Opening Remarks

Opening Remarks

December 13th(Sat.) 8:50-9:00

Satoaki Matoba
Chairperson, The 9th JCS Council Forum on Basic CardioVascular Research (BCVR2025)
Department of Cardiovascular Medicine, Kyoto Prefectural University of Medicine, Japan

Symposium

Symposium 1

December 13th(Sat.) 9:00-10:30

Nucleic Acid Therapeutics, Genome Editing, and Omics Technologies

Chairperson: Koh Ono (Kyoto University, Japan)
Seitaro Nomura (The University of Tokyo, Japan)

SY1-1 **Acid-Degradable PEG-Lipid Nanoparticles Enable Efficient Cardiac mRNA Delivery in Vivo**
Tomohiro Nishino (Department of Cardiovascular Medicine, Kyoto University, Japan)

SY1-2 **Development of Synthetic Nucleic Acids Targeting MicroRNAs for Therapeutic Applications**
Takahiro Horie (Department of Cardiovascular Medicine, Graduate School of Medicine, Kyoto University, Japan)

SY1-3 **Therapeutic Genome Editing of RBM20-Associated Dilated Cardiomyopathy**
Takahiko Nishiyama (Department of Cardiology, Keio University School of Medicine, Japan)

SY1-4 **Engineering Compact Cas Proteins for Cardiovascular Diseases**
Atsushi Hoshino (Department of Cardiovascular medicine, Kyoto Prefectural University of Medicine, Japan)

SY1-5 **Development of Gene-Therapy for End-Stage Heart Failure and Ischemic Cardiomyopathy**
Toshiyuki Ko (Department of Frontier Cardiovascular Science, The University of Tokyo, Japan)

Award Session

Award Session

December 13th(Sat.) 10:40-11:40

Chairperson: Ichiro Manabe (Chiba University Graduate School of Medicine, Japan)
Motoaki Sano (Yamaguchi University School of Medicine, Japan)

AS-1 **TGM2-Mediated Histone Serotonylation Represents a Novel Epigenetic Cardioprotective Mechanism in HFpEF**
Ryo Ogawara (Cardiovascular medicine, Fukushima Medical University, Japan)

AS-2 **SVEP1: a novel fibroblast-derived blood biomarker for cardiac fibrosis**
Naoya Kuwahara (Cardiovascular Medicine, Kobe University Graduate School of Medicine, Japan)

AS-3 **Sipa1 Drives a Maladaptive Fibroblast-Myeloid Axis after Myocardial Infarction**
Seien Ko (Cardiology, Keio University School of Medicine, Japan)

AS-4 **SAAM-1 Immunization Mitigates Cardiac Remodeling and Vascular Lesions in Murine Models of Cardiovascular Disease**
ChiehLun Hsiao (Department of Cardiovascular Biology and Medicine, Juntendo University Graduate School of Medicine, Japan)

AS-5 **Tet2-Mutant Clonal Hematopoiesis Drives Aortic Aneurysm Progression via Macrophage-to-Osteoclast-like Differentiation**
Jun Yonekawa (Cardiology, Nagoya University School of Medicine, Japan)

Luncheon Seminar

Luncheon Seminar 1

December 13th(Sat.) 12:00-12:50

Sponsored by Nippon Boehringer Ingelheim Co., Ltd.

Chairperson: Koh Ono (Kyoto University, Japan)

LS1 **Functional analysis and applications of non-coding RNAs in cardiovascular and metabolic diseases**
Takahiro Horie (Kyoto University Graduate School of Medicine, Japan)

Keynote Lecture

Keynote Lecture 1

December 13th(Sat.) 13:00-14:00

Chairperson: Issei Komuro (IUHW (International University of Health and Welfare)/ University of Tokyo, Japan)

KL-1 **Applications of AI in Cardiovascular Development and Disease Modeling**
Sean M Wu (Medicine and Pediatrics and Cardiovascular Institute, Stanford University School of Medicine, United States of America)

Symposium

Symposium 2

December 13th(Sat.) 14:10-15:40

Regenerative Medicine and Development

Chairperson: Masaki Ieda (Keio University, Japan)
Hideki Uosaki (Jichi Medical University, Japan)

SY2-1 **Production of Cardiac Microtissues from Human iPSCs for Regenerative Therapy and Disease Modeling**
Shugo Tohyama (Clinical Regenerative Medicine, Fujita Medical Innovation Center, Fujita Health University/ Kanagawa Institute of Science and Technology/ Keio University, Japan)

SY2-2 **Heart Failure Treatment through Cardiac Regeneration and Antifibrosis**
Taketaro Sadahiro (Department of Cardiology, Keio University School of Medicine, Japan)

SY2-3 **Cardiac gene therapy for dilated cardiomyopathy caused by bi-allelic loss-of-function mutations in BAG5**

Hidetaka Kioka (Department of Cardiovascular Medicine, The University of Osaka Graduate School of Medicine, Japan)

SY2-4 **Maturation of Cardiac Organoids And Their Promise for Future Cardiovascular Therapies**

Kozue Murata (Department of Cardiovascular Surgery , Kyoto University Hospital, Japan)

SY2-5 **Taurine Stabilizes Mitochondrial tRNALys and Restores Bioenergetics in KARS1 Related Cardiomyopathy**

Takeshi Tokuyama (Department of Biochemistry, Division of Functional Biochemistry, Department of Biochemistry, JICHI Medical University., Japan)

Progress Report for Basic Research

Progress Report for Basic Research

December 13th(Sat.) 15:50-17:20

Chairperson: Mari Ishida (Hiroshima Shudo University, Japan)
Ichiro Shiojima (National Cerebral and Cardiovascular Center, Japan)

PB-1 **Epicardial Fat-Mediated Lymphatic Impairment Contributes to Atrial Fibrillation Development**

Ichitaro Abe (Department of Frontier Cardiovascular Science, The University of Tokyo, Japan)

PB-2 **Development of a novel antiarrhythmic therapy using antisense oligonucleotide to improve the prognosis of cardiomyopathy**

Hideaki Inazumi (The University of Tokyo/ Kyoto University/ Japanese Society for the Promotion of Science. Japan)

PB-3 **Multi-omics analysis on atrial structural remodeling in patients with atrial fibrillation**

Kosuke Sawami (Department of Frontier Cardiovascular Science, The University of Tokyo Hospital, Japan)

PB-4 **Characterization of Cardiac FAPs and Therapeutic Strategies via Primary Cilia**

Daishi Yamakawa (Department of Molecular Physiology and Cardiovascular Biology, Graduate School of Medicine, Mie University, Japan)

PB-5 **Role of interleukin 34 in pulmonary hypertension due to pulmonary fibrosis**

Tetsuro Yokokawa (Department of Cardiovascular Medicine, Fukushima Medical University, Japan)

Poster Session

Poster Session

December 13th(Sat.) 17:30-19:00

Cardiac and Systemic Metabolism

P-1 **Renal Proximal Epithelial Cells Retain Adpogenecity in a Primary Cilia Dependent Fashion**

Raymond Adjei (Molecular Physiology and Cardiovascular Biology, Mie University, Japan)

P-2 **Myocardial Lipin1 Attenuates Ischemic Injury through Preservation of Lipid Homeostasis**

Jiaxi Guo (Department of Anesthesiology, The First Affiliated Hospital, Zhejiang University School of Medicine, China/ Department of Cardiovascular Medicine, Graduate School of Medicine, The University of Tokyo , Japan)

P-3 **Pivotal Role of TGF β /SMAD-Mediated Endothelial-to-Mesenchymal Transition in Vitamin D Deficiency_Induced Cardiac Fibrosis**

Monisha Jayabalan (Anatomy, Dr. A.L.M Postgraduate Institute of Basic Medical Sciences, University of Madras, India)

P-4 **Effects of Soluble Guanylate Cyclase (sGC) Stimulator in High Fat Diet-induced Obesity in Rats and 3T3-L1 Adipocytes**

PangYen Liu (Cardiology, Tri-Service General Hospital, Taiwan)

P-5 **Molecular Mechanisms Underlying Trastuzumab-Induced Cardiotoxicity in Diabetes Mellitus**

Yoshinori Mikami (Department of Physiology, Faculty of Medicine, Toho University, Japan)

P-6 **Investigation of energy substrates governing pacemaking function of the sinus node in mice**

Shu Nakao (Department of Physiology/ The Institute of Medical Sciences, Tokai University School of Medicine/ College of Life Sciences, Ritsumeikan University, Japan)

P-7 **Metabolic Landscape of Human End-Stage Ischemic Cardiomyopathy Shows Remarkable Similarities to Non-Ischemic Cardiomyopathy**

Sho Tanosaki (Cardiovascular Institute, University of Pennsylvania, United States of America)

Poster Session

December 13th(Sat.) 17:30-19:00

Gene therapy/Cell Therapy

P-8 **Development of a Genome Editing Therapy for Dyslipidemia with Minimized Off-Target Effects**

Tomohiro Hino (Cardiovascular Medicine, Department of Cardiovascular Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan)

P-9 **TAOK1 as a Novel Therapeutic Target to Prevent Cardiomyocyte Death under Doxorubicin- or Hypoxia-Induced Stress**

Masatsugu Oishi (Cardiology, Kyoto Prefectural University of Medicine, Japan)

P-10 **Development of Highly Functional Compact Cytosine Base Editing Tools Using Deep Mutational Scanning**

Yu Sakaue (Department of Cardiovascular Medicine, Kyoto Prefectural University of Medicine, Japan)

P-11 **A CnCas12f-based genome-editing tool derived by deep mutational scanning**

Satoshi Tasaka (Cardiology, Kyoto Prefectural University of Medicine, Japan)

P-12 **Engineering of Hypercompact CRISPR-Cas12j for Clinical Applications**

Yuka Toyoshima (Cardiovascular Medicine, Kyoto Prefectural University of Medicine, Japan)

P-13 **Engineering a Compact Cas9d for AAV-Based Base Editing Therapy**

Yuki Uchio (Cardiology, Kyoto prefectural university of medicine, Japan)

Poster Session

December 13th(Sat.) 17:30-19:00

Heart Failure

P-14 **Cardiac Macrophage-Derived Chemokine Modulates Pressure Overload-Induced Cardiac Remodeling**

Fujimi Kudo (Department of Systems Medicine, Chiba University Graduate School of Medicine, Japan)

P-15 **The complement C3-complement factor D-C3a receptor signalling axis regulation for right heart failure.**

Kazuhiro Kuroda (Cardiovascular Medicine, Okayama University Hospital, Japan)

P-16 **Macrophage extracellular traps promote maladaptive cardiac remodeling and heart failure via PAD4-dependent mechanisms**

Tomofumi Misaka (Cardiovascular Medicine/ Department of Community Cardiovascular Medicine, Fukushima Medical University, Japan)

P-17 **A Novel CKD-HFpEF Model Preserving Renal Afferent Nerves: Kidney Surface Ablation for Investigating Neurogenic Contribution to Cardiorenal Interaction**

Ryohei Miyamoto (Department of Cardiovascular Medicine, Faculty of Medical Sciences, Kyushu University, Japan)

P-18 **Sex-Specific Alterations in Estradiol-Associated Circulating miRNA Profiles in Heart Failure**

Shun Nakamura (Department of Cardiovascular Medicine, Institute of Science Tokyo/ Department of Cardiovascular Medicine, The University of Tokyo Hospital, Japan)

P-19 **Cardioprotection of β -Aminoisobutyric Acid , an Exercise-Derived Amino Acids, against Doxorubicin-Induced Cardiomyopathy**

Ryo Numazawa (Department of Pharmacology, Sapporo Medical University School of Medicine, Japan)

P-20 **Proteomic Analysis of Circulating Extracellular Vesicles Identifies CAPG as a Prognostic Marker in Heart Failure**

Satoshi Okochi (Cardiovascular Medicine, Fukushima Medical University, Japan)

Poster Session

December 13th(Sat.) 17:30-19:00

Inflammation/Regeneration

P-21 **IGFBP2 Promotes Proliferation of Human iPSC-Derived Cardiomyocyte through the PTEN-AKT Signaling Axis**

Soah Lee (Pharmacy, Sungkyunkwan University, Korea)

P-22 **VEGF-C-mediated Cardiac Lymphangiogenesis Promotes Inflammation Resolution in Autoimmune Acute Myocarditis in Mice**

Nanako Nakanishi (Pathology and Matrix Biology, Mie University, Japan)

P-23 **Targeting the CXCL10-IFN-gamma axis to prevent myocardial injury following mRNA vaccination**

Masataka Nishiga (Cardiovascular Institute, Stanford University, United States of America)

P-24 **Regulatory Role of Nitrosative Stress in Cardiomyocyte Proliferation and Fibrotic Regression during Post-Cryoinjury Cardiac Regeneration in Adult Zebrafish**

Muhammed ibrahim Sekar (Department of Anatomy, Dr. ALM Postgraduate Institute of Basic Medical Sciences University of Madras, India)

P-25 **SPP1 Expressing Macrophages Drive Fibro Calcific Remodeling in Lung Fibrosis and Aortic Stenosis: Implications for Heart Failure Pathogenesis**
Kohsuke Shirakawa (Cardiology, Keio University School of Medicine, Japan)

P-26 **Protective Effects of Omentin against Oxidative Stress-Induced Endothelial Damage: Restoration of Barrier Function and Adherens Junction Integrity**
Yoke Keong Yong (Human Anatomy, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia)

Poster Session

December 13th(Sat.) 17:30-19:00

Mitochondria/Oxidative Stress

P-27 **Investigation of mtDNA Polymorphism Found in Normal Inbred Mouse Strain**
Satomi Hayashi (Biological Sciences, The university of Osaka, Japan)

P-28 **Inhibition of VDAC1 Oligomerization Exacerbates Doxorubicin-Induced Mitochondrial Dysfunction via Iron Overload and Oxidative Stress**
Shunsuke Miura (Department of Cardiovascular Medicine, Fukushima Medical University, Japan)

P-29 **Deep Learning Integration of Single-Cell and Bulk Transcriptomics to Map Oxidative Stress Trajectories in Human Myocardium**
Prihantini Prihantini (AI-BioMedicine Research Group, IMCDS-BioMed Research Foundation, Indonesia)

P-30 **Maintenance of acetyl-CoA synthetase 2 prevents cytosolic acetyl-CoA depletion and cardiac dysfunction**
Toranosuke Sekine (Department of Cardiology, Fukushima Medical University, Japan)

P-31 **Screening for compounds that improve mitochondrial function by modulating mitochondrial nucleoid morphology**
Hanabusa Soichiro (Department of Biological Sciences, Graduate School of Science, The University of Osaka, Japan)

P-32 **Deferoxamine Protects against Doxorubicin-Induced Cardiotoxicity by Inducing Heme Oxygenase-1**
Yoshikatsu Takeda (Pediatrics, Kanazawa University, Japan)

Poster Session

December 13th(Sat.) 17:30-19:00

Translational Research/Cell Signaling

P-33 **Expression of Incretin Receptor in Fibro-Adipogenic Progenitor Cells in Mice**
Chihomi Banno (Molecular Physiology and Cardiovascular Biology, Mie University, Japan)

P-34 **A Spontaneous Atrial Fibrillation Mouse Model: a Platform for Exploring Atrial Fibrillation Pathogenesis and Therapeutics**
Nur Syakirah Binti Othman (Department of Cardiovascular Aging, National Cerebral and Cardiovascular Centre, Japan)

P-35 **Machine Learning_Driven Multi_Omic Atlas of Stress_Responsive Regulatory Elements Predicting Anthracycline Cardiotoxicity and Arrhythmia Risk in Breast Cancer Survivors**

Rifaldy Fajar (Mathematics and Computer Science, Karlstad University, Sweden)

P-36 **Immune-Mediated Clearance of Senescent Cells via Sensitization: a Novel Approach for Treating Age-Associated Disorders**

ChiehLun Hsiao (Department of Cardiovascular Biology and Medicine, Juntendo University Graduate School of Medicine Department, Japan)

P-37 **Senescence-associated metabolic shift impedes endothelial angiogenic functions**

Fumiaki Ito (Department of Cardiovascular Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan)

P-38 **SGLT2 Inhibitors suppress Atrial Fibrillation through Regulation of Macrophage-mediated Inflammation and Fibrosis in Mice**

Satoshi Iwamiya (Department of cardiovascular Medicine, Institute of Science Tokyo, Japan)

P-39 **Inhibition of N-terminal acetyltransferase C mitigates ER stress-mediated muscle atrophy in cancer cachexia.**

Yusaku Kaneko (Department of Cardiovascular Medicine, Nishijin Hospital, Japan)

P-40 **The clock gene Tef promoted the expression of Col1a1 in human cardiac fibroblasts.**

Kenta Kaneshiro (Division of Evidence-Based Laboratory Medicine, Kobe University Graduate School of Medicine, Japan)

P-41 **Single-Cell and Nucleus Transcriptomics with TCR Repertoire Profiling Identify Immune-Myofibroblast Crosstalk via SPP1 and PAR Signaling in CTEPH**

Keisuke Nakamura (Cardiovascular Medicine, Kobe University, Japan)

P-42 **Deep Learning Integration of Blood DNA Methylation and Endothelial Transcriptomes Predicts Aging-Driven Plaque Risk**

Sahnaz Vivinda Putri (Health Management Laboratory, International University Semen Indonesia, Indonesia)

P-43 **Pharmacoinformatic Evaluation of Thiazole-Coumarin-Azomethine Derivatives Targeting the Klotho-Wnt Axis for Cardio-Cerebrovascular Disease Prevention**

Rizki Rachmad Saputra (Chemistry, Universitas Palangka Raya, Indonesia)

P-44 **Mathematical Model of Transcriptional Burst-Splice Instability Predicts Atrial Fibrillation Maintenance from Single-Nucleus RNA Data**

Elfiany Syafruddin (Computational Science Research Laboratory, BLK Muhammadiyah University, Indonesia)

P-45 **Role of Procollagen C-proteinase Enhancer-1 (PCPE-1) in Aging-related Renal Fibrosis and UUO-induced Heart Failure**

Aung Tinmay (Department of Cardiovascular Aging, National Cerebral and Cardiovascular Center, Japan)

P-46 **Machine Learning-Derived Signal-Integration Burden of Piezo1-YAP/TAZ and TGF β EndoMT Predicts Microvascular Rarefaction in Human Heart Failure**

Rini Winarti (Biology, Yogyakarta State University, Indonesia)

P-47 **TMAO Impairs Skeletal Muscle Function by Disrupting Autophagy Lysosome Homeostasis**

Li Zhihong (Department of Cardiovascular Aging, National Cerebral and Cardiovascular Center, Japan)

Poster Session

December 13th(Sat.) 17:30-19:00

Vascular Biology

P-48 **Targeting endothelial cannabinoid receptor 1 ameliorates disturbed flow-induced vascular inflammation and atherosclerosis in vivo**

Dai Jung Chung (Department and Graduate Insttute of Pharmacology, National Taiwan University, College of Medicine, Taiwan)

P-49 **Efficacy and Safety of Interleukin-6 Receptor Inhibitors in Giant Cell Arteritis: a Systematic Review and Meta-Analysis of Randomized Controlled Trials**

Mohamed Hamouda Elkasaby (Faculty of Medicine, Al-Azhar University, Egypt)

P-50 **Deletion of Integrin Alpha 1 Suppresses Angiotensin II-Induced Abdominal Aortic Aneurysm Rupture**

Yoshitake Fukuda (Department of Cardiovascular Medicine, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan)

P-51 **VSMC-Specific NRDC Deficiency Improves Survival by Reducing Rupture-Related Deaths in Mice.**

Enkhjin Gansukh (Pharmacology, Shiga University of Medical Science, Japan)

P-52 **The impact of PERM1 in acute lower limb ischemia**

Chun Yang Huang (Division of Cardiovascular Surgery, Taipei Veterans General Hospital/ Cardiovascular Surgery, National Yang-Ming Chiao-Tung University Hospital, Taiwan)

P-53 **Single cell and Spacial transcriptome analysis of Vascular Calcification in a Mouse Model of Chronic Kidney Disease**

Mitsukuni Kimura (Department of Cardiovascular Medicine, Kyushu University, Japan)

P-54 **Notch Ligand Dll1 Promotes Macrophage Activation and Arteriosclerosis**

Junichiro Koga (The Second Department of Internal Medicine, University of Occupational and Environmental Health, Japan, Japan)

P-55 **The Effect of Ketone Bodies on angiogenesis**

Takumi Nagakura (Cardiology, Kumamoto University Hospital, Japan)

Morning Seminar

Morning Seminar

December 14th(Sun.) 8:15-8:50

Sponsored by Daiichi Sankyo Co., Ltd

Chairperson: Koh Ono (Kyoto University, Japan)

MS **Long-Term Management Strategies for Venous Thromboembolism**
Naohiko Nakanishi (Kyoto Prefectural University of Medicine, Japan)

Keynote Lecture

Keynote Lecture 2

December 14th(Sun.) 9:00-10:00

Chairperson: Yasuchika Takeishi (Fukushima Medical University Hospital, Japan)

KL-2 **Understanding Human Cardiac Metabolism**
Zoltan Pierre Arany (Cardiology, University of Pennsylvania, United States of America)

Symposium

Symposium 3

December 14th(Sun.) 10:10-11:40

Mitochondria, Metabolism and Cardiovascular diseases

Chairperson: Naotada Ishihara (Osaka University, Japan)
Norihiko Takeda (The University of Tokyo, Japan)

SY3-1 **Reverse genetic studies on mutant mitochondrial DNAs in mice: Insights for understanding mitochondrial DNA-based disorders**
Kazuto Nakada (Institute of Life and Environmental Sciences, University of Tsukuba, Japan)

SY3-2 **Lipid metabolism through mitochondria**
Yasushi Tamura (Faculty of Science, Yamagata University, Japan)

SY3-3 **Essential role of coordinated dynamics of the mitochondrial membranes and nucleoids in cardiac function**
Takaya Ishihara (Department of Life Science, Shimane University/ Department of Biological Sciences, The University of Osaka, Japan)

SY3-4 **Novel Regulatory Mechanism of Myocardial Inflammation Mediated by Mitochondrial DNA**
Shouji Matsushima (Department of Cardiovascular Medicine, Kyushu University Hospital, Japan)

SY3-5 **Linking Inflammation to Metabolic Changes in Heart Disease**
Yasutomi Higashikuni (Center for Molecular Medicine, Jichi Medical University, Japan)

Luncheon Seminar

Luncheon Seminar 2

December 14th(Sun.) 12:00-12:50

Sponsored by Novartis Pharma K.K / Otsuka Pharmaceutical Co., Ltd.

Chairperson: Satoaki Matoba (Kyoto Prefectural University of Medicine, Japan)

LS2-1 **Effects of Natriuretic Peptides on the Kidney -Impact on Podocytes and Renal Blood Flow-**
Hideki Yokoi (Kumamoto University Graduate School of Medicine, Japan)

LS2-2 **The Role of Natriuretic Peptides in Evolution and Their Actions in the Kidney**
Akira Nishiyama (Kagawa University/Japanese Society of Hypertension, Japan)

Grant Session in Basic Research

Grant Session in Basic Research

December 14th(Sun.) 13:00-14:00

Chairperson: Shinsuke Yuasa (Okayama University, Japan)
Soichi Sano (National Cerebral and Cardiovascular Center, Japan)

GB-1 **The Development of Novel Therapeutics Targeting Gut Dysbiosis in Pulmonary Arterial Hypertension**
Ryotaro Asano (Vascular Physiology, National Cerebral and Cardiovascular Center, Japan)

GB-2 **Understanding the Pathological Mechanism of the Cardio-Sarcopenia Syndrome Caused by Age-related Change in Macrophages**
Mao Kuriki (Department of Medical Biochemistry, Institute of Science Tokyo, Japan)

GB-3 **Metabolic Reprogramming of Vascular Endothelial Stem Cells as a Novel Therapeutic Target in HFpEF Pathogenesis**
Yuki Tatekoshi (Department of Pharmacology, Sapporo Medical University/ Division of Cardiovascular-Kidney-Metabolic Medicine, Department of Internal Medicine, Sapporo Medical University School of Medicine, Japan)

GB-4 **Elucidation of New Pathophysiology of Heart Failure and Drug Discovery Applications Focusing on Heart-Kidney Interaction using Organoid Technology**
Hidenori Tani (Department of Clinical Regenerative Medicine, Cardiology, Fujita Medical Innovation Center Tokyo, Fujita Health University, Japan)

GB-5 **Lineage-Specific Tissue Macrophage Mediated Pathological Microenvironments in Cardiac Fibrosis**
Norika Liu (International Research Center for Medical Sciences, Kumamoto University, Japan)

JCS/U45 ISHR Joint Symposium

JCS/U45 ISHR Joint Symposium

December 14th(Sun.) 14:10-15:20

Rising star session

Chairperson: Atsuko Okazaki (Juntendo University, Japan)
Yoshimitsu Yura (Nagoya University Hospital, Japan)

Joint-1 **Vascular Homeostasis as a Foundation for Cancer Immune Activation**
Megumu Tanaka (Department of Cardiovascular Research, Shinshu University School of Medicine, Japan)

Joint-2 **RNA regulation as a protective mechanism in cardiac stress and remodeling**
Teruki Sato (Department of Cardiovascular medicine, Akita university Graduate School of medicine/ Department of Pharmacology, Kyushu university Graduate School of medicine, Japan)

Joint-3 **A Novel BAT-derived Pro-Fibrotic Protein Promotes Pathogenesis in Cardiovascular-metabolic Diseases**
Yung Ting Hsiao (Department of Cardiovascular Aging, National Cerebral and Cardiovascular Center Research Institute, Japan)

Joint-4 **Spatial Omics Analysis of Immune Cell Infiltration in Cardiac Sarcoidosis**
Mikako Katagiri (Department of Cardiovascular Medicine, Graduate School of Medicine, The University of Tokyo, Japan)

Joint-5 **Elucidation of the protective effect of endocardial-derived tissue macrophages against myocardial fibrosis**
Norika Liu (International Research Center for Medical Sciences, Kumamoto University, Japan)

Joint-6 **Heart failure-specific cardiac fibroblasts promote cardiac dysfunction via the MYC-CXCL1-CXCR2 signaling axis**
Jin Komuro (Department of Cardiology, The University of Tokyo/ Department of Cardiology, Keio University, Japan)

Symposium

Symposium 4

December 14th(Sun.) 15:30-17:00

Senescence and Cardiovascular aging

Chairperson: Eiji Hara (Osaka University, Japan)
Yuichi Oike (Kumamoto University, Japan)

SY4-1 **Capillary deterioration due to aging and its regulation**
Nobuyuki Takakura (Department of Signal Transduction, Research Institute for Microbial Diseases, The University of Osaka, Japan)

SY4-2 **Age-related loss of organ-specific endothelial cell heterogeneity and its impact on organismal aging**
Shigetomo Fukuhara (Dept. of Mol. Pathophysiol., Inst. of Adv. Med. Sci., Nippon Medical School, Japan)

SY4-3 **Innate immune memory in age-associated diseases**
Ichiro Manabe (Systems Medicine, Chiba University Graduate School of Medicine, Japan)

SY4-4 **Exploring the Molecular Basis of Cardiac Aging**

Michio Sato (Department of Molecular Genetics, Kumamoto University/ Cardiology, Department of Cardiovascular Medicine, Faculty of Medicine, Saga University, Japan)

SY4-5 **Roles and Mechanisms of Cellular Senescence in Aging and Aging-Associated Diseases: Insights into Microbial Interactions**

Eiji Hara (Research Institute for Microbial Diseases, The University of Osaka, Japan)

Closing and Award Ceremony

Closing and Award Ceremony

December 14th(Sun.) 17:05-17:30