SPECIAL SESSION
참가안내서

Saturday, November 24, 2018
Room 324, EXCO
Republic of Korea

▣ 아태안티에이징코스 Special Session

행 사 명	아태안티에이징코스 특별세션
주 제	4차 산업혁명과 의료혁신
일 시	2018년 11월 24일(토) 13:00 ~ 18:00
장 소	엑스코 324호
참가대상	지역 의과대학생, 지역 관련 공대생, 국내 거주 해외 교환 학생 등 관심자
제공사항	무료등록 및 런치쿠폰&커피브레이크 제공 *3층 등록데스크 수령*
공식언어	영어 (중국어 동시통역 제공)

▣ 프로그램 및 연사 소개

Special Session

SPEAKERS | 5 eminent professors

T O P I C | Congenital vascular anomaly, computational mechanics for medical devices, 3D printing technology and anti-aging and AI & AR/VR

PROGRAM | 5 sessions of hi-tech and new trend medical technologies related to "The 4th Industrial Revolution & Anti-aging Innovation"

DAY 1 Lecture

Time	
13:00-13:50	**Current Updates of Congenital Vascular Anomaly** Ho-Yun Chung (Associate Professor, Department of Plastic Surgery, Kyungpook National University Hospital)
14:00-14:50	**Computational Mechanics for Medical Devices** Gunwoo Noh (Assistant Professor, Kyungpook National University School of Mechanical Engineering)
15:00-15:50	**Anti-Aging and AR/VR** Jae-Sung Hong (Professor, Department of Robotics Engineering, Daegu Gyeongbuk Institute of Science and Technology)
16:00-16:50	**Anti-Aging and Big Data(AI)** Il Hyung Park (Professor, Department of Orthopedic Surgery, Kyungpook National University Hospital)
17:00-17:50	**Medical Application of 3D Printing Technology** Dong Hyun Yang (Assistant Professor, Department of Radiology, Asan Medical Center, Seoul)

● Lecture Program

Jong Min Lee
Chair of APAAC Special Session
Director, Department of Radiology, Kyungpook National University Hospital

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Current Updates of Congenital Vascular Anomaly

Ho-Yun Chung
Associate Professor, Department of Plastic Surgery, Kyungpook National University Hospital

There are some cases when the vascular lesions are found on the skin and soft tissues during antiaging treatment. A number of challenges might occur during treatment if these are overlooked. This lecture will provide an overview of the concept of this disease to help the antiaging treatment.

Computational Mechanics for Medical Devices

Gunwoo Noh
Assistant Professor, Kyungpook National University School of Mechanical Engineering

Analysis and optimal design of various medical devices using computational mechanics will be addressed. There will be a brief introduction of current computational mechanics applied to the medical field, with a number of instances including microsurgical robots, dental implants, osteosynthesis plates, sleep apnea-improving devices, etc. This lecture aims to have the audience consider using the computational mechanics in their fields.

Anti-Aging and AR/VR

Jae-Sung Hong
Professor, Department of Robotics Engineering, Daegu Gyeongbuk Institute of Science and Technology

Recently, the usage of AR/VR technologies, engineering for accurate and safe dental implant procedure and double-jaw surgery, was developed. This lecture will introduce principles of the state-of-art surgical navigation technology and explain its effective application in the clinical practice. The lecture will also consider the usefulness of surgical navigation using AR/VR and challenges to be solved in the future. Instances of usage in neurosurgery, otorhinolaryngology and orthopedics will also be introduced.

Anti-Aging and Big Data (AI)

Il Hyung Park
Professor, Department of Orthopedic Surgery, Kyungpook National University Hospital

Artificial intelligence in medicine is not a future story, but a progressive form of development and must go forward. Big Data means refined structured data that is completely different from all other data. Machine learning, which means learning by using a machine, has developed many methods, but in particular, the deep-learning method is most commonly used. If the computer is deep-learning, it keeps the wisdom it has learned and uses it for the next search. In artificial intelligence, the fact that the human brain remembers data from experience or learning in the form of know-how is called hidden file, and the more data it hides, the smarter it becomes.

Medical Application of 3D Printing Technology

Dong Hyun Yang
Associate Professor, Department of Radiology, Asan Medical Center, Seoul

Current status of the newly developed 3D printing and its medical applications will be introduced. In particular, the usage of 3D printing in surgery simulation and treatment decision will be presented, focusing on actual cases conducted at ASAN Medical Center.

[등 록 신 청 서]

◼ 하단의 등록신청서를 작성하여 **11월 13일(화) 까지** 하단의 준비사무국 이메일로 보내주시기
바랍니다.

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