ISHR Featured Research Session

ISHR

Featured Research Session

December 15th (Sun.) 9:50～11:20 Room 4 (5F 504+505)

Chairs : Masaki Ieda (Department of Cardiology, Faculty of Medicine, University of Tsukuba)
Yoshihiro Asano (Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine)

FRS-IS-1 Homeobox A4 Suppresses Vascular Smooth Muscle Cell Phenotypic Switching as a novel Regulator of YAP/TEAD Transcriptional Activity

Masahiro Kimura (Department of Cardiovascular Medicine, Graduate School of Medicine, Kyoto University)

FRS-IS-2 MAIR-II deficiency ameliorates adverse cardiac remodeling post-myocardial infarction

Saori Yonebayashi (University of Tsukuba, Faculty of Medicine, Department of Cardiology)

FRS-IS-3 Visualizations of Cardiomyocyte Maturation on Extracellular Matrices Using a Novel Myom2-RFP Reporter Line

Nawin Chanthra (Division of Regenerative Medicine, Center for Molecular Medicine, Jichi Medical University)

FRS-IS-4 Mitochondrial E3 ubiquitin ligase "March5/Mitol" is involved in vulnerability to doxorubicin induced cardiomyopathy via ferroptosis

Hiroki Kitakata (Department of Cardiology, Keio University school of medicine)

FRS-IS-5 Generation of Human Disease Model for Personalized Medicine Targeting Intractable Cardiomyopathy

Shuichiro Higo (Department of Medical Therapeutics for Heart Failure, Osaka University Graduate School of Medicine)

FRS-IS-6 Impaired NF-κB signalling underlies cyclophilin D-mediated mitochondrial permeability transition pore opening in doxorubicin cardiomyopathy

Lorrie A. Kirshenbaum (Department of Physiology and Pathophysiology, Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Manitoba, Canada R2H2A6.)

ISHR Oral Session

ISHR

Oral 1

December 14th (Sat.) 10:15～11:05 Room 4 (5F 504+505)

「Heart failure and cardiomyopathy」

Chairs : Masanori Asakura (Department of Cardiovascular Medicine, Hyogo College Of Medicine)
Shintaro Kinugawa (Department of Cardiovascular Medicine, Graduate School of Medicine, Hokkaido University)

01-IS-1 DPP-4 inhibitor, Vildagliptin, Induces FGF21 in Cardiac Fibroblasts and Improves Myocardial Energy Metabolism through Upregulation of Sirt1.

Nozomi Furukawa (Department of Cardiovascular Medicine, Gunma University Graduate School of Medicine)

01-IS-2 Disease modeling of LMNA-mutant dilated cardiomyopathy using patient-specific induced pluripotent stem cell derived cardiomyocytes.

Masamichi Ito (The University of Tokyo Hospital)

01-IS-3 Circulating pro fibrotic protein promotes fibrosis in liver and heart

Yuki Tsukano (Department of Cardiovascular Biology and Medicine, Niigata University Graduate School of Medical and Dental Sciences)

01-IS-4 Regulatory Effect of Neprilysin on cGMP Plays an Important Role in Cardiac Remodeling

Hitoshi Nakagawa (Nara Medical University Cardiovascular Medicine)

01-IS-5 Empagliflozin improves cardiac function through the increased production of acetylcarnitine in a murine non-diabetic heart failure model

Masaaki Nakao (Department of Cardiovascular Biology and Medicine, Niigata University Graduate School of Medical and Dental Sciences)

ISHR

Oral 2

December 14th (Sat.) 11:05～11:55 Room 4 (5F 504+505)

「Metabolic disorder and heart failure」

Chairs : Tatsuya Iso (Department of Cardiovascular Medicine, Gunma University Graduate School of Medicine)
Norihiko Takeda (Department of Cardiovascular Medicine, The University of Tokyo)

02-IS-1 Reduced fatty acid uptake aggravates cardiac contractile dysfunction in streptozotocin-induced diabetic cardiomyopathy

Ryo Kawakami (Department of Cardiology, Gunma University Graduate School of Medicine)

02-IS-2 Dynamic changes in cardiac myosin head regulation during dobutamine stress tests and hyperglycemic events in insulin resistant rats

James Pearson (Department of Cardiac Physiology, National Cerebral and Cardiovascular Center Research Institute / Department of Physiology, Monash University)

02-IS-3 The fluctuation of postprandial blood glucose and triglyceride level govern HSC metabolism, transcription, premature aging and rejuvenation.

Masayoshi Iwasaki (Department of Medicine II, Kansai Medical University.)

02-IS-4 SDPR / Cavin-2 Regulates Adipocyte Differentiation with PPARγ Expressions in 3T3L1 Cells

Yusuke Higuchi (Department of Cardiovascular Medicine Kyoto Prefectural University of Medicine)

02-IS-5 S100A9-RAGE Axis With Hyperglycemia Accelerates Formation of Macrophage-mediated Extracellular Vesicle Microcalcification

Ryo Kawakami (Department of Cardiorenal and Cerebrovascular Medicine, Faculty of Medicine, Kagawa University)

ISHR

Oral 3

December 15th (Sun.) 9:00～9:50 Room 4 (5F 504+505)

「Novel targets for cardiovascular disease」

Chairs : Yasuko K. Bando (Department of Cardiology, Nagoya University Graduate School of Medicine)
Tetsuya Matoba (Department of Cardiovascular Medicine, Kyushu University)

03-IS-1 The enhancement of calmodulin binding affinity toward ryanodin receptor is essential to prevent catecholaminergic polymorphic ventricular tachycardia

Yoshihide Nakamura (Division of Cardiology, Department of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine)

03-IS-2 Direct reprogramming of mouse fibroblasts into cardiac mesoderm.

Taketaro Sadahiro (Department of Cardiology, Faculty of Medicine, University of Tsukuba)

03-IS-3 SIRT7 exerts its anti-hypertrophic effect by interacting with and promoting deacetylation of GATA4

Yasuhiro Izumiya (Department of Cardiovascular Medicine, Osaka City University)

03-IS-4 Deletion of the nicotinamide phosphoribosyltransferase (Nampt) and high-fat diet increases atrial fibrillation inducibility through altering calcium handling pathway

Duo Feng (University of Tsukuba)

03-IS-5 Loss of SDPR/Cavin-2 suppresses monocyte adhesion on endothelial cells and abdominal aortic aneurysm development

Akira Sakamoto (Department of Cardiovascular Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine)

ISHR Poster Session

ISHR

Poster 1

December 14th (Sat.) 14:00～14:32 Poster Room 1 (3F Reception Hall)

「Oxidative stress and cardiomyocyte death」

Chair : Naoki Ishimori (Hokkaido University, Faculty of Medicine and Graduate School of Medicine, Depertment of Community Heart Failure Healthcare and Pharmacy)

P1-IS-1 Clinical significance of circulating cardiomyocyte-specific cell-free DNA in patients with heart failure

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

P1-IS-2 Hemoglobin is expressed in cardiomyocytes cells and related oxiative stress

Hiroki Fukuda (Department of Clinical Medicine and Development, National Cerebral and Cardiovascular Center)

P1-IS-3 Genome-wide CRISPR screen to identify protective regulators against cardiac cell death

Shunta Taminishi (Kyoto Prefectural University of Medicine)

P1-IS-4 Impact of activation of necroptosis signaling on mitochondrial dynamics in cardiomyocytes

Toshiyuki Yano (Department of Cardiovascular, Renal and Metabolic Medicine, Sapporo Medical University School of Medicine)

ISHR

Poster 2

December 14th (Sat.) 14:00～14:32 Poster Room 1 (3F Reception Hall)

「Cardiomyopathy and myocarditis」

Chair : Koh Ono (Department of cardiovascular Medicine, kyoto University Graduate School of Medicine)

P2-IS-1 Mice immunized with recombinant BCG expressing cardiac myosin epitope develop sustained myocardial inflammation: a new model of inflammatory dilated cardiomyopathy

Kazuko Tajiri (Department of Cardiology, Faculty of Medicine, University of Tsukuba)

P2-IS-2 Functional antibody against Ca2+ permeable channel ameliorates dilated cardiomyopathy in animal models

Yuko Iwata (National Cerebral and Cardiovascular Center)

P2-IS-3 Disorders in energy metabolism are associated with pathophysiology of Fabry cardiomyopathy unable to be treated by enzyme replacement therapy.

Yuki Kuramoto (Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine)

P2-IS-4 Loss of insulin signaling gives rise to diastolic dysfunction in the early stage of diabetic cardiomyopathy in T1DM model mice

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

ISHR

Poster 3

December 14th (Sat.) 14:00～14:32 Poster Room 1 (3F Reception Hall)

「Cardiac hypertrophy and heart failure」

Chair : Kayoko Sato (Department of Cardiology Tokyo Womens medical University)

P3-IS-1 Alternative splicing of Mtus1 mRNA affects cardiac hypertrophy and heart failure

Shin Ito (National Cerebral and Cardiovascular Center, Department of Clinical Medicine and Development)

P3-IS-2 Ryanodine receptor stabilizer prevents ventricular tachycardia in pressure-overloaded heart failure

Toshiro Kajii (Department of Medicine and Clinical Science, Division of Cardiology, Yamaguchi University Graduate School of Medicine)

P3-IS-3 Werner gene is responsible for cardiac aging via autophagic Off-Rate.

Takahiro Kamihara (Department of Cardiology, Nagoya university graduate school of medicine)

P3-IS-4 A Novel Long Intergenic Noncoding RNA, Lionheart, Regulates Myosin Heavy Chain 6 in Pressure Overload Induced Heart Failure.

Shuhei Tsuji (Kyoto University Graduate School of Medicine, Department of Cardiovascular Medicine)

ISHR

Poster 4

December 14th (Sat.) 14:00～14:32 Poster Room 1 (3F Reception Hall)

「Novel targets for cardiovascular disease」

Chair : Takehiro Ogata (Department of Pathology and Cell Regulation, Kyoto Prefectural University of Medicine)

P4-IS-1 Linoleic acid improves assembly of the complex II subunit and supercomplex of the mitochondrial oxidative phosphorylation in heart failure

Satoshi Maekawa (Department of Cardiovascular Medicine, Otaru-kyokai hospital)

P4-IS-2 Management of serum phosphate level is an important novel therapeutic target in Chronic Heart Failure

Hiroshi Asanuma (Department of Internal Medicine, Meiji University of Integrative Medicine)

P4-IS-3 The role of Th1 and Th17 During the acute phase of Myocardial Infarction in SR-BI KO/ApoeR61h/h Mice

Hiroyasu Inui (Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine)

P4-IS-4 A dipeptidyl peptidase-IV inhibitor improves diastolic dysfunction in Dahl salt-sensitive rats

Yuri Nakajima (Clinical Research and Development, National Cerebral and Cardiovascular Center)

ISHR

Poster 5

December 15th (Sun.) 14:15～14:47 Poster Room 1 (3F Reception Hall)

「Fibrosis and ischemia-reperfusion injury」

Chair : Tetsuya Matoba (Department of Cardiovascular Medicine, Kyushu University)

P5-IS-1 Genome-wide CRISPR screen to identify genes involved in fibrosis

Toshiyuki Nishiji (Department of Cardiovascular Medicine, Kyoto Prefectural University of Medicine)

P5-IS-2 Cardiac-specific MicroRNAs Increase after Myocardial Reperfusion in the Ischemic Region

Satoru Yamazaki (Department of Molecular Pharmacology, National Cerebral and Cardiovascular Center)

P5-IS-3 Cyclin dependent kinase 1 (CDK1) positively regulates transforming growth factor-β (TGF-β) expression and transforming fibroblast to myofibroblast

Taishi Yamamoto (Cardiovascular Medicine, Faculty of Medical Sciences, Graduate School of Medical Sciences, Kyushu University)

P5-IS-4 Hypoxia Upregulates Cartilage Intermediate Layer Protein 1 (CILP-1) and Contributes to the Suppression of TGF-β Signaling in Cardiac Fibroblasts

Tatsuro Hitsumoto (National Cerebral and Cardiovascular Center)

ISHR

Poster 6

December 15th (Sun.) 14:15～14:47 Poster Room 1 (3F Reception Hall)

「Metabolism and atherosclerosis」

Chair : Ippei Shimizu (Department of Cardiovascular Biology and Medicine Niigata University Graduate School of Medical and Dental Sciences)

P6-IS-1 Steatohepatitis mediated by the dietary cholesterol, 7-ketochlesterol accelerated atherosclerosis in Ldlr deficient mice

Kotaro Kanno (Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine)

P6-IS-2 Prevalence of Coronary Artery Disease and Achievement of Low-density Lipoprotein Cholesterol Management Targets in Familial Hypercholesterolemia Patients at Osaka University Hospital

Takeshi Okada (Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine / Department of Community Medicine, Osaka University Graduate School of Medicine)

P6-IS-3 CHOP knockdown reduced atherosclerosis in apolipoprotein E-knockout mice

Haiying Fu (Department of Clinical Medicine and Development, National Cerebral and Cardiovascular Center / Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine)

P6-IS-4 Glucose-dependent insulinotropic peptide is essential for maintenance of cardiac lipid metabolism.

Remina Yasheng (Department of cardiology, Nagoya university)

ISHR

Poster 7

December 15th (Sun.) 14:15～14:39 Poster Room 1 (3F Reception Hall)

「Pulmonary vascular diseases」

Chair : Yoshikazu Nakaoka (Department of Vascular Physiology National Cerebral and Cardiavascular Center Research Institute)

P7-IS-1 JAK2 V617F mutation promotes hypoxia-induced pulmonary hypertension in mice

Yusuke Kimishima (Department of Cardiovascular Medicine, Fukushima Medical University)

P7-IS-2 Effects of Endogenous Adenosine on Hemodynamics in Experimental Acute Pulmonary Embolization

Hiroko Takahama (Department of Clinical Research and Development, National Cerebral and Cardiovascular Center)

P7-IS-3 Cavin-Caveolin system relates with pulmonary hypertension by regulating BMP/Smad signaling

Shinya Tomita (Department of Cardiovascular Medicine Graduate School of Medical Science Kyoto Prefectural University of Medicine)