



한국조직공학·재생의학회
Korean Tissue Engineering and Regenerative Medicine Society

www.kterms.or.kr

제24차 한국조직공학 · 재생의학회 학술대회

Innovative Regenerative Medicine for Translation to Human

2024. **05. 02** (목) 오후 2시 ~ **05. 04** (토) 오후 12시
제주, 신화월드 랜딩컨벤션센터

Sessions

바이오패브리케이션, 생체재료·의료기기·약물전달, 줄기세포·세포치료, 조직공학·재생의학, 유전자치료·면역치료, 엑소좀, 오가노이드·장기칩, 수의재생
이비인후과, 치의학, 성형외과·피부과, 정형외과, 심혈관, 신경, 산부인과
한국-대만 국제세션, 정년교수 퇴직기념, (재)범부처재생의료기술개발사업단, 대한신경과학회 공동세션, 산업체, 신진연구자, 학생발표

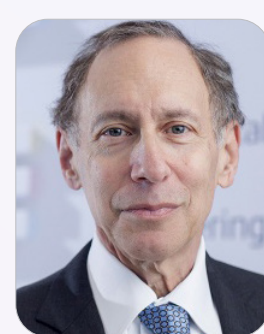
Call for Abstracts

포스터 초록 접수 마감: 2024년 4월 19일(금)
학생 구두발표 초록접수마감 : 2024년 4월 5일(금)

Registration

사전등록마감: 2024년 4월 22일(월)
연수평점: 1~10점(교육 이수시간에 따라 상이함)

Plenary Lecture



Robert S. Langer
MIT



한동근
차의과학대학교

한국조직공학·재생의학회 사무국 TEL : 070-7558-2608, FAX : 070-8258-2608, E-mail : kterms@gmail.com

제24차 한국조직공학 · 재생의학회 학술대회

Innovative Regenerative Medicine for Translation to Human

2024. **05. 02** (목) 오후 2시 ~ **05. 04** (토) 오후 12시

제주, 신화월드 랜딩컨벤션센터

Day1: 5월 2일(목)

Time	Room A	Room B	Room C
14:00-14:10	Opening Ceremony (Room B)		
14:10-15:25	S01 Biofabrication	S02 Young Investigator	S03 Student Presentation I
15:25-15:45	Coffee break		
15:45-16:25	Plenary Lecture I (Room B)		
16:25-17:40	S04 Biomaterials & Drug Delivery	S05 Industry Session	S06 Student Presentation II

Day2 : 5월 3일(금)

Time	Room A	Room B	Room C
09:00-10:15	S07 Stem Cells	S08 Otorhinolaryngology	S09 Dentistry
10:15-10:30	Coffee break		
10:30-12:10	S10 Honoring Faculty Milestones	S11 Plastic Surgery & Dermatology	S12 Korea-Taiwan International Session
12:10-12:30	KTERMS General Meeting (Room B)		
12:30-13:00	Luncheon Session (Room A)		
13:00-14:00	Poster Session		
14:00-14:40	Plenary Lecture II (Room B)		
14:40-15:55	S13 Tissue Engineering	S14 Cardiovascular Therapy	S15 Korean Fund for Regenerative Medicine
15:55-16:15	Coffee break		
16:15-17:30	S16 Gene Therapy & Immunotherapy	S17 Orthopedic Surgery	S18 Korean Fund for Regenerative Medicine

Day3 : 5월 4일(토)

Time	Room A	Room B	Room C
09:00-10:15	S19 Exosome	S20 Nerve	S21 Obstetrics & Gynecology
10:15-11:30	S22 Organoid & Organ Chip	S23 Veterinary Regenerative Medicine	S24 Korean Neurological Association Joint Session
11:30-12:00	Award Ceremony & Closing Remark (Room B)		

제24차 한국조직공학 · 재생의학회 학술대회

Innovative Regenerative Medicine for Translation to Human

2024. 05. 02 (목) 오후 2시 ~ 05. 04 (토) 오후 12시 / 제주, 신화월드 랜딩컨벤션센터

Day1: 5월 2일(목)			
Time	Room A	Room B	Room C
14:00-14:10	Opening Ceremony (Room B)		
14:10-15:25	S01. Biofabrication 오거나이저: 장진아(POSTECH) 좌장: 서영권(동국대), 장진아(POSTECH) 14:10-14:35 Polymeric Biomaterials for Next-Generation Soft Electronics 서정목(연세대) 14:35-15:00 Photo-induced Cross-linking of Unmodified Proteins for the Development of Peptide Immobilized Bioinks: Towards 3D Bioprinted Skeletal Muscle 최영진(한국재료연구원) 15:00-15:25 Multiscale Biomedical Engineering Approaches for Subfertility Treatment: Microfluidics and Tissue Regeneration 안중호(차의대)	S02. Young Investigator 오거나이저: 신진연구자위원회 좌장: 방석호(성균관대), 김한영(가톨릭대) 14:10-14:25 Bioelectrochemical Interfaces: Bridging Digital and Biological Systems 박지민(KAIST) 14:25-14:40 Ultrasound Imaging with Magnetic Nanomaterials to Detect the Change of Organoid and Tissue Stiffness 민성진(성균관대) 14:40-14:55 Radiation Energy-converting Nanoparticles for Cancer Therapy 강미경(고려대) 14:55-15:10 Tissue-like Electronic Materials for Bioelectronics 강지형(KAIST) 15:10-15:25 3D Printed Auxetic Scaffold for the Treatment of Myocardial Infarction 박현지(아주대)	S03. Student Presentation I 오거나이저: 진윤희(연세의대), 신미경(성균관대) 좌장: 신미경(성균관대), 이준민(POSTECH) 14:10-14:20 Metabolic dysfunction-associated steatohepatitis modeling with human liver microenvironment-incorporated organoids 김수결(연세대) 14:20-14:30 Interactions between the location of endothelial cells and the process of bone vascularization 강윤주(한국교통대) 14:30-14:40 Nanoparticle that inhibits immune checkpoints of both macrophages and T cells in tumor microenvironment 문상준(서울대) 14:40-14:50 Tilapia-derived collagen filler embedded with ceria nanoparticles with prolonged therapeutic effects to UV induced photoaging skin 김예은(성균관대) 14:50-15:00 Improved Neural Inductivity of Size-Controlled 3D Human Embryonic Stem Cells Using Magnetic Nanoparticles 손보람(안양대) 15:00-15:10 A Strategy to Strengthen Hydrogel Network through Sequential Crosslinking via Chain Reaction in Visible Light-Activated Photocrosslinking Systems 김민지(포항공대) 15:10-15:20 Development of Multifunctional Anti-inflammatory Wound Healing System with Optimized Mechanical Properties and ROS Scavenge Property using Dopamine-Collagen Hydrogel 권수현(한국과학기술연구원)
15:25-15:45	Coffee break		
15:45-16:25	Plenary Lecture I (Room B) 오거나이저: 조승우 학술위원장 좌장: 임균일(동국대) Functional Biomaterials for Tissue Regeneration and Biomedical Devices Speaker: 한동근(차의과대)		
16:25-17:40	S04. Biomaterials & Drug Delivery 오거나이저: 박경민(인천대) 좌장: 박귀덕(KIST), 박경민(인천대) 16:25-16:50 Adhesive Hydrogel Biointerfaces for Sutureless Bioelectronics and Peripheral Nerve Repair 신미경(성균관대) 16:50-17:15 Development of RNA-based Therapeutics/Vaccines 이규리(경상국립대) 17:15-17:40 Revitalizing Respiratory Function through Nanotherapeutics for ARDS Treatment 이원화(성균관대)	S05. Industry Session 오거나이저: 이재영(통젠) 좌장: 최병현(인하대), 이재영(통젠) 16:25-16:50 Enabling Genome Medicine with Polymeric Nanoparticle 김석중(젠에딧) 16:50-17:15 Development of Lipid Nanoparticle Formulation for Gene and Cell Therapy 이혁진(서지넥스/이화여대) 17:15-17:40 Umbilical Cord Blood-derived Stem Cell Pipelines & Platforms: Opportunities for Collaboration 이승진(메디포스트)	S06. Student Presentation II 오거나이저: 진윤희(연세의대), 신미경(성균관대) 좌장: 진윤희(연세의대), 정현도(안양대) 16:25-16:35 Unveiling the focal adhesion-lysyl oxidase axis: Exploring inhibition of chondrocyte dedifferentiation through traction force microscopy 김민규(순천향대) 16:35-16:45 Angiogenic Peptide-Loaded Nanocomposite Cryogel Matrix for Facilitating Vascularized Bone Regeneration Amirthalingam Sivashanmugam (서울대) 16:45-16:55 Biomaterial-based Differentiation of Induced Pluripotent Stem Cells into Hematopoietic Stem Cells and Endothelial Cells for Diverse Ischemic Disorders Alvin Bello (동국대) 16:55-17:05 Size-controllable siRNA-assembled Nanosponges for Efficient siRNA 문성현(서울시립대) 17:05-17:15 Harnessing Computational-Guided Directed Evolution to Develop AAV Variants for Crossing the Blood-Brain Barrier 지은연(이화여대) 17:15-17:25 Electrochemical Platform for Functional Assessment and Drug Screening in GLA-mutant Human Kidney Organoid Models via Mitochondrial Metabolism 구경모(중앙대) 17:25-17:35 Post-surgery Adhesive and Antifouling Film for Prevention of Residual Colorectal Cancer Recurrence 이재범(성균관대)

제24차 한국조직공학 · 재생의학회 학술대회

Innovative Regenerative Medicine for Translation to Human

2024. 05. 02 (목) 오후 2시 ~ 05. 04 (토) 오후 12시 / 제주, 신화월드 랜딩컨벤션센터

Day2 : 5월 3일(금)			
Time	Room A		Room C
09:00~10:15	S07. Stem Cells 오거나이저: 양기석(인천대) 좌장: 황창모(울산대), 양기석(인천대) 09:00~09:25 Advanced Cell Therapies through Genome Editing 임동현(성신여대) 09:25~09:50 Human Spinal Cord Organoids Model Systems for Human Biology and Medicine 이주연(KIST) 09:50~10:15 Synthetic Biology Driven Engineering of Small Molecule Gated T Cell for Next Generation Immune Cell Therapy 이혜선(KAIST)	S08. Otorhinolaryngology 오거나이저: 박혜상(한림의대) 좌장: 권성근(서울의대), 박혜상(한림의대) 09:00~09:25 Development of Space Biology Platform Based on Satellite 박찬율(한림의대) 09:25~09:50 The Journey from Bedside to Bench: Clinician's Perspectives 김한수(이화의대) 09:50~10:15 Stem Cell Spheroid: From Basic Research to Mass Production and Preclinical Application 권성근(서울의대)	S09. Dentistry 오거나이저: 박준범(가톨릭의대) 좌장: 윤정호(전북대치대), 변준호(경상의대) 09:00~09:25 Immunogenicity and Antigenicity of Allogeneic Demineralized Dentin Matrix as Osteoinductive Material 구정귀(서울대치대) 09:25~09:50 Symbiotically Integrating Biomaterials for Oral-Gut Axis: Symbiomer 최성환(연세대치대) 09:50~10:15 Conceptual Advancement in Dental Hard Tissue Regeneration Based on Small Molecule Compounds 김도현(연세대치대)
10:15~10:30	Coffee Break		
10:30~12:10	S10. Honoring Faculty Milestones 오거나이저: 신미경(성균관대) 좌장: 김문석(아주대), 구승엽(서울의대) 10:30~10:50 Science, Colleagues, and Memory 조인호(이화여대, 범부처재생의료기술개발사업단) 10:50~11:05 Angiogenesis and Tissue regeneration 박우신(충북대) 11:05~11:20 Translational and Clinical Development of Tonsil-derived Mesenchymal Stem Cells 정성철(이화외대) 11:20~11:40 From Materials to Life 임정욱(경북외대) 11:40~11:55 Tooth and Bone Regeneration 박익균(경북대치대) 11:55~12:10 Beyond the Paper: Celebrating a Legacy of Mentorship and Collaboration with Professor Lim 오지원(연세외대)	S11. Plastic Surgery & Dermatology 오거나이저: 박지웅(서울의대) 좌장: 박지웅(서울의대), 윤정기(중앙대) 10:30~10:55 Development of Anti-Aging Therapeutics Using Extracellular Vesicles 백우열(연세대) 10:55~11:20 3D ASC Spheroids Enhance Adipogenesis and Angiogenesis in Fat Graft 김일국(영남대) 11:20~11:45 Adipose-Derived Exosomes as a Preventative Strategy Against Nodule Formation in Hyaluronic Acid Filler Applications: A Comprehensive In Vivo Analysis 정운혁(계명대)	S12. Korea-Taiwan International Session 오거나이저: 국제협력위원회 좌장: 황석연(서울대), 신홍수(한양대) 10:30~11:00 Smart CRISPR for Tissue Regeneration Andy Yu Chen Hu (National Tsing Hua University) 11:00~11:30 Infrapatellar Fat Pads-derived Stem Cells is a Favorable Cell Source for Articular Cartilage Tissue Engineering: A Study Based on 3D Organized Self-assembled Biomimetic Scaffold Chen-Chie Wang (Hualien Tzu-Chi University) 11:30~11:50 3D printed Versatile Assemblable Scaffold for Tailored Microgel Carrier in Regenerative Medicine 이승훈(동국대) 11:50~12:10 Development of Diagnostic based on CRISPR Technology 송자연(성균관대)
12:10~12:30	KTERMS General Meeting (Room B)		
12:30~13:00	Luncheon Session (Room A)		
13:00~14:00	Poster Session		
14:00~14:40	Plenary Lecture II (Room B) Delivery Systems for Regenerative Medicine		오거나이저 : 조승우(연세대), 황석연(서울대) 좌장: 임정욱(경북외대) Speaker: Robert S. Langer (MIT)
14:40~15:55	S13. Tissue Engineering 오거나이저: 정영미(KIST) 좌장: 이수홍(동국대), 정영미(KIST) 14:40~15:05 Coacervate as a Versatile Drug Delivery Supplement for Tissue Engineering 정지홍(서울의대) 15:05~15:30 Advancing Cell Therapy through Tissue Engineering Technology 정지현(성균관외대) 15:30~15:55 Scalable Single Nucleus RNA-seq of FFPE Clinical Samples by Fixative Exchange (FX)-seq 손창호(연세대)	S14. Cardiovascular Therapy 오거나이저: 박훈준(가톨릭의대) 좌장: 박우신(충북대), 강선웅(안전성평가연구소) 14:40~15:00 Application of Human Cardiomyocytes and Machine Learning for Enhanced Cardiotoxicity Prediction 문성환(중앙대) 15:00~15:20 Therapeutic Potential of 3D Cardiac Spheroids Derived from Human Pluripotent Stem Cells for Cardiac Regeneration 박훈준(가톨릭의대) 15:20~15:40 Bioresorbable Temporary Cardiac Pacemakers 최연식(연세대) 15:40~15:55 Prevention of Ischemic Heart Disease by Oral Administration of Engineered Probiotics 반기원(홍콩시립대)	S15. Korean Fund for Regenerative Medicine 오거나이저: 이정승(성균관대) 좌장: 최윤혁 R&D 기획관리본부장 14:40~15:05 Bioprinting-assisted Tissue Assembly for Structural and Functional Modulation of Engineered Heart Tissue 장진아(POSTECH) 15:05~15:30 Cell-assembling Technologies for Regenerative Medicine 김상현(KIST) 15:30~15:55 Customized Treatment for Patients with Chronic Kidney Disease Using AI and 3D Bioprinting Technologies 류지나(로켓헬스케어)
15:55~16:15	Coffee Break		
16:15~17:30	S16. Gene Therapy & Immunotherapy 오거나이저: 주진명(UNIST) 좌장: 오세행(단국대), 박우람(성균관대) 16:15~16:40 Modulation of Nitric Oxide for Immunocancer Therapy 김원중(POSTECH) 16:40~17:05 Exploring the Impact of Spatial Distribution of CpG Ligands on DNA Origami for Cancer Vaccine 류주희(KIST) 17:05~17:30 Harnessing Nanoparticles for Induction of Immune Tolerance in Autoimmune Diseases 김재윤(성균관대)	S17. Orthopedic Surgery 오거나이저: 한혁수(서울의대) 좌장: 임균일(동국의대), 양희석(단국대) 16:15~16:40 Cell Therapeutics for Rotator Cuff Disease 조현철(서울의대) 16:40~17:05 Cell Therapy for Osteonecrosis of the Femoral Head 백승훈(경북외대) 17:05~17:30 Costal Chondrocyte Derived Pellet-type Autologous Chondrocyte Implantation: an Overview 박재영(차의과대)	S18. Korean Fund for Regenerative Medicine 오거나이저: 이정승(성균관대) 좌장: 조순로 R&D 운영본부장 16:15~16:40 Regulatory Science Support Based Efficient Development Strategic Consideration of Advanced Therapeutic Medicinal Products 김종원(규제과학지원단장/오송첨단의료산업진흥재단) 16:40~17:05 Considerations for the Efficacy and Safety Evaluation of Advanced Therapy Medicinal Products for the Salivary Gland Disease 전상호(고려대학교) 17:05~17:30 Pancreatic Islet Cells Transplantation with Immunoisolation 황석연(서울대학교)

제24차

한국조직공학 · 재생의학회

학술대회

Innovative Regenerative Medicine for Translation to Human

2024. 05. 02 (목) 오후 2시 ~ 05. 04 (토) 오후 12시 / 제주, 신화월드 랜딩컨벤션센터

Day3 : 5월 4일(토)			
Time	Room A	Room B	Room C
09:00~10:15	S19. Exosome 오거나이저: 조용우 (한양대/엑소스텍) 좌장: 조용우 (한양대/엑소스텍), 박우람 (성균관대)	S20. Nerve 오거나이저: 박영석 (충북의대) 좌장: 현상환 (충북대수의대), 박영석 (충북의대)	S21. Obstetrics & Gynecology 오거나이저: 김윤영 (서울대병원) 좌장: 구승엽 (서울의대), 김성우 (서울의대)
	09:00~09:25 Exosome-mediated CRISPR/Cas-based Epigenome Editing in Alzheimer's Disease 조동규 (성균관대)	09:00~09:25 The Role of Astrocytes and Collagen in Non-Human Primate Photothrombosis-Induced Stroke Model: Functional Recovery from Neurological Damage Utilizing H ₂ O ₂ Scavenger 유승준 (을지의대)	09:00~09:25 Ovary Engineering Using Stem Cells 김윤영 (서울대병원)
	09:25~09:50 Exosome Surface Glycan Targeting Lectin Nanoparticles for the Theragnosis of Tumor 최종훈 (중앙대)	09:25~09:50 Development of Cultured Food Utilizing Muscle Regeneration Technology for Preventing Sarcopenia 최정석 (충북대)	09:25~09:50 The Clinical Unmet Need for Tissue Engineering and Regenerative Medicine in Female Reproduction 김용진 (고려의대)
	09:50~10:15 Microbial Nano Vesicles (MNV) for Treatment of Inflammatory Diseases 최기영 (강릉원주대)	09:50~10:15 Enhanced Intervertebral Disc Repair and Regeneration Using a Nanohybrid Peptide Hydrogel 한인보 (차의과대)	09:50~10:15 Development of Endometrial Tissue Assembly for Lego-like Customizable Tissue Regeneration 홍인선 (가천대학교)
10:15~11:30	S22. Organoid & Organ Chip 오거나이저: 황용성 (순천향대) 좌장: 황용성 (순천향대), 이진우 (가천대)	S23. Veterinary Regenerative Medicine 오거나이저: 이정익 (건국대) 좌장: 이정익 (건국대), 박상혁 (부경대)	S24. Korean Neurological Association Joint Session 오거나이저: 김치경 (고려의대) 좌장: 김치경 (고려의대), 안중호 (차의과대)
	10:15~10:40 Patient-derived Microphysiological Systems to Reconstruct Tumor Microenvironments 고지훈 (가천대)	10:15~10:40 Translational Medicine and Companion Animal Clinical Study 구민 (VET STEM SOLUTION)	10:15~10:40 CADASIL: A Genetic Cause of Stroke 최재철 (제주대의대)
	10:40~11:05 Development of Organoid Chip for Liquid Biopsy Diagnostic Markers 송영준 (인천대)	10:40~11:05 Safety and Efficacy of I.V. Administration of Allo-Mesenchymal Stem Cells in Companion Animal Patients 김의진 (메디펫 동물병원, 건국대학교 부속 동물병원 동물 줄기세포 치료 센터장)	10:40~11:05 Vascular Gemotry and Stroke: What We Know and Need 김범준 (울산의대)
11:30~12:00	11:05~11:30 Understanding the Forces that Control Cell Fate and Disease Progression Using Patient-derived Organoids 황용성 (순천향대)	11:05~11:30 Stem Cell Research in Veterinary Medicine 이혜정 (농림축산검역본부 수의연구사)	11:05~11:30 Tissue Engineering in a Neurovascular Unit 김치경 (고려의대)
Award Ceremony & Closing Remark (Room B)			