

Kim, Kyung Hwan

M.D., Ph.D.



Professor

Thoracic and Cardiovascular Surgery

Seoul National University College of Medicine,

Seoul National University Hospital

Seoul, Korea

#11102, Biomedical Research Building, Biomedical Research Institute,
Seoul National University Hospital,

101 Daehak-ro, Jongro-gu, Seoul, South Korea, 03080

Office) 82-2-2072-3971, 82-2-2072-2347

Fax. 82-2-765-7117

Mobile: 82-10-8711-9327

E-mail: kkh726@snu.ac.kr ; kkh726@gmail.com

Education

1998.03 - 2000.02	Department of Thoracic and Cardiovascular Surgery College of Medicine Seoul National University Thesis: The changes of cerebral metabolic, hemodynamic parameters, brain histology and serum levels of neuron-specific enolase during retrograde cerebral perfusion under profound hypothermic total circulatory arrest in pigs	Ph.D
----------------------	--	------

1993.03 - 1997.02	Department of Thoracic and Cardiovascular Surgery College of Medicine Seoul National University Thesis: The morphological changes of cryopreserved rat trachea after heterotopic transplantation	M.S
1984.03 - 1990.02	College of Medicine Seoul National University	M.D

Current and Past Positions

2022. 01 – 2023. 12	The Korean Society for Thoracic and Cardiovascular Surgery	CEO
2023. 03 – 2025.03.	Institute for Convergence Medicine with Innovative Technology (ICMIT), Seoul National University Hospital	President
2011. 3. -	Thoracic and Cardiovascular Surgery, Seoul National University College of Medicine, Seoul National University Hospital	Professor
1998. 05 – 2011. 02	Thoracic and Cardiovascular Surgery, Seoul National University College of Medicine, Seoul National University Hospital	Instructor, Assistant Professor, Associate Professor
2017. 02 - 2020. 05	Office for Hospital Information, Seoul National University Hospital	CIO
2020. 07 – 2024. 07	Department of Thoracic and Cardiovascular Surgery College of Medicine, Seoul National University	Chairman
2017. 05 -	Edwards Intuity Elite (Next Generation Heart Valve Operation) – Worldwide biggest experience (INNOVA- ELITE operaton)	Proctor, 1st in Korea
2002. 07 - 2003. 12	Department of Thoracic and Cardiovascular Surgery Cleveland Clinic Foundation, Cleveland, OH, USA (PI: Lars Svensson, MD, PhD)	Clinical Research Fellow
2019. 03 -	Heart Valve Disease Forum(HVDF)	President
2024.01 -	The Korean Society for Patient Blood Management	President

Awards		
2000	YK Lee Academic Award, The Korean Society for Thoracic and Cardiovascular Surgery	
2021	Contribution Award, Ministry of Health and Welfare, Korea	
2023	Contribution Award, Ministry of Health and Welfare, Korea	
2021	Presidential Award for Rural Talent Sharing in Korea (Healthcare Medical Service for Residents for medically under-served areas)	

Society Membership

Jan 2021: National Academy of Medicine of Korea (NAMOKL)

Mar 1995: Korean Society for Thoracic and Cardiovascular Surgery (KSTCVS)

Mar 2000: Asian Society for Cardiovascular Surgery (ASCVS -> ASCVTS)

June 2004: International Society for Minimally Invasive Cardiac Surgery (ISMICS)

Jan 2004: Society for Thoracic Surgeons (STS)

Sep 2013: European Association of Cardiothoracic Surgery (EACTS)

May 2024: The International Academy of Health Sciences Informatics (IAHSI)

2024: The Society for the Advancement of Patient Blood Management (SABM)

2024: Network for the Advancement of Patient Blood Management, Haemostasis and Thrombosis (NATA)

Jan 2025: American Association for Thoracic Surgery (AATS)

Fields of Expertise

PBM lover

Adult Cardiovascular Surgery

Innovative heart valve surgery

MV repair

Complex heart valve surgery

Aortic surgery with brain and CNS protection

Surgery for HCMP

Pulmonary thromboendarterectomy

Surgery for Malignant Cardiac Tumor

Hospital Information System, Healthcare IT
Precision Medicine, Next Generation EMR, PHR
CDW (clinical data warehouse), CDM(clinical data model), SNOMED CT
Smart and Decentralized Clinical Trial Research

Fund Raising for Hospital and University

Wine Expertise: WSET L3(Wine and Spirits Education Trust Level 3 advanced), IWS (Italian Wine Scholar), FWS (French Wine Scholar), SWS (Spanish Wine Scholar), CAPSTONE Intermediate Level Certified (California Wine), Portugal Wine Intermediate Level Certified

Society Contribution

Mar 2019 -: President, Heart Valve Disease Forum
Oct 2018 – 2019: Vice President, The Korean Society of Medical Informatics (KOSMI)
Mar 2008 – Nov 2009: Deputy Secretary General, 19th Biennial Congress of the Association of Thoracic and Cardiovascular Surgeons of Asia (ATCSA)
Mar 1999 - Present: member, Medical Board Examination Committee, The Korean Society for Thoracic and Cardiovascular Surgery (KSTCVS)
Mar 1999 – Oct 2009: member, Homepage and National Database Committee, The Korean Society for Thoracic and Cardiovascular Surgery (KSTCVS)
Oct 2009 – Oct 2011: Secretary General, The Korean Society for Thoracic and Cardiovascular Surgery (KSTCVS)
Mar 2015-Present: member, academic Program Committee, The Korean Society for Cardiology
April 2006 – 2011: Reviewer, European Journal of Cardiothoracic Surgery
Mar 2013 –: Reviewer, The Korean Journal of Thoracic and Cardiovascular Surgery (Journal of Chest Surgery)
Mar 2014 –: Reviewer, Korean Circulation Journal
Mar 2014 –: Reviewer, Korean Journal of Critical Care Medicine
2022- : Editor (Surgical Field), International Journal of Cardiology

Academic Interest Area

Heart valve surgery: valve reconstruction, valve replacement, complex valve surgery, aortic root surgery, redo valve surgery, sutureless valve, rapid deployment valve

Aorta surgery: arch replacement using brain perfusion, thoracoabdominal aorta replacement using spinal protection, ascending aorta replacement under unilateral brain perfusion, hybrid

aorta surgery

Minimally invasive cardiac surgery, robotic surgery: adult congenital heart disease, mitral valve repair

Extensive myectomy for IHSS, Pulmonary thromboendarterectomy for CTEPH

Coronary artery bypass surgery

Adult congenital heart disease

Patient Blood Management

Precision Medicine and Genomics in Cardiovascular Disease

Cardiac anatomy VR (virtual reality) modeling for cardiologist, anesthesiologist, pathologist and surgeons with students

Healthcare IT, AI, Bigdata, Cloud, IoT device, Convergence Medicine, SNOMED CT, HL7 FHIR, CDM, CDW

Research grants received within the past five years

Topic	Period	Grant(USD)	Funding by
Next-generation smart clinical trial technology innovation center	2019.05 ~ 2022.03	1,395,236	Ministry of Health and Welfare, South Korea
Development of Patient Blood Management Guidelines and Hospital Information System	2020.5~ 2022.12	72,176	Korea Disease Control and Prevention Agency, South Korea
Clinical Outcomes and cost-effectiveness of transcatheter aortic valve replacement in patients with severe aortic stenosis	2021.9.1.~ 2023.5.31.	72,176	PACEN(Patient-Centered Clinical Research Coordinating Center), South Korea
Development of the nationwide decentralized clinical trial technologies including remote monitoring platform	2023.8 - 2027	324,792	Ministry of Health and Welfare, South Korea
Development of a set of standard healthcare medical terms based on clinical field demand: The Korean Society for Thoracic and Cardiovascular Surgery	2023.8 – 2023. 12	28,870	Korea Health Information Service, South Korea

Kyung Hwan Kim is Chairman and has worked as a staff Cardiac surgeon as a professor in the Department of Thoracic and Cardiovascular surgery, Seoul National University Hospital (SNUH), Seoul, Korea, since 1998. He is one of the top-class cardiac surgeons in Korea leading innovative heart valve surgery and complex aorta surgery. Until June 2024, he performed around 5000 cases of major cardiovascular surgery. He has served as CEO of the Korean Society for Thoracic and Cardiovascular Surgery, and currently is President of Heart Valve Disease Forum and official Proctor of Edwards INTUITY Elite Rapid Deployment Valve which is related to innovative heart valve surgery. He is also President of the Korean Society for Patient Blood Management (KPBM). He is expertise in innovative heart valve replacement, mitral valve repair, complex valve surgery and major aortovascular surgery. He is member of the Society of Thoracic Surgeons (STS), European Association of Cardiothoracic Surgery, and Asian Society for Cardiovascular and Thoracic Surgery.

He has steadily thought connection between clinical practice and healthcare medical data. That's why he is deeply involved in the medical IT field. He is distinguished IT leader in Korea and has dedicated as CIO and IT team leader in SNUH for around 20 years since the year 2004 when the full Hospital Information System (HIS) system had launched in SNUH. He served as Vice President of The Korean Society of Medical Informatics (KOSMI) and currently, he is chairman of the medical CIO forum and board member for international cooperation. Medical CIO forum is assembly of tertiary hospital CIOs in Korea. He contributed to the first implementation of the Precision Medicine Platform (Syapse) in Korea for advanced stage cancer patients. He is CEO elect of the Korean Society of Medical Informatics (KOSMI) from Jan 2025. In the HIMSS 2024 Orlando Meeting, he is one of speakers in Education Session. The topic is The Impact of Convergence Medicine on Healthcare and Medical Technology.

He was the principal investigator of next-generation smart clinical trial technology innovation center funded by the Korean Ministry of Health and Welfare for 3 years from 2019. Recently, he published one meaningful paper in the Journal of Medical Internet Research; Information Technology-Based Management of Clinically Healthy COVID-19 Patients-Lessons From a Usability Study at a Living and Treatment Support Center Operated by a National Hospital in Korea. As President in the Korean Society for Patient Blood Management (KPBM), he is making nationwide platform for adequate transfusion, blood conservation and patient safety via FHIR and SNOMED CT. He is preparing many big data platform projects which can make roles for contributing standardized healthcare data-based patient health.

He served as a head of Institute of Convergence Medicine with Innovative Technology (ICMIT) in Seoul National University Hospital pioneering cutting edge, high end future medicine in South Korea. Recently he has started working as principal investigator of nationwide big project, 'Development of the Nationwide Decentralized Clinical Trial Technologies including Remote Monitoring Platform' in South Korea (DECENT)'. As a cardiac surgeon, and as a healthcare IT specialist, he is continuously performing best clinical practices with medical IT toward futuristic medicine.