registration & Continental Breakfast		Paradise City Hotel & Resort
08:30-10:00	Session 6: Pectus Carinatum & Mixed Deformity		
10:00-10:20	Break		
10:20-10:50	Presidential Address	Hyung Joo Park	
10:50-11:50	Session 7: Pectus Surgery-Follow up & Management of Complications		
11:50-12:40	Session 8: Institutional Experience		
12:40-13:40	Lunch		
13:00-13:30	Luncheon Seminar : VR Surgical Simulation		
13:40-14:40	Session 9: Surgical vs. Conservative Approaches-New or Alternative Techniques		
14:40-14:50	Break		
14:50-15:30	Task Force : Which Index Should We Use? The CWIG Guideline/ Perspective		
15:30-16:10	Session 10: Chest Wall Trauma		
16:10-16:20	Break		
16:20-17:00	CWIG Plenary Session		
17:30-22:00	Picnic on Island		Mo-Do Bus departs on 17:30 at Paradise City Hotel & Resort

• Scientific Program

DAY 1 (JUNE 13) Seoul St. Mary's Hospital Auditorium, B1 Operating Theater, 5F

10:00-11:30	CWIG Executive Committee Meeting		Seoul St. Mary's Hospital Faculty Lounge, 8 th Floor	
11:00-12:00	Registration & Brunch			
12:00-18:00	Live Surgery & Video Presentation			
12:00-13:00	Live Surgery Demonstration Case 1		Auditorium: Jose Ribas Milanez De Campos Operating Theater: Jae Ho Chung	
	Pectus Excavatum, M/3, Type 1A			
	Totally Craned Entire Chest Wall Reconstruction			
	"Column-Roof Concept"			
	Symmetric Bar			
	Claw fixator			
	Flare-buster			
13:00-13:50	Cine Salon 1 (Presentation 7min/ Q&A 3min)		Chair : Frank-Martin Haecker, Ana Laín	
13:00-13:10	1. Video-assisted Thoracoscopic Surgery for Intrathoracic First Rib Resection in Thoracic Outlet Syndrome	<u>Jinwook Hwang</u>	Korea Univ. Ansan Hospital	Ansan, Korea
13:10-13:20	2. En-bloc Diaphragm and Chest Wall Resection & Reconstruction for Solitary Colon Cancer Metastasis: Unusual Indication	<u>Abdulhadi Almutairi</u>	King Fahad Specialist Hospital-Dammam	Dammam, Saudi Arabia
13:20-13:30	3. The Development Process of Double Compression and Complete Fixation Bar System in MIRPE	<u>Seung Jin Lee, In-Hag Song, Seock Yeol Lee</u>	Soonchunhyang Univ. Cheonan Hospital	Cheonan, Korea
13:30-13:40	4. 30 Cases of Re-operation Using Submuscular Nuss Method after the Initial Nuss Method Treatment	<u>Yasushi Kasagi, Machiko Kasagi</u>	Matsuyama Cardiovascular Medical Center	Matsuyama, Japan
13:40-13:50	5. Submuscular Nuss Procedure by Inserting 3 Bars in the Intercostal Space with Single Bilateral Skin Incision	<u>Yasushi Kasagi, Machiko Kasagi</u>	Matsuyama Cardiovascular Medical Center	Matsuyama, Japan
13:50-14:10	Break & Visit Exhibition			
14:10-15:30	Live Surgery Demonstration Case 2		Auditorium: Andre Hebra Operating Theater: Jae Ho Chung	
	Pectus Excavatum, M/13, Type 2A3R, Grand Canyon			
	Totally Craned Entire Chest Wall Reconstruction			
	"Column-Roof Concept"			
	Asymmetric Bar			
	Cross-bar			
	Hinge Plate			
	Bridge Fixation			
	Flare-buster			
	Magic String			



15:30-16:20	Cine Salon 2 (Presentation 7min/ Q&A 3min)		Chair : Ivan Schewitz, Sergio Sesia	
15:30-15:40	1. Oblique - (cross-) Bar Fixation Technique	<u>Vladimir Kuzmichev</u> ^{1,2} , Sergey Tarasov ¹ , Ksenija Ershova ² , Vladimir Gatsutsyn ² , Alexander Mashkov ² , Alexander Nalivkin ² , Dmitry Pykhteev ²	MSU Medical Center ¹ , MONIK ²	Moscow, Russia
15:40-15:50	2. Bimanual Tunnel Technique: Another Strategy to Prevent Pericardial Injury During Nuss Procedure	<u>Hans Van Veer</u> , Willy Coosemans	University Hospitals Leuven	Leuven, Belgium
15:50-16:00	3. Sternal Plating for Traumatic Manubriosternal Pseudoarthrosis after Steel Wire Repair Failure (Case Presentation)	<u>Vladimir Kuzmichev</u> , David Asratyan, Sergey Nikitin, Sergey Tarasov	MSU Medical Center	Moscow, Russia
16:00-16:10	4. Thoracic Softening Method During Nuss Procedure with Use of an Engine Jack in Anterior Chest Wall Elevation	<u>Yasushi Kasagi</u> , Machiko Kasagi	Matsuyama Cardiovascular Medical Center	Matsuyama, Japan
16:10-16:20	5. Total Crane-Triple Crossbar in Extreme Pectus Excavatum Repair: A Challenge	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
16:20-16:40	Break & Visit Exhibition			
16:40-18:00	Live Surgery Demonstration Case 3		Auditorium: Vladimir Kuzmichev Operating Theater: Jae Ho Chung	
	Pectus Carinatum, M/14, Type 2A1R			
	Sandwich Technique			
	Asymmetric Bar			
	Bridge Fixation			
	Flare-buster			
19:00-22:00	Welcome Reception		Lotte World Tower Bus departs on 18:20 at St. Mary's Hospital	

• Scientific Program

DAY 2 (JUNE 14) Paradise City Convention Center Sapphire Ballroom

07:30-08:20	Registration & Continental Breakfast			
08:20-08:30	Opening Address Welcome Speech	Hyung Joo Park, CWIG President Tae Yun Oh, KTCVS Chairman		
08:30-09:40	Session 1: Pectus Excavatum : Diagnostic Tools & Functional Studies (Presentation 7min/ Q&A 3min)		Chair : Robert E. Kelly, Deog Gon Cho	
08:30-08:40	1. Effect of Positional Echocardiogram on Right-sided Hemodynamics Based on Pectus Excavatum Severity	Dawn Jaroszewski, Venkata Sivakrishna Pulivarthi, Reza Arsanjani, Inna Robrahn, Farouk Mookadam, Samuel Unzek, Rose Simpson, Clinton Jokerst, Michael B. Gotway	Mayo Clinic Arizona	Phoenix, USA
08:40-08:50	2. Is there is Unifying Mechanistic Explanation for Cardio-Respiratory Dysfunction in Patients with Pectus Excavatum?: A Preoperative Prospective Clinical Study	Christopher M R Satur, Ian Cliff, Khurum Mazhar, Nick Watson	University Hospital of North Midlands NHS Trust	Stoke-on-Trent, UK
08:50-09:00	3. Severity of Chest Wall Depression is Associated with Cardiac Dysfunction in Pectus Excavatum: Prospective Observation Study in Minimally Invasive Repair	Kook Nam Han, Hyun Koo Kim, Kanghoon Lee, Young Ho Choi	Korea University Guro Hospital	Seoul, Korea
09:00-09:10	4. Is Sternal Rotation a Relevant Factor of Cardiac Compression in Patients with Pectus Excavatum? (Prospective Study in 120 Patients)	Maximiliano Nazar-Peirano ^{1,3} , Gaston Bellia-Munzon ¹ , Jorge Martinez ² , Alejandro Deviggiano ² , Gaston Rodriguez-Granillo ² , Marcelo Martinez-Ferro ¹	Fundacion Hospitalaria Children Hospital ¹ , Diagnostico Maipu ² , CEMIC ³	Buenos Aires, Argentina
09:10-09:20	5. Dimensional Changes of Thorax after Nuss Procedure	June Lee, Jin Yong Jeong, Eun Young Rha	Incheon St. Mary's Hospital, Catholic Univ. of Korea	Incheon, Korea
09:20-09:30	6. A Classification of Sub-types of Pectus Excavatum	Christopher M R Satur, Ian Cliff, Khurum Mazhar, Nick Watson	University Hospital of North Midlands NHS Trust	Stoke-on-Trent, UK
09:30-09:40	7. Are X-rays Sensible Enough to Select Surgical Pectus Excavatum Patients?	Ana Laín, Javier Güizzo, Laura García, Carles Giné, Joan Carles Carreño, Carlos Leganés, Manuel López	Hospital Vall d'Hebron	Barcelona, Spain
09:40-10:20	Session 2: 3D Scanning (Presentation 5min)		Chair : Dawn E. Jaroszewski, Sungsoo Lee	
09:40-09:45	1. Use of an Optical Scanning Device to Monitor Progress of Non-invasive Treatments for Chest Wall Deformity: A Pilot Study	Robert E. Kelly, Jr. ^{1,2,3} , Robert J. Obermeyer ^{1,2} , M. Ann Kuhn ^{1,2} , Frazier W. Frantz ^{1,2} , Kristina Laws ¹ , Mohammad Obeid ³ , N Kidane ³ , Frederic D McKenzie ³	Children's ¹ , Eastern Virginia Medical School ² , Old Dominion University ³	Norfolk, USA
09:45-09:50	2. A Usefulness of Three-dimensional Body Surface Scanning Images in the Evaluation of Patients with Pectus Carinatum Treated with Compressive Orthotic Brace	Sungsoo Lee, Min Kyun Kang, Duk Hwan Moon	Yonsei University College of Medicine, Gangnam Severance Hospital	Seoul, Korea



09:50-09:55	3. Measurement of Chest Figure in Patients with Pectus Excavatum Using 3D Body Scanning before and after the Nuss Procedure	<u>Atsushi Yoshida</u> , Sadashige Uemura, Hisako Kuyama	Kawasaki Medical School	Kurashiki, Japan
09:55-10:00	4. Evaluation of pectus excavatum by 3D external scan. Is there a correlation between internal and external indexes?	<u>Ana Laín</u> , Paula Jimenez, Laura García, Carles Giné, Manuel López	Hospital Vall d'Hebron	Barcelona, Spain
10:00-10:05	5. Evaluation of Pectus Excavatum (PE) Severity by Means of a portable 3D body scanner: an evolving appraisal	<u>Antonio Messineo</u> , Maria Chiara Cianci, Giada Panagini, Marco Ghionzoli, Flavio Facchini, Yary Volpe, Francesca Ucheddu, Michaela Servi, Monica Carfagni	Meyer Children Hospital, University of Florence	Florence, Italy
10:05-10:20	Discussion	All Panels		
10:20-10:50	Break : Visit Exhibition with Coffee / Scientific Posters with Wine			
10:50-11:20	Honorary Presidential Address	Chair : Hyung Joo Park		
	Henry Ford, the Wright Brothers and the Minimally Invasive Pectus Excavatum Repair	<u>Donald Nuss</u>	Children's Hospital for King's Daughter	Norfolk, USA
11:20-12:40	Session 3: Oncology / Resection & Reconstruction (Presentation 6min/ Q&A 4min)	Chair : Cosimo Lequaglie, Jong Ho Cho		
11:20-11:30	1. Bio-prosthesis in Chest Wall Repair after Cancer Resection	<u>Cosimo Lequaglie</u> , Gabriella Giudice	IRCCS CROB Referral Oncologic Center Basilicata	Rionero in Vulture, Italy
11:30-11:40	2. Chest Wall and Sternal Resection for Primary or Secondary Tumors, Our Experience in Single Unit in Albania, from December 2003 to December 2017	<u>Fadil Gradica</u> , Dhimitraq Argjiri, Lutfi Lisha, Agron Menzelxhiu, Alma Cani, Fahri Kokici, Ibrahim Avdiu, Alketa Pere, Helidon Nina, Daniela Xhemalaj	University Hospital	Tirana, Albania
11:40-11:50	3. Surgical Treatment of a Rare Chest Wall Deformity: Jeune Syndrome	<u>Nezih Onur Ermerak</u> , Mustafa Yüksel, Tunç Laçın, İlhan Ocakcioğlu	Marmara University, Faculty of Medicine	Istanbul, Turkey
11:50-12:00	4. Long Term Outcomes of Surgically Resected Lung Cancer Invading the Chest Wall	<u>Samina Park</u> , Woo Jung Kim, Jae Won Song, Kwon Joong Na, Hyun Joo Lee, In Kyu Park, Chang Hyun Kang, Young Tae Kim	Pediatric Thoracic & Cardiovascular Surgery, Seoul National University	Seoul, Korea
12:00-12:10	5. Staged Management of Septic Sternoclavicular Joint Arthritis	<u>Sergio B. Sesia</u> , Tobias M. Homann, Ralph A. Schmid, Gregor J. Kocher	Bern University Hospital/Inselspital	Bern, Switzerland
12:10-12:20	6. Sternal Wire Neo Rib Technique for Chest Wall Reconstruction	<u>Lalengmawia Darlong</u>	Rajiv Gandhi Cancer Institute & Research Centre	Delhi, India

• Scientific Program

DAY 2 (JUNE 14) Paradise City Convention Center Sapphire Ballroom

12:20-12:30	7. The Use of Vacuum-assisted Closure in Sternal Dehiscence and Difficult-to-heal Wounds Following Sternotomy	<u>Nezih Onur Ermerak</u> , İlhan Ocakcioğlu, Esra Şirzai, Tunç Laçın, Bihter Sayan, Ali Fuad Durusoy, Mustafa Yüksel	Marmara University, Faculty of Medicine	Istanbul, Turkey
12:30-12:40	8. Follow up and Outcomes in Patients of Chronic Empyema Having Undergone Open Window Thoracostomy	<u>Ravindra Dewan</u> , Klein Dantis, Rajat Saxena	National Institute of TB and Respiratory Diseases New Delhi	New Delhi, India
12:40-13:40	Lunch			
13:00-13:30	Luncheon Seminar		Chair : Hoseok I	
	Computer-aided Design and Finite Element Analysis Technique for Patient-specific Minimally Invasive Surgery of Chest Wall Deformities	<u>Chi Seung Lee</u>	Biomedical Research Institute, Pusan National Univ.	Busan, Korea
13:40-15:20	Session 4: Risk-free Pectus Surgery (Presentation 6min/ Q&A 4min)		Chair : Andre Hebra, Jin Yong Jeong	
13:40-13:50	1. 3 Keys for Risk-free Pectus Surgery	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
13:50-14:00	2. A Simple Technique for Effective Sternal Elevation During the Nuss Procedure	<u>Andre Hebra</u> , Cynthia Reyes, Tamara Westmoreland, Adela Casas-Melley	Nemours Children's Hospital	Orlando, USA
14:00-14:10	3. Techniques of Sternal Elevation To Improve Safety During the Nuss Procedure	<u>Frank-Martin Haecker</u> ^{1,2} , Sergio Sesia ³	Children's Hospital of Eastern Switzerland ^d , University of Basel ^e , Bern University Hospital ^h	Basel/ Bern, Switzerland
14:10-14:20	4. Oblique Inserted Pectus Bar to Avoid Displacement	<u>Sergio B Sesia</u> , Tobias M Homann, Ralph A Schmid, Gregor J Kocher	Inselspital, University Hospital Bern	Bern, Switzerland
14:20-14:30	5. Bridge Fixation System with Two Bars for Pectus Excavatum Repair – Single Center Experience	<u>Huu Vinh Vu</u>	Choray Hospital	Hochiminh City, Vietnam
14:30-14:40	6. Bar Displacement and Stabilization Method in the Minimally Invasive Repair of Pectus Excavatum: Systematic Review and Meta-analysis	<u>Mi Hyoung Moon</u> , Hyo chan An, Hyung Joo Park	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
14:40-14:50	7. Gasless Endoscopic Surgery with Lifting Technique for Correction of Bifid Ribs	<u>Qi Zeng</u> , Chenghao Chen, Na Zhang, Jie Yu, Dong Yan, Changqi Xu, Dingyi Liu, Qian Zhang	Beijing Children's Hospital, Capital Medical University, National Center for Children's Health	Beijing, China
14:50-15:00	8. Needlescope-assisted Nuss Procedure in Patients with Pectus Excavatum	<u>Kook Nam Han</u> , Hyun Koo Kim, Young Ho Choi	Korea University Guro Hospital	Seoul, Korea
15:00-15:10	9. Detection of Sternal Bar Adhesion to the Heart Using an EKG Monitor During a Nuss Bar Removal	<u>Sunghoon Kim</u> , Olajire Idowu	UCSF Benioff Children's Hospitals	Oakland, USA
15:10-15:20	10. Effect of Pectus Deformities on Spinopelvic Parameters	Esra Şirzai, Erhan Okay, Tural Khalilov, <u>Nezih Onur Ermerak</u> , İlhan Ocakcioğlu, Tunç Laçın, Murat Bezer, Mustafa Yüksel	Marmara University, Faculty of Medicine	Istanbul, Turkey
15:20-15:50	Break : Visit Exhibition with Coffee / Scientific Posters with Wine			
15:50-17:00	Grand Rounds : Fact Sheets on Crossbar Technique-To Cross, Or Not to Cross? (Presentation 6min/ Q&A 4min)		Chair : Antonio Messineo, Sungsoo Lee	
15:50-16:00	1. Use of Non-horizontal Bars in the Nuss Procedure	<u>Hans K. Pilegaard</u>	Aarhus University Hospital	Aahrus, Denmark



16:00-16:10	2. 27 Reasons to Cross the Bars	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital Catholic Univ. of Korea	Seoul, Korea
16:10-16:20	3. Cross-bar – Fashion or Breakthrough?	<u>Vladimir Kuzmichev</u> , Sergey Tarasov, Ksenija Ershova, Vladimir Gatsutsyn, Alexander Mashkov, Alexander Nalivkin, Dmitry Pykhteev	MSU Medical Center, MONIKI	Moscow, Russia
16:20-16:30	4. Elevating the Deepest More: Cross Bar vs Parallel Bar Technique	<u>Mi Hyoung Moon</u> , Hyo Chan An, Hyung Joo Park	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
16:30-16:40	5. Effectiveness of Two-bar Correction for Pectus Excavatum: Comparison of Parallel Bar and Cross Bar Insertion Techniques	<u>Chul Hwan Park</u> , Duk Hwan Moon, Min Kyun Kang, Tae Hoon Kim, Sungsoo Lee	Gangnam Severance Hospital, Yonsei University College of Medicine	Seoul, Korea
16:40-16:50	6. How Many Nuss-bars Can You Fit in a Thorax?	<u>Gerda Zijp</u> , Jan-Hein Allema, Pieter-Jan van Huijstee	Juliana Children's Hospital/Haga Hospital of the Hague	Hague, Netherlands
16:50-17:00	Round Table Discussion	All Panels		
17:00-18:00	Session 5: Innovations (Presentation 6min/ Q&A 4min)		Chair : Sadashige Uemura, Hyun Koo Kim	
17:00-17:10	1. The Ideal Pectus Bar. Predictions of the Future	<u>Ivan Schewitz</u>	University of Pretoria	Johannesburg, South Africa
17:10-17:20	2. Evaluating the Biadaptability of 3D Printing Material Nylon 680 Co-polymer Prior to Implantation into Human Subjects	<u>Nezih Onur Ermerak</u> ¹ , Mustafa Yüksel ¹ , Tunç Laçin ¹ , Barış Yüksel ²	Marmara University, Faculty of Medicine ¹ , Free Lance Consultancy ²	Istanbul, Turkey
17:20-17:30	3. Evaluation of a New Model of Metallic Bar and Stabilizer for Use in Minimally Invasive Repair of Pectus Excavatum	<u>Miguel Tedde</u> , Jose De Campos, Joao Macedo, Rafael Carvalho, Niura Hamilton	Heart Institute (InCor), Hospital das Clínicas, Sao Paulo University	Sao Paulo, Brazil
17:30-17:40	4. Pectus Press in the "Pre-and Postoperative" Correction of Pectus Excavatum with the Nuss Procedure	<u>Jose Ribas Campos</u> , Adriana Imamura, Maria Candida Luzo, Paulo Pego Fernandes	University of Sao Paulo	Sao Paulo, Brazil
17:40-17:50	5. 3D Printing Combined with Finite-element Analysis in the Design of Customized Nuss Bar	<u>Hui Wang</u> , Wei Liu, Fenghua Wang, Jianhua Liang, Jiahang Zeng	Guangzhou Women and Children's Medical Center	Guangzhou, China
17:50-18:00	6. From Theory to Practice: 3D Reconstruction and Printing as a Valuable Tool for the Chest Wall Surgeon. Implementation in a Series of 78 Consecutive Patients	<u>Maximiliano Nazar-Peirano</u> ^{1,2} , Gaston Bellia-Munzon ¹ , Jorge Martinez ² , Marcelo Martinez-Ferro ¹	Fundacion Hospitalaria ¹ , CEMIC ²	Buenos Aires, Argentina
19:00-22:00	Gala Night 1. Dinner 2. Gable Ceremony for Next President 3. Classical Music Concert		Paradise City Hotel Grand Ball Room	

• Scientific Program

DAY 3 (JUNE 15) Paradise City Convention Center Sapphire Ballroom

07:30-08:30	Registration & Continental Breakfast			
08:30-10:00	Session 6: Pectus Carinatum & Mixed Deformity : Repair Technique/Bracing (Presentation 6min/ Q&A 4min)		Chair : Mustafa Yuksel, Hoseok I	
08:30-08:40	1. How to Deal with Complications in the Minimally Invasive Repair of Pectus Carinatum	<u>Horacio Abramson</u>	Cetrangolo Hospital	Buenos Aires, Argentina
08:40-08:50	2. Development and Validation of the Pectus Carinatum Body Image Quality of Life (PeCBI-QOL) Questionnaire	Robert E. Kelly, Jr. ^{1,2} , James F. Paulson ^{1,2,3} , Kelsey Ellis ³ , Robert J. Obermeyer ^{1,2} , M. Ann Kuhn ^{1,2} , Frazier W. Frantz ^{1,2} , Margaret M. McGuire ^{1,2} , Erika Ortiz ³	Children's Hospital of The King's Daughters ¹ , Eastern Virginia Medical School ² , Old Dominion University ³	Norfolk, USA
08:50-09:00	3. Surgical Repair of Pectus Carinatum and Mixed Deformities: The Sandwich Technique	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
09:00-09:10	4. Evaluation of a new MIRPC Bar Fixation Technique in a Biomechanical Cadaver Study-first Results	<u>Stephan Rohleder</u> ¹ , Jessica Kempgen ¹ , Max Ackermann ² , Oliver Muensterer ¹ , Jan Goedeke ¹	University Medical Center Mainz ¹ , Johannes Gutenberg University ²	Mainz, Germany
09:10-09:20	5. Modified Reversed NUSS with Presternal Compression for Repair of Pectus Carinatum Deformity	<u>William CF Chong</u>	Raja Isteri Pengiran Anak Saleha Hospital	Bandar Seri Begawan, Brunei Darussalam
09:20-09:30	6. Long Term Results of Compressive Brace Therapy for Pectus Carinatum	Duk Hwan Moon, Sungsoo Lee, Min Kyun Kang	Yonsei University College of Medicine, Gangnam Severance Hospital	Seoul, Korea
09:30-09:40	7. Nonsurgical Treatment of Pectus Carinatum and Associated Improvements in Body Image and Related Quality of Life	Robert E. Kelly, Jr. ^{1,2,3} , James F. Paulson ^{1,2,3} , Kelsey Ellis ³ , Robert J. Obermeyer ² , M. Ann Kuhn ^{1,2} , Frazier W. Frantz ^{1,2} , Margaret M. McGuire ^{1,2} , Erika Ortiz ³	Children's Hospital of The King's Daughters ¹ , Eastern Virginia Medical School ² , Old Dominion University ³	Norfolk, USA
09:40-09:50	8. 13 Years of Experience on Minimally Invasive Repair of Pectus Carinatum	Nezih Onur Ermerak, Mustafa Yuksel, İlhan Ocakcıoğlu, Esra Şirzai, Tunç Laçın, Bihter Sayan	Marmara University, Faculty of Medicine	Istanbul, Turkey
09:50-10:00	9. CAD-devised Cutting Template to Perform Precise Transversal Sternotomy in Pectus Arcuatum (PA) Treatment	Antonio Messineo ¹ , Yary Volpe ² , Francesca Uccheddu ² , Monica Carfagni ² , Marco Ghionzoli ² , Flavio Facchini ² , Kejd Bici ¹	Meyer Children Hospital ¹ , University of Florence ²	Florence, Italy
10:00-10:20	Break : Visit Exhibition with Coffee / Scientific Posters with Wine			
10:20-10:50	Presidential Address		Chair : Frank-Martin Haecker	
	The Future Pectus Surgery: The "Column-Roof Concept" will be a New DNA for Totally Craned, Entire Chest Wall Remodeling	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea



10:50-11:50	Session 7: Pectus Surgery-Follow up & Management of Complications (Presentation 6min/ Q&A 4min)		Chair : Manuel Lopez, Sukki Cho	
10:50-11:00	1. Two Year Experience with Perioperative Co-management at a Free-standing Children's Hospital	<u>Robert Kelly, Jr.</u>	Children's Hospital of The King's Daughters	Norfolk, USA
11:00-11:10	2. Do Patients with Pectus Excavatum Fail to Engage Satisfactorily in Exercise Protocols?	<u>Christopher M R Satur</u> , Ian Cliff, Khurum Mazhar, Nick Watson	University Hospital of North Midlands	Stole-on-Trent, UK
11:10-11:20	3. Re-do Surgery after Nuss-bar Procedures	<u>Gerda Zijp</u> , Jan Hein Allema, Pieter-Jan van Huijstee	Juliana Children's Hospital/Haga Hospital of the Hague	Hague, Netherlands
11:20-11:30	4. Management of Pectus Excavatum Recurrence: What Shall We Do?	<u>Ana Laín</u> , Carles Giné, Laura García, Manuel López	Hospital Vall d'Hebron	Barcelona, Spain
11:30-11:40	5. Use of Cryoanalgesia During a Nuss Procedure: Update	<u>Sunghoon Kim</u> ¹ , Olajire Idowu ² , Sang Lee ²	UCSF Benioff Children's Hospitals ¹ , Regional Hospital of San Jose ²	Oakland, USA
11:40-11:50	6. Enlargement of the Intercostal Space after Primary Nuss Procedure Creates an Adverse Impact on the Reconstructed Thoracic Shape	<u>Masahiko Noguchi</u> , Yuki Hoshino, Kichiro Yaguchi	Nagano Children's Hospital	Nagano, Japan
11:50-12:40	Session 8: Institutional Experience (Presentation 6min/ Q&A 4min)		Chair : Horacio Abramson, Jin Wook Hwang	
11:50-12:00	1. Nuss Procedure Results 5-10 Years Postop	<u>Robert E. Kelly, Jr.</u> ^{1,2} , Antarius Daniel ¹ , Michael J. Goretsky ^{1,2} , M. Ann Kuhn ^{1,2} , Frazier W. Frantz ^{1,2} , Robert J. Obermeyer ^{1,2} , Donald Nuss ^{1,2}	Children's Hospital of The King's Daughters ¹ , Eastern Virginia Medical School ²	Norfolk, USA
12:00-12:10	2. Minimal Invasive Surgery for the Correction of Pectus Excavatum in Patients with Marfan Syndrome: The Mexican Experience	<u>Carlos García-Hernández</u> , Lourdes Carvajal-Figueroa, Cesar Mauricio Calderon Alipi	Universidad Nacional Autónoma de México	México City, México
12:10-12:20	3. Nuss Procedure; Actual Outcome for Pectus Excavatum in Mexico	<u>José Refugio Mora</u> ^{1,2} , Héctor Pérez ¹ , Jesús Enrique Santiago ¹ , Jose Luis Quintero ¹ , Victor Manuel Puga ¹ , Sandra Yasmin López ¹ , Laura Cecilia Cisneros ¹	Mexican Social Security Institute IMSS ¹ , Health Services of PEMEX ²	México City, México
12:20-12:30	4. 13 Years of Experience on Minimally Invasive Repair of Pectus Excavatum	<u>Nezih Onur Ermerak</u> , Mustafa Yüksel, İlhan Ocakcioğlu, Esra Şirzai, Tunç Laçın, Çağatay Çetinkaya	Marmara University, Faculty of Medicine	Istanbul, Turkey
12:30-12:40	5. Minimally Invasive Repair of Pectus Deformities: Selcuk University Experience	<u>Murat Öncel</u> , Güven Sadi Sunam, Hüseyin Yıldırım	Selcuk University Medical Faculty, Department of Thoracic Surgery, Konya, Türkiye	Konya, Turkey
12:40-13:40	Lunch			

• Scientific Program

DAY 3 (JUNE 15) Paradise City Convention Center Sapphire Ballroom

13:00-13:30	Luncheon Seminar		Chair : Hyun Koo Kim	
	Virtual Reality Application in Surgical Simulation	<u>Young Lae Moon</u>	Chosun University Hospital, Chosun Univ. of Korea	Gwangju, Korea
13:40-14:30	Session 9: Surgical vs. Conservative Approaches-New or Alternative Techniques (Presentation 6min/ Q&A 4min)		Chair : Claus Petersen, Sunghoon Kim	
13:40-13:50	1. Proposal of a New Operation for Pectus Excavatum Based on the Recovery of Pulmonary Function after Operation in Young Children	<u>Sadashige Uemura</u> , Atsushi Yoshida, Hisako Kuyama	Kawasaki Medical School	Kurashiki, Japan
13:50-14:00	2. Short and Asymmetrically Bent Bars with Minimal Intrathoracic Passage Could Improve Results in PE Patients?	<u>Antonio Messineo</u> , Marco Ghionzoli, Flavio Facchini, Roberto Lo Piccolo, Alessandra Martin, Alessia Bertocchini	Meyer Children Hospital	Florence, Italy
14:00-14:10	3. Do We Always Need Surgery to Treat Chest Wall Deformities?	<u>Frank-Martin Haecker</u>	Children's Hospital of Eastern Switzerland, University of Basel	St. Gallen, Switzerland
14:10-14:20	4. Surgical and Orthotic Techniques Are Complementary Procedure Dealing with Chest Wall Congenital Deformities	<u>Horacio Abramson</u>	Cetrangolo Hospital	Buenos Aires, Argentina
14:20-14:30	5. Different Nuss Procedures and Risk Management for Pectus Excavatum after Surgery for Congenital Heart Disease	<u>Chenghao Chen</u> , Qi Zeng, Na Zhang, Jie Yu, Dong Yan, Changqi Xu, Dingyi Liu, Qian Zhang	Beijing Children's Hospital, Capital Medical University, National Center for Children's Health	Beijing, China
14:30-14:50	Break : Visit Exhibition with Coffee / Scientific Posters with Wine			
14:50-15:30	Task Force : Which Index Should We Use? The CWIG Guideline/ Perspective (Presentation 10min)		Chair : Hans K. Pilegaard, Hyung Joo Park	
14:50-15:00	1. Browsing the Current CTIs: Science or Myth?	<u>Mi Hyoung Moon</u>	Seoul St. Mary's Hospital	Seoul, Korea
15:00-15:10	2. Undertreating Pectus? Comparison Between Haller Index with Correction and Depression Index	<u>Ana Laín</u> , Javier Güizzo, Laura García, Carles Giné, Carlos Leganés, Joan Carles Carreño, Manuel López	Vall d'Hebron Hospital	Barcelona, Spain
15:10-15:20	3. ADiEU Index for 4-way Measurements of Severity of Pectus Deformity: A Universal Index Comprehending All Types of Deformity	<u>Hyung Joo Park</u>	Seoul St. Mary's Hospital, Catholic Univ. of Korea	Seoul, Korea
15:20-15:30	Discussion			
15:30-16:10	Session 10: Chest Wall Trauma (Presentation 6min / Q&A 4min)		Chair : Kook Nam Han, Samina Park	
15:30-15:40	1. Rib Fixation a Game Changing Intervention in the Management of Major Chest Wall Trauma	<u>Christopher M R Satur</u> , Sherif Mansour, Cristian Bogdan, Shilajit Ghosh	University Hospital of North Midlands NHS Trust	Stoke-on-Trent, UK
15:40-15:50	2. Evaluated the Results of Rib Fixation Procedure in the Patient Had Rib Broken	<u>Nguyen Viet Dang Quang</u> , Vu Huu Vinh	Cho Ray Hospital	Hochiminh City, Vietnam
15:50-16:00	3. Comparison of Conservative and Surgical Treatments for Traumatic Flail Chest Associated with Respiratory Failure	<u>Qiang Wang</u>	Wujin People's Hospital of Changzhou	Changzhou, China



16:00-16:10	4. Summary of Experience in Surgical Treatment of Congenital Sternal Cleft in Children (Report of 21 Cases)	Jie Yu, Qi Zeng, Chenghao Chen, Na Zhang, Dong Yan	Beijing Children's Hospital, Capital Medical University, National Center for Children's Health	Beijing, China
16:10-16:20	Break			
16:20-17:00	CWIG Plenary Session		Chair : Donald Nuss, Hyung Joo Park	
16:20-16:30	CWIG Annual Report	Manuel Lopez	Barcelona, Spain	CWIG Secretary
16:30-16:40	CWIG Website and Member Registration	Claus Petersen	Hannover, Germany	
16:40-16:50	Next President Address	F-M Haecker	St. Gallen, Switzerland	
16:50-17:00	Introduction of CWIG 2019- South Africa	Ivan Schewitz	Johannesburg, South Africa	
17:00	Farewell Remark	Hyung Joo Park	President	
17:30-22:00	Picnic on Island	Korean Barbecue at the Beach	Mo-Do Bus departs on 17:30 at Paradise City Hotel & Resort	

• Scientific Program

Poster

NO.	Title	Author	Affiliation	Presenting Country
P-01	Radiological Assessment of Surgical Treatment Results in Children and Adolescents with Pectus Excavatum: Medium-term Results of 75 Cases	<u>Khodjanov Iskandar</u> ¹ , Khakimov Sherali ² , Kasymov Khatam ^{1*}	<i>Republican Specialized Scientific and Practical Medical Center Traumatology and Orthopaedy¹, Bukhara branch of Republican Scientific Center of Emergence²</i>	<i>Uzbekistan</i>
P-02	Incentive Spirometry as a Measure of Recovery Following Chest Wall Surgery	<u>Ashley Johnstone</u> [*] , Kathryn Sharp	<i>Royal Hospital for Children</i>	<i>Glasgow, United Kingdom</i>
P-03	Is It Necessary to Remove the Bar?	<u>Murat Oncel</u> ¹ , Guven Sadi Sunam ¹ , Huseyin Yildiran ^{2*}	<i>Selcuk University Medical Faculty¹, Kars Harakani State Hospital²</i>	<i>Turkey</i>
P-04	Nursing Care in Patients Undergoing Minimally Invasive Pectus Deformity Repair	Neriman Onaran [*] , <u>Serdar Evman</u> , Levent Alpay, Hakan Kiral, Serda Kanbur, Serkan Bayram, Cagatay Tezel, Volkan Baysungur	<i>Sureyyapasa Chest Diseases and Thoracic Surgery Educational and Research Hospital</i>	<i>Istanbul, Turkey</i>
P-05	Conservative and Surgical Treatment of Children with Pectus Carinatum (PC)	<u>Ikromjon Uralboev</u> , Yusufojon Akhmedov [*]	<i>Samarkand State Children Multibranch Medical Center</i>	<i>Uzbekistan</i>
P-06	Conservative and Surgical Treatment of Children with Pectus Excavatum (PE)	<u>Ikromjon Uralboev</u> , Yusufojon Akhmedov [*]	<i>Samarkand State Children Multibranch Medical Center</i>	<i>Uzbekistan</i>
P-07	Minimally Invasive Repairment of Pectus Excavatum in State Hospital: 2 Cases Experience	Huseyin Yildiran ^{1*} , <u>Murat Oncel</u> ² , Guven Sadi Sunam ²	<i>Kars Harakani State Hospital¹, Selcuk University Medical Faculty²</i>	<i>Turkey</i>
P-08	Concave Deformity Centered at Left Hypochondrium	<u>Satoshi Takagi</u> [*] , Ai Morita, Yoshihisa Kawakami, Hiroyuki Ohjimi	<i>Fukuoka University</i>	<i>Japan</i>
P-09	Brachial Plexus Palsy after Nuss Procedure	<u>Jin Yong Jeong</u> [*] , Min-Wook Kim	<i>Incheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea</i>	<i>Incheon, Korea</i>
P-10	Bar Removal and Breast Implants-Important Area for Thoracic and Plastic Surgeon Cooperation	<u>Vladimir Kuzmichev</u> ^{1*} , Ruben Adamyan ^{1,3} , Nina Berezovskaya ¹ , Igor Gulyaev ³ , Madina Dovgopolaya ³ , Ksenija Ershova ² , Sergey Nikitin ¹	<i>MSU Medical Center¹, MONIKP², Petrovsky RNSCS³</i>	<i>Russian Federation</i>
P-11	Pathological Influences of Connective Tissue Dysplastic Disorders to Surgical Treatment Results of Pectus Excavatum in Children	<u>Khodjanov Iskandar</u> ¹ , Khakimov Sherali ² , Kasymov Khatam ^{1*}	<i>Republican Specialized Scientific and Practical Medical Center Traumatology and Orthopaedy¹, Bukhara Branch of Republican Scientific Center of Emergence²</i>	<i>Uzbekistan</i>

NO.	Title	Author	Affiliation	Presenting Country
P-12	Sternal-Preserving Manubrial Resection: The “Chaudhery-Mutairi” Reconstructive Technique	<u>Abdulhadi Almutairi*</u> , Ikram Chaudhery	King Fahad Specialist Hospital- Dammam	Saudi Arabia
P-13	An Interesting Chest Wall Tumor: Lung Cancer Metastasis	<u>Murat Oncel</u> ¹ , Guven Sadi Sunam ¹ , Huseyin Yildiran ^{2*} , Osman Akdag ¹ , Cemil Isik ¹	Selcuk University Medical Faculty ¹ , Kars Harakani State Hospital ²	Turkey
P-14	Application of Pectus Bars for Chest Wall Reconstruction after Sternal Tumor Resection	Kyung Soo Kim, Soo Whan Choi, Seung Keun Yun, Hyung Joo Park, Ji Eun Lee, Kyo Young Lee, Seok Whan Moon*	Seoul St. Mary's Hospital	Seoul, Korea
P-15	Severe Thoracic Trauma Initial Evaluation and Management: Analyses of Our Cases Period of Time July 2004-December 2017	Fadil Gradica ^{1,2,3} , Agron Dogjani ² , Lutfi Lisha ¹ , Dhimitraq Argjiri ¹ , Alma Cani ¹ , Fahri Kokici ¹ , Ylber Vata ¹ , Dorjan Bozaxhiu ¹ , Flora Gradica ³ , Afron Mici ²	University Hopspital "Shefqet Ndroqi" ¹ , University Hospital of Trauma Center ² , Public Pharmacy ³ , University Hospital of Trauma Center ⁴	Albania
P-16	An Interesting Gunshot Trauma to the Right Chest Wall	Huseyin Yildiran ^{1*} , <u>Murat Oncel</u> ² , Guven Sadi Sunam ²	Kars Harakani State Hospital ¹ , Selcuk University Medical Faculty ²	Turkey
P-17	Is It Lung Herniation or Subcutaneous Emphysema after Cardiopulmonary Resuscitation?	<u>Murat Oncel</u> ¹ , Huseyin Yildiran ^{2*} , Guven Sadi Sunam ¹	Selcuk University Medical Faculty ¹ , Kars Harakani State Hospital ²	Turkey
P-18	Development of Numerical Techniques for Minimally Invasive Surgery of Pectus Excavatum	Sangeui Lee ^{1*} , Chiseung Lee ¹ , <u>Hoseok I</u> ²	Pusan National University ¹ , Pusan National University Hospital ²	Pusan, Korea
P-19	Establishing the Role of a Dedicated Physiotherapist as Part of the Scottish National Chest Wall Service	<u>Ashley Johnstone*</u> , Kathryn Sharp	Royal Hospital for Children	Glasgow, United Kingdom
P-20	Delayed Intrathoracic Nuss Bar Dislocation after MIRPE	<u>Jan Gödeke*</u> , Stephan Rohleder, Oliver Muensterer	University Medical Center Mainz	Germany

- **Social Program**

Welcome Reception (June 13)



Gala Night (June 14)



• Social Program

Gala Night (June 14)



CWIG2018-Seoul

Gala Concert

Dress Code: Business Casual

**June 14, 8 PM
Emerald Ballroom
Paradise City Hotel & Resort**

PROGRAM

14TH OF JUNE, 2018

1. A. VIVALDI: TRUMPET CONCERTO IN C,
1ST MOV.
2. E. MORRICONE: "GABRIEL'S OBOE"
3. J. HAYDN: TRUMPET CONCERTO IN Eb,
3RD MOV.

Trumpet: Seokyoung Ahn, Hyangmin Baek
Piano: Sora Jung

4. F. CHOPIN: POLONAISE BRILLANTE
IN C MAJOR, OP. 3
5. V. MONTI: "CZARDAS"
ON CELLO AND DOUBLE BASS
6. D. SHOSTAKOVICH: WALTZ NO. 2

Cello: Jakyoung Huh
Double Bass: Jungsu Lee
Piano: Sora Jung
Trumpet: Hyangmin Baek
Ballet: Junhee Park, Minyong Yoo

7. J. S. BACH: CONCERTO FOR TWO VIOLINS
BWV 1043, 1ST & 2ND MOV.

Violin: Frank-Martin Haecker, Kyumin Park
Piano: Shi Hyun Lee

- INTERMISSION -

8. W. A. MOZART: SELECTIONS FROM OPERA
"THE MAGIC FLUTE"
9. G. BIZET: "CARMEN" SUITE

Horn: Sopra Horn Ensemble
(Kyung Il Choi, Yoon Mi Lee, Hee Sung Kim, Yea
Wool Han, Hyun Sang Yoon, Hyoung Il Kim)
Piano: Sora Jung

10. D. SHOSTAKOVICH: VIOLIN CONCERTO
NO. 1 IN A MINOR, OP. 77(99)
PASSACAGLIA, CADENZA, BURLESQUE

Violin: Kyumin Park
Piano: Shi Hyun Lee
Horn: Hyoung Il Kim

• Social Program

Farewell Picnic (June 15)



Spouse Program

• CWIG 2018 Tour Program

13th of June (Wed) Half Day Tour of “Gangnam”

Time	Details
13:00-13:10	Depart from Seoul St.Mary's Hospital
13:30-14:30	Visit Sinsadong Garosu-gil (it means roadside tree street), popular, upscale street in Seoul. Enjoy Free time.
14:30-14:50	Forward to UNESCO Heritages Seon-neung (Royal Tomb)
14:50-16:00	Visit Seon-neung, gentle walking around tomb and park
16:10-16:50	Visit Bongeun-sa Temple
16:50-17:30	Forward to COEX mall
17:30-17:45	Drive to Lotte World Tower for Reception. End of the tour.

*Including: Tour Bus, English Speaking Guide, Admission Fee.

Tour Fare

Min of Person	8 people over	10 people over	15 people over	20 people over
Per Person	KRW66,000	KRW53,000	KRW38,000	KRW31,00

*Tours starts from a min of 8 people.

*Once the tour is confirmed, participants can pay by credit card in advance.

*The tour fee varies according to the number of participants.

Seonjeong Neung (Royal Tomb)



Seonjeong-neung is comprised of Seollueung Royal Tomb and Jeongneung Royal Tomb. Seonjeongneung has a lush forest, and benches on the promenade provide an ideal place to relax. There are numerous small hills with clusters of trees that create a border between the mystery and serenity of the royal tombs and the hustle and bustle of downtown Seoul. Upon entering the grounds, you can see a red gate (the red colour denotes holiness) with a taeguk (yin-yang) symbol. The stone paths leading to the sacrificial building are noteworthy because there are two stone paths—the elevated path is for the dead King and the lower one is for living people.

Bongeunsa Buddhist Temple

It is one of the greatest millennial temples where not only the aspiration of the Great Buddhist monk Bowoo who revived the Buddhism during the Joseon Dynasty of “Buddhism oppression and Confucianism Veneration” period but also the spirit of the Great monks Seosan and Samyung who saved Joseon Dynasty, is now making the new history on Korean Buddhism owing to its practice and propagation-centered temple management system. It has possessed a total 40 pieces of Buddhist Cultural Properties including two pieces designated as National treasures.



• Social Program

Spouse Program

14th of June (Thu) Full Day Tour of Seoul City

Time	Details
08:30-08:40	Depart from Paradise City Hotel and Resort
09:40-12:10	Visit Changdeok Palace and Huwon Garden (known as Secret Garden)
12:30-14:30	*English Guide Time 10:30-12:00 (90min) Visit Insadong Alley, Lunch and Free time
14:30-15:30	Visit Bukchon Hanok Village next to Palace. Tea Break at the local café
15:40-16:50	Visit Namdaemun old Market
17:00-18:00	Depart Seoul for Paradise City Hotel
18:00-	Arrive and end of the tour

*Including: Tour Bus, English Speaking Guide, Admission Fee.

*Korean Style Lunch at local restaurant, Beef Bulgogi or Ginseng Chicken Soup etc.

*Include Tea Break over the tour.

Tour Fare

Min of Person	4 people	6 people	8 people	10 people	15 people	20 people
Per Person	KRW201,000	KRW140,000	KRW132,000	KRW110,000	KRW92,000	KRW79,000

*Tours starts from a min of 4 people.

*Once the tour is confirmed, participants can pay by credit card in advance.

*The tour fee varies according to the number of participants.

Changdeok Palace



Changdeokgung, also known as Changdeokgung Palace or Changdeok Palace, is set within a large park in Jongno-gu, Seoul, South Korea. It is one of the "Five Grand Palaces" built by the kings of the Joseon Dynasty. Because of its location east of Gyeongbok Palace, Changdeokgung, is also referred to as the East Palace. The literal meaning of Changdeokgung is "Palace of Prospering Virtue". Changdeokgung was the most favored palace of many princes of the Joseon Dynasty and retained many elements dating from the Three Kingdoms of Korea period that were not incorporated in the more contemporary Gyeongbokgung. One such element is the fact that the buildings of Changdeokgung blend with the topography of the site instead of imposing upon nature.

Insa-dong Street

Insa-dong Street is one of the most memorable attractions in Seoul and represents the focal point of Korean traditional culture and crafts. Stores in Insa-dong specialize in a wide variety of goods that can only be purchased or appreciated in Korea: hanbok (traditional clothing), hanji (traditional paper), traditional teas, pottery, and folk crafts.



Buckchon Hanok village



Surrounded by Gyeongbokgung Palace, Changdeokgung Palace and Jongmyo Shrine, Bukchon Hanok Village is home to hundreds of traditional houses called 'hanok' that date back to the Joseon Dynasty. The name, 'Bukchon,' which literally translates to 'northern village,' came about as the neighborhoods that the village covers lie to the north of the two significant Seoul landmarks, Cheonggyecheon Stream and Jongno. Today, many of these hanoks operate as cultural centers, guesthouses, restaurants and tea houses, providing an opportunity to experience, learn and immerse in Korean traditional culture.

15th of June (Fri) DMZ Tour

Time	Details
07:40-07:50	Depart from Paradise City Hotel and Resort
07:40-08:50	Drive to Imjingak Peace Park, the check point for DMZ tour Change to Shuttle bus for DMZ Tour at Imjingak.
09:20-12:20	Tour of Dorasan Observatory, Dora Station, the 3rd Infiltration Tunnel
12:30-12:50	Visit Imjingak Park Area
12:50-14:00	Depart for Hotel, arrival and end of the tour

*Including: Tour Bus, English Speaking Guide, Admission Fee

*All the participant need passport for the tour.

Tour Fare

Min of Person	8 people	10 people	15 people	20 people
Per Person	KRW107,000	KRW86,000	KRW68,000	KRW57,000

*Tours starts from a min of 8 people.

*Once the tour is confirmed, participants can pay by credit card in advance.

*The tour fee varies according to the number of participants.

Imjingak Park

Imjingak located 7 km from the Military Demarcation Line, is now at the forefront of tourism related to the Korean Conflict. It was built in 1972 with the hope that someday unification would be possible. Three-storied Imjingak is surrounded by several Monuments, Unification Park and North Korea Center. 400 kinds of photos and documents showing the stark reality of North Korea are displayed in the North Korea Center of Unification Board. Outside Imjingak, there are 12 kinds of tanks and crafts on display that were used during the Korean Conflict. Mangbaedan, which stands opposite of Imjingak, is famous for the place where people from North Korea visit and perform ancestral rites by bowing toward their hometown every New Years Day and Chuseok. The Bridge of the Freedom, South Koreans crossed when they came back to their mother country from North Korea, stands behind Mangbaedan.



• Social Program

Spouse Program

The 3rd Infiltration Tunnel



The 3rd tunnel was discovered on October 17, 1978. It is located 52 km from Seoul. Approximately 10,000 soldiers can move through this tunnel in 1 hour. When this tunnel was discovered, North Koreans insisted steadfastly that it was made by South Koreans to invade North Korea, but this proved to be false.

Dora Observatory

You can view a part of North Korean life from this observation platform, the nearest point to North Korea from South Korea. This 304 sq. ft., 500 capacity observation platform was constructed following the closing of Mt. songak OP. It is located at Mt. Tora in Kunne-myun. Paju-si.



- Floor plan



• Registration Fee

Categories		Early Bird Registration (USD)	Pre-Registration (USD)	Onsite Registration (USD)
		Until March 31 (Sat), 2018	Until May 31 (Thu), 2018	
CWIG Member	*Country Group A	400	500	600
	*Country Group B	200	300	400
	*Country Group C	100	200	300
Non Member		500	600	700
# Student/Resident/Fellow/Nurse		100 (Group A)/ 50 (Group B/C)		
Accompanying Person		100 (Group A)/ 50 (Group B/C)		
** Gala Night (Dinner and Concert)		100 (Group A)/ 50 (Group B/C)		
*** Welcome Reception at Lotte World Tower (Dining and Musical Performances)		Free		

- The amount of payment is in US Dollars.
- All presenters must register with designated fees.
- CWIG membership fee is 50 Euros. To become a member and acquire a member discount, please go to CWIG website and sign up for the membership
- Oral presenters for accepted papers are granted a 50% discounted registration fee and free invitation to the Gala Night for Dinner and Concert.
- Poster presenters are granted a free invitation to the Gala Night for Dinner and Concert.
 - * Please check the IMF World Bank Country Groups according to GNI per capita. (Group A: High; Group B: Mid; Group C: Low)
 - ** Gala Dinner requires a separate registration and has limited seating.
 - *** Welcome Reception for Cocktails/Dining/Musical Performances is free of charge to all registrants.
- # For Student/Resident/Fellow/Nurse registration, an official certificate has to be submitted by email to the Organizing Secretariat.

Registration fee includes:

- › Full access to the scientific sessions and exhibition
- › Congress program and further scientific material
- › Refreshment breaks
- › Certificate of attendance
- › Name badge
- › Welcome Reception

Accompanying person's registration fee includes:

- › Welcome Reception
- › Name badge

Payment Method

Credit Card Payment: Click the registration button below

Bank Transfer: to the Account shown below

(Please note that registrants are responsible for all bank charges.)

- **Beneficiary:** The Korean Society for Thoracic & Cardiovascular Surgery
- **Bank Name:** KEB Hana Bank (Seongbuk-Dong Branch)
- **Account Number:** 187-910004-10104
- **Swift Code:** HNBKRS
- **Address:** 94-1, Seongbuk-Dong, Seongbuk-gu, Seoul, 136-823, Korea

Confirmation

Registration will be considered complete and valid upon full payment of fees.

A confirmation email will be sent upon completion of the registration process.

Refund Policy

Refund will be made upon a written request and will be processed after the congress.

All bank service charges are to be paid by the registrant.

Refund	No Refund
Request Received before Pre-registration date	Request Received after Pre-registration date

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Reference

¹ Narrowest jaw, thinnest shaft, greater articulation and the stability of a powered firing for enhanced visibility, broader angles of approach, greater angles of reach, better maneuverability and improved access compared to Endo GIA™ Curved Tip Reload with Tri-Staple™ Technology. ² System components include ECHELON FLEX™ Powered Plus Stapler and ECHELON™ ENDOPATH Reloads with Gripping Surface Technology.

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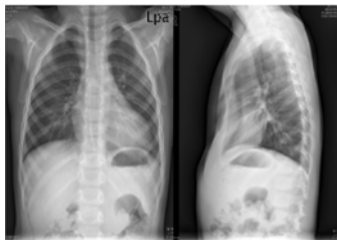


Edwards

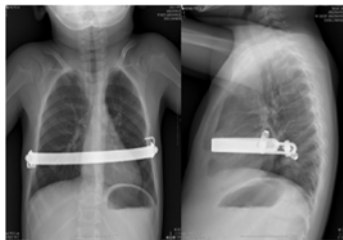
Convenient & Simple technique and Best Result !

Single Bar Technique

Before Surgery



1 month after surgery

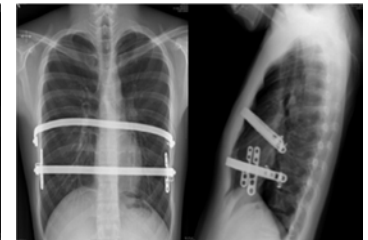


Multi Bar Technique

Before Surgery



3 month after surgery

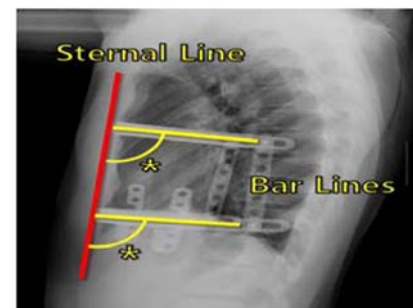
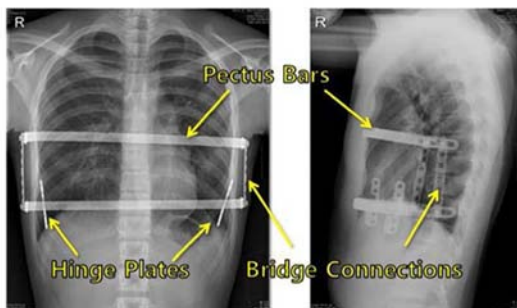


Bridge Technique – Displacement Rate “ Zero”



Parallel bar

cross bar



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20

Years of
Pectus Bar

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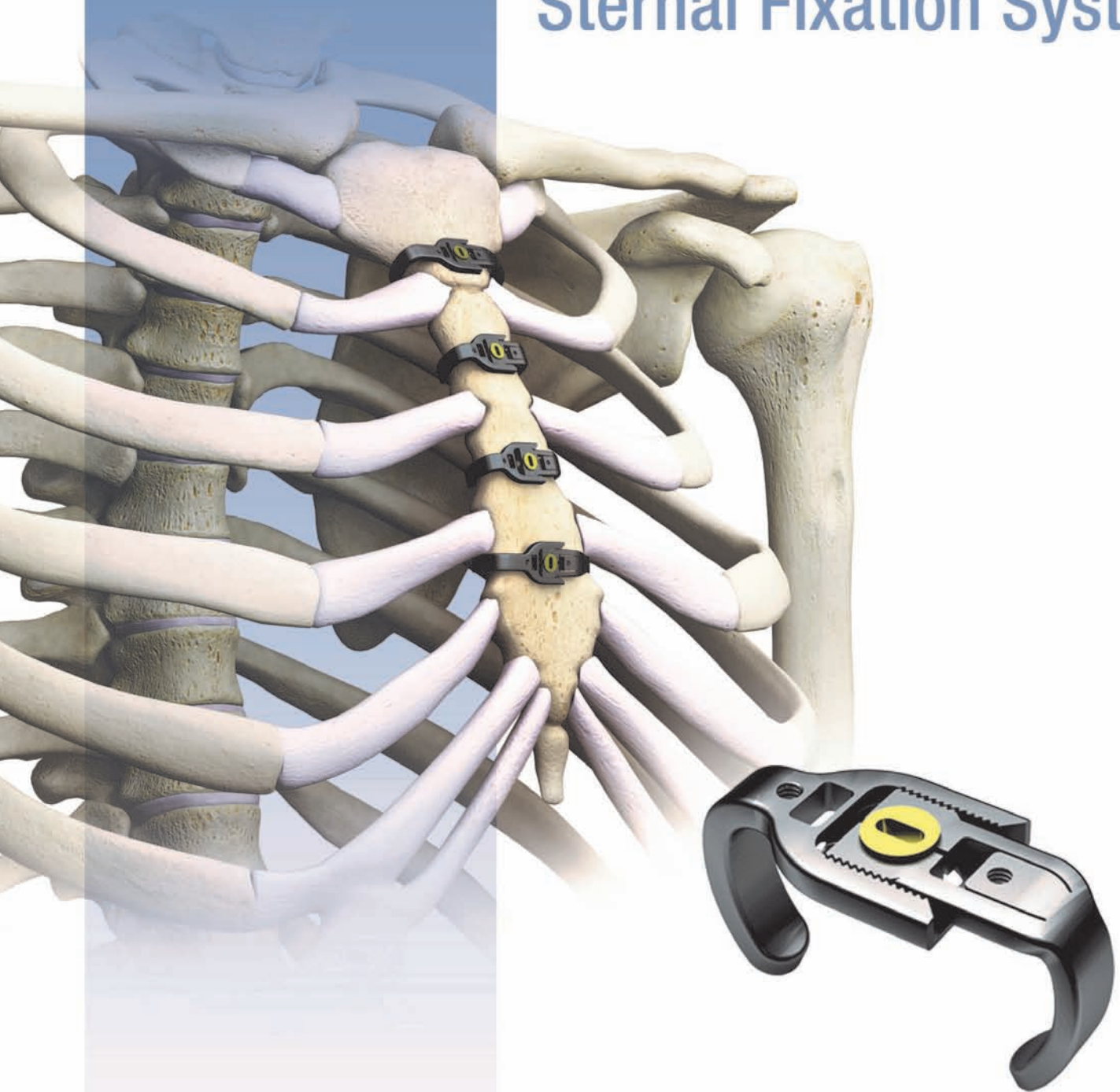


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Sternal Fixation System



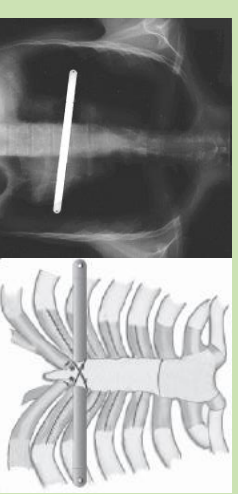
- A convenient and stable solution for sternal closure,
- Various types provided

Highly engaged in the whole field of chest wall deformities:

Pectus Carinatum: FME Dynamic Compression System



Pectus excavatum Bars



The Eckart Klobe Vacuum Bell

Physiotherapeutic Approach

Case 5471, male



Before treatment

14 years of age
1.77 m, 67 kg
2.3 cm deep

after 11 months

15 years of age
1.79 m, 69 kg
1.0 cm deep

The Vacuum Bell did overcome the resistance of the pectus excavatum.

However, the posture was supported by individual muscle strength.

Conclusion:

Physical exercise is just as important as the application of the Vacuum Bell.

The Eckart Klobe Vacuum Bell

against Pectus Excavatum



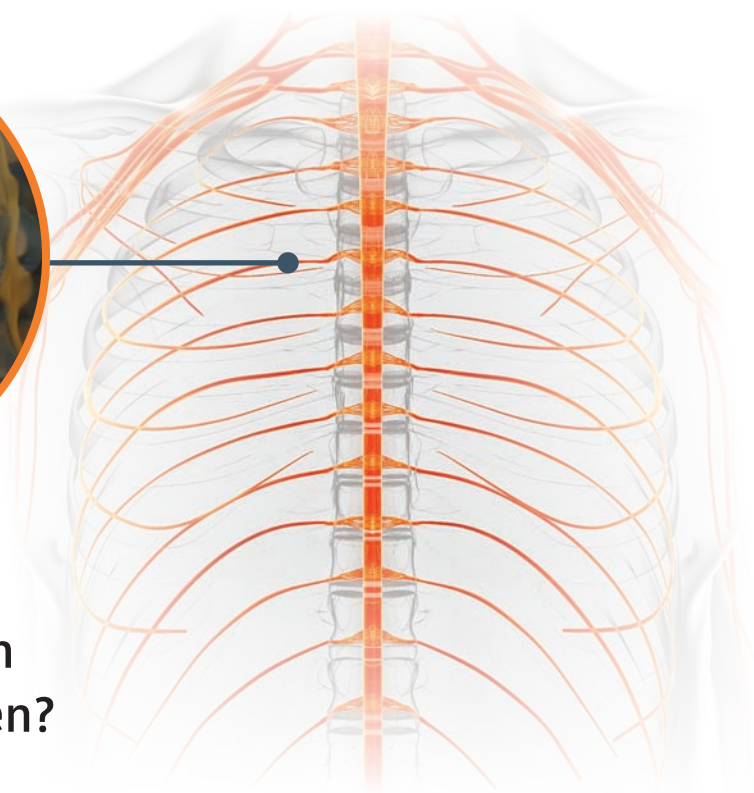
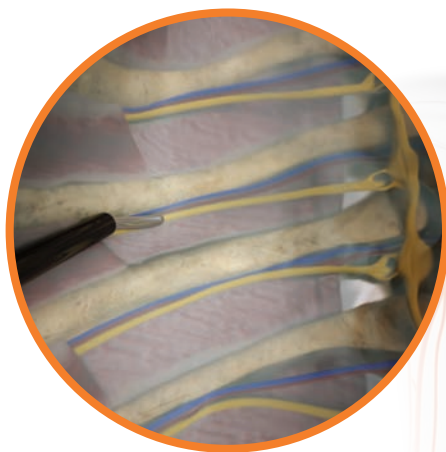
The alternative to surgery

- It is non-surgical
- It is non-invasive
- It is applicable up to medium adult age
- It works similar to braces for teeth

Eckart Klobe
M 7, 9a-10
68161 Mannheim
Germany

Tel. + 49 621 13528
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Indication for Use:

US Only: AtriCure's cryoICE cryoablation probes are sterile, single use devices intended for use in the cryosurgical treatment of cardiac arrhythmias by freezing target tissues, creating an inflammatory response (cryonecrosis) that blocks the electrical conduction pathway. AtriCure's cryoICE CRYO2 cryoablation probe is indicated for use in blocking pain by temporarily ablating peripheral nerves.

Europe: AtriCure's cryoICE cryoablation probe is indicated for use in the cryosurgical treatment of cardiac arrhythmias. The PROBE freezes target tissues, creating an inflammatory response (cryonecrosis) that blocks the electrical conduction pathway.

Non-European International: AtriCure's cryoICE cryoFORM cryoablation probes when used with the AtriCure cryoICE BOX Cryosurgical Module (ACM) are indicated for cryosurgical treatment of cardiac arrhythmias.

MKT-2495A-G

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Half-Century for Future*



2018 대한흉부심장혈관외과학회 제32차 춘계통합학술대회

• Program

2018년 대한흉부심장혈관외과학회 제32차 춘계통합학술대회 및 연수교육

2018. 06.14 (목)

	Grand Ballroom 1	Grand Ballroom 2	Grand Ballroom 3	미팅룸 A	Sapphire Ballroom
11:30~12:00	의료정책 방향에 대한 특강 (가칭) 정통령 과장 (보건복지부 건강보험 정책국 보험급여과)				CWIG 2018 (제19차 세계흉벽학회 학술대회)
12:00~13:00	Luncheon seminar 1 〈장소: Grand Ballroom 1〉 〈메드트로닉 코리아(유)〉 좌장: 나국주 (전남대학교병원) The Safe VATS procedure with new technology 이진구 (연세대학교 세브란스병원)				
13:00~15:00	대한흉부종양외과학회 학술대회	ECMO연구회 학술대회	로봇수술연구회 학술대회	하지정맥류연구회 학술대회	
15:00~15:30	Coffee Break				
15:30~18:00	대한흉부종양외과학회 학술대회	ECMO연구회 학술대회	로봇수술연구회 학술대회	하지정맥류연구회 학술대회	

2018. 06. 15 (금)

	Grand Ballroom 1	Grand Ballroom 2	Grand Ballroom 3	미팅룸 A	미팅룸 C	Sapphire Ballroom
08:30~10:00	Postgraduate course I. 〈체외순환교육〉	중환자의학연구회 학술대회	대한중재혈관외과학회 학술대회	지도전문의 연수교육		
10:00~10:30	Coffee Break					
10:30~12:00	Postgraduate course I. 〈체외순환교육〉	중환자의학연구회 학술대회	대한중재혈관외과학회 학술대회	지도전문의 연수교육		
12:00~13:00	Luncheon seminar 2 〈장소: Grand Ballroom 2〉 〈한국존슨앤드존슨메디칼(주)〉 좌장: 오태윤 (성균관대학교 강북삼성병원) Air Leaks in a Physiologic Lung Model Masahiro Tsuboi, MD, PhD National Cancer Center Hospital East, Japan					CWIG 2018 (제19차 세계흉벽학회 학술대회)
13:00~14:30	Postgraduate course II. 〈PA교육〉	초음파연수강좌 학술대회	보험세션	중증외상연구회 학술대회		
14:30~15:00	Coffee Break					
15:00~18:00	Postgraduate course II. 〈PA교육〉	초음파연수강좌 학술대회	CPB hands-on	중증외상연구회 학술대회	학술위원회 워크샵	

• Program

2018. 6. 14 (목)



프로그램



강의자료

2018년 대한흉부종양외과학회 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 1

11:00~	등록	장소: Grand Ballroom 로비
11:30~12:00	의료정책 방향에 대한 특강 (가칭)	정통령 과장 (보건복지부 건강보험정책국 보험급여과)
12:00~13:00	Luncheon seminar 1 〈메드트로닉 코리아(유)〉 좌장: 나국주 (전남대학교병원) The Safe VATS Procedure with New Technology 이진구 (연세대학교 세브란스병원)	
13:00~13:10	Welcome Remarks	회장: 나국주 (대한흉부종양외과학회)
13:10~15:00	Session 1. Recent achievement of thoracic surgical oncology in Korea 1	좌장: 김영대 (부산대학교병원) 백희중 (원자력병원)
13:10~13:40	Validation of new T Stages in Ground Glass Nodule (Ann Thoracic Surgery 2017)	분당서울대학교병원 조석기
13:40~14:10	Surgical Management of GGO : Resection Margin & Lymph node Dissection (World Journal of Surgery 2018)	가톨릭대학교 서울성모병원 문영규
14:10~14:40	Extended Sleeve Lobectomy	삼성서울병원 조종호
14:40~15:10	Surgical Outcomes after Pulmonary Resection for Non-Small Cell Lung Cancer with Localized Pleural Seeding First Detected during Surgery (Thorac Cardiovasc Surg 2018)	서울아산병원 김형렬
15:10~15:30	Coffee Break	
15:30~17:30	Session 2. Recent achievement of thoracic surgical oncology in Korea 2	좌장: 이종목 (국립암센터) 금동윤 (계명대학교 동산병원)
15:30~16:00	Midterm Outcomes of Single port Thoracoscopic Surgery for Major Pulmonary Resection	고려대학교 구로병원 김현구
16:00~16:30	Thymic Nodules Detected in Screening chest CT scan (J Thorac Oncol 2018)	서울대학교병원 영상의학과 윤순호
16:30~17:00	Comparison of Perioperative Outcomes Following Hybrid Minimally Invasive Versus open Ivor Lewis Esophagectomy for Esophageal Cancer	화순전남대학교병원 윤주식
17:00~17:30	Long-term Survival of Robot Esophagectomy (Ann Thorac Surg 2017)	연세대학교 세브란스병원 김대준
19:00~22:00	Gala Night	



프로그램



강의자료

2018년 춘계 ECMO 연구회 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 2

11:00~	등록	장소: Grand Ballroom 로비
11:30~12:00	특강	장소: Grand Ballroom 1
	의료정책 방향에 대한 특강 (가칭)	정통령 과장 (보건복지부 건강보험정책국 보험급여과)
12:00~13:00	Luncheon seminar 1 (Grand Ballroom 1) 〈메드트로닉 코리아(유)〉 좌장: 나국주 (전남대학교병원) The Safe VATS Procedure with New Technology 이진구 (연세대학교 세브란스병원)	
13:30~15:10	Session I. The Newest but oldest issues	좌장: 성기익 (성균관대 삼성서울병원)
13:30~14:00	연명의료결정법과 ECMO	삼성서울병원 최재혁 변호사
14:00~14:20	ECPR for Out-of-Hospital Cardiac Arrest – not Anymore?	인제대학교 상계백병원 정의석
14:20~14:40	ECMO for Refractory Septic Shock – not Anymore?	전남대학교병원 정인석
14:40~15:00	Central ECMO – When and How?	고려대학교 안암병원 임주영
15:00~15:10	Discussion	
15:10~15:30	Coffee Break	
15:40~17:10	Session II. Troubleshooting and Weaning	좌장: 김형수 (한림대학교 평촌성심병원)
15:40~16:00	Troubleshooting and Weaning Hematologic Complications of ECMO	부산대학교병원 송승환
16:00~16:20	Vascular Complications of ECMO Cannulation sites	중앙대학교병원 홍준화
16:20~16:40	Unsatisfactory flow	분당서울대학교병원 김준성
16:40~17:00	Weaning from the ECMO – When and How?	분당서울대학교병원 장형우
17:00~17:10	Discussion	

• Program

2018. 6. 14 (목)



프로그램



강의자료

2018년 로봇수술연구회 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 3

12:30~13:00	등록	장소: Grand Ballroom 로비
11:30~12:00	특강	장소: Grand Ballroom 1
	의료정책 방향에 대한 특강 (가칭)	정통령 과장 (보건복지부 건강보험정책국 보험급여과)
12:00~13:00	Luncheon seminar 1 (Grand Ballroom 1) 〈메드트로닉 코리아(유)〉 좌장: 나국주 (전남대학교병원) The Safe VATS Procedure with New Technology 이진구 (연세대학교 세브란스병원)	
	로봇수술연구회 학술대회	Moderator: 이재원 (서울아산병원)
	Presentation: 정성호 (서울아산병원), 주민호 (양산부산대학교병원)	
	Pannel: 김지훈 (한림대학교 강남성심병원), 김재현 (계명대학교 동산병원), 김호진 (서울아산병원), 정동섭 (삼성서울병원), 주민호 (양산부산대학교병원), 제형근 (양산부산대학교병원), 황호영 (서울대학교병원)	
13:00~16:00	Project: I can perform the mitral valve repair using da Vinci system	
	1) Pre-operative Evaluation: Indication or Relative Contraindications	
	2) Anesthesia	
	3) Position of Patients	
	4) Port Placement	
	5) Cardiopulmonary bypass	
	6) Myocardial Protection: Cardioplegic solution, Delivery Method	
	7) Aorta Clamping	
	8) LA tomy and Atrial Retractor Application	
	9) Mitral Valve leaflet Procedure	
	10) Ring annuloplasty: Rigid ring, Flexible ring / Interrupted Suture and Continuous	
	11) Bleeding control: Root Cannula Management	
16:00~16:30	Coffee Break	
16:30~17:00	Concomitant Maze procedure using da Vinci system	양산부산대학교병원 주민호
	Totally Endoscopic Mitral Valve Surgery using 3D Videoscope	세종병원 유재석
17:00~17:30	Why does Robotic Approach Dominate Urologic Cancer Surgeries?	분당서울대학교병원 비뇨의학과 변석수



프로그램



강의자료

2018년 하지정맥류연구회 학술대회

장소: 파라다이스시티호텔 미팅룸 A

12:30~13:00	등록	장소: Grand Ballroom 로비
11:30~12:00	특강	장소: Grand Ballroom 1
의료정책 방향에 대한 특강(가칭)		정통령 과장 (보건복지부 건강보험 정책국 보험급여과)
12:00~13:00	Luncheon seminar 1 (Grand Ballroom 1) 〈메드트로닉 코리아(유)〉 좌장: 나국주 (전남대학교병원) The Safe VATS Procedure with New Technology 이진구 (연세대학교 세브란스병원)	
하지정맥류연구회 학술대회		사회: 김성철 (안양평촌 삼성홍부외과)
12:50~13:00	인사말	회장: 홍기표 (국민건강보험 일산병원)
13:00~14:00	Session 1. How to start Varicose Vein Treatment	좌장: 이성호 (고려대학교 안암병원)
13:00~13:20	Modified Crossectomy and Stripping of Saphenous Vein	국민건강보험 일산병원 홍기표
13:20~13:40	How to Start Endothermal Ablation	안양평촌 삼성홍부외과 김성철
13:40~14:00	Sclerotherapy (Foam, Liquid & UGFS)	부산 수홍부외과 김병균
14:00~15:00	Session 2. Emerging new Techniques of Varicose vein Management (Non-thermal, Non-tumescent Management)	좌장: 홍기표 (국민건강보험 일산병원)
14:00~14:30	VenaSeal(cyanoacrylate) Treatment	국립중앙의료원 김우식
14:30~15:00	A new Non-tumescent Endovenous Ablation Method for Varicose Vein Tx.: ClariVein™	부산 수홍부외과 김병균
15:00~15:30	Coffee Break	
15:30~16:30	Session 3. Venous ulcer Management	좌장: 김해균 (연세홍부외과)
15:30~16:00	Surgical Treatment of Venous Ulcer	순천향대병원 장원호
16:00~16:30	Conservative Treatment of Venous Ulceration	국민건강보험 일산병원 김도균
16:30~17:30	Session 4. Hands-on Course of Duplex Sonography Moderators: 홍기표 (국민건강보험 일산병원), 김우식 (국립중앙의료원), 정재호 (고대 안암병원)	

• Program

2018. 6. 15 (금)



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강의자료

제7차 Postgraduate Course I

장소: 파라다이스시티호텔 Grand Ballroom 1

08:30~09:00	등록	장소: Grand Ballroom 로비
09:00~12:00	Postgraduate Course I	좌장: 조양현 (삼성서울병원)
09:00~09:30	Hardware of CPB	삼성서울병원 조양현
09:30~10:00	Pathophysiology of CPB	연세대학교 심장혈관병원 이승현
10:00~10:30	Priming and Preparation of CPB	동국대학교 일산병원 이재항
10:30~11:00	Coffee Break	
11:00~11:30	Management and Monitoring During CPB	보라매병원 오세진
11:30~12:00	Separation from CPB	부산대학교병원 송승환
12:00~13:00	점심식사	
<p>Luncheon seminar 2 (Grand Ballroom 2)</p> <p>〈한국존슨앤드존슨메디칼(주)〉</p> <p>좌장: 오테윤 (성균관대학교 강북삼성병원)</p> <p>Air Leaks in a Physiologic Lung Model</p> <p>Masahiro Tsuboi, MD, PhD</p> <p>National Cancer Center Hospital East, Japan</p>		

CPB Hands-on

장소: 파라다이스시티호텔 Grand Ballroom 3

15:00~18:00	CPB Hands-on	좌장: 조양현 (삼성서울병원) 최은석 (서울아산병원)
1)	CPB related Aortic Arch Dissection Surgery (include Simulation)	시연: 강남 세브란스병원 박윤지
<p>Panel: 함소영 (아주대학교병원), 주광로 (전남대학교병원), 최성욱 (부산대학교병원), 임한중 (경상대학교창원병원), 박해웅 (부산해운대백병원), 최미선 (강릉아산병원), 이진권 (부천세종병원), 이상문 (계명대학교병원)</p>		
2)	CPB related Thoracic aorta aneurysms Surgery(include Simulation)	시연: 삼성서울병원 박정길
<p>Panel: 함소영 (아주대학교병원), 주광로 (전남대학교병원), 최성욱 (부산대학교병원), 임한중 (경상대학교창원병원), 박해웅 (부산해운대백병원), 이진권 (부천세종병원)</p>		



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강의자료

제7차 Postgraduate Course II

장소: 파라다이스시티호텔 Grand Ballroom 1

13:00~18:00	Postgraduate Course II	좌장: 이길수 (제주한라병원)
13:00~13:30	순환기 해부학과과 생리학	울산대학교 서울아산병원 김호진
13:30~14:00	호흡기계의 해부와 생리	신촌세브란스병원 박성용
14:00~14:30	Basic Bedside Procedures	서울대학교병원 최재웅
14:30~15:00	Coffee Break	
15:00~15:30	수술실 및 병실에서 접하는 Monitoring 및 수술 기구의 이해	고려대학교 안산병원 황진욱
15:30~16:00	흉부외과 영역 주요 약물	제주한라병원 이길수
16:00~16:15	Q&A	
16:15~16:45	Coffee Break	
16:45~17:15	창상, Drain, Vascular Line의 관리	분당서울대학교병원 전재현
17:15~17:45	Postoperative Complication After Cardiac Surgery	성균관대학교 삼성서울병원 정수련
17:45~18:00	Q&A	

• Program

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강의자료

중환자의학연구회 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 2

08:00~08:30	등록	장소: Grand Ballroom 로비
08:30~10:00	ICU Rehabilitation	좌장: 임상현 (아주대학교병원)
08:30~09:00	Post-Intensive Care Syndrome	계명대학교 동산의료원 김재범
09:00~09:30	ICU Acquired Weakness	연세대신촌세브란스병원 마취통증의학과 나성원
09:30~10:00	Early Rehabilitation in the ICU	전남대학교병원 김도완
10:00~10:30	Coffee Break	
10:30~12:00	Nutrition & Glucose Management in ICU	좌장: 박철현 (가천대 길병원)
10:30~11:00	Nutritional Support in Critical care	분당서울대학교병원 김동중
11:00~11:30	Role of Micronutrients	고려대학교 안암병원 임주영
11:30~12:00	Glucose Management in ICU	영남대학교의료원 백종현
12:00~13:00	점심	장소: Grand Ballroom 2
Luncheon seminar 2 <한국존슨앤드존슨메디칼(주)> 좌장: 오태윤 (성균관대학교 강북삼성병원) Air Leaks in a Physiologic Lung Model Masahiro Tsuboi, MD, PhD National Cancer Center Hospital East, Japan		(Grand Ballroom 2)

Air Leaks in a Physiologic Lung Model

*Masahiro Tsuboi, MD, PhD¹, Chad E. Eckert, PhD², Jason L. Harris, PhD³,
Jordon Wong, BS³, Suzanne Thompson, DVM², Edmund S. Kassis, MD⁴, Seth Force, MD⁵*

Division of Thoracic Surgery and Oncology in National Cancer Center Hospital East¹,
Preclinical Center of Excellence², Research and Development³, and Medical Affairs in Ethicon⁴,
Division of Cardiothoracic Surgery, Department of Surgery in Emory University Hospital⁵

Prolonged air leaks (PALs) is a common complication following pulmonary resections and other thoracic surgeries and have been associated with an increased risk of patient morbidity and mortality, length of stay, and healthcare costs. Most PALs develop immediately after surgery or within the first post-operative day, with reported incidence rates from 15-58%. A clear understanding of the pathophysiology of PALs is further hindered by the very low rate of reoperations to treat PALs since the standard of care for PAL treatment is waiting for leaks to naturally resolve. With an emphasis on staple-line specific leaks, we hypothesize that ventilation modality – positive versus negative pressure – and stapler design may play a role in PALs.

Here, the results of a basic research work using experimental model, which was developed by Ethicon will be presented. A novel physiologically-based ex vivo lung model capable of simulating various ventilation modalities was utilized to study air leaks. Because the model enables the observation, collection, and quantification of air leaks, it provides the capability to study isolated factors such as tissue thickness and stapler type under ventilation mechanics similar to those experienced intra and post-operatively by the patient. Specifically, this work explores the impact of positive and negative pressure ventilation modalities on air leaks associated with graduated (GRD) and uniform (UNI) staple configurations in excised porcine lungs.

In all cases, negative pressure ventilation was associated with a higher occurrence of leaks when compared to positive pressure ventilation. Lungs leaked more air and at a faster rate under negative pressure ventilation when compared to positive pressure ventilation. GRD staple designs were associated with higher occurrence of leaks as well as larger leak rates when compared to UNI staples. Tissue thickness was not directly associated with differences in air leak performance when tested with appropriate staple heights.

This physiologic lung model has enabled the isolation of staple line specific leaks for the purpose of investigating the pathophysiology of PALs related to the staple line. The model has identified breathing modality and staple design as two important variables to consider. Future study is warranted in human tissue with disease to confirm findings, help inform clinical practice, and to better inform the design of future staplers.

• Program

2018. 6. 15 (금)



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강의자료

2018년 초음파연수강좌 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 2

13:00~14:30	초음파 이론 강의	좌장: 정진용 (가톨릭의대 인천성모병원)
13:00~13:30	Basic Transthoracic Echocardiography (TTE)	전남대학교병원 김도완
13:30~14:00	Perioperative Transesophageal Echocardiography (TEE)	분당서울대학교병원 김동중
14:00~14:30	What we Should Inspect on Duplex Ultrasonography	국민건강보험 일산병원 홍기표
14:30~15:00	Coffee Break	
15:00~18:00	Hands-on (조별 실습, 2~4인 1조)	
	Class I: 경흉부 심초음파 (TTE)	강사: 김도완 (전남대학교병원) 김재범 (계명대학교병원) 김태식 (한림병원)
	Class II: 경식도 심초음파 (TEE)	강사: 김동중 (분당서울대학교병원) 장형우 (분당서울대학교병원)
	Class III: 혈관 초음파 (Vascular SONO)	강사: 홍기표 (국민건강보험 일산병원) 김우식 (국립중앙의료원)



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강의자료

대한중재혈관외과학회 학술대회

장소: 파라다이스시티호텔 Grand Ballroom 3

08:30~09:00	등록	장소: Grand Ballroom 로비
09:00~10:00	Session I. Case-based Learning	좌장: 정성운, 임태근
	Case 1 정의석	
	Case 2 이재항	
	Case 3 Clinical Experiences as a Full-Time Vascular Surgeon	인천한림병원 김태식
	Case 4 허균	
10:00~10:30	Coffee Break	
10:30~11:50	Session II. 전문가의 경험	좌장: 신재승, 오상기
10:30~11:00	인조혈관의 종류 및 선택	부산대학교병원 이충원
11:00~11:20	Recent Trend of Management of Venous Thromboembolism	메디플렉스 세종병원 공준혁
11:20~11:35	Anticoagulation in DVT	국립의료원 신용철
11:35~11:50	PAOD Intervention 후 약물유지 요법에 대해서	청주성모병원 심장내과 박재홍
11:50~12:00	총 회	
12:00~13:00	점 심	
<p>Luncheon seminar 2 (Grand Ballroom 2)</p> <p>〈한국존슨앤드존슨메디칼(주)〉</p> <p>좌장: 오테윤 (성균관대학교 강북삼성병원)</p> <p>Air Leaks in a Physiologic Lung Model</p> <p>Masahiro Tsuboi, MD, PhD</p> <p>National Cancer Center Hospital East, Japan</p>		

• Program

2018. 6. 15 (금)

2018년 보험세션 특강

장소: 파라다이스시티호텔 Grand Ballroom 3

13:00~14:30	보험세션	좌장: 강경훈, 문석환
13:00~13:15	흉벽 및 외상	황정주 위원
13:15~13:30	성인심장 및 중환자	정재승 위원
13:30~13:45	소아시장	곽재건 위원
13:45~14:00	일반흉부	이해원 위원
14:00~14:30	패널토의	



프로그램



강의자료

제8차 흉부외과 지도전문의 교육

장소: 파라다이스시티호텔 미팅룸 A

08:00~08:40	등록	장소: Grand Ballroom 로비
08:40~09:20	전공의 연차별 수련목표 및 내용	부산대학교병원 김영대
09:20~10:00	전공의 수련 프로그램의 효과적인 평가방법	분당서울대학교병원 조석기
10:00~10:30	Coffee Break	
10:30~11:10	전문의 자격시험 취득 요건	가천대학교 길병원 최창휴
11:10~12:00	논문 리뷰어 입장에서 논문지도	(주)컴팩스 Compecs 황윤희
12:00~13:00	점심	
<p>Luncheon seminar 2 (Grand Ballroom 2)</p> <p>〈한국존슨앤드존슨메디칼(주)〉</p> <p>좌장: 오탈윤 (성균관대학교 강북삼성병원)</p> <p>Air Leaks in a Physiologic Lung Model</p> <p>Masahiro Tsuboi, MD, PhD</p> <p>National Cancer Center Hospital East, Japan</p>		



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강의자료

2018년 중증외상연구회 학술대회

장소: 파라다이스시티호텔 미팅룸 A

12:30~12:55	등록	장소: Grand Ballroom 로비
12:55~13:00	인사말	가천대학교 길병원 전양빈
13:00~14:30	Chest wall Stabilization	좌장: 이석기 (조선대학교병원)
13:00~13:30	Surgical Rib Fixation	제주한라병원 전순호
13:30~14:00	Indication of Surgery (Anatomy vs. function)	부산대학교병원 조현민
14:00~14:30	Innovation of Instruments	아산 총무병원 황정주
14:30~15:00	Coffee Break	
15:00~16:00	Training for Trauma care	좌장: 전양빈 (가천대학교길병원)
15:00~15:30	한국형 외상센터의 새지평	가천대학교 길병원 주 석
15:30~16:00	REBOA (Resuscitative Endovascular Balloon Occlusion of the Aorta)	단국대학교병원 장성욱

• Meeting Information

Registration Desk

There are two registration desks for this Congress.

- 1) CWIG2018's registration desk is located in front of the **Sapphire Room**.
- 2) KTCVS's registration desk is located in front of the **Grand Ballroom 2**.

Operating Hours: June 14 (Thu) ~ 15 (Fri) 07:30~17:00

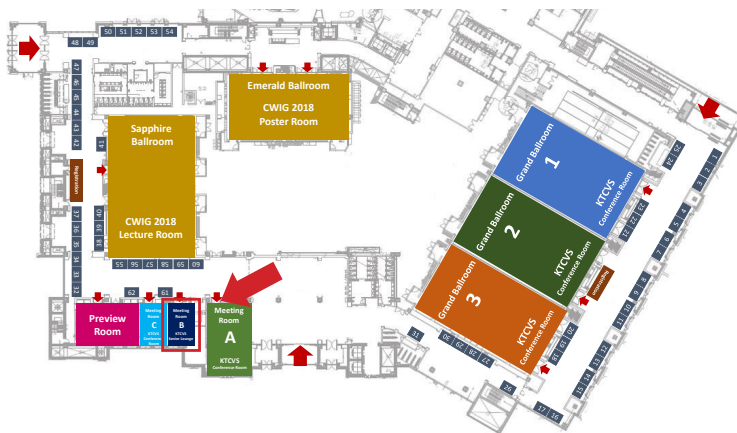
Preview Room



The preview room is placed at the **Meeting Room E**.

Operating Hours: June 14 (Thu) ~ 15 (Fri) 07:30~17:00

Senior Lounge

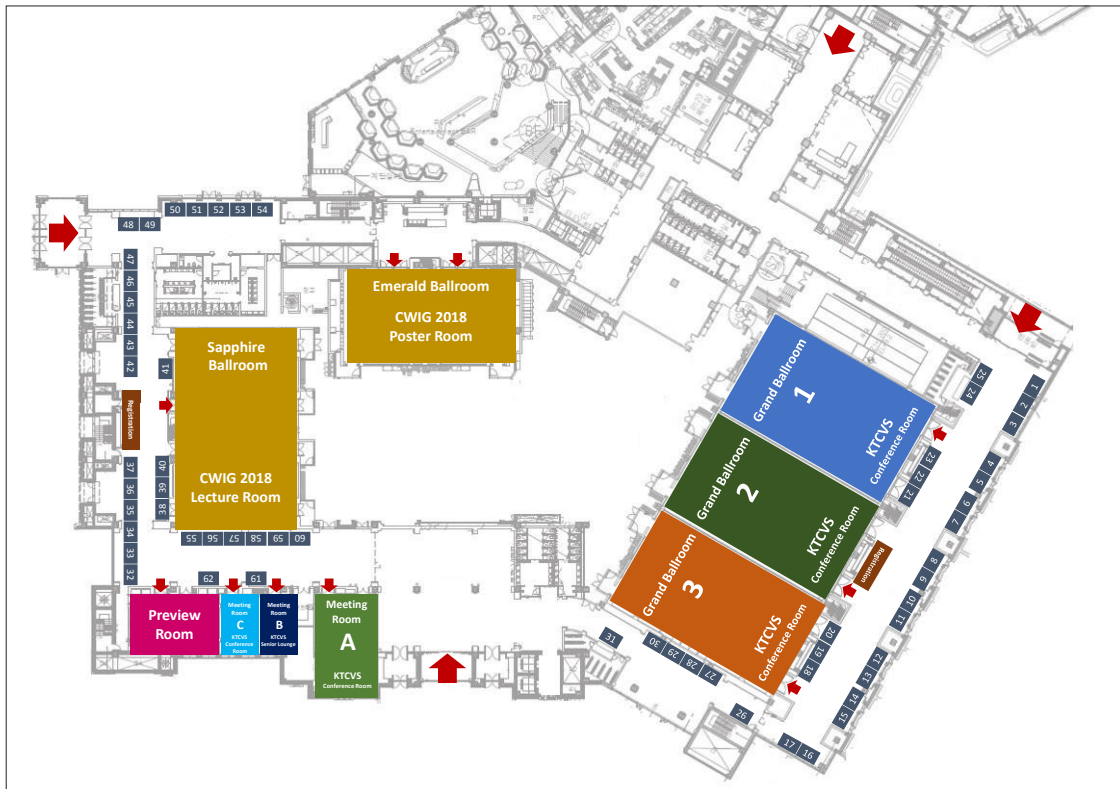


A lounge for senior members is available.

Place: **Meeting Room B**

Operating Hours: June 14 (Thu) ~ 15 (Fri) 07:30~17:00

• Sponsorship



부스위치	업체명	부스위치	업체명
38	AtriCure	2	(주)씨에이치케이
39	CHANGZHOU WASTON MEDICAL APPLIANCE CO., LTD	18~20	에드워즈라이프사이언스코리아
40	Zimmer Biomet	62	에이스코리아
41	Eckart Klobe Vacuum Bells	16~17	(주)유한양행
1	GC녹십자	57~58	올림푸스한국(주)
61	GE Healthcare	32	(주)유파인메드 (kcpmed)
46	나우메드 유한회사	13	인튜이티브서지컬코리아 유한회사
31	남북써지칼(주)	7	일동제약(주)
34	다림바이오텍	3	(주)제일메디칼코퍼레이션
52	(주)대웅제약	30	주식회사 루엔메디
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