

Molecular Imaging New Drug development center



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Research Area

- Medical AI, brain imaging, nuclear medicine, PET/CT, dementia PET imaging
- Basic research for brain disease using animal models

Projects

	Title	Funding
2017.04.~2021.03.	Project for enhancement of basic research capacity for MD	National Research Foundation
2017.06.~2020.05.	Project of individual basic research	National Research Foundation
2020.09.~2021.02.	Project of data construction for artificial intelligence development	National Research Foundation
2020.09.~ing	Project of mid-career researcher	National Research Foundation
2020.09.~ing	BK21 (Brain Korea) 4 project: in the Department of AI Convergence of CNU graduate school	National Research Foundation
2023.07.~ing	AI convergence training center: in the Department of AI Convergence of CNU graduate school	National Research Foundation
2024.07.~ing	ICT research center: in the Department of AI Convergence of CNU graduate school	National Research Foundation

MIND - Equipment



MIND Center



Hot Lab

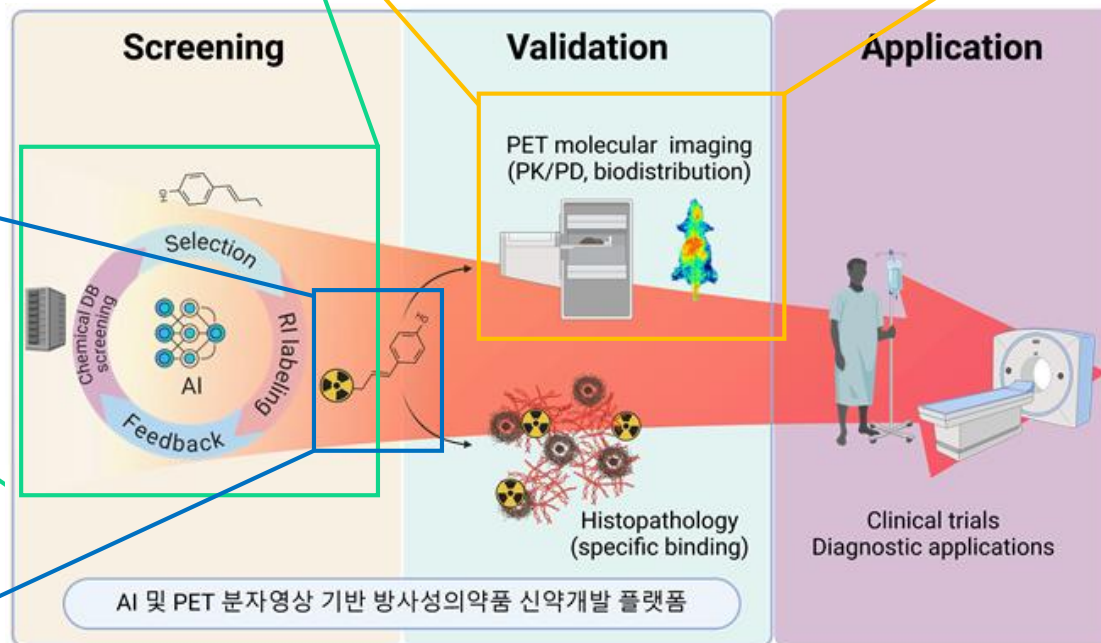
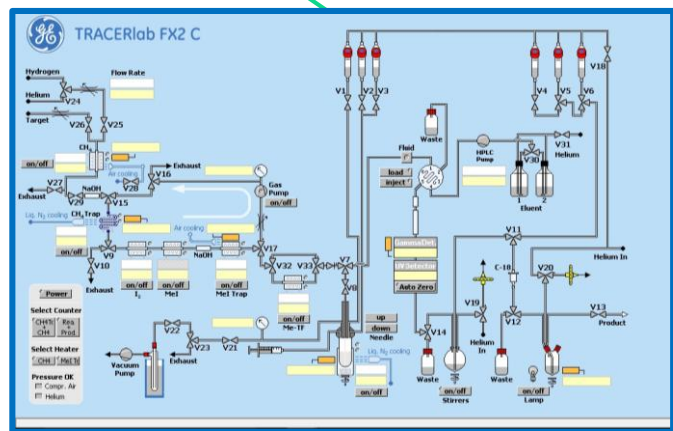
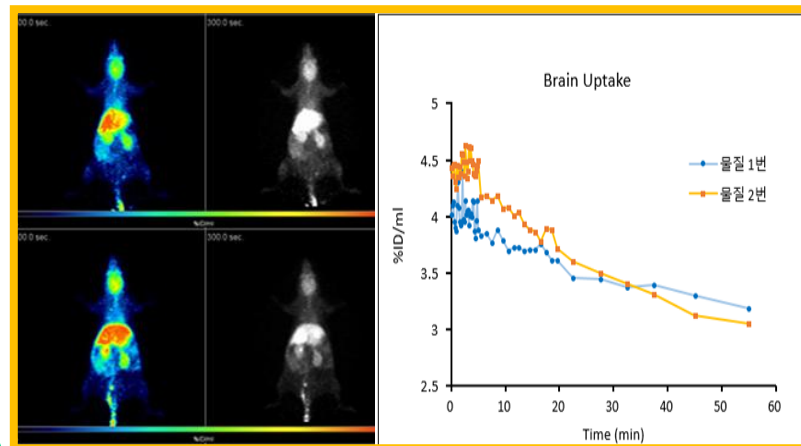
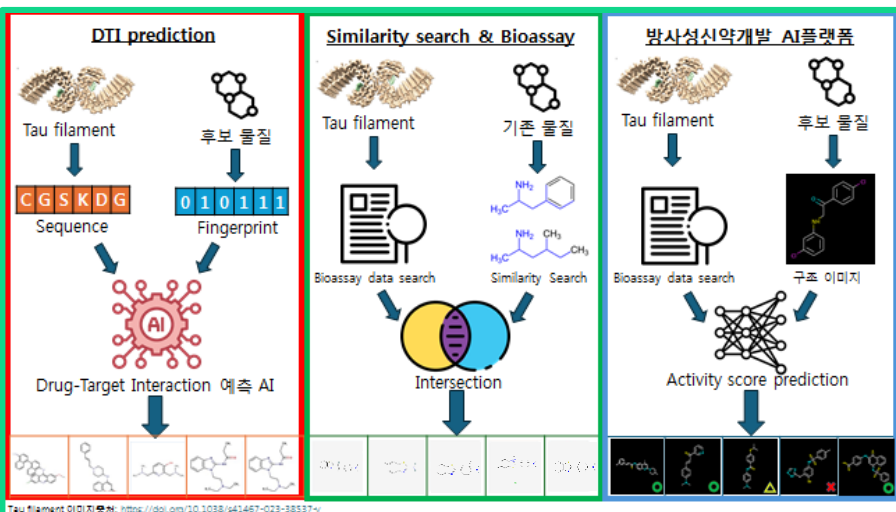


Cyclotron



Animal PET/CT

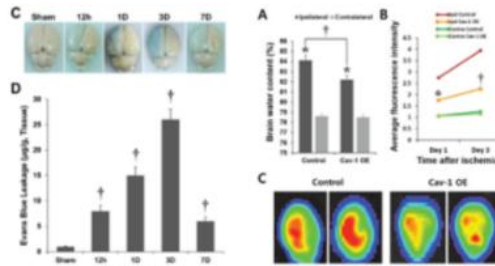
MIND – Research Area



MIND – Research Area

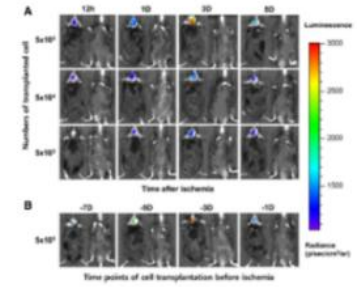
초창기:
형광영상을
활용한 연구

Oncotarget 2016

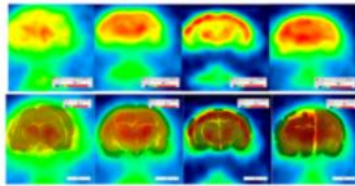


초창기:
생체발광영상을
활용한 연구

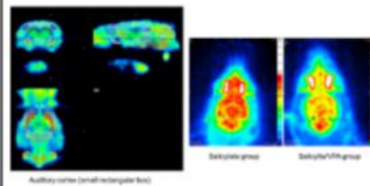
Stroke 2016



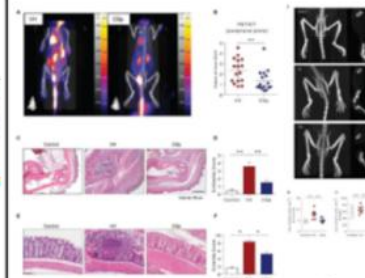
중반기:
PET/CT를
활용한 연구



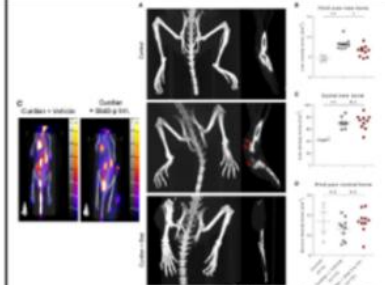
Brain Sci 2021



Int J Mol Sci 2021

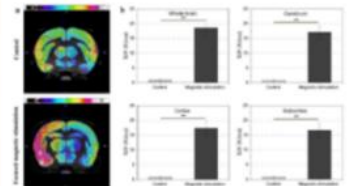


Front Rheumatol 2021

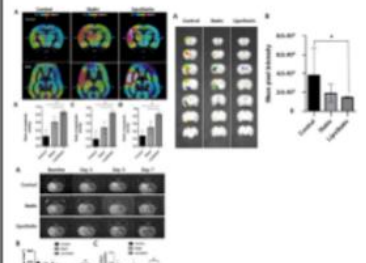


Rheumatol 2021

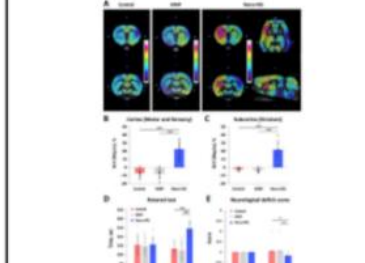
최근:
PET/형광/MR를
다양하게 활용하여
치료효과를
평가한 연구들



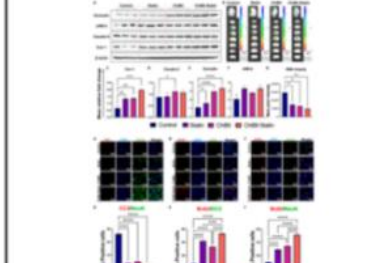
Sci Rep 2023



Transl Stroke Res 2023



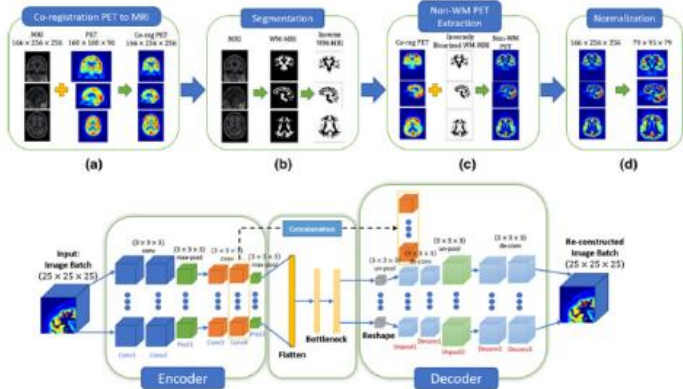
Brain Stimulation 2024



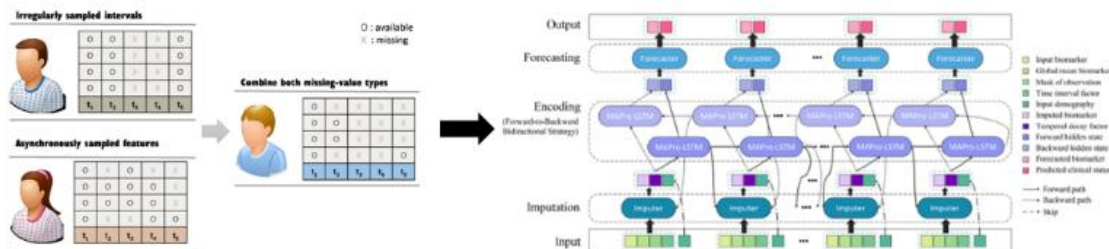
Biomaterials Res 2024

MIND – Research Area

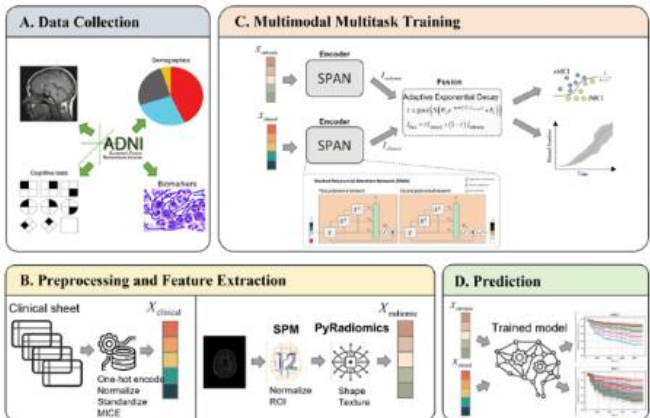
Soft computing 2018



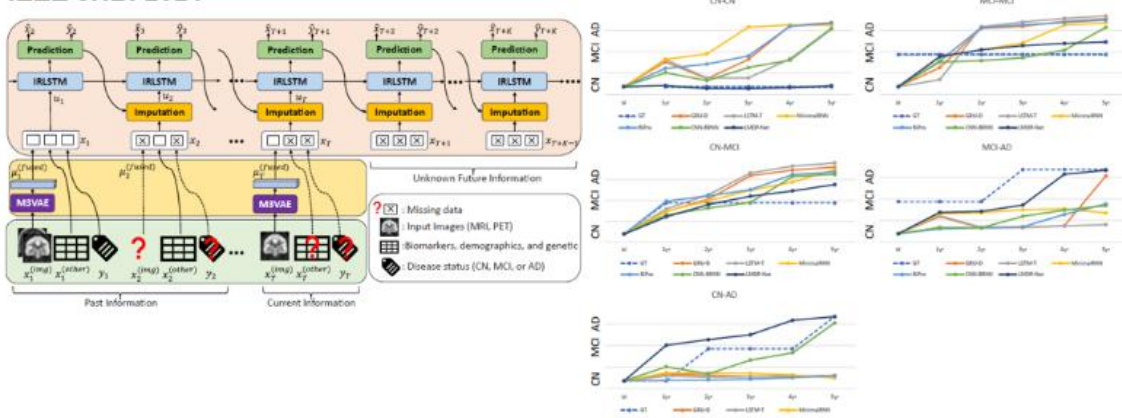
Neural Networks 2022



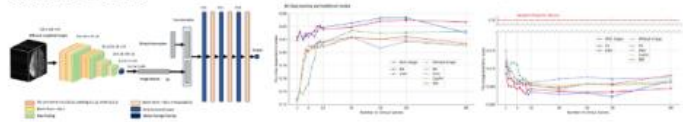
Sci Rep 2023



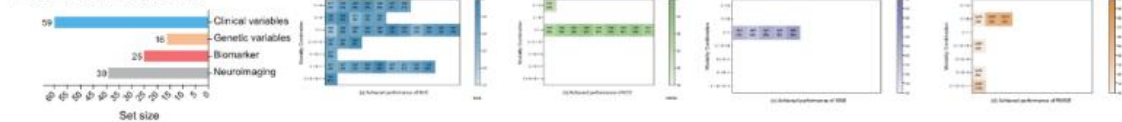
IEEE JHBI 2024



JNNP 2023



IEEE JHBI 2024



MIND – Symposium

2019 MIND

Molecular Imaging and New drug Development center

분자영상신약개발센터 개소식 및 기념 심포지엄

12.
23. 월

전남대학교
의과대학
덕재홀

08:40	09:00	등록	사회: 김순실(전남대학교병원)
09:00	09:20	분자영상신약개발센터 경과보고 및 GMP-certified cyclotron 소개	송호천(전남대학교병원)
09:20	09:30	분자영상신약개발센터 개소식 축하	이승용(전남대학교병원장)
09:30	10:00	분자영상신약개발센터 커킹식 및 투어	
10:00	10:20	Coffee Break	사회: 김지혜(전남대학교병원)
10:20	10:25	개회사	송호천(전남대학교병원)
10:25	10:30	심포지엄 축하	김병채(전남대학교병원 의생명연구소장)
Session 1. Radiopharmaceuticals for Molecular Imaging			
10:30	11:00	Molecular imaging in cyclotron facility	이재성(서울대학교병원)
11:00	11:30	Drug developments for molecular imaging	오승준(서울아산병원)
11:30	12:00	패널토의	김경민(전남대학교병원), 김동연(화순전남대학교병원), 박정환(한국원자력연구원), 강세영(화순전남대학교병원)
12:00	13:00	Lunch	사회: 조상건(전남대학교병원)
Session 2. Preclinical Research in Molecular Imaging			
13:00	13:30	New medical RI and its labeling techniques for molecular imaging	최정민(한국원자력연구원)
13:30	14:00	Cardiovascular research in porcine model	김민기(전남대학교병원)
14:00	14:15	패널토의	김민철(전남대학교병원), 김원우(전남대학교병원), 이신영(전남대학교병원), 유수용(화순전남대학교병원)
14:15	14:30	Coffee Break and Photo	
Session 3. Basic and Clinical Research in Molecular Imaging			
14:30	15:00	Molecular thyroid imaging	안병철(경북대학교병원)
15:00	15:30	Molecular cardiovascular imaging	공은정(영남대학교병원)
15:30	16:00	Molecular brain imaging	오민영(서울아산병원)
16:00	16:15	패널토의	유영재(화순전남대학교병원), 정인식(전남대학교병원), 최성민(전남대학교병원), 정아리(조선대학교병원)
16:15	16:30	Coffee Break	
Session 4. Experience of PET/CT in Clinical Research			
16:30	16:45	Experience of PET/CT in oncology	권성영(화순전남대학교병원)
16:45	17:00	Experience of PET/CT in neurology	김지혜(전남대학교병원)
17:00	17:15	Experience of PET/CT in cardiology	조상건(전남대학교병원)
17:15	17:30	패널토의	조은(전남대학교병원), 김원우(전남대학교병원), 황의정(화순전남대학교병원), 김호신(전남대학교병원)
17:30	18:00	폐회사	송호천(전남대학교병원)
18:00		Dinner	

2021 MIND

분자영상 신약개발 센터

Molecular
Imaging
New Drug
Development Center

심포지엄

S Y M P O S I U M

New Horizon of
nuclear imaging and
theranostics

PROGRAM

08:30-08:50	등록	사회: 김지혜(전남대학교병원)
08:50-08:55	개회사	송호천(전남대학교병원)
08:55-09:00	심포지엄 축하	안영근(전남대학교병원장)
	Plenary Lecture	좌장: 송호천(전남대학교병원)
09:00-09:40	Nuclear imaging and theranostics 성공을 위한 노력	오승준(서울아산병원)
09:40-10:00	온라인 질의 및 패널토의	김정민(전남대학교병원), 김병채(전남대학교병원)
	Session 1	좌장: 김병채(전남대학교병원)
10:00-10:20	Clinical Implication & Future perspective of Neurology	김도영(동아대학교병원)
10:20-10:40	F-18 Florbetaben	오민영(서울아산병원)
10:40-11:00	F-18 FP-CIT	최성민(전남대학교병원), 송민근(전남대학교병원)
	Session 2	좌장: 정병호(전남대학교병원)
11:00-11:20	Clinical Implication & Future perspective of Cardiology	이주영(삼성서울병원)
11:20-11:40	N-13 Ammonia	조상건(전남대학교병원)
11:40-12:00	C-11 Acetate	방진철(서울대학교병원)
12:00-12:20	F-18 NaF	심두성(전남대학교병원), 이승현(전남대학교병원)
	Session 3	좌장: 김택민(전남대학교병원)
12:20-12:30	Clinical Implication & Future perspective of Prostate cancer	윤미진(세브란스병원)
12:30-13:30	Photo and Lunch	김건욱(서울대학교병원)
13:30-13:50	Ga-68 PSMA	유성현(전남대학교병원), 김지혜(전남대학교병원)
13:50-14:10	Lu-177 PSMA	좌장: 김현수(전남대학교병원)
14:10-14:30	Clinical Implication & Future perspective of Neuroendocrine tumor	변병환(한국원자력의학원)
14:30-14:50	Ga-68 DOTATATE	오도연(서울대학교병원)
14:50-15:10	Lu-177 DOTATATE	김호준(전남대학교병원), 박선영(전남대학교병원)
15:10-15:30	Clinical Implication & Future perspective of HCC	좌장: 박정환(전남대학교병원)
15:30-16:00	온라인 질의 및 패널토의	최준영(삼성서울병원)
16:00-16:20	Updates in PET/CT for HCC	송효성(연세대학교병원)
16:20-16:40	Y-90 TARE	윤재현(전남대학교병원), 김희선(전남대학교병원)
16:40-17:00	Clinical Implication & Future perspective of parathyroid disease	좌장: 정동진(전남대학교병원)
17:00-17:20	온라인 질의 및 패널토의	조영석(삼성서울병원)
17:20-17:40	F-18 Fluorocholine	박기성(전남대학교병원)
17:40-18:00	C-11 methionine	김빛나(전남대학교병원), 조동혁(전남대학교병원)
18:00-18:10	폐회사	송호천(전남대학교병원)

일시
2021년 11월 29일 (월)

장소
전남대학교병원
5동 1층 대강당
On-Line (Zoom meeting)

MIND – Symposium

2022 분자영상 신약개발 센터 Molecular Imaging New Drug Development Center 심포지엄 SYMPOSIUM

일시 2022. 11. 14 (일)

장소 · 전남대학교 의학박물관 문석홀 · 온라인

주관 : 전남대학교병원 핵의학과
후원 : 전남대학교병원 의생명연구원



Drug Discovery and Development

8:30-8:45 등록	사회: 김지혜 전남대학교병원
8:45-8:55 개회사	송호천 전남대학교병원
8:55-9:00 심포지엄 축하	안영근 전남대학교병원장

Session1 Synthetic Biology in Drug Discovery

9:00-9:30 What is Synthetic Biology?	최석용 전남대학교
9:30-10:00 Synthetic Biology for the Development of Living Medicines	이태희 한국생명공학연구원
10:00-10:20 온라인 질의 및 패널토의	김근호 충남대병원 한원희 전북대병원 조상건 전남대병원

Session2 Current Status and Prospects of AI-based Drug Discovery

10:30-10:50 AI 신약개발 최신 동향	김우연 KAIST
10:50-11:10 인공지능 활용 신약개발: 신규표적 및 신규물질 발굴 사례 중심으로	송상욱 스태디움
11:10-11:30 전사체학 데이터 기반의 AI 신약개발의 실제 사례	김지훈 은코크로스
11:30-11:50 온라인 질의 및 패널토의	김철환 송북대병원 서영덕 호남대병원 박기성 전남대병원
11:50-13:30 Photo and Lunch	사회: 조상건 전남대학교병원

Session3 Applications of Click Chemistry in Drug Discovery

13:30-14:00 Click Chemistry for Drug Development	이선우 전남대학교
14:00-14:30 Click Bioorthogonal F-18 Labeling Chemistry for PET Molecular Imaging	김동욱 연희대학교
14:30-14:50 온라인 질의 및 패널토의	김강빈 전남대병원 표이영 경성대학교 김지혜 전남대병원
14:50-15:00 Coffee and Break	

Session4 The Role of Molecular Imaging in Drug Discovery

15:00-15:30 분자영상을 이용한 신약개발 가속화	박현수 서울대학교
15:30-16:00 원자력학원에서의 방사성인약품 신약개발 경험	임일만 원자력연구원
16:00-16:20 온라인 질의 및 패널토의	김재현 단국대병원 강세영 호산전남대병원 유수홍 호산전남대병원
16:20-16:30 폐회사	김지혜 전남대학교병원

2023 MIND

2023 Molecular Imaging New drug Development center Symposium

Theme The Present and Future of Nuclear Medicine Therapy

2023 분자영상신약개발센터심포지엄

핵의학 치료의 현재와 미래

🕒 2023. 11. 13(MON) 08:30~17:30

📺 On-Line(Zoom Only)



ZOOM LINK
ID 880 469 5502
PW 123456

8:30-8:45 Registration	Jahae Kim	Chonnam National University Hospital	
8:45-8:55 Opening Ceremony	Ho-Chun Song	Chonnam National University Hospital	
8:55-9:00 Congratulatory Message	Youngkeun Ahn	President & CEO, Chonnam National University Hospital	
Plenary lecture			
9:00-10:00 Immuno-PET in Ab Drug Discovery	Kyung-Han Lee	Samsung Medical Center	
10:00-10:20 On-Line Question & Panel discussion	Jahae Kim Sae-Ryung Kang	Chonnam National University Hospital Chonnam National University Hwasun Hospital	
10:20-10:30 Break			
Session 1: Novel imaging tracer			
10:30-10:50 Fibroblast Activation Protein- α (FAP): a New Theranostics Target	Sunwoo Lee	Chonnam National University	
10:50-11:10 In vivo imaging of invasive aspergillosis with 18F-fluorodeoxyisorbital positron emission tomography	Yun-Sang Lee	Seoul National University Hospital	
11:10-11:30 Novel Imaging Tracer:[18F]FSPG	Dong-Yeon Kim	Gyeongsang National University	
11:30-11:50 On-Line Question & Panel discussion	Seung Jun Oh	Ulsan National University Hospital	
11:50-14:00 Lunch	Ayoung Pyo Kangbin Kim Ji Yong Park	Gyeongsang National University Chonnam National University Hospital Seoul National University Dental Research Institute	
Special Talk : Alpha therapy			
14:00-14:30 Alpha-particle based therapies in prostate cancer and NETs	Sang-Geon Cho	Chonnam National University Hospital	
14:30-15:00 Alpha-particle approved treatments and novel therapies	Mike Sathekge	University of Pretoria & Steve Biko Academic Hospital	
15:00-15:30 Production of alpha radioisotope and MEDICIS	Andrew Scott	Olivia Newton John Cancer Research Institute, Melbourne	
15:30-15:50 On-Line Question & Panel discussion	Thierry Stora	CERN-MEDICIS, Switzerland	
15:50-16:00 Break	Seong Young Kwon Su Woong Yoo Kyungdon Choi	Chonnam National University Hwasun Hospital Chonnam National University Hwasun Hospital CM DATA	
Session 2: TARE			
16:00-16:20 The Role of TARE in Hepatocellular Carcinoma Treatment: Current Insights and Future Directions	Hwan Jeong Jeong	Jeonbuk National University Hospital	
16:20-16:40 Role of TARE in the management of hepatocellular carcinoma in a tertiary hospital in Korea	Sun gyu Lee	Incheon ST. Mary's Hospital	
16:40-17:00 Y-90 TARE: Where We Are	Dongho Hyun	Samsung Medical Center	
17:00-17:20 On-Line Question & Panel discussion	Y-90 TARE: A Nuclear Medicine Physician's Perspective on Updated Guidelines	Kisoo Park	Korea University Anam Hospital
17:20-17:30 Closing Address	Yang seok Koh Chan Park Sang-Geon Cho	Chonnam National University Hwasun Hospital Chonnam National University Hospital Chonnam National University Hospital	
17:30-17:40 Closing Address	Ho-Chun Song	Chonnam National University Hospital	

