International Symposium

Monday May 12

	Monday May 12 - Session 1 - 8.30 am	Hall A+B			Presentation Title
1	*Mitochondria, Protein homeostasis and Cell Death*	Chair	Derek	Hausenloy	
		Chair	Kinya	Otsu	
		Speaker	Richard	Kitsis	Unifying Cell Death Programs in Myocardial Infarction
		Speaker	Sonia	Singh	Targeting the JAK1-STAT3 pathway to treat cardiac proteinopathy
		Speaker	Asa	Gustafsson	Extracellular Vesicles and Cellular Quality Control Mechanisms in Cardioprotection
		Speaker	Luca	Scorrano	Mitochondrial Shape, Autophagy, and Heart Failure: a Triad to Combat.
		Speaker	Petra	Kienesberger	Role of lipid phosphate phosphatases in cardiac energy metabolism and function
		Oral Abst 266	Sauri	Hernandez	ND-13 confers cardioprotection by inhibiting mitochondrial fission and preserving mitochondrial bioenergetics via the RhoA-ROCK1-Drp1 pathway
	Monday May 12 - Session 1 - 8.30 am	**Room 201+202**			Presentation Title
2	*New mechanisms to protect against heart failure with preserved ejection fraction*	Chair	David	Lefer	
		Chair	Sean	Davidson	
		Speaker	Johannes	Backs	Targeting Class IIa HDAC signaling in cardiometabolic disease
		Speaker	Rebecca	Ritchie	Cyclic GMP as a therapeutic target for HFpEF
		Speaker	Taketaro	Sadahiro	Trans-differentiation of cardiac fibroblasts reveals a new molecular mechanisms for HfpEF
		Speaker	Brandon	Biesiadecki	Tyrosine kinase phosphorylation of troponin I is a novel mechanism to increase myocardial relaxation
		Speaker	Judy	de Haan	Unique immunometabolic treatment strategies to protect against HFpEF
		Oral Abst 22	Dan	Meng	PCSK5 Promotes Angiogenesis and Cardiac Repair After Myocardial Infarction
	Monday May 12 - Session 1 - 8.30 am	**Room 203**			Presentation Title
3	*Interorgan communications in heart failure*	Chair	Doan	Ngo	
		Chair	Yu	Ying	
		Speaker	Yukiteru	Nakayama	Multi-organ cross-talk via innate immune memory in heart failure
		Speaker	Gabriele	Schiattarella	Liver/adipose tissue-Heart cross talk in HFpEF and Cardiometabolic disease
		Speaker	Stefanie	Dimmeler	Hematopoietic mutations and cardiac fibrosis
		Speaker	Zoltan	Varga	Immune checkpoint signaling and heart failure
		Speaker	Daniela	Carnevale	Brain-heart cross talk in HF
		Oral Abst189	Jane	Yu	Deletion of Piezo1 in adult cardiomyocytes accelerates cardiac senescence and causes premature death
	Monday May 12 - Session 2 - 4.05 pm	**Hall A+B**			Presentation Title
4	*Shaping the cardiac proteome in health and disease*	Chair	Lucie	Carrier	
		Chair	Ying	Ge	
		Speaker	Yibin	Wang	Regulation of the cardiac translatome
		Speaker	Sakthivel	Sadayappan	Myosin S2 and cMyBP-C Interactions in Cardiac Function and Hypertrophic Cardiomyopathy
		Speaker	Shirin	Doroudgar	The unfolded protein response and ER stress
		Speaker	Federica	Accornero	Proteostasis regulation by the multi-tRNA synthetase complex
		Speaker	Diederik	Kuster	Proteostasis in hypertrophic cardiomyopathy
		Oral Abst202	Maarten	van den Hoogenhof	CAMK2D underlies cardiac dysfunction in RBM20 cardiomyopathy
	Monday May 12 - Session 2 - 4.05 pm	**Room 201+202**			Presentation Title
5	*E-C Coupling: channels, regulators and key players*	Chair	Ana-Maria	Gomez	
		Chair	Yoshihiko	Saito	
		Speaker	Marek	Michalac	Endoplasmic reticulum stress and excitation-contraction coupling machinery
		Speaker	Long-Sheng	Song	Junctophilin-2 Regulation of Cardiac E-C Coupling and Transcription
		Speaker	Shi-Qiang	Wang	GRK2 regulation of beta-adrenergic signaling and Ca2+ handling in the heart
		Speaker	Jeffrey	Erickson	S-Nitrosylation of CaMKII and cardiac arrhythmia
		Speaker	Emiliano	Medei	IL-1β enhances susceptibility to atrial fibrillation in mice by acting through resident macrophages and promoting caspase-1 expression
		Oral Abst 250	George	Madders	PEGylated isoprenaline reveals distinct functions of cardiac β-adrenergic receptors located in the T-tubule vs. outer surface membrane
	Monday May 12 - Session 2 - 4.05 pm	**Room 203**			Presentation Title
6	Regulation of endogenous cardiac regeneration	Chair	Lena	Ho	
		Chair	Florian	Weinberger	
		Speaker	Mauro	Giacca	RNA therapies for cardiac regeneration
		Speaker	Eldad	Tzahor	Advancing Cardiac Therapeutics
		Speaker	Eva	van Rooij	Creating a repair permissive heart
		Speaker	Diana	Nascimento	A switch in cardiac fibroblasts hinders regeneration after neonatal myocardial infarction
		Speaker	Caitlin C.	O'Meara	Modulating cell polarity to promote cardiomyocyte regeneration
		Oral Abst64	Mona	Malek Mohammadi	Ventricular crosstalk activates regenerative mechanisms in the contralateral ventricle in neonatal mice

Tuesday May 13

	Tuesday May 13 - Session 3 - 8.15 am	Hall A+B			Presentation Title
7	*New players in mitochondrial calcium regulation*	Chair	Lea	Delbridge	
		Chair	Yi	Zhu	
		Speaker	Livia	Hool	Manipulating the L-type calcium channel to alter mitochondrial function in diastolic heart disease
		Speaker	Diego	De Stefani	TMEM65 controls mitochondrial Ca2+ extrusion
		Speaker	Nina	Kaludercic	Targeting mitochondrial ROS formation in cardiac pathology
		Speaker	Melanie	Paillard	Sarcoplasmic reticulum-mitochondria communication in diabetic HFpEF
		Speaker	Toshiyuki	Yano	A new facet of myocardial necroptosis: crosstalk with mitochondrial dynamics and autophagy
		Oral Abst412	Candice	Todd	A porcine model of prolonged cardiac arrest and extracorporeal membrane oxygenation following myocardial infarction. A Pilot Feasibility Study
	Tuesday May 13 - Session 3 - 8.15 am	**Room 201+202**			Presentation Title
8	*Health and Disease Mechanisms of Women's Heart*	Chair	Lorrie	Kirshenbaum	
		Chair	Sucharov	Carmen Kika	
		Speaker	Inna	Rabinovich-Nikitin	The cardiac pathophysiological outcomes of shift work during pregnancy
		Speaker	Ana Filipa	da Silva Ferreira	Cardiovascular (reverse) remodeling induced by pregnancy
		Speaker	Maggie	Lam	Proteogenomic insights into dimorphic exon usage in aging hearts
		Speaker	Rudolf	de Boer	Heart failure with preserved ejection fraction in humans and mice: what does sex have to do with it?
		Speaker	Raffaele	Coppini	Sex differences in cardiac electrophysiology and drug response
		Oral Abst318	Anja	Helmer	Sex differences in left ventricular recovery and corresponding gene expression in a rat model of cardiac donation after circulatory death
	Tuesday May 13 - Session 3 - 8.15 am	**Room 203**			Presentation Title
9	*Cardiac Hippo-YAP signaling*	Chair	Metin	Avkiran	
		Chair	Emilio	Hirsch	
		Speaker	Enzo	Porrello	Role of Hippo-YAP in cardiac development and regeneration
		Speaker	James	Martin	Targeting Hippo-YAP signaling in heart failure
		Speaker	Mei	Xin	Beta adrenergic and YAP crosstalk regulate cardiomyocyte proliferation
		Speaker	Dominic	Del Re	The role of YAP in cardiac fibrosis
		Speaker	Ichiro	Shiojima	Wnt5a-YAP signaling axis mediates mechanotransduction in cardiac myocytes
		Oral Abst153	Kendrick	Yiu	Investigating the role of an orphan nuclear receptor NR4A1 in atrial fibrillation
	Tuesday May 13 - Session 4 - 2.50 pm	**Hall A+B**			Presentation Title
10	*Modulators of cell-cell communication in heart failure*	Chair	Donald	Bers	
		Chair	Susmita	Sahoo	
		Speaker	Paula	Longhi	Crosstalk between adipose tissue and the heart in atrial fibrillation
		Speaker	Julie	McMullen	Impact of heart-derived factors from the protected and failing heart
		Speaker	Jose Angel	Nicolas Avila	Reciprocal regulation between macrophages and tissue mitochondrial function
		Speaker	Kristin	Stanford	Exercise-induced interorgan communication
		Speaker	Ichiro	Manabe	Innate immune memory and organ cross-talk in heart failure
		Oral Abst215	Sarah	Hilderink	Proteomics of hypertrophic cardiomyopathy extracellular vesicles elucidates detrimental effects of in vitro HCM cardiomyocyte secretome on endothelial cells and cardion
	Tuesday May 13 - Session 4 - 2.50 pm	**Room 201+202**			Presentation Title
11	*Spatial organization of protein synthesis in the myocardium*	Chair	Llewelyn	Roderick	
		Chair	Tim	Kamp	
		Speaker	Marie-Jo	Moutin	The tubulin code as spatial regulator - what we can learn from the brain and the use of cell-free systems
		Speaker	Izhak	Kehat	Localized protein translation in the heart
		Speaker	Benjamin L.	Prosser	Microtubule-mediated spatial control: directing translation and remodeling in the myocardium
		Speaker	Gail A.	Robertson	Coordinated cotranslational association of ion channels mRNA in the heart
		Speaker	Julia	Gorelik	Beta 1 and beta 2 receptor translation dynamics in healthy and failing heart
		Oral Abst428	Leonoor	Wijdeveld	Blood-based Protein Markers Associated with Myocardial Interstitial Fibrosis
	Tuesday May 13 - Session 4 - 2.50 pm	**Room 203**			Presentation Title
12	*Mechanistic insights of the role of impaired cardiac metabolism in driving heart failure*	Chair	Yasuchika	Takeishi	
		Chair	Junjie	Xiao	
		Speaker	Christoph	Maack	Mechano-energetic uncoupling in HFrEF and HFpEF
		Speaker	Veronica	Eisner	Mitochondrial crystae dynamics in the aging heart
		Speaker	Alexander	Pinto	New mechanistic insights into cardiac fibrosis and heart failure in diabetes emerging from cutting-edge computational biology and single-cell omics
		Speaker	Valentina	Parra	Identification of new transcription factors involved in the control of cardiac hypertrophy and mitochondrial metabolism of cardiomyocytes
		Speaker	Chrishan	Ramachandra	Heart Failure in a Dish: Empagliflozin's Metabolic and Contractile Benefits in Patient Derived iPSC Cardiac Models
		Oral Abst 419	Abraham	Mendez Fernandez	Mitochondrial bioenergetics and ATP synthase
	Tuesday May 13 - Session 5 - 5.05 pm	**Hall A+B**			Presentation Title
13	*Regulatory mechanisms of intracellular Ca2+ signalling and excitability via intracellular organelle cross-talk*	Chair	Gargia Rivas	Gerardo	
		Chair	Michelle	Munro	
		Speaker	Bjorn C.	Knollmann	RyR2 as an antiarrhythmic drug target
		Speaker	Mario	Delmar	Arrhythmogenic Remodeling of Intracellular Calcium Dynamics in ARVC
		Speaker	Deli	Zhang	Critical role of mitochondrial remodeling in cardiac arrhythmia
		Speaker	Ayako	Takeuchi	Impact of Ca2+ crosstalk between mitochondria and sarcoplasmic reticulumin cardiomyocyte during workload transition
		Speaker	Hideaki	Inazumi	Critical role of NRSF-GNAO1 pathway in regulating Ca2+ signaling in ventricular myocytes
		Oral Abst 401	Shanmugasundaram	Pakkiriswami	Adaptation to mitochondrial calcium overload varies between left and right ventricles
	Tuesday May 13 - Session 5 - 5.05 pm	**Room 201+202**			Presentation Title
14	*Drug targets in Heart Failure*	Chair	Walter J	Koch	
		Chair	Lauren	May	
		Speaker	Simon	Lebek	Targeting CAMKII to mend the failing heart
		Speaker	Tim	McKinsey	HDACs as target for therapy in heart failure
		Speaker	Lilei	Zhang	Treating heart failure with novel REV-ERB agonist
		Speaker	Priscila	Sato	GRK2 and Cardio-metabolic signaling in Heart Failure
		Speaker	Atsushi	Hoshino	Development of genome editing tools based on deep mutationalscanning
		Oral Abst238	Marion	Delaunay	Targeting HDAC11 to reverse obesity and metabolic dysfunction in mice
	Tuesday May 13 - Session 5 - 5.05 pm	**Room 203**			Presentation Title
15	*Targeting metabolism to prevent heart failure progression: HFrEF vs HFpEF*	Chair	Joan Heller	Brown	
		Chair	Yumiko	Oishi	
		Speaker	Jenny	van Eyk	Myocardial proteome defines the continuum in human HFpEF
		Speaker	Rong	Tian	Mitochondria in HFpEF
		Speaker	Luc	Bertrand	Targeting glucose-derived O-GlcNAcylation pathway in heart failure
		Speaker	Mahmoud	Abdellatif	Targeting nicotinamide adenine dinucleotide for the treatment of HFpEF
		Speaker	Ming	Xu	The protective role of exercise on children metabolic syndrome
		Oral Abst44	Jae Woo	Jung	One Carbon Metabolism Defect In Human Failing Hearts

International Symposium

Wednesday May 14

	Wednesday May 14 - Session 6 - 8.15 am	Hall A+B			Presentation Title
16	*Non-Myocyte Contributors to Arrhythmia*	Chair	Bianca	Brundel	
		Chair	Karin	Sipido	
		Speaker	Jim	Bell	Cardiac adiposity and arrhythmias
		Speaker	Arjun	Deb	Fibroblasts regulate cardiac excitability and arrhythmogenesis
		Speaker	Molly	O'Reilly	Exploring the role of neuronal dysfunction in inherited arrhythmia syndromes
		Speaker	Patrizia	Camelliti	Fibroblast-Myocyte interactions and their impact on cardiac electrophysiology
		Speaker	Sebastian	Clauss	Macrophages and Electrical conduction in the Heart
		Oral Abst231	Tandy	Meier	Impact of tachypacing and mechanical load on fibroinflammatory cross-talk between cardiomyocytes and non-myocytes in engineered heart tissue
	Wednesday May 14 - Session 6 - 8.15 am	**Room 201+202**			Presentation Title
17	*Mechanisms of cardiac dysfunction in diabetic heart disease*	Chair	Mittal	Anupam	
		Chair	Charles	Steenbergen	
		Speaker	Jonathan	Kirk	Cardiomyocyte myofilament glycation in diabetes
		Speaker	Junichi	Sadoshima	Mitophagy & the diabetic heart
		Speaker	Kim	Mellor	Glycophagy and glycogen in diabetic cardiomyopathy
		Speaker	Melanie	White	Multi-omics approaches to investigating diabetic cardiomyopathy
		Speaker	Lisa	Heather	Metabolite-mediated PTM's driving Diabetic Cardiomyopathy
		Oral Abst117	Qingzhong	Xiao	Neutrophil Elastase: A Novel Therapeutic Target for Heart Failure with Preserved Ejection Fraction
	Wednesday May 14 - Session 6 - 8.15 am	**Room 203**			Presentation Title
18	*Cutting-edge research on genomics and omics*	Chair	Fadi	Charchar	
		Chair	Emily	Wong	
		Speaker	Gianluigi	Condorelli	Non-coding RNAs as epigenetic markers of myocardial diseases
		Speaker	Roger	Foo	Genome and omics analyses in CVDs
		Speaker	Seitaro	Nomura	Single-cell and spatial omics analysis to develop cardiovascular precision medicine
		Speaker	Eddy	Kizana	Cardiotropic AAV variants
		Speaker	Miguel	Torres	Transcriptional Regulation of Cardiomyocyte Polyploidization
		Oral Abst 205	Atsuko	Okazaki	Genetic Landscape and Prognostic Factors in Pediatric Mitochondrial Cardiomyopathy: A 20-Year Comprehensive Study
	Wednesday May 14 - Session 7 - 2 pm	**Hall A+B**			Presentation Title
19	Current status of cardiac regeneration therapy: from preclinical study to clinical trial	Chair	Job	van Berlo	
		Chair	Kaoru	Ito	
		Speaker	Keiichi	Fukuda	Current status of human iPS cell derived cardiomyocyte transplantation to the patients with severe heart failure due to ischemic heart disease in LAPiS study
		Speaker	Wolfram-Hubertus	Zimmermann	iPS-cell derived engineered heart muscle in patients with advanced heart failure
		Speaker	Wataru	Kimura	Nucleotide and lipid dynamics in postnatal regeneration and stress response
		Speaker	Charles	Murry	Can Academics Make a Stem Cell Drug?
		Speaker	Monika	Gladka	Novel Molecular Targets for Cardiac Repair in Post-Infarcted Heart
		Oral Abst20	Zhan	Chen	A Drug-Elicitable Alternative-Splicing Module (DreAM) for Tunable AAV Expression and Controlled Myocardial Regeneration
	Wednesday May 14 - Session 7 - 2 pm	**Room 201+202**			Presentation Title
20	*Metabolic reprogramming to prevent and treat heart failure*	Chair	John	Elrod	
		Chair	Dunja	Aksentijevic	
		Speaker	Zoltan	Arany	Understanding Human Cardiac Metabolism
		Speaker	Tao	Li	BCAA metabolism and HFpEF
		Speaker	Cat	Makerewich	Modulating Cardiac Mitochondria with Micropeptides
		Speaker	Sun	Xiaolei	Mitochondrial Transfer: a Therapy for Cardiomyopathy?
		Speaker	Daniel	Kelly	Targeting Metabolic Maturation in the Developing and Diseased Heart
		Oral Abst316	Giulia	Guerra	Doxorubicin Damages the Heart Inducing Metabolic Rewiring: a Multi-Omics Journey Through Anthracycline Cardiotoxicity
	Wednesday May 14 - Session 7 - 2 pm	**Room 203**			Presentation Title
21	*Sex matters in Cardiovascular remodeling*	Chair	Eiki	Takimoto	
		Chair	Friederike	Cuello	
		Speaker	Manuel	Mayr	Proteomic Atlas of Atherosclerosis
		Speaker	Dhandapany	Perundurai	Sex differences in a newly identified heart failure syndrome
		Speaker	Katrin	Streckfuss-Boemeke	Takotsubo Syndrome-mechanisms and Therapy
		Speaker	John	Ussher	Sex differences in diabetes-related cardiovascular disease: insights from basic science
		Speaker	Yang	Cao	Genetic dissection of mitochondrial dysfunction in heart failure
		Oral Abst288	Meng	Wang	BCAA Catabolism Targeted Therapy
	Wednesday May 14 - Session 8 - 4.15 pm	**Hall A+B**			Presentation Title
22	*Epigenetic Regulation of Cardiac Stress*	Chair	Elena	Azizan	
		Chair	Wei	Kong	
		Speaker	Thomas	Vondriska	Histone variants as mechanical stress sensors
		Speaker	Liming	Pei	Epigenetic insights into cardiac biology and disease
		Speaker	Li	Qian	Epigenetic regulation of direct cardiac reprogramming
		Speaker	Jan	Lammerding	New insights into the pathogenic mechanism of cardiac laminopathies and the therapeutic effect of LINC complex disruption
		Speaker	Sam	El-Osta	Epigenetics in cardiovascular health and disease
		Oral Abst 115	Mick	Lee	Validating functional cardiomyocyte-specific histone-acetylated variant enhancers in human ES-derived cardiomyocytes using a STARR-Seq Approach
	Wednesday May 14 - Session 8 - 4.15 pm	**Room 201+202**			Presentation Title
23	*Cardiac Ca2+ handling as a therapeutic target*	Chair	Davor	Pavlovich	
		Chair	Cecilia	Mundina	
		Speaker	Eduardo	Bertero	Mitochondrial calcium signaling and redox homeostasis in cardiac health and disease.
		Speaker	Stephan	Lehnart	The Ca2+-sensitive protein Dysferlin protects cardiomyocyte nanodomains in ischemic heart disease
		Speaker	Manfra	Ornella	Assembly and disassembly of cardiomyocyte structure during development and disease.
		Speaker	Niels	Voigt	Impaired intracellular buffering as arrhythmogenic substrate in cardiomyocytes from patients with Afib
		Speaker	Luis	Gonano	Modulation of Sarcoplasmic Reticulum Ca2+ release and uptake: focus on the Ca2+ waves and Ca2+ alternans relationship
		Oral Abst407	Jin	O'Uchi	Pathological impact of SARS-CoV-2 viroporin on the cardiomyocyte function
	Wednesday May 14 - Session 8 - 4.15 pm	**Room 203**			Presentation Title
24	*Mediators of protein phosphorylation in cardiac disease*	Chair	Satomi	Adachi-Akahane	
		Chair	Huangtian	Yang	
		Speaker	Maria	Kontaridis	Role of TRPM4 in Cardiac Disease and Arrhythmogenesis
		Speaker	Xander	Wehrens	Interleukin-6 signaling as an upstream mediator of altered RyR2 phosphorylation in post-operative atrial fibrillation
		Speaker	Alessandra	Ghigo	Beta-adrenergic regulation of cardiac function through PI3K signaling
		Speaker	Kate	Weeks	The cardiac phosphatome in metabolic heart disease & failure
		Speaker	Nicole	Purcell	PHLPPs in cardiac physiology & pathophysiology
		Oral Abst418	Hariharan	Subramanian	AKAP1 silencing-based gene therapy for the prevention of cardiac hypertrophy