

Avison Biomedical Symposium 2016

“Artificial Intelligence in Medicine(AIM) : Imaging, Informatics and Robotics”

May 27- May 28, 2016

Yonsei University College of Medicine, Seoul, Korea

Main Symposium

Day 1: Friday, May 27, 2016

Location: Grandballroom, Baekyangro, Yonsei University, Seoul, Korea

Opening

09:00-09:05	Opening Remarks	Byung Seok Lee (Dean, Yonsei Univ. College of Medicine, Korea)
09:05-09:10	Welcome Address	Namsik Chung (President and CEO, Yonsei Univ. Health System, Korea)
09:10-09:15	Congratulatory Address	Seokyoung Jang (Director General, Office of Internet Convergence Policy, Korea)

Plenary Lecture 1

09:15-09:45	IBM Watson Health: Advancing Innovation Through Insights	Julie Bowser (IBM Watson, USA)
09:45-10:15	TBD	Byoung-Tak Zhang (Seoul National Univ. College of Engineering, Korea)
10:15-10:30	Q & A	
10:30-11:00	Coffee Break	

Session I - A : Development of Surgical Robotic System

11:00-11:30	Democratizing Surgery	Pablo Garcia Kilroy (Verb Surgical Inc., USA)
11:30-12:00	TBD	Mohan Nathan (Transenterix Inc., USA)
12:00-12:15	Communication between Developer and Surgeon: learning a foreign language	Byung Soh Min (Yonsei Univ. College of Medicine, Korea)
12:15-12:30	Q & A	
12:30-13:30	Lunch	

Session I - B : Machine Learning for Data Processing

11:00-11:30	Will machine learning replace physician interpretation in cardiac imaging?	Piotr Slomka (Cedars-Sinai Medical Center, USA)
11:30-12:00	Deep Learning for Medical Image Analysis	Junmo Kim (KAIST, Korea)
12:00-12:15	Machine Learning for Understanding Brain Images	Heung-Il Suk (Dept. of Brain and Cognitive Engineering, Korea Univ., Korea)
12:15-12:30	Machine Learning for Predicting Degenerative brain disease development	Changsoo Kim (Yonsei Univ. College of Medicine, Korea)
12:30-13:30	Q & A	

Plenary Lecture 2

13:40-14:00	Inventing the Future: Image-Guided Surgery	Jacques Marescaux (IRCAD France, France)
14:00-14:15	Past, Present and Future of Robotic Surgery : Yonsei Perspective 2016	Koon Ho Rha (Yonsei Univ. College of Medicine, Korea)
14:15-14:30	Q & A	
14:30-15:00	Coffee Break	

Session II - A : Future Imaging Technology

15:00-15:30	Future Imaging Technology in Surgical Robotics	Catherine Mohr (Intuitive Surgical Inc., USA)
15:30-15:50	New Trends in Diagnostic and Interventional Imaging	Huseyin Tek (Siemens Healthcare, USA)
15:50-16:10	Minimally invasive Image Guided Surgery: Today and Tomorrow	Joseph Kletzel (Novadaq, USA)
16:10-16:30	Future Technology of Olympus Imaging System	Yukinori Tomimuro (Olympus, Japan)
16:30-16:45	Q & A	
16:45-17:00	Closing Remarks	

Session II - B : AI for Clinical Decision Support

15:00-15:30	Computational intelligence in diagnosis of cancer in medical images	Kenji Suzuki (Illinois Institute of Technology, USA)
15:30-15:50	Deep Learning for Biomedical Informatics	Sungroh Yoon (Seoul National Univ. college of Engineering, Korea)
15:50-16:10	Smart CDSS and Authoring Tool	Sungyoung Lee (Kyung Hee Univ. College of Electronics and information, Korea)
16:10-16:30	The end of Eminence based Medicine - From Doctor to 'I'	Kwang-Joon Kim (Yonsei Univ. College of Medicine, Korea)
16:30-16:45	Q & A	
16:45-17:00	Closing Remarks	Sue Goo Rhee (Honorary director, Avison Biomedical Research Center, Korea)

Satellite Symposium “Meet the professors”

Day 2: Saturday, May 28, 2016

Location: Helinox hall, Baekyangro, Yonsei University, Seoul, Korea

09:00-09:40	Clinical Needs about Artificial Intelligent based Image Processing	Reza Arsanjani (Cedars-Sinai Medical Center, USA)
09:40-10:20	Computer-Aided Detection and Diagnosis with Image-based Neural Networks	Kenji Suzuki (Illinois Institute of Technology, USA)
10:20-11:00	Coffee Break	
11:00-11:40	Development of automated myocardial perfusion quantification and multimodality image registration	Piotr Slomka (Cedars-Sinai Medical Center, USA)
11:40-12:20	Cardiovascular Image Analysis	Dongjin Han (Yonsei Univ. College of Medicine, Korea)
12:20-13:20	Lunch	
13:20-14:00	IBM Watson	Julie Bowser (IBM Watson, USA)
14:00-14:40	Segmentation with learning method	Huseyin Tek (Siemens Healthcare, USA)
14:40-15:20	Introduction of Novel S/W for CAD evaluation	Damini Dey (Cedars-Sinai Medical Center, USA)
15:20-15:35	Closing Remarks	

O.R. Avison, 1860 - 1956

The fourth Chejung-won superintendent
The founder of the Severance union medical college



YONSEI UNIVERSITY COLLEGE OF MEDICINE
BRAIN KOREA 21 PLUS PROJECT FOR MEDICAL SCIENCE