ISHR
International Society for Heart Research

ISHR-2019

2019 XXIII ISHR WORLD CONGRESS

June 3 – 6, 2019 • Beijing, China

CONFERENCE PROGRAM

Healthy Heart, Happy Life

2019 XXIII ISHR WORLD CONGRESS

June 3 – 6, 2019 • Beijing, China

ORGANIZER:
International Society for Heart Research (ISHR)

SUPPORTING ORGANIZER:
International Society for Heart Research Chinese Section
The Cardiovascular Society of Chinese Association of Pathophysiology

President of ISHR
Elizabeth Murphy
National Heart, Lung, and Blood Institute

Congress Chair of ISHR2019
Yi Zhu
Tianjin Medical University

CONTENTS

Invitation

WELCOME FROM THE ISHR PRESIDENT

On behalf of the International Society for Heart Research, it is my great pleasure to welcome you to Beijing and the XXIII ISHR World Congress, an event 3-years in the making! Similar to the Olympics and the World cup that only happen every 4 years, the ISHR World Congresses only occur every 3 years and 2019 is the year for the Beijing World Congress. The triennial World Congress is the main event for ISHR International, and we've been working and planning for this for three years. This is shaping up to be an outstanding scientific meeting in a historic venue. The highlights of the program include the outstanding scientific program, the extensive early career activities, the poster sessions, the social interactions and a chance to connect with international colleagues.

Meetings such as this do not happen without a lot of work and effort. First and foremost, thanks to Yi Zhu, Ming Xu, the local organizing committee, and the Chinese section for their tireless work on this World Congress. Thanks also to Lea Delbridge and the International program committee for putting together an outstanding series of International sponsored symposia. The ISHR is also grateful to the Early Career Investigator (ECI) committee, chaired by Kate Weeks and Chen Gao and their faculty mentors Litsa Kranias and Johannes Backs. The ECI committee has planned numerous scientific and social events and based on experience from previous World Congresses, these ECI events are a highlight of the meeting. The ISHR is also pleased to announce the formation of a new Mid-Career Investigator Committee, chaired by Davor Pavlovic. This committee has planned a number of activities at the World Congress and I encourage all Mid-Career Investigators to attend. Thanks also to Asa Gustafsson for chairing the Richard Bing Competition committee. Special thanks to Leslie Lobaugh, our Executive Secretary for all she does and to the ISHR Executive Committee for their leadership.

Welcome and enjoy the Congress.

Elizabeth Murphy, Ph.D.
President of International Society for Heart Research

WELCOME FROM THE SCIENTIFIC PROGRAM COMMITTEE CHAIR

Welcome to the 2019 World Congress of the International Society for Heart Research!

The ISHR is among the leading societies internationally dedicated to understanding the basis for inherited and acquired diseases of the heart and vascular system, with the ultimate goal of improving clinical approaches to treatment and prevention of disease. This year's World Congress promises to report new advances in our understanding of determinants of cardiac health and disease. More than 200 speakers from all our regional sections will make oral presentations addressing the primary themes of the meeting:

- New Mechanisms of Cardioprotection & Injury
- New Insights into Cardiac Dysfunction
- Ion Channel Mechanisms & Arrhythmias
- Signalling in Cardiac Disease & Therapy
- Emerging Concepts for Cardiac Regulation: Beyond the Genome
- Regenerative Medicine for Heart Disease
- Cardiac Metabolism
- Vascular Dysfunction, Inflammation and Remodeling

The Scientific Program Committee in collaboration with the Local Organizing Committee has drafted a schedule of 40 symposia that ensures that these themes are carried through the three days of the Congress. The scientific program notably features participation by investigators at early career stages: a half-day pre-Congress session involving oral presentations by Early Career Investigators, symposium presentations by faculty at ranks equivalent to assistant professor, and co-chairing of all the symposia that comprise the meeting. In all Symposia sessions selected abstracts are chosen to be highlighted as oral presentations. The schedule has been tailored to ensure that poster sessions occur during "prime time" each day. The outstanding poster from each of the three sessions selected by the judges will be recognized by a poster prize to the primary author.

On behalf of the ISHR, we extend deepest appreciation to the Scientific Program Committee and the Local Organizing Committee for their thoughtful and dedicated work in bringing this World Congress to fruition. We especially thank Yi Zhu and Ming Xu, Chair and Co-Chair of the Local

Organizing Committee for their leadership in hosting this meeting in Beijing and for their commitment to excellence in organizing the meeting. To the Chairs and Members of the Topic Groups we express special thanks. Their assistance in reviewing all the submitted symposia for each theme area and advising on the selection of Symposia sessions and speakers has been immensely valuable, as has been the input from the ISHR Council Executive in helping to shape the final program.

To gain the full benefit of attending the World Congress, we encourage you to take part in the General Assembly and organized social activities to learn more about the ISHR and to meet colleagues from around the globe. We hope you will enjoy both the quality research presentations and the social interactions. Our best wishes, and thanks for being part of the vibrant ISHR community!

Lea M. D. Delbridge
Chair, Scientific Program Committee

Huangtian Yang
Co-Chair, Vice Scientific Program Committee

WELCOME FROM THE XXIII WORLD CONGRESS PROGRAM CHAIR AND CO-CHAIR

Dear Colleagues and Friends,

On behalf of the Local Organizing and Scientific Committees of the XXIII World Congress of the ISHR and the Chinese Section of the ISHR, it is our great pleasure to warmly welcome you to the 2019 XXIII World Congress on June 3 – 6, 2019 in Beijing, China, the first ISHR World Congress which has ever been held in China. The theme of the congress is "Healthy Heart, Happy Life".

The Scientific Committee has developed an exciting, informative, and up-to-date program with seven main topics devoted to Mechanisms of Cardioprotection and Injury, New Insights into Cardiac Dysfunction, Ion Channel Mechanisms and Arrhythmias, Signaling in Cardiac Disease and Therapy, Emerging Concepts for Cardiac Regulation: Beyond the Genome, Cardiac Metabolism and Regenerative Medicine for Heart Disease.

As in previous meetings, the XXIII World Congress of the ISHR will invite the internationally distinguished speakers to participate in our congress and provides a platform for basic and clinical scientists to present their new findings, technical advancement, and therapeutic innovation. We hope that all delegates can benefit maximally through exchange of views and social networking to promote global cardiovascular health.

June is the best season to visit Beijing, one of the most historical and cultural cities in China. Beijing has the largest number of cultural heritages in the world. We sincerely hope that during your stay in China, you will enjoy the experience about Chinese history, traditions, and culture, and, most importantly, the science of ISHR.

We look forward to welcoming you in Beijing in June 2019.

Best wishes!

Yi Zhu, M.D.
Congress Chair
The President of Chinese Section of ISHR

Ming Xu, M.D. Ph.D.
Congress Co-Chair
The Secretary of Chinese Section of ISHR

10 *Invitation*

About ISHR

THE INTERNATIONAL SOCIETY FOR HEART RESEARCH

History of the International Society for Heart Research

•The Society started as an "International Study Group for Research in Cardiac Metabolism" in Dubrovnik in 1968; at the 1976 World Congress in Tokyo, we adopted the name "International Society for Heart Research".

•Over the years, our roster has grown to include over 3,000 members.

•The society has 7 international Sections (Australasian, Chinese, European, Indian, Japanese, Latin American and North American).

•To date 22 World Congresses of the ISHR have been held (Dubrovnik, 1968; Gargona, 1969; Stowe. 1970; Geneva, 1971; Winnipeg. 1972; Freiburg, 1973; Quebec, 1974; Tokyo, 1976; New Delhi, 1978; Moscow, 1980; London, 1983; Melbourne, 1986; Ann Arbor, 1989; Kobe, 1992; Prague, 1995; Rhodes, 1998; Winnipeg, 2001; Brisbane, 2004; Bologna, 2007; Kyoto, 2010; San Diego, 2013; Buenos Aires, 2016) and two future World Congresses are scheduled (Beijing, 2019 and Berlin, 2022).

•The Society has developed a number of prestigious awards (Peter Harris Distinguished Scientist Award, Research Achievement Award, Outstanding Investigator Award, three named Distinguished Lecture Awards and Distinguished Leader Award for Faculty; and Richard Bing Award and Travel and Poster Awards for Early-Career Investigators); publishes its own journal (Journal of Molecular and Cellular Cardiology. Editor: R John Solaro) and has its own newsletter (Heart News and Views, Editor: Leslie Anderson Lobaugh).

Missions

Our mission is to promote the discovery and dissemination of knowledge in the cardiovascular sciences on a world-wide basis through publications, congresses and other media. Our goals are:

•To promote the exchange of ideas on a world-wide basis between scientists and clinicians interested in all aspects of cardiovascular biology and medicine.

•To promote discovery and dissemination of knowledge in all areas of cardiovascular biology and medicine.

•To organize and support national and international congresses devoted to all aspects of cardiovascular research.

•To provide an international forum for discussion of problems and controversies at the cutting edge of cardiovascular research.

•To publish a world class journal devoted to advances in cardiovascular research

EXECUTIVE COMMITTEE 2016-2019

President: Elizabeth Murphy, PhD
Past-President: Metin Avkiran, PhD
President-Elect: Thomas Eschenhagen, PhD
Secretary General: Lea M. Delbridge, PhD
Treasurer: Asa Gustafsson, PhD
Member: R John Solaro, PhD
At-Large Member: Yoshihiko Saito, MD, PhD

ISHR ADMINISTRATIVE OFFICES/STAFF

Leslie Anderson Lobaugh, PhD
Executive Secretary
P.O. Box 52643, Durham, NC 27717-2643
Fax: 919-493-4418 • E-mail: llobaugh@nc.rr.com
ISHR Web Site: www.ishrworld.org
World Congress Web Site: www.ishr2019.org

ISHR SECTION LEADERSHIP

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SECTION VICE PRESIDENT
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SECTION VICE PRESIDENT
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SECTION VICE PRESIDENT
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SECTION TREASURER
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Gary D. Lopaschuk
SECTION PRESIDENT
Peipei Ping
SECTION TREASURER
Rong Tian

Organization

2019 WORLD CONGRESS ORGANIZING COMMITTEE

Chair:

Yi Zhu, MD, Tianjin Medical University

Co-Chair:

Ming Xu, MD, PhD, Peking University

Members:

Jun Bu, MD, PhD, Shanghai Jiao Tong University
Qi Chen, MD, PhD, Nanjing Medical University
Shaoliang Chen, MD, Nanjing Medical University
Xiang Cheng, MD, PhD, Huazhong University of Science and Technology
Erdan Dong, MD, PhD, Peking University
Yaling Han, MD, General Hospital of Shenyang Military Region
Ben He, MD, Shanghai Jiaotong University
Yu Huang, PhD, The Chinese University of Hong Kong
Rutai Hui, MD, PhD, Chinese Academy of Medical Sciences
Xiangqing Kong, MD, Nanjing Medical University
Yuhua Liao, MD, Huazhong University of Science and Technology
Gang Liu, PhD, Hebei Medical University
Genshan Ma, MD, Southeast University
Peng Qu, MD, PhD, Dalian Medical University
Jianan Wang, MD, PhD, Zhejiang University
Liling Wu, MD, Peking University
Huangtian Yang, MD, PhD, Chinese Academy of Sciences
Zuyi Yuan, MD, PhD, Xi'an Jiaotong University
Youyi Zhang, MD, PhD, Peking University
Zhiren Zhang, MD, Harbin Medical University
Jingang Zheng, MD, China-Japan Friendship Hospital
Jianhua Zhu, MD, Zhejiang University
Yunzeng Zou, MD, PhD, Fudan University

INTERNATIONAL SCIENTIFIC PROGRAM COMMITTEE

Chair:

Lea Delbridge, PhD

Co-Chair:

Huangtian Yang, MD, PhD

Topic Group Co-Chairs:

Asa Gustafsson, PhD
Derek Hausenloy, PhD
Jolanda van der Velden, PhD
Martin Vila-Petroff, PhD
Livia Hool, PhD
Ana-Marie Gomez, PhD
Burns Blaxall, PhD
Tetsuji Miura, MD, PhD
Tom Vondriska, PhD
Issei Komuro, MD, PhD
Huang-Tian Yang, MD, PhD
Joe Wu, MD, PhD
Rong Tian, MD, PhD
Rui-Ping Xiao, MD, PhD

Topic Group Members:

Jun Sadoshima, MD, PhD
Roger Hajjar, MD, PhD
Brian O'Rourke, PhD
Charles Steenbergen, MD, PhD
Jenny Van Eyk, PhD
Mark Sussman, PhD
Renee Ventura-Clapier, PhD
John Elrod, PhD
Jeff Molkentin, PhD
Xander Wehrens, MD, PhD
Walter Koch, PhD
Mauro Giacca, MD, PhD
Thomas Eschenhagen, MD, PhD
Toyoaki Murohara, MD, PhD
Masafumi Kitakaze, MD, PhD
Lucie Carrier, MD, PhD
Zhiren Zhang, MD, PhD
Emilio Hirsch, PhD
Manuel Mayr, MD, PhD
Keiichi Fukuda, MD, PhD
Yu Huang, MD, PhD
Yong Ji, MD, PhD
Yasuchika Takeishi, MD, PhD
Alejandro Aiello, PhD
Alicia Mattiazzi, PhD
Eva van Rooij, PhD
Salvatore Pepe, PhD
Lorrie Kirschenbaum, MD, PhD
Rebecca Ritchie, PhD
Burkert Pieske, MD, PhD
SK Maulik, MD, PhD
KK Talwar, MD, PhD
Julieta Palomeque, PhD

LOCAL SCIENTIFIC PROGRAM COMMITTEE

Chair:
Huangtian Yang, MD, PhD, Chinese Academy of Sciences

Co-Chair:
Yu Huang, PhD, The Chinese University of Hong Kong
Xiyong Yu, PhD, Guangzhou Medical University

Members:
Jun Cai, MD, PhD, Chinese Academy of Medical Sciences
Kaizheng Gong, MD, PhD, Yangzhou University
Wei Huang, MD, Peking University
Zhengrong Huang, MD, PhD, Xiamen University
Yong Ji, MD, PhD, Nanjing Medical University
Jingsong Ou, MD, PhD, Sun Yat-sen University
Yida Tang, MD, PhD, Chinese Academy of Medical Sciences
Xin Tu, PhD, Huazhong University of Science and Technology
Ye Tian, MD, PhD, Harbin Medical University
Daowen Wang, MD, PhD, Huazhong University of Science and Technology
Jiguang Wang, MD, PhD, Shanghai Jiao Tong University
Yunlong Xia, MD, PhD, Dalian Medical University
Junjie Xiao, PhD, Shanghai University
Ying Yu, MD, PhD, Tianjin Medical University
Chunyu Zeng, MD, PhD, Third Military Medical University
Li Zhang, MD, PhD, Zhejiang University
Yi Zhu, MD, Tianjin Medical University

ORGANIZING COMMITTEE FOR MCI ACTIVITIES AT THE 2019 ISHR WORLD CONGRESS

MCI representatives:

Kenji Onoue and Mikito Takefuji (Japan Section)
Jeff Erickson and James Bell (Australasia Section)
Xue-Yan Jiang and Han Xiao (China Section)
Davor Pavlovic and Nina Kaludercic (Europe Section)
Uma Nahar Saikia and Sivasubramanianarah Ramakrishnan (India Section)
Alejandro Orlowski and Jaime Riquelme (Latin America Section)
Sarah Franklin and Rajasekaran Namakkal-Soorappan (North America Section)

ORGANIZING COMMITTEE FOR ECI ACTIVITIES AT THE 2019 ISHR WORLD CONGRESS

ECI representatives:

Kate Weeks (Chair) and Helena Viola (Australasia Section)
Junjie Xiao and Ding Ai (China Section)
Delphine Mika and Alessandra Ghigo (Europe Section)
Anupam Mittal and Lakshmi Subramanian (India Section)
Takeshi Shimizu and Hitoshi Nakagawa (Japan Section)
Luis Gonano and Zully Pedroza (Latin America Section)
Chen Gao (Vice-Chair) and Randi Parks (North America Section)

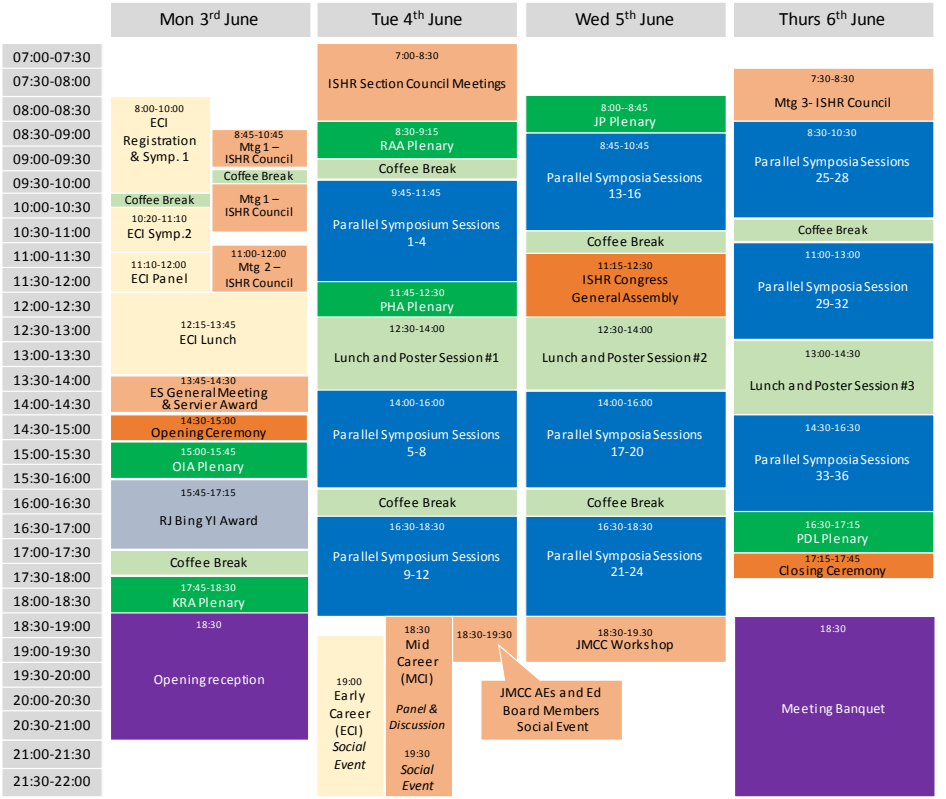
Faculty advisors:

Litsa Kranias
Johannes Backs

Organization

Schedule

Program at a Glance



Session Overview

ISHR XXIII WORLD CONGRESS 2019 - SCIENTIFIC SESSIONS

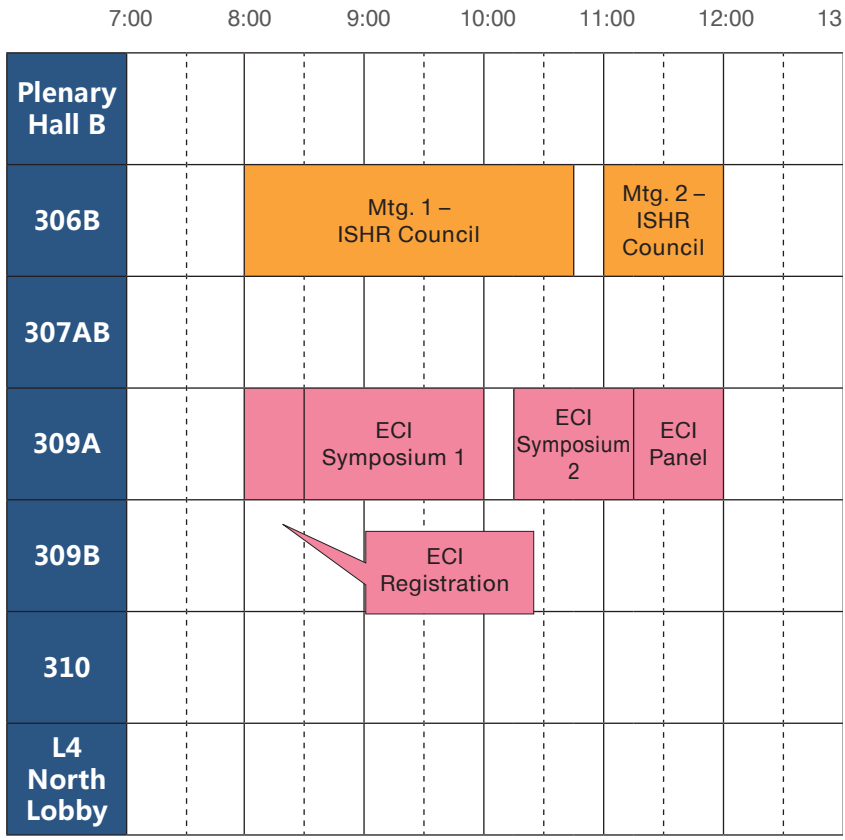
- New Mechanisms of Cardioprotection and Injury
- New Insights into Cardiac Dysfunction
- Ion Channel Mechanisms and Arrhythmias
- Signalling in Cardiac Disease and Therapy
- Emerging Concepts for Cardiac Regulation: Beyond the genome
- Regenerative Medicine for Heart Disease
- Cardiac Metabolism
- Vascular Dysfunction, Inflammation and Remodelling

ISHR- INTERNATIONAL SPONSORED SYMPOSIUM

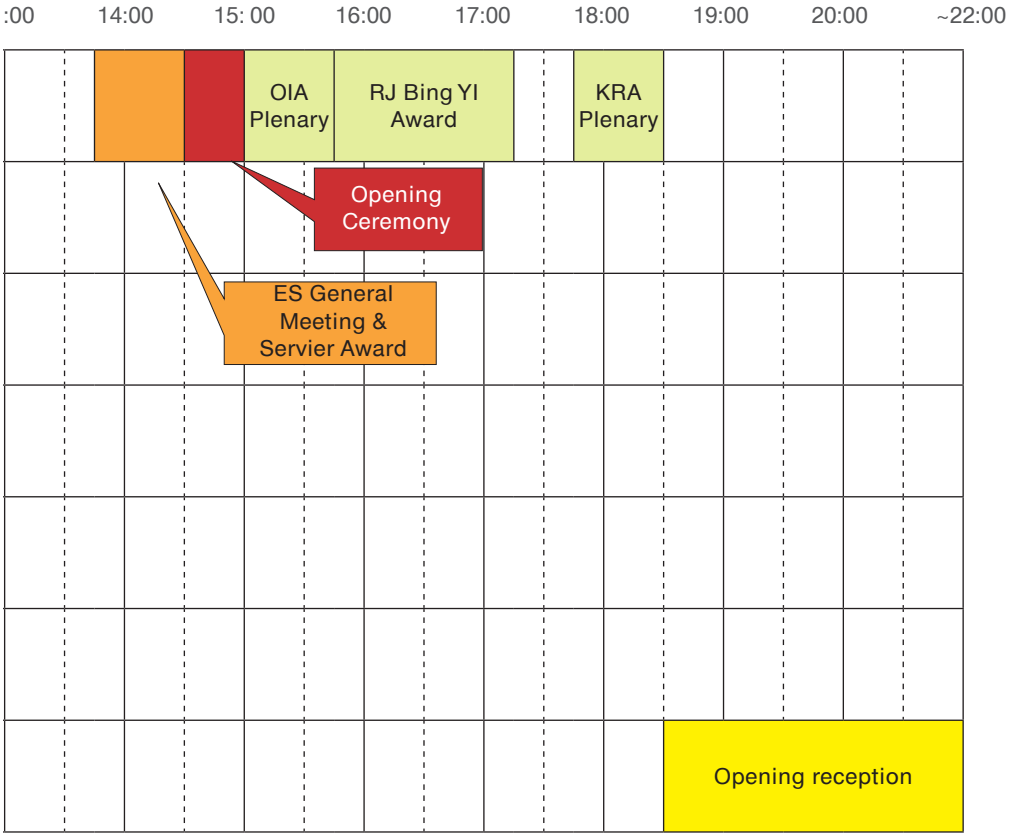
ISHR- CHINA SPONSORED SYMPOSIUM

	Room:	307AB	309A	309B	310
3rd June	15:00	Outstanding investigator Award | Bin Zhou (Plenary Hall B)			
	15:45	RJ Bing Young Investigator Award (Plenary Hall B)			
	17:45	Keith Reimer Distinguished Lecture | Christoph Maack (Plenary Hall B)			
4th June	08:30	Research Achievement Award | Issei Komuro (Plenary Hall B)			
	09:45 TO 11:45	New concepts in cardiac arrhythmia mechanisms – from single molecule to human disease	Mitochondrial mechanisms in cardiac myopathies	Genetic and epigenetic regulation in cardiovascular Diseases	New insights in metabolic dysregulation of the heart in obesity and diabetes
	11:45	Peter Harris Distinguished Scientist Award | Sian Harding (Plenary Hall B)			
	14:00 TO 16:00	The role of lipids, lipoproteins and cholesterol in cardiovascular protection and injury	Mitochondrial homeostasis and cardioprotection	Localisation – receptors, channels and signalling	Energy and metabolic regulation in the vulnerable heart
	16:30 TO 18:30	Fibrosis: an important play in myocardial disease	Cardioprotection autophagy and mitochondrial involvement	New perspectives on gene regulation and signalling	Approaches for cardiac protection and regeneration
5th June	08:00	Janice Pfeffer Distinguished Lecture | Lucie Carrier (Plenary Hall B)			
	08:45 TO 10:45	Molecular and transcriptional regulation of cardiac E-C coupling	Adaptation and intervention approaches for cardioprotection	Heart Failure with preserved ejection fraction - mechanistic advances	New strategies for myocardial reprogramming and repair
	14:00 TO 16:00	Novel exploration of ion channels and arrhythmias	New strategies for protection against ischemia-reperfusion injury	Cardiomyopathy: mechanism and management	Stem cell and tissue engineering for cardiac therapy
	16:30 TO 18:30	Mitochondria and metabolism in cardiac disease	Understanding cardiac deficits and molecular defects	New insights into cardiomyopathy and heart failure	Stem Cells for Precision Medicine
6th June	08:30 TO 10:30	Disrupted and dysfunctional RyR2 – disease consequences	Translational views of cardiac injury and protection	New approaches for heart regeneration	Epigenetic and RNA involvement in cardiac disease & hypertrophic remodelling
	11:00 TO 13:00	Hippo signalling in atherosclerosis	An understanding of dysfunctional proteins in heart failure	Novel insights in exosome mediated cardiac repair	New concepts of reactive oxygen and nitrogen species as signalling mediators
	14:30 TO 16:30	Kinase signalling in cardiac stress	Molecular evidence linking physical exercise to cardioprotection	Cardiovascular disease: mechanisms and disease targets	Modelling and remodelling in the heart – metabolic and systemic regulators
	16:30	President's Distinguished Lecture | Yoshihiko Saito (Plenary Hall B)			

Day 1 Monday, June 3

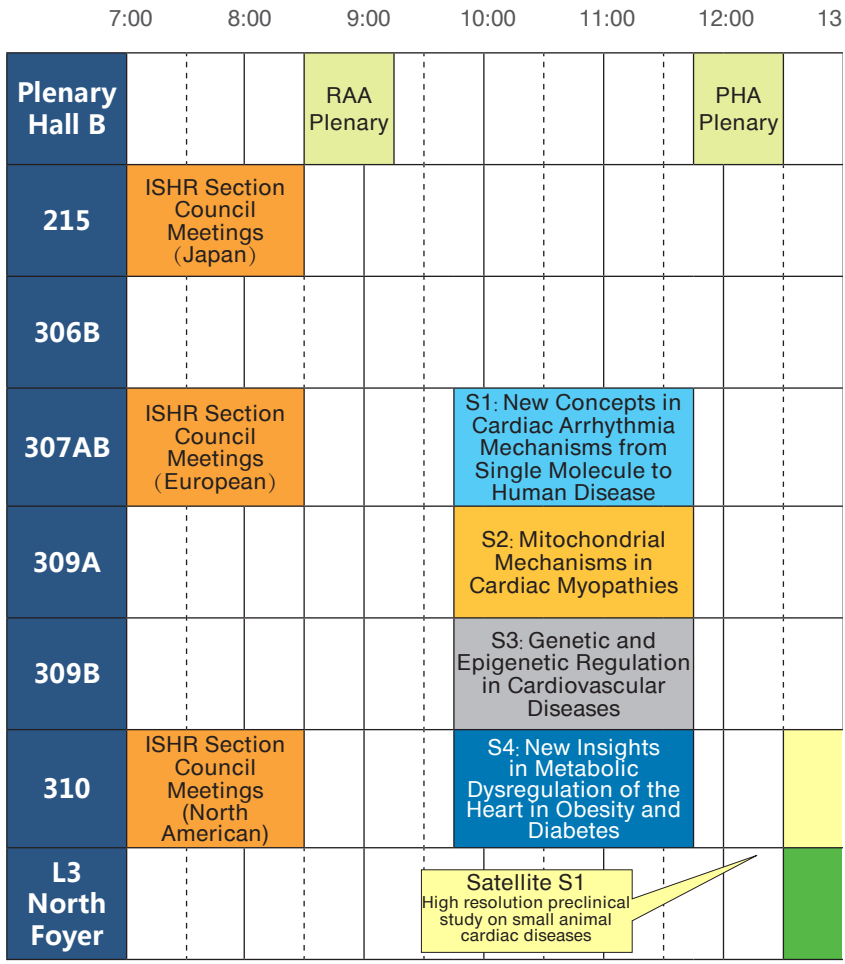


OIA Plenary: Outstanding Investigator Award
KRA Plenary: Keith Reimer Distinguished Lecture

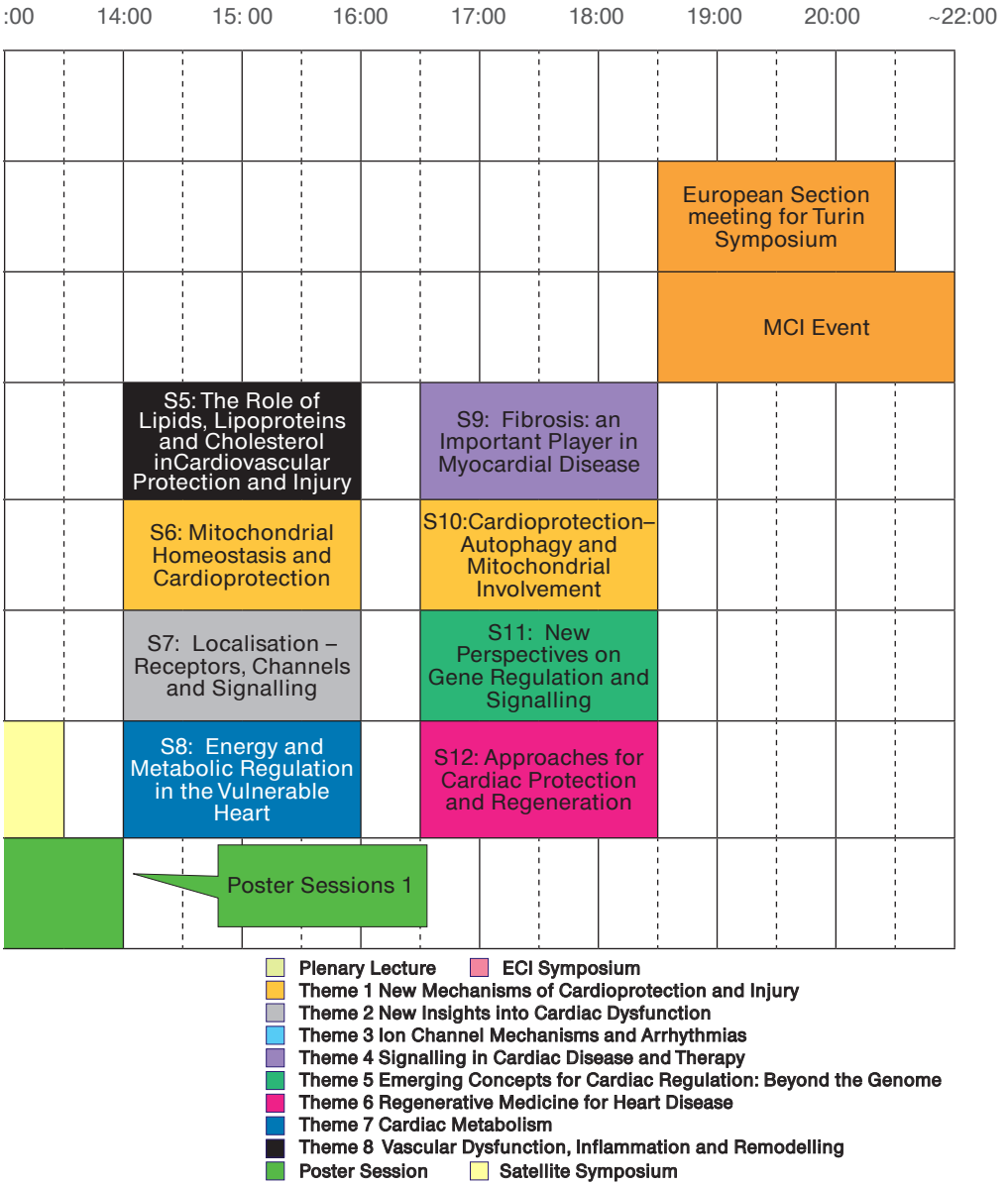


Plenary Lecture
ECI Symposium
Theme 1 New Mechanisms of Cardioprotection and Injury
Theme 2 New Insights into Cardiac Dysfunction
Theme 3 Ion Channel Mechanisms and Arrhythmias
Theme 4 Signalling in Cardiac Disease and Therapy
Theme 5 Emerging Concepts for Cardiac Regulation: Beyond the Genome
Theme 6 Regenerative Medicine for Heart Disease
Theme 7 Cardiac Metabolism
Theme 8 Vascular Dysfunction, Inflammation and Remodelling
Poster Session
Satellite Symposium

Day 2 Tuesday, June 4



RAA Plenary: Research Achievement Award
PHA Plenary: Peter Harris Distinguished Scientist Award


:00
14:00
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16:00
17:00
18:00
19:00
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European Section meeting for Turin Symposium
MCI Event
S5: The Role of Lipids, Lipoproteins and Cholesterol inCardiovascular Protection and Injury
S9: Fibrosis: an Important Player in Myocardial Disease
S6: Mitochondrial Homeostasis and Cardioprotection
S10:Cardioprotection–Autophagy and Mitochondrial Involvement
S7: Localisation – Receptors, Channels and Signalling
S11: New Perspectives on Gene Regulation and Signalling
S8: Energy and Metabolic Regulation in the Vulnerable Heart
S12: Approaches for Cardiac Protection and Regeneration
Poster Sessions 1
Plenary Lecture
ECI Symposium
Theme 1 New Mechanisms of Cardioprotection and Injury
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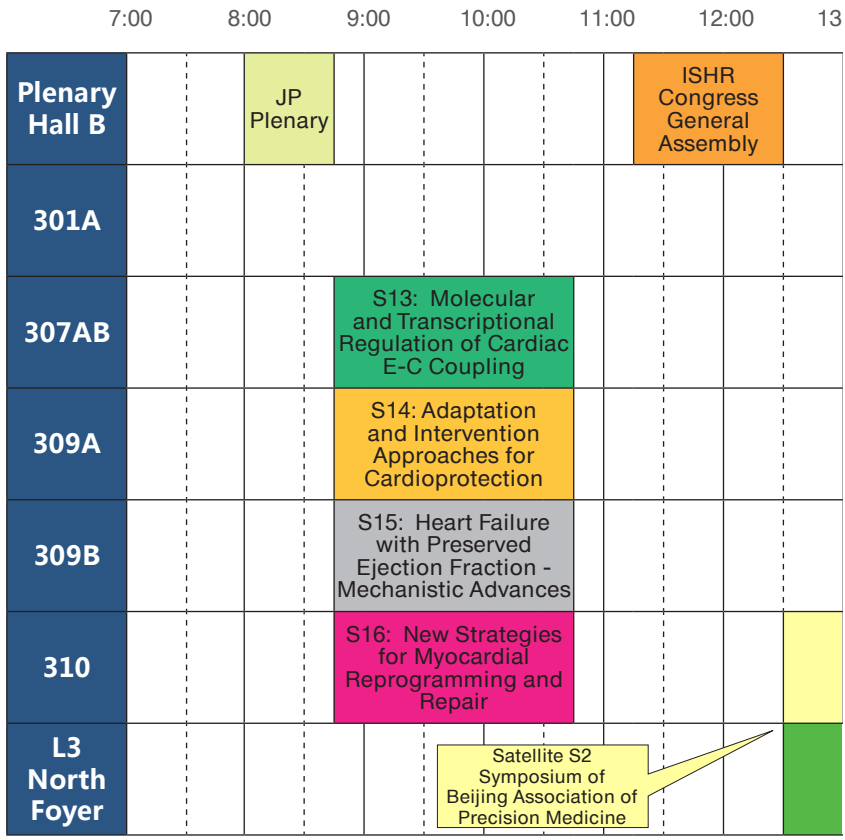
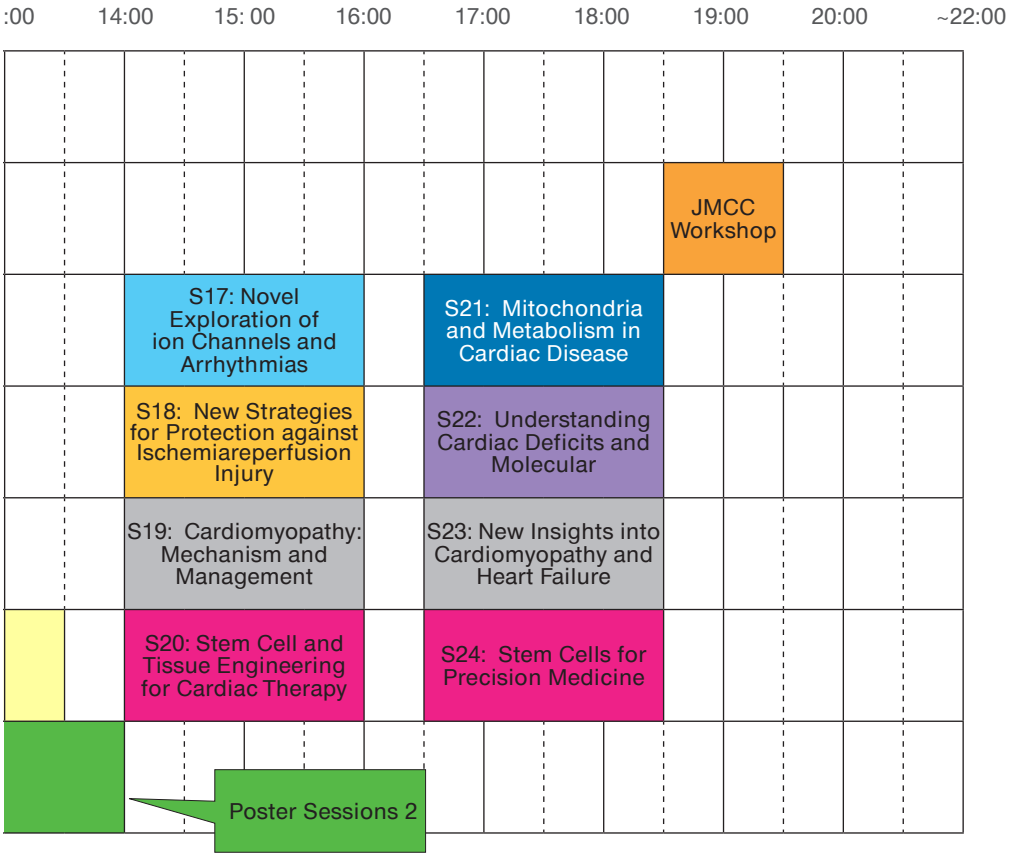
Theme 8 Vascular Dysfunction, Inflammation and Remodelling
Poster Session
Satellite Symposium

Day 3 Wednesday, June 5



JP Plenary: Janice Pfeffer Distinguished Lecture



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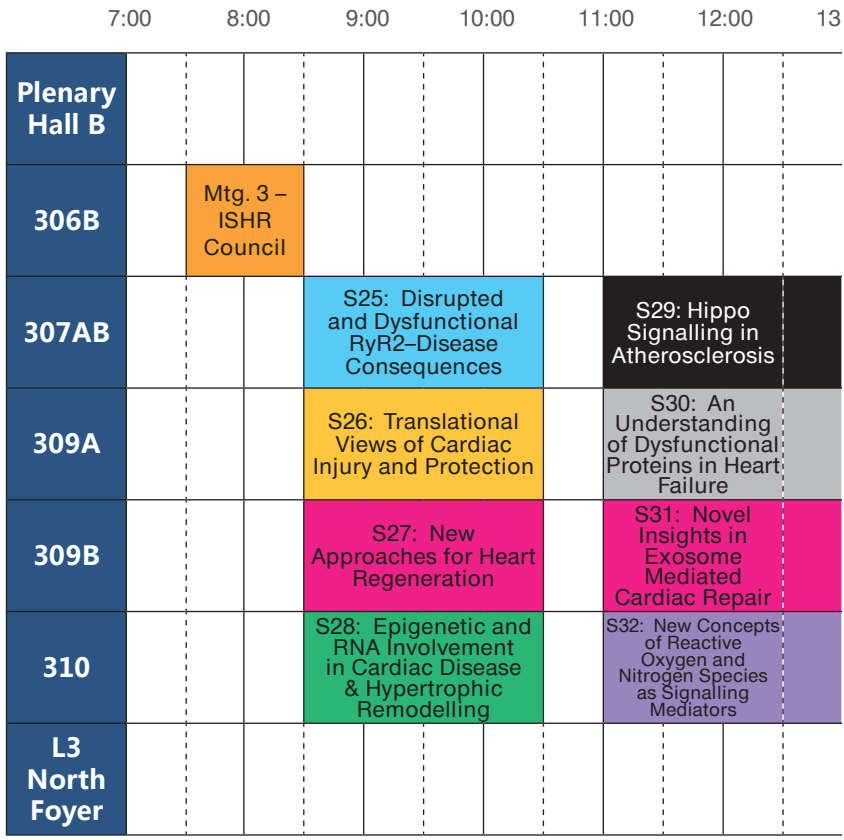
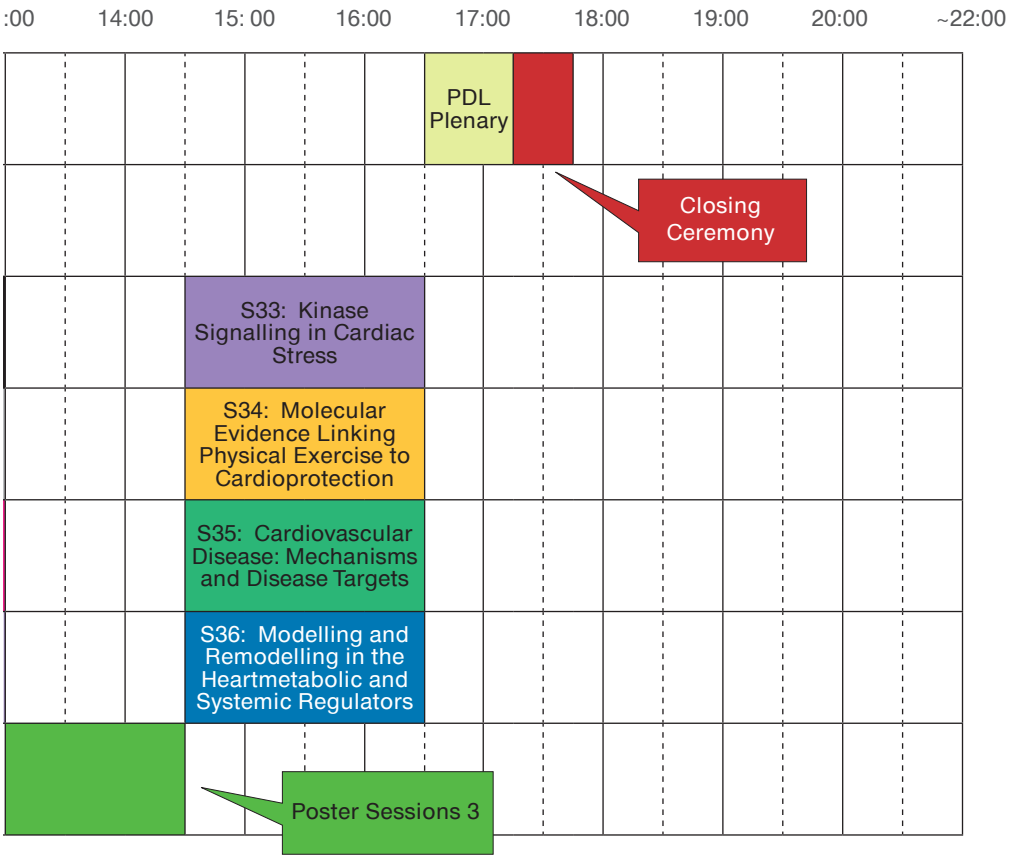
Poster Session
Satellite Symposium

Day 4 Thursday, June 6



PDL Plenary: President's Distinguished Lecture



Plenary Lecture
ECI Symposium
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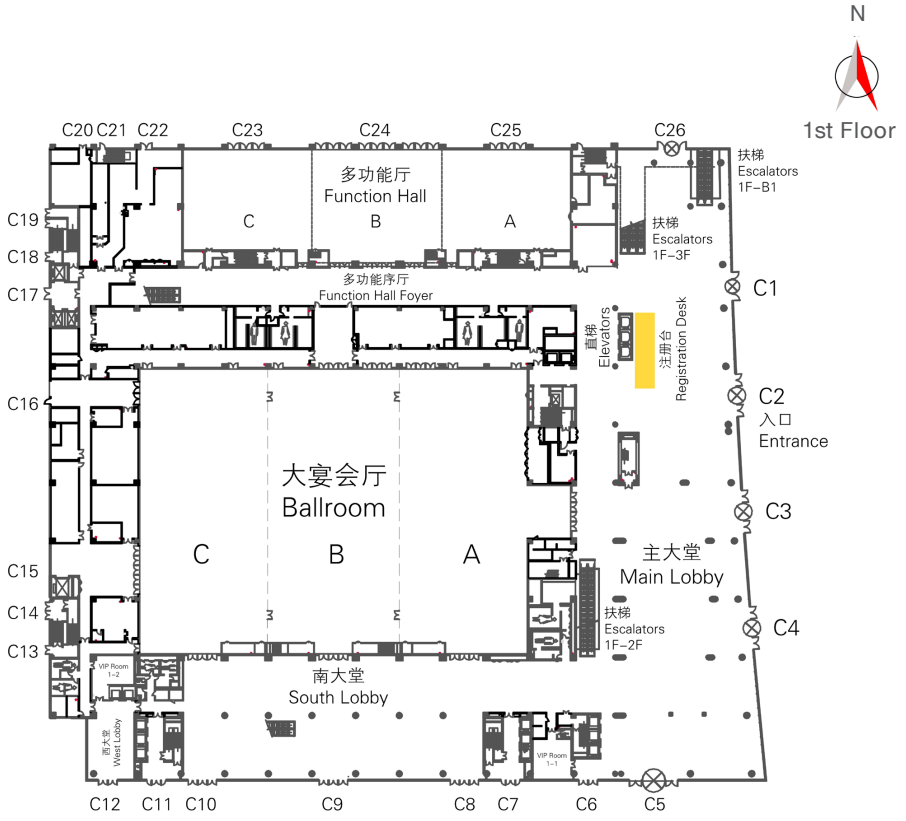
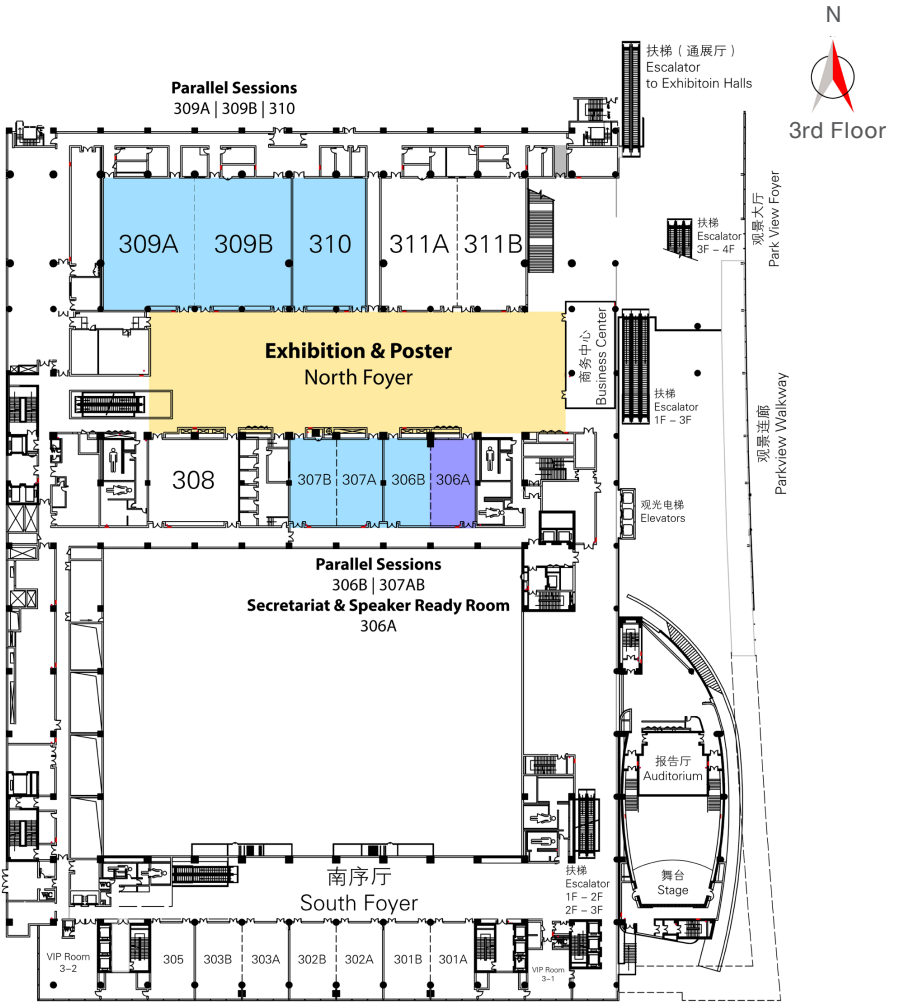
Poster Session
Satellite Symposium

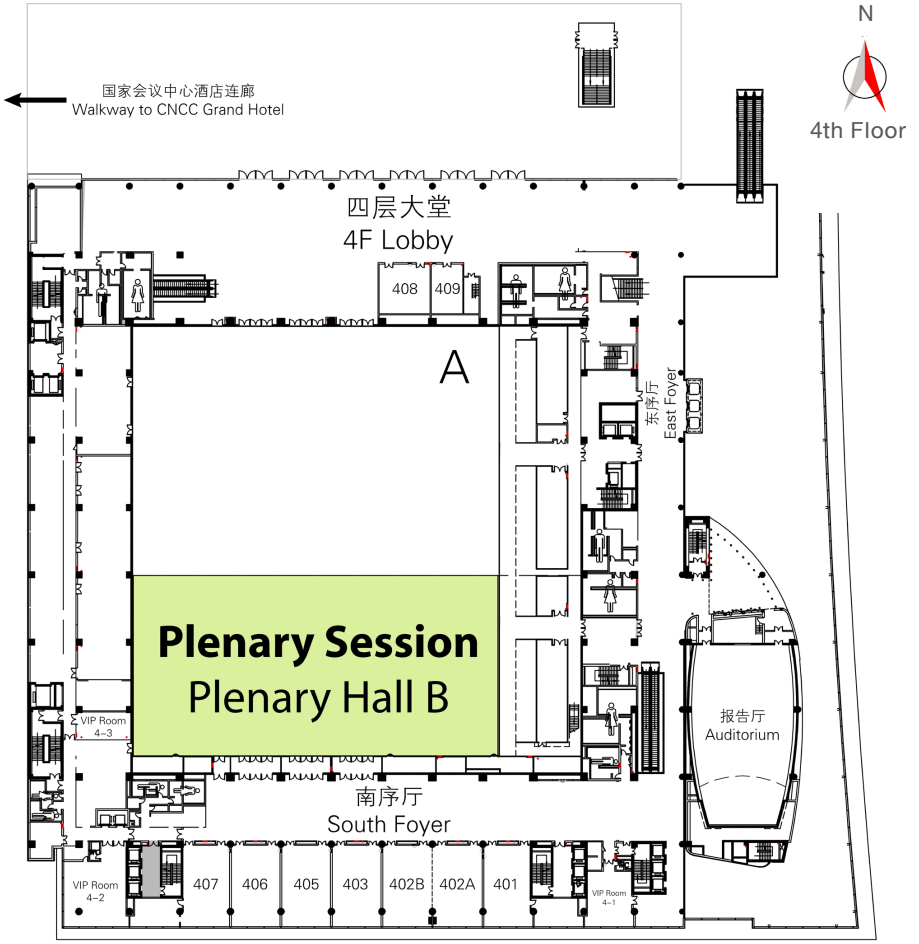
Floor Plans and Maps



Floor Plans and Maps



Floor Plans and Maps



Programs

Early Career Investigator Registration

Monday, June 3, 08:00-08:25

Room: 309A

08:00 Registration

All Early Career Investigators

Early Career Investigator (ECI) Representatives

AUS
Kate Weeks (Chair)
Helena Viola

ES
Delphine Mika
Alessandra Ghigo

JPN
Takeshi Shimizu
Hitoshi Nakagawa

LAT
Luis Gonano
Jaime Riquelme

CHN
Junjie Xiao
Ding Ai

NAS
Chen Gao (Vice-Chair)
Randi Parks

IND
Anupam Mittal
Lakshmi Subramanian

All ECI are required to register on arrival. Please collect your gift and tickets to the ECI luncheon and social event from the registration desk in Room 309A.

Early Career Investigator Symposium 1

Monday, June 3, 08:25-10:00

Room: 309A

Chair: Alessandra Ghigo, University of Torino, Italy

Co-Chair: Tyler Bauer, National Institutes of Health, USA

08:25 **Welcome Speech**
Alessandra Ghigo, *University of Torino, Italy*

08:30 **Hypoxia-dependent Zeb2 transcription factor regulates cardiac repair after ischemic injury**
Monika Gladka, *Hubrecht Institute, The Netherlands*

08:45 **Diabetic cardiomyocyte stiffness and defective length-dependence of Ca^{2+} sensitivity - a myofilament 'AGE' burden?**
Johannes Janssens, *University of Melbourne, Australia*

09:00 **Troponin T mutation causes cellular energy deprivation in human iPSC-derived cardiomyocyte model of hypertrophic cardiomyopathy**
Lili Wang, *Vanderbilt University Medical Center, USA*

09:15 **Knockout of beta-2 microglobulin enhances cardiac repair by modulating exosome imprinting stem cell-induced immune rejection**
Lianbo Shao, *Soochow University, China*

09:30 **A knock-in mutation at a site of S-nitrosylation on TRIM72 (TRIM72-C144S) is cardioprotective**
Natasha Fillmore, *National Institutes of Health, USA*

09:45 **Epicardial fat and fibro-fatty deposits promote atrial substrate in chronic sheep models: implications for sustained weight gain and fluxes during weight loss**
Thomas Agbaedeng, *South Australian Health and Medical Research Institute, Australia*

Early Career Investigator Symposium 2

Monday, June 3, 10:20-11:10

Room: 309A

Chair: Delphine Mika, INSERM Université Paris-Sud, France

Co-Chair: Farid Khalafalla, California Health Sciences University, USA

10:20	**Cardiomyocyte fructose exposure in vitro impacts on glycolytic metabolic flux** ***Lorna Daniels,*** *University of Auckland, New Zealand*
10:25	**Increased alternans susceptibility in heart failure is linked to action potential morphology** ***George Madders,*** *University of Manchester, UK*
10:30	**Neutrophil extracellular trap (NET)-associated elastase delays resolution of acute inflammation via Annexin A1 cleavage in myocardial infarction** ***Kazuko Tajiri,*** *University of Tsukuba, Japan*
10:35	**Macrophage-specific deletion of PPARα promotes angiotensin II induced hypertension in mice** ***Guomin Xie,*** *Capital Medical University, China*
10:40	**Cardiosphere derived cell-induced cellular reprogramming of transcriptional and translational machinery in heart failure with preserved ejection fraction** ***Daniel Soetkamp,*** *Cedars-Sinai Heart Institute, USA*
10:45	**Inhibition of monoamine oxidase A in pulmonary artery banding-induced right ventricular failure** ***Eva Peters,*** *Amsterdam University Medical Center, The Netherlands*
10:50	**Nucleolin involved in atherosclerosis by regulating phenotypic switching of vascular smooth muscle cells** ***Hui Sun,*** *Central South University, China*
10:55	**Hyperactivity of the NHE1 Na^+/H^+ exchanger in a mouse model of type 2 diabetic cardiomyopathy** ***Carolina Jaquenod De Giusti,*** *National University of La Plata, Argentina*
11:00	**Questions**

Panel Discussion on Grant Strategy

Monday, June 3, 11:10-12:00

Room: 309A

Chair: Junjie Xiao, Shanghai University, China
Co-Chair: Helena Viola, University of Western Australia, Australia

Sakthivel Sadayappan, *University of Cincinnati, USA*

Huangtian Yang, *Chinese Academy of Sciences, China*

Sian Harding, *Imperial College London, UK*

Enzo Porrello, *Murdoch Children's Research Institute, Australia*

Monday, June 3, 12:15-13:45

Room: 311A+B

12:15 **ECI luncheon**

Opening Ceremony

Monday, June 3, 14:30-15:00

Room: Plenary Hall B

14:30	Opening Ceremony

Outstanding Investigator Award

Monday, June 3, 15:00-15:45

Room: Plenary Hall B

Chair: Thomas Eschenhagen, University Medical Center Hamburg-Eppendorf, Germany

15:00 **Elucidating the origin of new cardiomyocytes in the adult mammalian heart**
Bin Zhou, *Chinese Academy of Sciences, China*

RJ Bing Young Investigator Award

Monday, June 3, 15:45-17:15

Room: Plenary Hall B

Chair: Asa Gustafsson, University of California-San Digeo, USA

15:45 **Why do athletes have heart block? A new role for electrical remodeling of the atrioventricular node in equine and murine models of endurance exercise**
Alicia D'Souza, *University of Manchester, UK*
Advisor: Dr Mark Boyett

16:05 **The mitochondrial adenine nucleotide translocator mediates mitophagy independently of its nucleotide exchange activity**
Atsushi Hoshino, *University of Pennsylvania, USA*
Advisor: Dr Zolt Arany

16:25 **Nitrosative stress-dependent suppression of Xbp1s drives heart failure with preserved ejection fraction**
Gabriele Schiattarella, *University of Texas Southwestern Medical Center, USA*
Advisor: Dr Joseph Hill

16:45 **An acute immune response underlies the benefit of cardiac adult stem cell therapy**
Ronald Vagnozzi, *Cincinnati Children's Hospital Medical Center, USA*
Advisor: Dr Jeffery Molkentin

Keith Reimer Distinguished Lecture

Monday, June 3, 17:45-18:30

Room: Plenary Hall B

Chair: Robert Jennings, Duke University Medical Center, USA

17:45 **Mitochondrial redox regulation in heart failure**
Christoph Maack, *University Clinic Würzburg, Germany*

Opening Reception

Monday, June 3, 18:30-21:00

Room: L4 North Lobby

18:30	Opening Reception

Research Achievement Award

Tuesday, June 4, 08:30-09:15

Room: Plenary Hall B

Chair: Yoshihiko Saito, Nara Medical University, Japan

08:30 **Precision medicine for heart failure based on molecular mechanisms**
Issei Komuro, *University of Tokyo, Japan*

Theme 3: Ion Channel Mechanisms and Arrhythmias

Tuesday, June 4, 09:45-11:45

Symposium 1: New Concepts in Cardiac Arrhythmia Mechanisms – from Single Molecule to Human Disease

(Theme 3-1, ISHR-INT Sponsored)

Room: 307AB

Chair: Livia Hool, University of Western Australia, Australia
Co-Chair: Marcel Egger, University of Bern, Switzerland

09:45	**The phospholamban link in cardiac arrhythmias: insights from genetic models and human studies** ***Litsa Kranias,*** *University of Cincinnati, USA*
10:07	**Ion channels as sensors of metabolic activity and arrhythmia mechanisms** ***Livia Hool,*** *University of Western Australia, Australia*
10:29	**Abnormal protein-protein interactions contributing to arrhythmias revealed by super-resolution imaging** ***Stephan Lehnart,*** *University of Goettingen, Germany*
10:51	**New insights into Wolff-Parkinson-White derived from human and mouse genetic studies** ***Xander Wehrens,*** *Baylor College of Medicine, USA*
11:13	**Ion channel regulation of pacemaker activity** ***Matteo Mangoni,*** *Institut de Genomique Fonctionnelle, France*
11:35	**Abstract** **PDE4 regulates cardiac pacemaker function** ***Delphine Mika,*** *Institut National de la Santé et de la Recherche Médicale, France*

Theme 1: New Mechanisms of Cardioprotection and Injury

Tuesday, June 4, 09:45-11:45

Symposium 2: Mitochondrial Mechanisms in Cardiac Myopathies

(Theme 1-1, ISHR-INT Sponsored)

Room: 309A

Chair: Asa Gustafsson, University of California-San Diego, USA
Co-Chair: Jeremy Fauconnier, Montpellier University, France

09:45 **Mitochondrial oscillations and ischemia-reperfusion injury**
Brian O'Rourke, *Johns Hopkins University, USA*

10:07 **Oxidative stress and mitochondrial dysfunction in failing heart**
Hiroyuki Tsutsui, *Kyushu University, Japan*

10:29 **Mitohormesis: cardioprotection by the superoxide generator MitoParaquat**
Thomas Krieg, *University of Cambridge, UK*

10:51 **Structure and assembly of the MCU complex**
Diego De Stefani, *University of Padova, Italy*

11:13 **Role of mitochondrial Epac1 in cardiac diseases**
Frank Lezoualc'h, *Institut National de la Santé et de la Recherche Médicale, France*

11:35 **Abstract**
CaMKII mediates increased mitochondrial Ca^{2+} uptake in heart failure
Samuel Dudley, *University of Minnesota, USA*

Theme 2: New Insights into Cardiac Dysfunction

Tuesday, June 4, 09:45-11:45

Symposium 3: Genetic and Epigenetic Regulation in Cardiovascular Diseases (Theme 2-1, ISHR-CHN Sponsored)

Room: 309B

Chair: **Yunzeng Zou,** Fudan University, China

Co-Chair: **Weibo Zhao,** Third Military Medical University, China

09:45	**Exploiting the hidden treasure of non-coding RNAs in cardiovascular system** ***Daowen Wang,*** *Tongji Medical College, China*
10:07	**Non-coding RNAs in cardiovascular diseases** ***Qing Jing,*** *Chinese Academy of Sciences, China*
10:29	**Increased transcription and translation rates in cardiac hypertrophy are regulated by lncRNAs** ***Zhihua Wang,*** *Wuhan University, China*
10:51	**Epigenetic regulation of distinct forms of heart failure** ***Sam El-Osta,*** *Baker Heart and Diabetes Institute, Australia*
11:13	**A translational study of genetic regulation in hypertension** ***Zhaoqiang Cui,*** *Fudan University, China*
11:35	**Abstract** **CircRNA_000203, via miR-26b-5p and miR-140-3p regulation of Gata4, aggravates cardiac hypertrophy** ***Zhixin Shan,*** *Guangdong Cardiovascular Institute, China*

Theme 7: Cardiac Metabolism

Tuesday, June 4, 09:45-11:45

Symposium 4: New Insights in Metabolic Dysregulation of the Heart in Obesity and diabetes (Theme 7-1, ISHR-INT Sponsored)

Room: 310

Chair: Ruiping Xiao, Peking University, China
Co-Chair: Zhongwei Yin, Huazhong University of Science and Technology, China

09:45 **MG53 and diabetes**
Ruiping Xiao, *Peking University, China*

10:07 **Defining the roles of insulin signaling and glucose transport in cardiac pathology**
Dale Abel, *University of Iowa, USA*

10:29 **Regulation of insulin signaling by hydrogen sulfide in HFD-induced obesity**
John Calvert, *Emory University, USA*

10:51 **Novel therapeutic targets for diabetic cardiomyopathy**
Rebecca Ritchie, *Baker Heart and Diabetes Institute, Australia*

11:13 **MicroRNA interaction network in the hypercholesterolemic heart: unbiased way to identify molecular targets**
Peter Ferdinandy, *Semmelweis University, Hungary*

11:35 **Abstract**
Diabetes is associated with cardiac glycogen mishandling
Kim Mellor, *University of Auckland, New Zealand*

Peter Harris Distinguished Scientist Award

Tuesday, June 4, 11:45-12:30

Room: Plenary Hall B

Chair: David Eisner, University of Manchester, UK

11:45 **Broken heart syndrome – what doesn't kill you makes you stronger?**
Sian Harding, *Imperial College London, UK*

Satellite Symposium 1

Tuesday, June 4, 12:30-13:30

Room: 310

Host: Micro Technology Hong Kong Ltd.

12:30 **High resolution preclinical study on small animal cardiac diseases**
Minjie Weng, *Micro Technology Hong Kong Ltd.*

Theme 8: Vascular Dysfunction, Inflammation and Remodelling

Tuesday, June 4, 14:00-16:00

Symposium 5: The Role of Lipids, Lipoproteins and Cholesterol in Cardiovascular Protection and Injury

(Theme 8-1, ISHR-CHN Sponsored)

Room: 307AB

Chair: Jingsong Ou, Sun Yat-sen University, China

Co-Chair: Feng Cao, Chinese PLA General Hospital, China

14:00 **Non-coding RNA regulation of lipid-mediated changes in smooth muscle cell fate in advanced atherosclerosis**
Lars Mägdefessel, *Technical University of Munich, Germany*

14:22 **Is high-density lipoprotein function the key to cardioprotection?**
Kerry Anne Rye, *University of New South Wales, Australia*

14:44 **New explorations on the ancient molecule cholesterol**
Baoliang Song, *Wuhan University, China*

15:06 **Sonodynamic therapy-induced PPARγ-LXRα-ABCA1/ABCG1 regulates cholesterol efflux in advanced plaque formation**
Ye Tian, *Harbin Medical University, China*

15:28 **Angiogenic properties of high-density lipoprotein from healthy and coronary artery diseases patients**
Jingsong Ou, *Sun Yat-sen University, China*

15:50 **Abstract**
Application of 3D genomics in exploring the novel drug targets on atherosclerosis
Hongshan Chen, *Nanjing Medical University, China*

Theme 1: New Mechanisms of Cardioprotection and Injury

Tuesday, June 4, 14:00-16:00

Symposium 6: Mitochondrial Homeostasis and Cardioprotection

(Theme 1-2, ISHR-INT Sponsored)

Room: 309A

Chair: Elizabeth Murphy, National Institutes of Health, USA
Co-Chair: John Mulvey, University of Cambridge, UK

14:00 **The role of the mitochondrial NCX in calcium homeostasis**
John Elrod, *Temple University, USA*

14:22 **Role of mitochondrial iron in cardiovascular disease**
Hossein Ardehali, *Northwestern University, USA*

14:44 **Mitochondrial permeability transition pore and calcium regulation**
Paolo Bernardi, *Padua University, Italy*

15:06 **Mitochondrial 'omics' in remodeling and injury**
Peipei Ping, *University of California – Los Angeles, USA*

15:28 **Mitochondrial disease adjunct therapies**
Salvatore Pepe, *University of Melbourne, Australia*

15:50 **Abstract**
miR-181c activates mitochondrial calcium uptake by regulating MICU1 in the heart
Samarjit Das, *Johns Hopkins University, USA*

Theme 2: New Insights into Cardiac Dysfunction

Tuesday, June 4, 14:00-15:38

Symposium 7: Localisation – Receptors, Channels and Signaling

(Theme 2-2, ISHR-INT Sponsored)

Room: 309B

Chair: Rodolphe Fischmeister, Institut National de la Santé et de la Recherche Médicale, France
Co-Chair: Wenli Xu, Peking University, China

14:00 **Functional implications of cardiomyocyte cAMP nano-domains**
Manuela Zaccolo, *University of Oxford, UK*

14:22 **Subcellular current dynamics influence cardiomyocyte function**
Don Bers, *University of California-Davis, USA*

14:44 **NO-AMPK signaling protects cardiomyocyte contractile function in osmotic stress**
Martin Vila-Petroff, *National University of La Plata, Argentina*

15:06 **cAMP signaling in the normal and failing heart**
Rodolphe Fischmeister, *Institut National de la Santé et de la Recherche Médicale, France*

15:28 **Abstract**
Role of the PP2A regulatory subunit B56α in regulation of cardiac responses to β-adrenergic stimulation
Alican Guran, *King's College London, UK*

Theme 7: Cardiac Metabolism

Tuesday, June 4, 14:00-16:00

Symposium 8: Energy and Metabolic Regulation in the Vulnerable Heart (Theme 7-2, ISHR-INT Sponsored)

Room: 310

Chair: Lisa Heather, University of Oxford, UK
Co-Chair: Azrul Abdul Kadir, University of Oxford, UK

14:00 **Ketone metabolism in the failing heart**
Daniel Kelly, *University of Pennsylvania, USA*

14:22 **Therapeutic approaches to treat heart failure by altering fatty acid oxidation**
Gary Lopaschuk, *University of Alberta, Canada*

14:44 **Decreased branched chain amino acid metabolism contribution to heart failure severity**
Yibin Wang, *University of California-Los Angeles, USA*

15:06 **The battle between HIF and diabetes: an alternative role for fatty acids in cardiovascular disease**
Lisa Heather, *University of Oxford, UK*

15:28 **Glucose metabolism in failing hearts**
Toyoaki Murohara, *Nagoya University, Japan*

15:50 **Abstract**
A novel therapy to prevent hypertrophic cardiomyopathy.
Helena Viola, *University of Western Australia, Australia*

Theme 4: Signaling in Cardiac Disease and Therapy

Tuesday, June 4, 16:30-18:08

Symposium 9: Fibrosis: an Important Player in Myocardial Disease

(Theme 4-1, ISHR-INT Sponsored)

Room: 307AB

Chair: Merry Lindsey, University of Nebraska Medical Center, USA
Co-Chair: Raffaele Altara, University of Oslo, Norway

16:30	**Exploring the continuum of fibroblasts in myocardial fibrosis** ***Jeffery D.Molkentin,*** *Cincinnati Children's Hospital Medical Center, USA*
16:52	**Soluble epoxide hydrolase inhibitors and cardiac fibrosis** ***Yi Zhu,*** *Tianjin Medical University, China*
17:14	**Fibrosis and cardiac dysfunction** ***Yasuchika Takeishi,*** *Fukushima Medical University, Japan*
17:36	**Role of inflammation and ECM in MI remodeling** ***Merry Lindsey,*** *University of Nebraska Medical Center, USA*
17:58	**Abstract** **Alpha V integrin regulates the contribution of PW1^{+} cells to cardiac fibrosis** ***Marion Bouvet,*** *Institut National de la Santé et de la Recherche Médicale, France*

Theme 1: New Mechanisms of Cardioprotection and Injury

Tuesday, June 4, 16:30-18:30

Symposium 10: Cardioprotection–Autophagy and Mitochondrial Involvement (Theme 1-3, ISHR-INT Sponsored)

Room: 309A

Chair: Tetsuji Miura, Sapporo Medical University, Japan
Co-Chair: Sauri Hernandez-Resendiz, Duke-NUS Medical School, Singapore

16:30 **Mitochondrial autophagy in cardiac stress protection**
Junichi Sadoshima, *Rutgers New Jersey Medical School, USA*

16:52 **Signaling pathways in cardioprotection**
Tetsuji Miura**,** *Sapporo Medical University, Japan*

17:14 **Autophagy and mitochondrial dynamics**
Sergio Lavandero**,** *University of Chile, Chile*

17:36 **Loss of mitochondrial GRK2 protects the heart**
Priscila Sato, *Temple University, USA*

17:58 **Cardiac electrical, mechanical and metabolic study of a Type 2 diabetes experimental mice model**
Emiliano Medei**,** *Federal University of Rio de Janeiro, Brazil*

18:20 **Abstract**
Monoamine oxidase A deletion leads to autophagy inhibition and impairment in cardiomyocyte differentiation from hiPSCs
Nina Kaludercic**,** *National Research Council of Italy, Italy*

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Tuesday, June 4, 16:30-18:30

Symposium 11: New Perspectives on Gene Regulation and Signaling

(Theme 5-1, ISHR-INT and Bayer Yakuhin Sponsored)

Room: 309B

Chair: Sarah Franklin, University of Utah, USA
Co-Chair: Yong Zhang, Harbin Medical University, China

16:30 **Cardiac telomeres in development and disease**
Fadi Charchar, *Federation University, Australia*

16:52 **Circular RNAs in the cardiovascular system**
Thomas Thum, *Hannover Medical School, Germany*

17:14 **Chromatin regulation in cardiac disease**
Sarah Franklin, *University of Utah, USA*

17:36 **MicroRNA in cardiovascular biology and disease**
Koh Ono, *Kyoto University, Japan*

17:58 **Genomic medicine in sinus bradycardia and a strategy for development of a novel targeted therapy**
Yoshihiro Asano, *Osaka University, Japan*

18:20 **Abstract**
Analysis of cardiac differentiation at single cell resolution reveals a requirement of hypertrophic signaling for HOPX transcription
Nathan Palpant, *University of Queensland, Australia*

Theme 6: Regenerative Medicine for Heart Disease

Tuesday, June 4, 16:30-18:30

Symposium 12: Approaches for Cardiac Protection and Regeneration

(Theme 6-1, ISHR-CHN Sponsored)

Room: 310

Chair: Chunyu Zeng, Third Military Medical University, China
Co-Chair: Qingqi Ji, Shanghai Jiao Tong University, China

16:30 **Mitochondrial energetics in cardiac disease and regeneration**
Rong Tian, *University of Washington, USA*

16:52 **AMP-activated protein kinase γ2 to the rescue in ischemic heart**
Minghui Zou, *Georgia State University, USA*

17:14 **New method to increase the proliferation efficiency of adult cardiomyocyte after myocardial infarction**
Chunyu Zeng, *Third Military Medical University, China*

17:36 **The enhanced cardioprotective effect of N-Cadherin overexpression in adipocyte derived mesenchymal stem cells and its clinical perspectives**
Ling Tao, *Fourth Military Medical University, China*

17:58 **The clinical innovation of Liwen procedure practiced from animal experiment to clinical treatment**
Liwen Liu, *Fourth Military Medical University, China*

18:20 **Abstract**
Human embryonic stem cell-derived cardiomyocyte therapy in mouse permanent ischemia and ischemic reperfusion models
Zhen'ao Zhao, *Soochow University, China*

Janice Pfeffer Distinguished Lecture

Wednesday, June 5, 08:00-08:45

Room: Plenary Hall B

Chair: Huangtian Yang, Chinese Academy of Sciences, China

08:00 **Sarcomeropathy - from bedside to bench and back**
Lucie Carrier, *University Medical Center Hamburg-Eppendorf, Germany*

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the genome

Wednesday, June 5, 08:45-10:23

Symposium 13: Molecular and Transcriptional Regulation of Cardiac E-C Coupling (Theme 5-2, ISHR-CHN Sponsored)

Room: 307AB

Chair: Shey-Shing Sheu, Thomas Jefferson University, USA
Co-Chair: Shiqun Sun, Fudan University, China

08:45 **Defeating heart failure with energy: mechanisms of excitation-contraction-bioenergetics coupling**
Shey-Shing Sheu, *Thomas Jefferson University, USA*

09:07 **Transcriptional regulation of junctophilin-2 and cardiomyocyte E-C coupling**
Shiqiang Wang, *Peking University, China*

09:29 **Junctophilin-2 in cardiac E-C coupling and beyond**
Longsheng Song, *University of Iowa, USA*

09:51 **Small-molecule hormones, nuclear receptors and cardiovascular function**
Jun Bu, *Shanghai Jiaotong University, China*

10:13 **Abstract**
SPEG controls calcium re-uptake in cardiomyocytes via regulating SERCA2a
Shuai Chen, *Nanjing University, China*

Theme 1: New Mechanisms of Cardioprotection and Injury

Wednesday, June 5, 08:45-10:23

Symposium 14: Adaptation and Intervention Approaches for Cardioprotection (Theme 1-4, ISHR-INT Sponsored)

Room: 309A

Chair: Fabio Di Lisa, University of Padova, Italy

Co-Chair: Natasha Fillmore, National Institutes of Health, USA

08:45 **Key mechanisms of exercise induced cardiac protection:emerging concepts and therapies**
Julie McMullen, *Baker Heart and Diabetes Institute, Australia*

09:07 **The Hippo pathway can reverse systolic dysfunction**
James Martin, *Baylor College of Medicine, USA*

09:29 **Targetting ROS production in cardiac disease**
Fabio Di Lisa, *University of Padova, Italy*

09:51 **Role of S-nitrosylation in cardioproteciton**
Charles Steenbergen, *Johns Hopkins University School of Medicine, USA*

10:13 **Abstract**
The ribosomal prolyl hydroxylase OGFOD1 alters the proteomic landscape to protect the heart from injury
Leslie Kennedy, *National Institutes of Health, USA*

Theme 2: New Insights into Cardiac Dysfunction

Wednesday, June 5, 08:45-10:45

Symposium 15: Heart Failure with Preserved Ejection Fraction - Mechanistic Advances (Theme 2-3, ISHR-INT Sponsored)

Room: 309B

Chair: David Eisner, University of Manchester, UK
Co-Chair: Rio Juni, Amsterdam University Medical Center, The Netherlands

08:45	**Cardiomyocyte and matrix interaction in HFpEF** ***Jolanda Van der Velden,*** *Amsterdam University Medical Center, The Netherlands*
09:07	**The role of titin in conferring cardiomyocyte diastolic stiffness in HFpEF** ***Henk Granzier,*** *University of Arizona, USA*
09:29	**Unexpected cardiomyocyte etiologies in HFpEF** ***Lea Delbridge,*** *University of Melbourne, Australia*
09:51	**Systemic and local signaling influences in HFpEF development** ***Joseph Hill,*** *University of Texas-Southwestern, USA*
10:13	**HFpEF – understanding tissue and cellular remodeling** ***Burkert Pieske,*** *Charité-University Medicine Berlin, Germany*
10:35	**Abstract** **Loss of obscurin/Obsl1 results in diastolic dysfunction and HFpEF** ***Stephan Lange,*** *University of California-San Diego, USA*

Theme 6: Regenerative Medicine for Heart Disease

Wednesday, June 5, 08:45-10:45

Symposium 16: New Strategies for Myocardial Reprogramming and Repair (Theme 6-2, ISHR-CHN Sponsored)

Room: 310

Chair: Xin Xie, Chinese Academy of Sciences, China
Co-Chair: Shijun Hu, Soochow University, China

08:45 **Stem cell therapy in primates**
Jian'an Wang, *Zhejiang University, China*

09:07 **Critical regulations of cardiac niche on stem cell fate**
Xiyong Yu, *Guangzhou Medical University, China*

09:29 **Chemical mediated cardiac reprogramming**
Xin Xie, *Chinese Academy of Sciences, China*

09:51 **Materials encapsulated exosomes enhance cardiovascular function by transporting the ncRNA**
Yangxin Li, *University of Soochow, China*

10:13 **Cardiac cell therapy: The present and the future**
Buddhadeb Dawn, *University of Nevada, USA*

10:35 **Abstract**
The long noncoding RNA LncHrt promotes heart regeneration after myocardial infarction
Jinghai Chen, *Zhejiang University, China*

ISHR Congress General Assembly

Wednesday, June 5, 11:15-12:30

Room: Plenary Hall B

11:15 **Presentation of the Distinguished Leader Award to David Eisner**

11:20 **ISHR International Council Report and Business**

12:15 **ISHR 50th Anniversary Celebration**

The ISHR history
Robert Jennings, *Duke University Medical Center, USA*

ISHR and the future
Friederike Cuello, *University Medical Center Hamburg-Eppendorf, Germany*

Satellite Symposium 2: Symposium of Beijing Association of Precision Medicine

Wednesday, June 5, 12:30-13:30

Room: 310

Chair: Rutai Hui, Peking Union Medical College, China
Co-Chair: Yida Tang, Chinese Academy of Medical Sciences, China
Host: Jianzeng Dong, Capital Medical University, China
Lei Song, Chinese Academy of Medical Sciences, China
Jingang Yang, Peking Union Medical College, China

12:30 **Video of Work and Achievement**

12:40 **Speeches by the Chairman and guests**

12:55 **Genesis and Developmentof Macrovascular Diseases**
Zhou Zhou, *Shanghai University of Traditional Chinese Medicine, China*

13:10 **Application and Prospect of Precision Prevention and Rehabilitation**
Xue Feng, *Tsinghua University, China*

13:25 **Message and Outlook**
Yida Tang, *Chinese Academy of Medical Sciences, China*

Theme 3: Ion Channel Mechanisms and Arrhythmias

Wednesday, June 5, 14:00-16:00

Symposium 17: Novel Exploration of ion Channels and Arrhythmias

(Theme 3-2, ISHR-CHN Sponsored)

Room: 307AB

Chair: Ping Liang, Zhejiang University, China

Co-Chair: Yi Zhang, Xi'an Jiaotong University, China

14:00 **Anti-arrhythmic drugs: opportunities and challenges**
Yihan Chen, *Tongji University, China*

14:22 **Antiarrhythmic drugs – an updated classification after 50 years**
Ming Lei, *University of Oxford, UK*

14:44 **Key questions on the pro-arrhythmic role of cardiac fibrosis**
Xiaojun Du, *Baker Heart and Diabetes Institute, Australia*

15:06 **Studying cardiac arrhythmias using induced pluripotent stem cell-derived cardiomyocytes**
Ping Liang, *Zhejiang University, China*

15:28 **The common molecular switch mediating the multiple effects of H_2S**
Yichun Zhu, *Fudan University, China*

15:50 **Abstract**
Increase of late sodium current contributes to enhanced susceptibility to atrial fibrillation in diabetic mice
Zhenwei Pan, *Harbin Medical University, China*

Theme 1: New Mechanisms of Cardioprotection and Injury

Wednesday, June 5, 14:00-16:00

Symposium 18: New Strategies for Protection against Ischemia-reperfusion Injury (Theme 1-5, ISHR-INT Sponsored)

Room: 309A

Chair: David Lefer, Louisiana State University, USA
Co-Chair: Monika Gladka, Hubrecht Institute, The Netherlands

14:00	**Ischaemic preconditioning and postconditioning – underlying signaling pathways, mechanisms and clinical application** ***Derek Hausenloy,*** *Duke-National University of Singapore Medical School, Singapore*
14:22	**NO bio-availability and cardioprotection post MI** ***David Lefer,*** *Louisiana State University, USA*
14:44	**CaMKII and ischemia-reperfusion injury** ***Mark Anderson,*** *Johns Hopkins University, USA*
15:06	**MCU in ischemia/reperfusion injury** ***Elizabeth Murphy,*** *National Institutes of Health, USA*
15:28	**Targeting the eicosanoid pathway for cardioprotection** ***Ying Yu,*** *Tianjin Medical University, China*
15:50	**Abstract** **Cardioprotective role of FKBP8 during pressure overload by preventing accumulation of misfolded proteins and ER-associated apoptosis** ***Tomofumi Misaka,*** *Fukushima Medical University, Japan*

Theme 2: New Insights into Cardiac Dysfunction

Wednesday, June 5, 14:00-16:00

Symposium 19: Cardiomyopathy: Mechanism and Management

(Theme 2-4, ISHR-CHN Sponsored)

Room: 309B

Chair: Hao Zhang, Key Laboratory of Cardiac Regenerative Medicine, National Health Commission, China

Co-Chair: Jin Li, Shanghai University, China

14:00 **Calcium-containing cardioplegia aggravates ischemic calcium overload damage through pre-activated reverse mode NCX1 and LTCC in hypertrophic cardiomyocytes**
Hao Zhang, *Key Laboratory of Cardiac Regenerative Medicine, National Health Commission, China*

14:22 **Molecular regulation of cardiovascular function and disease**
Dazhi Wang, *Harvard Medical School, USA*

14:44 **T cells and myocardial ischemia injury**
Xiang Cheng, *Huazhong University of Science and Technology, China*

15:06 **Identification an early key gene regulating disease progression in familial dilated cardiomyopathy**
Ning Sun, *Fudan University, China*

15:28 **Modelling hypertrophic cardiomyopathy in human pluripotent stem cells by gene editing**
Diogo Mosqueira, *University of Nottingham, UK*

15:50 **Abstract**
Intrauterine exposure to angiotensin II type 1 receptor autoantibody induces left ventricular hypertrophy and metabolic disorders in offspring mice
Suli Zhang, *Capital Medical University, China*

Theme 6: Regenerative Medicine for Heart Disease

Wednesday, June 5, 14:00-16:00

Symposium 20: Stem Cell and Tissue Engineering for Cardiac Therapy

(Theme 6-3, ISHR-INT Sponsored)

Room: 310

Chair: Thomas Eschenhagen, University Medical Center Hamburg-Eppendorf, Germany
Co-Chair: Jennifer L. Strande, Medical College of Wisconsin, USA

14:00 **Heart repair with human engineered heart tissue patches**
Thomas Eschenhagen, *University Medical Center Hamburg- Eppendorf, Germany*

14:22 **CRISPR editing in the Hcm patient's iPSC-derived cardiomyocytes**
Sakthivel Sadayappan, *University of Cincinnati, USA*

14:44 **Cardiac regeneration with 3D cardiomimetic tissues**
Young-sup Yoon, *Emory University, USA*

15:06 **iPSC derivatives to study endothelial to cardiomyocyte communication**
Jennifer Strande, *Medical College of Wisconsin, USA*

15:28 **Cortical bone stem cell therapy improves post MI cardiac remodeling by modulating the immune response**
Steven Houser, *Temple University, USA*

15:50 **Abstract**
Preclinical testing of an upscaled engineered heart tissue patch
Richard Jabbour, *Imperial College London, UK*

Theme 7: Cardiac Metabolism

Wednesday, June 5, 16:30-18:30

Symposium 21: Mitochondria and Metabolism in Cardiac Disease

(Theme 7-3, ISHR-CHN Sponsored)

Room: 307AB

Chair: Depei Liu, Peking Union Medical College, China
Co-Chair: Chen Chen, Huazhong University of Science and Technology, China

16:30 **Sirtuins in cardiometabolic disease**
Depei Liu, *Peking Union Medical College, China*

16:52 **Cross-talk between insulin signaling and G protein-coupled receceptors in cardiomyopathy**
Yang Kevin Xiang, *University of California-Davis, USA*

17:14 **Mitochondrial ROS and calcium regulation in the stressed heart**
Wang Wang, *University of Washington, USA*

17:36 **Regulation of inter-mitochondrial communication in the heart**
Ming Zheng, *Peking University, China*

17:58 **Mitochondrial dysfunction and cardiomyopathies: from bedside to bench and back**
R. Mark Payne, *Indiana University, USA*

18:20 **Abstract**
Early aerobic exercise improves cardiac function and glucose metabolism in heart failure mice by upregulating GLUT1 through HDAC4 phosphorylation
Aijun Sun, *Fudan University, China*

Theme 4: Signaling in Cardiac Disease and Therapy

Wednesday, June 5, 16:30-18:08

Symposium 22: Understanding Cardiac Deficits and Molecular Defects

(Theme 4-2, ISHR-INT Sponsored)

Room: 309A

Chair: Federica Del Monte, Medical University of South Carolina, USA
Co-Chair: Rajasekaran Namakkal Soorappan, University of Alabama, USA

16:30 **The INs and OUTs of mitofusins**
Luca Scorrano, *University of Padua, Italy*

16:52 **Novel protective mechanisms targeting sarcomeric proteins in healthy and diseased hearts**
Wolfgang A. Linke, *University of Muenster, Germany*

17:14 **Small molecule control of mitochondrial turnover**
Asa Gustafsson, *University of California-San Digeo, USA*

17:36 **Amyloid induced cardiac proteotoxicity**
Federica Del Monte, *Medical University of South Carolina, USA*

17:58 **Abstract**
Global single cell sequencing reveals extensive cell-cell crosstalk and specific regulation of macrophage inflammatory polarisation by cardiac fibroblasts following myocardial injury
Matthew Ackers-Johnson, *National University of Singapore, Singapore*

Theme 2: New Insights into Cardiac Dysfunction

Wednesday, June 5, 16:30-18:08

Symposium 23: New Insights into Cardiomyopathy and Heart Failure

(Theme 2-5, ISHR-INT and Canon Sponsored)

Room: 309B

Chair: Joan Heller-Brown, University of California-San Digeo, USA
Co-Chair: Terje Kolstad, University of Oslo, Norway

16:30 **Profiling biological sex as a cardiac disease determinant**
Leslie Leinwand, *University of Colorado, USA*

16:52 **Pathological roles of TRP channels in heart failure**
Koichi Kuwahara, *Sinshu University, Japan*

17:14 **Phosphodiesterase inhibitor protection in tachyarrhythmia failure**
Andrew W. Trafford, *University of Manchester, UK*

17:36 **CaMKIIδ mediated inflammasome activation in heart failure**
Joan Heller-Brown, *University of California-San Digeo, USA*

17:58 **Abstract**
Disassembly of ryanodine receptor clusters in failing rat cardiomyocytes revealed by 3d dstorm imaging
Xin Shen, *University of Oslo, Norway*

Theme 6: Regenerative Medicine for Heart Disease

Wednesday, June 5, 16:30-18:30

Symposium 24: Stem Cells for Precision Medicine

(Theme 6-4, ISHR-INT Sponsored)

Room: 310

Chair: Joseph Wu, Stanford University, USA

Co-Chair: Jinxi Wang, Chinese Academy of Sciences, China

16:30	**Stem cells & genomics for precision medicine** ***Joseph Wu,*** *Stanford University, USA*
16:52	**Strategies to overcome the road blocks in pluripotent stem cell therapy** ***Jianyi Zhang,*** *University of Alabama at Birmingham, USA*
17:14	**Stem cell therapeutic potential for heart failure** ***Mark Sussman,*** *San Diego State University, USA*
17:36	**Aging: older isn't better for stem cell strategy** ***Michael Davis,*** *Georgia Institute of Technology, USA*
17:58	**Metabolic maturation of human pluripotent stem cell-derived cardiomyocytes** ***James Hudson,*** *University of Queensland, USA*
18:20	**Abstract** **BNC1: a master regulator of human epicardial heterogeneity and function** ***Sophie McManus,*** *University of Cambridge, UK*

JMCC Workshop

Wednesday, June 5, 18:30-19:30

Room: 301A

Chair: R. John Solaro, University of Illinois at Chicago, USA

Co-Chair: Donald M. Bers, University of California, USA

Co-Chair: Elizabeth Murphy, National Institutes of Health, USA

Co-Chair: Huangtian Yang, Chinese Academy of Sciences, China

18:30 **Publishing in JMCC**

R. John Solaro, *University of Illinois at Chicago, USA*

Theme 3: Ion Channel Mechanisms and Arrhythmias

Thursday, June 6, 08:30-10:30

Symposium 25: Disrupted and Dysfunctional RyR2–Disease Consequences (Theme 3-3, ISHR-INT Sponsored)

Room: 307AB

Chair: Julieta Palomeque, National University of La Plata, Argentina
Co-Chair: David Crossman, University of Auckland, New Zealand

08:30 **RyR2 phosphorylation and arrhythmias: not too much neither too little**
Hector Valdivia, *University of Michigan, USA*

08:52 **Insulin resistance induced RyR2 dependent arrhythmias**
Julieta Palomeque, *National University of La Plata, Argentina*

09:14 **RyR2 localisation – different tissues and different pathologies**
Katharine Dibb, *University of Manchester, UK*

09:36 **Calmodulin and defective RyR2 regulation**
Bjorn Knollmann, *Vanderbilt University, USA*

09:58 **CPVT: RyR2 and the Ca clock**
Anna-Maria Gomez, *Institut National de la Santé et de la Recherche Médicale, France*

10:20 **Abstract**
Istaroxime, an emerging inotrope with less cardiotoxicity than digitalis.
Luis Alberto Gonanco, *National University of La Plata, Argentina*

Theme 1: New Mechanisms of Cardioprotection and Injury

Thursday, June 6, 08:30-10:30

Symposium 26: Translational Views of Cardiac Injury and Protection

(Theme 1-6, ISHR-CHN Sponsored)

Room: 309A

Chair: Jie Du, Capital Medical University, China

Co-Chair: Kaizheng Gong, Yangzhou University, China

08:30	**Translational medicine for ischemic heart disease in China** ***Junbo Ge,*** *Fudan University, China*
08:52	**Targeting dysfunctional adipocytes for diabetic cardiac protection** ***Xinliang Ma,*** *Thomas Jefferson University, USA*
09:14	**Role of inflammation in cardiac injury** ***Jie Du,*** *Capital Medical University, China*
09:36	**Chemokine mediates monocyte mobilization and promotes cardiac remodeling** ***Huihua Li,*** *Dalian Medical University, China*
09:58	**Mitochondrial and cardiovascular disease: translational view from a cardiologist** ***Ben He,*** *Shanghai Jiaotong University, China*
10:20	**Abstract** **The zinc transporter Zip2 is cardioprotective against ischemia/reperfusion injury in hearts** ***Zhelong Xu,*** *Tianjin Medical University, China*

Theme 6: Regenerative Medicine for Heart Disease

Thursday, June 6, 08:30-10:30

Symposium 27: New Approaches for Heart Regeneration

(Theme 6-5, ISHR-INT and Kaito Sponsored)

Room: 309B

Chair: Shinsuke Yuasa, Keio University School of Medicine, Japan

Co-Chair: Enzo Porrello, Murdoch Children's Research Institute, Australia

08:30 **miRNAs and cardiac regeneration**
Ronglih Liao, *Harvard Medical School, USA*

08:52 **Transcriptional analysis of mammalian heart regeneration**
Enzo Porrello, *Murdoch Children's Research Institute, Australia*

09:14 **Next steps in cardiac regenerative strategies**
Mauro Giacca, *King's College London, UK*

09:36 **Epigenetics and stem cell therapy**
Shinsuke Yuasa, *Keio University School of Medicine, Japan*

09:58 **Heart regeneration: peering through the open window behind a closed door**
Li Wang, *Chinese Academy of Medical Sciences, China*

10:20 **Abstract**
Single-cell analysis of non-myocytes during cardiac regeneration
Jiandong Liu, *University of North Carolina, USA*

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the genome

Thursday, June 6, 08:30-10:30

Symposium 28: Epigenetic and RNA Involvement in Cardiac Disease & Hypertrophic Remodeling (Theme 5-3, ISHR-INT Sponsored)

Room: 310

Chair: Johannes Backs, University of Heidelberg at Chicago, Germany

Co-Chair: Uma Nahar, Post Graduate Institute of Medical Education & Research, Chandigarh, India

08:30 **G-protein coupled receptor kinase 5 (GRK5)-involvement in cardiac hypertrophy induction**
Walter Koch, *Temple University, USA*

08:52 **RNA methylation in the regulation of cardiac hypertrophy**
Federica Accornero, *Ohio State University, USA*

09:14 **Epigenetic regulation of takotsubo cardiomyopathy**
Johannes Backs, *University of Heidelberg* at Chicago*, Germany*

09:36 **Noncoding RNA species versus protein biomarkers**
Manuel Mayr, *King's College London, UK*

09:58 **Noncoding RNAs in cardiac hypertrophy and heart failure**
Paula da Costa Martin, *Maastricht University, The Netherlands*

10:20 **Abstract**
Circulating muscle-derived miR-206 links skeletal muscle dysfunction to cardiac autonomic denervation
Tania Zaglia, *University of Padova, Italy*

Theme 8: Vascular Dysfunction, Inflammation and Remodelling

Thursday, June 6, 11:00-13:00

Symposium 29: Hippo Signaling in Atherosclerosis

(Theme 8-2, ISHR-CHN Sponsored)

Room: 307AB

Chair: Yu Huang, Chinese University of Hong Kong, China

Co-Chair: Luyang Yu, Zhejiang University, China

11:00 **Critical role of the Hippo signaling effector YAP in vascular smooth muscle development and homeostasis**
Jiliang Zhou, *Medical College of Georgia, USA*

11:22 **Engineering DNA nanostructures for in vivo delivery to atherosclerotic plaques**
Jonathan Choi, *Chinese University of Hong Kong, China*

11:44 **The role of macrophage YAP in atherosclerosis**
Ding Ai, *Tianjin Medical University, China*

12:06 **Inflammatory phenotype of vascular smooth muscle cells during vascular remodeling**
Wei Kong, *Peking University, China*

12:28 **Hippo signaling in atherogenesis**
Yu Huang, *Chinese University of Hong Kong, China*

12:50 **Abstract**
Macrophage major vault protein suppresses atherogenesis by inhibiting NF-κB signaling mediated inflammation
Qi Chen, *Nanjing Medical University, China*

Theme 2: New Insights into Cardiac Dysfunction

Thursday, June 6, 11:00-12:38

Symposium 30: An Understanding of Dysfunctional Proteins in Heart Failure (Theme 2-6, ISHR-INT Sponsored)

Room: 309A

Chair: R John Solaro, University of Illinois at Chicago, USA
Co-Chair: Lili Wang, Vanderbilt University Medical Center, USA

11:00 **Utilising proteomics for clinical assessment of cardiac disease and translation**
Jenny Van Eyk, *Cedars Sinai Medical Center, USA*

11:22 **Cardiomyopathy and Ca-sensing protein pathologies**
R John Solaro, *University of Illinois* at Chicago*, USA*

11:44 **Identifying truncating titin mutations in dilated cardiomyopathies**
Diane Fatkin, *Victor Chang Cardiac Research Institute, Australia*

12:06 **Biophysical derangements in genetic cardiomyopathies.**
Jill Tardiff, *University of Arizona, USA*

12:28 **Abstract**
Oxidative modifications of cardiomyocyte passive stiffness exhibit age-dependent characteristics in developing rat cardiomyocytes
Zoltan Papp, *University of Debrecen, Hungary*

Theme 6: Regenerative Medicine for Heart Disease

Thursday, June 6, 11:00-13:00

Symposium 31: Novel Insights in Exosome Mediated Cardiac Repair

(Theme 6-6, ISHR-INT Sponsored)

Room: 309B

Chair: Susmita Sahoo, Icahn School of Medicine at Mount Sinai, USA
Co-Chair: Xiyong Yu, Guangzhou Medical University, China

11:00 **Myocardial repair by stem cell exosomes: sacks full of goodies or not**
Raj Kishore, *Temple University, USA*

11:22 **Therapeutic mechanisms of human CD34 exosomes**
Susmita Sahoo, *Icahn School of Medicine at Mount Sinai, USA*

11:44 **Paracrine effects of hPSC-derived cardiac lineage cells in myocardial repair**
Huangtian Yang, *Chinese Academy of Sciences, China*

12:06 **Exosomes: principles, possibilities and potential for cardioprotection**
Sean Davidson, *University College London, UK*

12:28 **Are the exosomes a valuable tool to induce cardiac regeneration? Exemple of the brain natriuretic peptide therapies**
Nathalie Rosenblatt Velin, *Lausanne University Hospital, Switzerland*

12:50 **Abstract**
Circulating myocardial microRNAs (myo-miRs) from infarcted hearts are carried in the exosomes and mobilize bone-marrow progenitor cells
Min Cheng, *Huazhong University of Science and Technology, China*

Theme 4: Signaling in Cardiac Disease and Therapy

Thursday, June 6, 11:00-13:00

Symposium 32: New Concepts of Reactive Oxygen and Nitrogen Species as Signaling Mediators (Theme 4-3, ISHR-INT Sponsored)

Room: 310

Chair: Phil Eaton, Queen Mary University of London, UK
Co-Chair: Xinyang Hu, Zhejiang University, China

11:00 **Mitoflashes and cardiomyocyte bioenergetics: mitochondrial reactive oxygen species signaling and ATP homeostasis**
Heping Cheng, *Peking University, China*

11:22 **Redox modulation of cardiac contractility after myocardial stretch-from physiology to pathophysiology**
Nestor Perez, *National University of La Plata, Argentina*

11:44 **NOX proteins as regulators of cardiac stress responses**
Ajay Shah, *King's College London, UK*

12:06 **S-Nitrosylation and disulphide formation in post-translational regulation of cardiac proteins**
Phil Eaton, *Queen Mary University of London, UK*

12:28 **Oxidant-mediated regulation of protein kinase activity**
Friederike Cuello, *University Medical Center Hamburg-Eppendorf, Germany*

12:50 **Abstract**
Cardioprotective effects of PKARIα oxidation occur through redox-dependent localization and regulation of the endolysosome
Jillian N. Simon, *University of Oxford, UK*

Theme 4: Signaling in Cardiac Disease and Therapy

Thursday, June 6, 14:30-16:08

Symposium 33: Kinase Signaling in Cardiac Stress

(Theme 4-4, ISHR-INT Sponsored)

Room: 307AB

Chair: Alessandra Ghigo, University of Turin, Italy
Co-Chair: Qinchuan Wang, Johns Hopkins University, USA

14:30 **p38 MAPK kinase and its role in fibrosis**
Jennifer Davis, *University of Washington, USA*

14:52 **G protein-coupled estrogen receptor (GPER) signaling and aldosterone-induced cardiac hypertrophy**
Ernesto A. Aiello, *National University of La Plata, Argentina*

15:14 **PI3Kgamma is a new player in chemotherapy-induced cardiomyopathy**
Alessandra Ghigo, *University of Turin, Italy*

15:36 **An update on myocardial cAMP signaling**
Emilio Hirsch, *University of Torino, Italy*

15:58 **Abstract**
CaMKII activation critically contributes to nitric oxide induced cardiac arrhythmias
Jeff Erickson, *University of Otago, New Zealand*

Theme 1: New Mechanisms of Cardioprotection and Injury

Thursday, June 6, 14:30-16:30

Symposium 34: Molecular Evidence Linking Physical Exercise to Cardioprotection (Theme 1-7, ISHR-CHN Sponsored)

Room: 309A

Chair: Junjie Xiao, Shanghai University, China
Co-Chair: Ming Xu, Peking University, China

14:30 **Exercise training prevents cardiac injury induced by sympathetic stress**
Han Xiao, *Peking University, China*

14:52 **Myocardial Nox4 regulates the physiological response to acute exercise**
Min Zhang, *King's College London, UK*

15:14 **Aerobic exercise prevents aging-related myocardial ischemic intolerance involving in mutual inhibition of insulin signaling and PHLPP-1**
Heng Ma, *Fourth Military Medical University, China*

15:36 **The Role of C/EBPβ and CITED4 in exercise-induced cardiac hypertrophy**
Anthony Rosenzweig, *Harvard Medical School, USA*

15:58 **Non-coding RNAs in control of physiological cardiac hypertrophy**
Junjie Xiao, *Shanghai University, China*

16:20 **Abstract**
The role of autophage in cardiac protection against I/R injury
Yida Tang, *Chinese Academy of Medical Sciences, China*

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Thursday, June 6, 14:30-16:30

Symposium 35: Cardiovascular Disease: Mechanisms and Disease Targets (Theme 5-4, ISHR-INT Sponsored)

Room: 309B

Chair: Thomas Vondriska, University of California-Los Angeles, USA
Co-Chair: Eva van Rooij, University Medical Centre Utrecht, The Netherlands

14:30 **Dynamics of chromatic structural features in the normal and diseased heart**
Thomas Vondriska, *University of California-Los Angeles, USA*

14:52 **Chromatin modifying enzymes in heart failure: mechanisms and therapies**
Timothy McKinsey, *University of Colorado, USA*

15:14 **DNA methylation and histone modifications in heart disease**
Gianluigi Condorelli, *Humanitas University, Italy*

15:36 **New approaches for RNA discovery and analysis**
Eva van Rooij, University Medical Center Utrecht*, The Netherlands*

15:58 **Inflammation and heart disease**
Pilar Alcaide, *Tufts University, USA*

16:20 **Abstract**
Improved gene delivery to the heart and evasion of pre-existing humoral immunity with exosomal AAVs
Marta Adamiak, *Icahn School of Medicine at Mount Sinai, USA*

Theme 7: Cardiac Metabolism

Thursday, June 6, 14:30-16:08

Symposium 36: Modelling and Remodeling in the Heart-Metabolic and Systemic Regulators (Theme 7-4, ISHR-INT Sponsored)

Room: 310

Chair: Maria Kontaridis, Harvard Medical School, USA
Co-Chair: Regis Lamberts, University of Otago, New Zealand

14:30 **Pericardial adipose accumulation and atrial dysfunction**
James Bell, *University of Melbourne, Australia*

14:52 **Key regulation of immune response in initiating and maintaining cardiac injury upon sympathetic stress**
Youyi Zhang, *Peking University, China*

15:14 **Redox modification of proteins in cardiovascular diseases**
Gemma Figtree, *University of Sydney, Australia*

15:36 **Using IPSCS to elucidate mechanisms regulating congenital heart disease in patients with rasopathy Disorders**
Maria Kontaridis, *Harvard Medical School, USA*

15:58 **Abstract**
Micro-RNA therapy stimulates endogenous cardiac regeneration after myocardial infarction in large animals
Lorena Zentilin, *International Center for Genetic Engineering and Biotechnology, Italy*

President's Distinguished Lecture

Thursday, June 6, 16:30-17:15

Room: Plenary Hall B

Chair: Elizabeth Murphy, National Institutes of Health, USA

16:30 **Molecular mechanism for cardio-renal connection**
Yoshihiko Saito, *Nara Medical University, Japan*

Closing Ceremony

Thursday, June 6, 17:15-17:45

Room: Plenary Hall B

17:15 **Closing Ceremony**

Meeting Banquet

Thursday, June 6, 18:30-22:00

Room: Yuxiandu Restaurant

Address: No.117, The Western Fourth North Ring Road, Haidian District, Beijing

18:30	**Meeting Banquet**

Posters

POSTER SESSIONS

Poster Distrubution

Poster Categories	Poster Session 1 Tuesday, June 4	Poster Session 2 Wednesday, June 5	Poster Session 3 Thursday, June 6
Theme 1	Tue-001 - Tue-047	Wed-001 - Wed-046	Thur-001 - Thur-047
Theme 2	Tue-048 - Tue-078	Wed-047 - Wed-076	Thur-048 - Thur-076
Theme 3	Tue-079 - Tue-095	Wed-077 - Wed-087	Thur-077 - Thur-089
Theme 4	Tue-096 - Tue-111	Wed-088 - Wed-105	Thur-090 - Thur-107
Theme 5	Tue-112 - Tue-120	Wed-106 - Wed-116	Thur-108 - Thur-115
Theme 6	Tue-121 - Tue-137	Wed-117 - Wed-132	Thur-116 - Thur-133
Theme 7	Tue-138 - Tue-149	Wed-133 - Wed-146	Thur-134 - Thur-148
Theme 8	Tue-150 - Tue-184	Wed-147 - Wed-183	Thur-149 - Thur-185

Poste Schedule

	Poster Session 1 Tuesday, June 4	Poster Session 2 Wednesday, June 5	Poster Session 3 Thursday, June 6
Presentation time	12:30 - 14:00	12:30 - 14:00	13:00 - 14:30

Note:

* ECI (Early Career Investigators) posters

Underlined Authors: Poster presenter

Poster hanging: 8:00 - 9:00

Poster removing: 18:00 - 19:00

Theme 1: New Mechanisms of Cardioprotection & Injury

Theme 2: New Insights into Cardiac Dysfunction

Theme 3: Ion Channel Mechanisms & Arrhythmias

Theme 4: Signalling in Cardiac Disease & Therapy

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Theme 6: Regenerative Medicine for Heart Disease

Theme 7: Cardiac Metabolism

Theme 8: Vascular Dysfunction, Inflammation and Remodeling

Poster Session 1

Tuesday, June 4, 12:30-14:00

Theme 1: New Mechanisms of Cardioprotection & Injury

Tue-001 Abstract ID: 5 * Metformin promotes autophagy in ischemia/reperfusion myocardium via cytoplasmic AMPKα1 and nuclear AMPKα2 pathways respectively

Zheng Yang[1], Yishi Wang[1], Nan Mu[1], Guoxu Zheng[1], Heng Ma[1]
[1] School of Basic Medical Sciences, Fourth Military Medical University, Xi'an, China

Tue-002 Abstract ID: 27 * Transcription factor EB-regulated autophagy depression participated in myocardial senescence induced by hyperhomocysteinemia

Shangyue Zhang[1], Jiahui Xu[1], Yi Zhou[1], Wen Wang[1]
[1]Capital Medical University, Beijing, China

Tue-003 Abstract ID: 147 * miRNA-320a in cardiac fibroblasts protects against cardiac fibrosis during the process of heart failure

Shuai Yuan[1], Huaping Li[1], Jiahui Fan[1], Chen Chen[1], Daowen Wang[1]
[1]Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Tue-004 Abstract ID: 149 * TBC1D15-regulated mitochondrial dynamics at the Mitochondria–lysosome contacts attenuates myocardial ischemia reperfusion injury

Shiqun Sun[1], Yingmei Zhang[1,2], Jun Ren[1,2]
[1]Institute of Cardiovascular Diseases, Zhongshan Hospital, Fudan University, Shanghai, China, [2]University of Wyoming, Laramie, WY, USA

Tue-005 Abstract ID: 155 * microRNA-210 is necessary for exercise-induced cardiomyocyte proliferation and mediates the benefical effect of exercise against cardiac ischemia-reperfusion injury

Yihua Bei[1], Xiangmin Meng[1], Siyi Fu[1], Lei Wang[2], Junjie Xiao[1]
[1]Shanghai University, Shanghai, China, [2]Second Medical School of Nanjing University of Chinese Medicine, Nanjing, China

Tue-006 Abstract ID: 159 * Atad3a alleviates cardiac ischemia/reperfusion injury by suppressing PINK1 dependent mitophagy

Xinyue Liang[1]
[1]Zhongshan Hospital, Shanghai, China

Tue-007 Abstract ID: 174 * Nucleolin facilitates myocardial infarction injury recovery by modulating macrophage polarization

Yuting Tang[1,2], Hui Sun[1,2], Yuanbin Li[1,2], Cheng Chen[1,2], Xiaofang Lin[1,2], Pengfei Liang[3], Bimei Jiang[1,2]
[1]Central South University, Changsha, China, [2]Central south university, Changsha, China, [3]Xiangya Hospital, Central South University, Changsha, China

Tue-008 Abstract ID: 196 * LncRNA H19 involved in myocardial ischaemic preconditioning via post-translational control of Nucleolin expression

Cheng Chen[1], Bimei Jiang[1], Yuting Tang[1], Xiaofang Lin[1], Hui Sun[1]
[1]Central South University, Changsha, China

Tue-009 Abstract ID: 212 * LncRNA-Safe contributes to cardiac fibrosis through Safe-Sfrp2-HuR complex in mouse myocardial infarction

Kaili Hao[1], Jie Wu[1], Zhuangzhuang Yang[1], Hongchun Wu[1], Jingjing Li[1], Xionglong Han[1], Zhen-Ao Zhao[1], Shijun Hu[1], Wei Lei[1]
[1]Soochow University, Suzhou, China

Tue-010 Abstract ID: 275 * Ecrg4 attenuates apoptosis of cardiomyocytes to ischemia/reperfusion injury through STAT3 signaling pathway

Yuanshu Liu[1], Haiyang Yuan[1], Yu Jiang[1], Wenjun Huang[1], Rui Zhou[1], Xitong Dang[1]
[1]Southwest Medical University, Luzhou, China

Tue-011 Abstract ID: 293 * Akt plays a protective role in adverse left ventricular responses to volume overload induced by aortic regurgitation in mice

Jian Wu[1], Jieyun You[2], Xiaoyan Wang[1], Shijun Wang[1], Jiayuan Huang[1], Qihai Xie[3], Zhiwen Ding[1], Yong Ye[2], Baoyong Gong[4], Cong Wang[1], Le Kang[1], Ran Xu[1], Yang Li[1], Peipei Yin[1], Fenghua Yang[4], Liping Bu[1], Peter Backx[5,6], Junbo Ge[1], Yunzeng Zou[1]
[1]Fudan University, Shanghai, China, [2]Tongji University School of Medicine, Shanghai, China, [3]Shanghai Jiading District Central Hospital, Shanghai, China, [4]Guangdong Laboratory Animal Monitoring Institute, Guangzhou, China, [5]York University, Toronto, Canada, [6]University Health Network, Toronto, Canada

Tue-012 Abstract ID: 309 * The PERK/Nrf2 pathway is involved in ERS-induced ER-phagy in H9c2 cells

Tiangi Tao[1], Xiuhua Liu[1]
[1]Chinese PLA General Hospital, Beijing, China

Tue-013 Abstract ID: 313 * Cardiac overexpression of low density lipoprotein receptor-related protein 6 alleviates myocardial ischemia-reperfusion injury in mice

Wang Ying[1], Gong Hui[1]
[1]Zhongshan Hospital Fudan University, Shanghai, China

Tue-014 Abstract ID: 492 * Roles of mitochondrial autophagy in TUDCA-induced myocardial protection

Yu Fu[1], Jinkun Xi[1], Yifei He[1], Miao Zhao[1], Yulin Liu[1], Yi Zheng[1]
[1]North China University of Science and Technology, Tangshan, China

Tue-015 Abstract ID: 504 * The protective effect and transcriptome analysis of Ganoderma spore oil against heart injury in pressure overload mice

Weijiang Tan[1], Zhangjie Pei[2], Ruoshui Xiao[3], Ailin Yue[4], Xiang Li[1], Shuang Zheng[1], Meili Chen[1], Yu Zhang[1], Ren Huang[1], Fenghua Yang[1]
[1]Guangdong Province Key Laboratory of Laboratory Animals, Guangzhou, China, [2]JSerra Catholic High School, CA, USA, [3]LGB Ecolint (International School of Geneva), Geneva, Switzerland, [4]Crean Lutheran High School, CA, USA

Tue-016 Abstract ID: 507 * Endogenous n-3 PUFAs protect hearts against ischemia-reperfusion injury

Shuang Zheng[1,2], Xiang Li[2], Weijiang Tan[2], Lijing Wang[1], Feng Hua Yang[2], Ren Huang[1,2]
[1]Guangdong Pharmaceutical University, Guanghzhou, China, [2]Guangdong Province Key Laboratory of Laboratory Animals, Guangzhou, China

Tue-017 Abstract ID: 509 * Preliminary study of human Slit2 gene overexpressing mice in cardiovascular field

Li Xiang[1,2], Zheng shuang[1,2,3], Tan weijiang[1,2], Zhang mengya[1,2], Ren xuecong[1,2], Huang ren[1,2], Yang fenghua[1,2]
[1]Guangdong laboratory animals monitoring institute, Guangzhou, China, [2]Guangdong Key Laboratory Animals for Laboratory Animals, Guangzhou, China, [3]Guangdong pharmaceutical university, Guangzhou, China

Tue-018 Abstract ID: 239 * Delayed reperfusion following myocardial ischemia in mice prevents fatal cardiac rupture but mimics cardiac injury associated with permanent occlusion

Ling Zhao[1,2], Daniel Donner[3], Amanguli Ruze[1,2], Helen Kiriazis[3], Xiao-Ming Gao[1,2,3], Xiao-Jun Du[3]
[1]Prevention and Treatment of High Incidence Diseases in Central Asia, Urumqi, China, [2]The First Affiliated Hospital of Xinjiang Medical University, Urumqi, China, [3]Baker Heart and Diabetes Institute, Melbourne, Australia

Tue-019 Abstract ID: 107 * Knockout of beta-2 microglobulin enhances cardiac repair by modulating exosome imprinting and inhibiting stem cell-induced immune rejection

Lianbo Shao[1], Yu Zhang[1], Xiangbin Pan[2], Bin Liu[3], Chun Liang[4], Yuqing Zhang[1], Yanli Wang[1], Bing Yan[1], Wenping Xie[1], Yi Sun[5], Zhenya Shen[1], Xiyong Yu[6], Yangxin Li[1]
[1]First Affiliated Hospital of Soochow University, Suzhou, China, [2]Fuwai Hospital, Beijing, China, [3]The First Hospital of Jilin University, Changchun, China, [4]Changzheng Hospital, Second Military Medical University, Shanghai, China, [5]Fuwai Yunnan Cardiovascular Hospital, Kunming, China, [6]Guangzhou Medical University, Guangzhou, China

Tue-020 Abstract ID: 37 * Acute overstretch causes abrupt inner mitochondrial collapsing of rat right ventricular papillary muscles

Naritomo Nishioka[1], Yoichiro Kusakari[1], Jun Tanihata[1], Susumu Minamisawa[1]
[1]The Jikei University School of Medicine, Tokyo, Japan

Tue-021 Abstract ID: 83 * Riociguat pretreatment reduces ischemia/reperfusion injury and preserves donor heart function in a rodent model of heterotopic cardiac transplantation

Kálmán Benke[1], Balázs Tamás Németh[1], Alex Ali Sayour[1], Klára Stark[1], Attila Oláh[1], Mihály Ruppert[1], Gabor Szabo[2], Sevil Korkmaz-Icöz[2], István Hartyánszky[1], Zoltán Szabolcs[1], Béla Merkely[1], Tamás Radovits[1]
[1]Semmelweis University, Budapest, Hungary, [2]University of Heidelberg, Germany

Tue-022 Abstract ID: 134 * A knock-in mutation at a site of S-nitrosylation on TRIM72 (TRIM72-C144S) is

cardioprotective

Natasha Fillmore[1], Junhui Sun[1], Hanley Ma[1], Jennifer Boylston[1], Audrey Noguchi[2], Chengyu Liu[3], Elizabeth Murphy[1]
[1]Laboratory of Cardiac Physiology, NHLBI, NIH, Bethesda, MD, USA, [2]Murine Phenotyping Core, NHLBI, NIH, Bethesda, MD, USA, [3]Transgenic Core, NHLBI, NIH, Bethesda, MD, USA

Tue-023 Abstract ID: 154 * Endothelial function more susceptible to ischemia-reperfusion injury than contractile function in an isolated rat heart model of donation after circulatory death

Natalia Mendez Carmona[1], Rahel K. Wyss[1], Maria Arnold[1], Anna Joachimbauer[1], Georg M. Fiedler[2], Thierry P. Carrel[1], Hendrik T. Tevaearai Stahel[1], Sarah Longnus[1]
[1]Bern University Hospital and University of Bern, Switzerland, [2]University Institute of Clinical Chemistry, University Hospital, Inselspital, Bern, Switzerland

Tue-024 Abstract ID: 190 * CCR5 promotes the resolution of inflammation in pressure overload-induced heart failure

Masato Ishizuka[1], Haruhiro Toko[1], Mutsuo Harada[1], Jiaxi Guo[1], Satoshi Bujo[1], Haruka Yanagisawa-Murakami[1], Issei Komuro[1]
[1]The University of Tokyo, Tokyo, Japan

Tue-025 Abstract ID: 194 * Neutrophil extracellular trap (NET)-associated elastase delays resolution of acute inflammation via Annexin A1 cleavage in myocardial infarction

Kazuko Tajiri[1], Yukino Ogura[1], Saori Yonebayashi[1], Siqi Li[1], Zi Xun Yuan[1], Fumi Yamagami[1], Duo Feng[1], Rujie Qin[1], Yuta Okabe[1], Fumiya Tamura[1], Mari Isomi[1], Sadahiro Taketaro[1], Dongzhu Xu[1], Nobuyuki Murakoshi[1], Masaki Ieda[1]
[1]University of Tsukuba, Tsukuba, Japan

Tue-026 Abstract ID: 218 * Novel PTP inhibitors with potent cardioprotective efficacy

Salvatore Antonucci[1], Justina Sileikyte[2], Moises Di Sante[1], Michela Carraro[1,3], Roberta Menabò[1,3], Tyler Bauer[4], Jordan Deveraux[5], Michael Cohen[5], Michael S. Forte[2], Elizabeth Murphy[4], Paolo Bernardi[1,3], Fabio Di Lisa[1,3]
[1]University of Padova, Padova, Italy, [2]Oregon Health & Science University, Portland, OR, USA, [3]National Research Council of Italy (CNR), Padova, Italy, [4]Systems Biology Centre, NHLBI, NIH, Bethesda, MD, USA, [5]Oregon Health and Science University, Portland, OR, USA

Tue-027 Abstract ID: 250 * Mechanical postconditioning stimulates glucose metabolism in parallel with improved post-ischemic recovery in an isolated rat heart model of donation after circulatory death

Maria Arnold[1], Natalia Méndez Carmona[1], Patrik Gulac[1,2], Rahel K. Wyss[1], Nina Rutishauser[1], Adrian Segiser[1], Hendrik Tevaearai Stahel[1], Thierry Carrel[1], Sarah Longnus[1]
[1]University of Bern, Switzerland, [2]Comenius University, Bratislava, Slovakia

Tue-028 Abstract ID: 1 Metabolic regulation of cardiomyopathy: role of the unfolded protein response and hexosamine biosynthesis

Zhao Wang[1]
[1]University of Texas Southwestern Medical Center, Dallas, TX, USA

Tue-029 Abstract ID: 10 GPR30 mediated cardioprotection of estrogen against stress through rapid signaling pathway

Hongyuan Zhang[1,2], Lu Fu[2], Jeremiah Ong'achwa Machuki[2]
[1]Suzhou No.9 People's Hospital, Suzhou, China, [2]Xuzhou Medical University, Xuzhou, China

Tue-030 Abstract ID: 11 The zinc transporter Zip2 is cardioprotective against ischemia/reperfusion injury in mouse hearts

Luping Du[1], Hualu Zhang[1], Huanhuan Zhao[1], Xinxin Cheng[1], Zhelong Xu[1]
[1]Tianjin Medical University, Tianjin, China

Tue-031 Abstract ID: 33 FKBPL, a novel player in cardiac ischaemia and fibrosis

Lana McClements[1], Benjamin Rayner[2], Abdelrahim Alqudah[3], David Grieve[3], Tracy Robson[4]
[1]University of Technology Sydney, NSW, Australia, [2]University of Sydney, NSW, Australia, [3]Queen's University Belfast, UK, [4]Royal College of Surgeons in Ireland, Dublin, Ireland

Tue-032 Abstract ID: 184 Permanent atrial fibrillation coincides with an age related increase of lymphocytes in the atria and a minor Parvovirus positivity

L. Wu[1,2], R.W. Emmens[1,2], J. van Wezenbeek[1,2], W. Stooker[5], C.P. Allaart[6], A.B.A. Vonk[2,3], A.C. van Rossum[6], K.C. Wolthers[4], H.W.M. Niessen [1,2,3], P.A.J. Krijnen[1,2]
[1]Amsterdam UMC, location VU Medical Center, Amsterdam, The Netherlands, [2]Amsterdam Cardiovascular Sciences, Amsterdam, The Netherlands, [3]Amsterdam UMC, location VU Medical Center,

Amsterdam, The Netherlands, [4]Amsterdam UMC, location Academic Medical Center, Amsterdam, The Netherlands, [5]OLVG, Amsterdam, The Netherlands, [6]Amsterdam UMC, location VU Medical Center, Amsterdam, The Netherlands

Tue-034 Abstract ID: 85 Early exercise intervention preserves coronary and cardiac function in the diabetic heart; emerging role of microRNAs

Daryl Schwenke[1], Jason Kar-Sheng Lew[1], James Pearson[2], Hirotsugu Tsuchimouchi[2], Rajesh Katare[1]
[1]University of Otago, Dunedin, New Zealand, [2]National Cerebral and Cardiovascular Center Research Institute, Osaka, Japan

Tue-035 Abstract ID: 104 In vivo genetic interrogations establish unequivocally the pathophysiological significance of proteasome phosphoregulation by protein kinase A

Penglong Wu[1,2], Bo Pan[1], Meagn Lewno[1], Nirmal Parajuli[1], Jinbao Liu[2], Xuejun Wang[1]
[1]University of South Dakota, Vermillion, USA , [2]School of Basic Medical Sciences of Guangzhou Medical University, Guangzhou, China

Tue-036 Abstract ID: 117 Tne effect of CARD9 on autophagy in cardiomyocytes in myocardial ischemia/reperfusion injury

Yuanbin Li[1], Pengfei Liang[1], Yuting Tang[1], Bimei Jiang[1], Xianzhong Xiao[1]
[1]Central South University, Changsha, China

Tue-037 Abstract ID: 135 Improvement of vascular response to Hypoxia/Reoxygenation injury: role of the P2Y11 purinergic receptor

Marie Piollet[1], Claudie Lefort[1], Stéphanie Chadet[1], Lauriane Benoist[1], Danina Muntean[2], Oana Duicu[2], Adrian Sturza[2], Denis Angoulvant[1,3], Fabrice Ivanes[1,3]
[1]University of Tours, Tours, France, [2]University of Victor Babes, Timisoara, Romania, [3]CHRU Tours, Tours, France

Tue-038 Abstract ID: 150 Developmental and sex differences in cardiac tolerance to ischemia/reperfusion injury: the role of mitochondria

Bohuslav Ostadal[1]
[1]Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic

Tue-040 Abstract ID: 204 Activation of Toll Like Receptor 4 (TLR4) promotes cardiomyocyte apoptosis and fibrosis through SIRT2-dependent p53 deacetylation

Parmeshwar Katare[1], Hina Nizami[1], Paramesha Bugga[1], Amit Dinda[2], Sanjay Banerjee[1]
[1]Translational Health Science and Technology Institute (THSTI), Faridabad-121001, Haryana, India, [2] All India Institute of Medical Sciences (AIIMS), Ansari Nagar, New Delhi, India

Tue-041 Abstract ID: 208 High-throughput screening to identify human microRNAs enhancing CRISPR/Cas9-based homologous recombination for cardiac gene correction

Edoardo Schneider[1], Luca Braga[1,2], Alice Rovai[1], Michele Lai[1], Mauro Giacca[1,2], Lorena Zentilin[1,2]
[1]International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy, [2]King's College London, London, UK

Tue-043 Abstract ID: 225 The neutrophil mediator S100A9 is a key promoter of cardiac repair after myocardial infarction

Goran Marinkovic[1], Lisa DeCamp[2], Laura Winkler[2], Razvan Gheorghita Mares[3], Istvan Adorjan Szabo[3], Ovidiu Simion Cotoi[3], Jan Nilsson[1], Stefan Jovinge[2,4,5], Alexandru Schiopu[1,3]
[1]Clinical Research Center Malmö, Lund University, Sweden, [2]Grand Rapids, MI, USA, [3]University of Medicine, Pharmacy, Science and Technology of Tirgu-Mures, Romania, [4]Spectrum Health Hospitals, Grand Rapids, MI, USA, [5]Stanford University, Palo Alto, CA, USA

Tue-044 Abstract ID: 231 LncRNAs functions as regulatory hub in cardiac remodeling

Yong Zhang[1], Ying Zhang[1], Lihua Sun[1], Baofeng Yang[1]
[1]Harbin Medical University, Harbin, China

Tue-045 Abstract ID: 238 Flavin containing monooxygenase 2 suppresses cardiac fibrosis via interfering TGF-β1/SMAD2/3 signaling through combining with CYP2J3

Cheng Ni[1,2], Xinyang Hu[1,2], Jian'an Wang[1,2], Keyang Zhu[1,2], Qingju Li[1,2], Changchen Xiao[1,2], Jing Zhao[1,2], Yan Wu[1,2], Yinchuan Xu[1,2]
[1]College of Medicine, Zhejiang University, Hangzhou, China, [2]Cardiovascular Key Laboratory of Zhejiang Province, Hangzhou, China

Tue-046 Abstract ID: 253 Mitofusin 2 as a novel therapeutic target to prevent adverse post-myocardial infarction remodelling

Sauri Hernandez-Resendiz[1,2], Elisa A. Liehn[1,2], Whendy E. Contreras [1,2], Hector A. Cabrera-Fuentes [1,2], Gustavo E. Crespo-Avilan [1,2], Derek Hausenloy[1,2]

[1]Duke-NUS Medical School, Singapore, [2]National Heart Centre Singapore, Singapore

Tue-047 Abstract ID: 260 Calreticulin post-conditioning protects cardiomyocytes against Hypoxia/Reoxygenation injury by restoring autophagy flux

Jianli Wang[1,2], Xiuhua Liu[1], Tianqi Tao[1], Xiaoreng Wang[1]
[1]Medical School of Chinese PLA, Beijing, China, [2]Jining Medical University, Shandong, China

Theme 2: New Insights into Cardiac Dysfunction

Tue-048 Abstract ID: 71 * The different roles of miRNA-92a-2-5p and let-7b-5p in mitochondrial translation in db/db mice

Huaping Li[1], Beibei Dai[1], Jiahui Fan[1], Chen Chen[1], Dao Wen Wang[1]
[1]Huazhong University of Science and Technology, Wuhan, China

Tue-050 Abstract ID: 142 * Dysbiotic gut microbes may contribute to hypertension by limiting vitamin D production

Jing Li[1], Kun Zuo[1], Jiuchang Zhong[1], Jun Cai[2], Xinchun Yang[1]
[1]Capital Medical University, Beijing, China [2]National Center for Cardiovascular Diseases of China, Beijing, China

Tue-051 Abstract ID: 156 * PPAR gamma mediates angiotensin II-induced muscle atrophy by increasing miR-29b

Jin Li[1], Yihua Bei[1], Junjie Xiao[1]
[1]Shanghai University, Shanghai, China

Tue-052 Abstract ID: 77 * Istaroxime, an emerging inotrope with less cardiotoxicity than digitalis

Luis Alberto Gonano[1], María Florencia Racciopi[1], Malena Morell[1], Martín Vila Petroff[1]
[1]Centro de Investigaciones Cardiovasculares Horacio Cingolani, UNLP-CONICET, La Plata, Argentina

Tue-053 Abstract ID: 178 * A novel non-invasive measurement of myocardial infarct size in the mouse using cardiac ultrasound tissue displacement mapping

Daniel Donner[1], Helen Kiriazis[1], Xiaoming Gao[1,2], Xiaojun Du[1]
[1]Baker Heart and Diabetes Institute, Melbourne, Australia, [2]Xinjiang Key Laboratory of Medical Animal Model Research, Urumqi, China

Tue-054 Abstract ID: 44 * The titin missense variant A178D causes cardiomyopathy via loss of telethonin from the Z-discs

He Jiang[1], Matthew Kelly[1], Charlotte Hopper[1], Violetta Steeples[1], Jillian Simon[1], Jacinta Kalisch-Smith[2], Ducan Sparrow[2], Benjamin Davies[3], Hugh Watkins[1], Katja Gehmlich[1]
[1]Radcliffe Department of Medicine, University of Oxford, Oxford, UK, [2]Department of Physiology, Anatomy and Genetics, University of Oxford, Oxford, UK, [3]Wellcome Centre for Human Genetics, University of Oxford, Oxford, UK

Tue-055 Abstract ID: 132 * Proteomic profiling of a large cohort of HCM patients: genotype-specific protein changes

Maike Schuldt[1], Jiayi Pei[2], Magdalena Harakalova[2], Michal Mokry[3], Jaco C. Knol[4], Thang V. Pham[4], Tim Schelfhorst[4], Sander R. Piersma[4], Cris dos Remedios[5], Michiel Dalinghaus[6], Michelle Michels[7], Folkert W. Asselbergs[2], Connie R. Jimenez[4], Diederik WD. Kuster[1], Jolanda van der Velden[1]
[1]Amsterdam Cardiovascular Sciences, Amsterdam, the Netherlands, [2]University Medical Center Utrecht, Utrecht, the Netherlands, [3]University Medical Center Utrecht, Utrecht, the Netherlands, [4]VUmc-Cancer Center Amsterdam, Amsterdam, the Netherlands, [5]The University of Sydney, Sydney, Australia, [6]Erasmus Medical Center, Rotterdam, Rotterdam, the Netherlands, [7]Erasmus Medical Center, Rotterdam, Netherlands

Tue-056 Abstract ID: 165 * MAIR-II deficiency promotes anti-inflammatory macrophage infiltration preventing cardiac dysfunction post-myocardial infarction

Saori Yonebayashi[1], Kazuko Tajiri[1], Nobuyuki Murakoshi[1], Dongzhu Xu[1], Yuta Okabe[1], Siqi Li[1], Zi Xun Yuan[1], Duo Feng[1], Rujie Qin[1], Fumi Yamagami[1], Akira Shibuya[1], Kazutaka Aonuma[1], Masaki Ieda[1]
[1]Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

Tue-057 Abstract ID: 168 * The role of diet and stress in the development of adverse post-ischaemic cardiovascular outcomes

Kyle Hatton-Jones[1], Amanda Cox[1], John Headrick[1], Jason Peart[1], Eugene Du Toit[1]
[1]Griffith University, Gold Coast, Australia

Tue-058 Abstract ID: 611 * Elucidating the role of cardiac myofibroblasts on matrix and vasculature remodeling

Emily Olszewski[1], Molly Mollica[1], Darrian Bugg[1], Mitchell Kirby[1], Mary Regier[1], Wendy Thomas[1], Ruikang Wang[1], Kelly Stevens[1], Jennifer Davis[1]
[1]University of Washington, Washington, USA

Tue-059 Abstract ID: 659 * Effect of metformin on the progression of post-ischemic heart failure in transgenic spontaneously hypertensive rats expressing human C-reactive protein

Jaroslav Hrdlička[1], František Papoušek[1], Jan Šilhavý[1], Firat Akat[1,2], Michal Pravenec[1], František Kolář[1], Jan Neckář[1]
[1]Institute of Physiology of the Czech Academy of Sciences, Prague, Czechia, [2]Faculty of Medicine, Ankara University, Ankara, Turkey

Tue-060 Abstract ID: 72 * Chondroitin sulfate in cardiovascular remodeling

Roger Foo[2], Matthew Ackers-Johnson[3], Justus Stenzig[4], Rongrong Zhao[1]
[1]National University of Singapore, Singapore

Tue-061 Abstract ID: 177 * Angiotensin II type I receptor antagonism prevents nicotine-induced cardiac dysfunction in rats

Anand Ramalingam[1], Norsyahida Mohd. Fauzi[2], Siti Balkis Budin[1], Rebecca Ritchie[3], Satirah Zainalabidin[1]
[1]University Kebangsaan Malaysia, Kuala Lumpur, Malaysia, [2]University Kebangsaan Malaysia, Kuala Lumpur, Malaysia, [3]Baker Heart & Diabetes Institute, Melbourne, Australia

Tue-062 Abstract ID: 188 Reperfusion 1, 2 and 4 hours post-ischemia prevents cardiac rupture and mitigates adverse cardiac remodelling in mice

Ling Zhao[1,2], Daniel Donner[3], Amanguli Ruze[1,2], Helen Kiriazis[3], Xiaoming Gao[1,2,3], Xiaojun Du[3]
[1]Prevention and Treatment of High Incidence Diseases in Central Asia, Urumqi, China, [2]The First Affiliated Hospital of Xinjiang Medical University, Urumqi, China, [3]Baker Heart and Diabetes Institute, Melbourne, Australia

Tue-063 Abstract ID: 453 Accelerated aging in lethal dilated cardiomyopathy

Alex Chia Yu Chang[1,2,3,4], Gaspard Pardon[2,4,5,6], Andrew Chia Hao Chang[2,3,4], John W Day[7], Joseph C Wu[3,4], Helen M Blau[2,4]
[1]Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai 200125, China, [2]Microbiology and Immunology, Stanford, CA, USA, [3]Cardiovascular Medicine, Stanford, CA, USA, [4]Stanford Cardiovascular Institute, Medicine, Stanford, CA, USA, [5]Department of Bioengineering at Stanford University, Stanford, CA, USA, [6]Department of Mechanical Engineering at Stanford University, Stanford, CA, USA, [7]Department of Neurology, Medicine, Stanford, CA, USA

Tue-065 Abstract ID: 12 defects in a cardiomyocyte-specific autophagic fusion lead to danon disease

Congwu Chi[1], Andrea Leonard[2], Walter Knight[1], Kevin Beussman[2], Yuanbiao Zhao[1], Yingqiong Cao[1], Pilar Londono[1], Ellis Aune[1], Michael Trembley[3], Eric Small[3], Mark Jeong[1], Lori Walker[1], Hongyan Xu[4], Nathan Sniadecki[2], Matthew Taylor[1], Peter Buttrick[1], Kunhua Song[1]
[1]University of Colorado, USA, [2]University of Washington, WA, USA, [3]University of Rochester School of Medicine and Dentistry, NY, USA, [4]Medical College of Georgia, Augusta University, GA , USA

Tue-066 Abstract ID: 14 Breath and skin acetone in cardiovascular diseases

Tetsuro Yokokawa[1], Akiomi Yoshihisa[1], Yasuchika Takeishi[1]
[1]Fukushima Medical University, Fukushima, Japan

Tue-068 Abstract ID: 55 Neddylation is required for ventricular chamber maturation through sustaining cardiomyocyte proliferation and developmental metabolic transition

Jianqiu Zou[1], Wenxia Ma[1], Jie Li[1], Rodney Littlejohn[1], Weiqin Chen[1], Jiliang Zhou[1], Huabo Su[1]
[1]Augusta University, Augusta, GE, USA

Tue-070 Abstract ID: 61 CircRNA_000203, via miR-26b-5p and miR-140-3p regulation of Gata4, aggravates cardiac hypertrophy

Hui Li[1], Jiening Zhu[2], Jindong Xu[2], Zhixin Shan[1]
[1]Guangdong Cardiovascular Institute, Guangzhou, China, [2]Guangdong Provincial People's Hospital, Guangdong Academy of Medical Sciences, Guangzhou, China

Tue-071 Abstract ID: 86 Down-regulation of lncRNA-CHKB-DT mediates heart failure

Xiang Nie[1], Chen Chen[1], Daowen Wang[1]
[1]Tongji Hospital, Tongji Medical College of Huazhong University of Science and Technology, Wuhan, China

Tue-072 Abstract ID: 95 Serum microRNA-122-5p reflects liver injury in patients with acute cardiac failure

Masahiro Kimura[1], Koh Ono[1]
[1]Kyoto University, Kyoto, Japan

Tue-073 Abstract ID: 113 Diabetes-induced myocardial NO• resistance, is circumvented by the nitric

oxide (NO) redox sibling, nitroxyl, HNO

Cheng Xue Qin[1,2,3], Jarryd Anthonisz[1,3], Leo Chen Huei[4,5], Nicola Kahlberg[4], Edwina Jap[1], Owen L. Woodman[1], Laura J. Parry[4], John D. Horowitz[6], Barbara K. Kemp-Harper[7], Rebecca H. Ritchie[1,2,3]
[1]Melbourne, VIC, Australia , [2]University of Melbourne, Melbourne, VIC, Australia, [3]Monash University, Melbourne, VIC, Australia, [4]University of Melbourne, Parkville, VIC, Australia, [5]Singapore University of Technology Design, Singapore, [6]The University of Adelaide, Woodville, SA, Australia, [7]Monash University, Clayton, VIC, Australia

Tue-074 Abstract ID: 114 A virus-encoded microRNA induces dilated cardiomyopathy and heart failure

Chen Chen[1]
[1]Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Tue-075 Abstract ID: 115 MiR-665 aggravates heart failure via suppressing CD34-mediated coronary microvessel angiogenesis

Chen Chen[1]
[1]Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Tue-077 Abstract ID: 164 LncRNA- CFAL regulates cardiac function by inhibiting SERCA2a

Benzhi Cai[1], Yang Zhang[1], Yue Zhao[1], Jin Wang[1], Tingting Li[1], Yiyuan Zhang[1], Yuan Jiang[1], Xuexin Jin[1], Genlong Xue[1], Penghui Li[1], Yilin Sun[1], Qihe Huang[1], Xiaofang Zhang[1], Wanzhen Su[1], Ying Yang[1], Yangyang Sun[1], Ling Shi[1], Xingda Li[1], Yanjie Lu[1], Baofeng Yang[1], Zhenwei Pan[1]
[1]Harbin Medical University, Harbin, China

Tue-078 Abstract ID: 197 Sympathetic nervous remodeling in the intermediolateral nucleus after myocardial infarction via BDNF-TrkB axis

Masayoshi Oikawa[1], Minoru Nodera[1], Kazuhiko Nakazato[1], Takafumi Ishida[1], Yasuchika Takeishi[1]
[1]Fukushima Medical University, Fukushima, Japan

Theme 3: Ion Channel Mechanisms & Arrhythmias

Tue-079 Abstract ID: 143 * SPEG controls calcium re-uptake in cardiomyocytes via regulating SERCA2a

Chao Quan[1], Min Li[1], Qian Du[1], Qiaoli Chen[1], Hong Wang[2], David Campbell[3], Lei Fang[4], Bin Xue[4], Carol MacKintosh[5], Xiang Gao[1], Kunfu Ouyang[2], Hongyu Wang[1], Shuai Chen[1]
[1]Nanjing University, Nanjing, China, [2]Peking University, Shenzhen, China, [3]University of Dundee, Scotland, UK., [4]School of Medicine, Nanjing University, Nanjing, China, [5]University of Dundee, Scotland, UK

Tue-080 Abstract ID: 173 * Cx43 expression in cardiac fibroblasts is upregulated by the activation of β2-AR/cAMP/PKA pathway

Yi Zhang[1], Mengchen Hou[1], Gang She[1], Zhengda Pang, Xiaojun Du, Xiuling Deng
[1]University Health Science Center, Xi'an, China,

Tue-081 Abstract ID: 43 * Blood-based 8-OHdG level: a potential diagnostic biomarker of atrial fibrillation

Jin Li[1], Deli Zhang[1], Lucienne Baks[1], Natasja de Groot[2], Bianca Brundel[1]
[1]Amsterdam Cardiovascular Sciences, The Netherlands, [2]Erasmus Medical Center, Rotterdam, The Netherlands

Tue-082 Abstract ID: 185 * Epicardial fat and fibro-fatty deposits promote atrial substrate in chronic sheep models: implications for sustained weight gain and fluxes in during weight loss

Thomas Agbaedeng[1,2], Darragh Twomey[1,2], Shivshankar Thanigaimani[1,2], Dominik Linz[1,2,3], Dennis Lau[1,2,3], Rajiv Mahajan[1,2,3], Prashanthan Sanders[1,2,3]
[1]South Australian Health and Medical Research Institute, Adelaide, Australia, [2]The University of Adelaide, Adelaide, Australia, [3]Royal Adelaide Hospital, Adelaide, Australia

Tue-084 Abstract ID: 251 * SAN function is altered in a mice model of heart failure

Jianbin Xue[1], Limor Arbel Ganon[2], Susana Gomez[1], Jean-Pierre Benitah[1], Yael Yaniv[2], Ana María Gómez[1]
[1]Inserm, Univ. Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France, [2]Biomedical engineering, Technion institute, Haifa, Israel

Tue-085 Abstract ID: 144 Treprostinil is a potent inhibitor of human Trek-1 and Trek-2 Two-Pore domain potassium channels

Kevin Cunningham[1,2], Emma L Veale[2], Lucie H Clapp[3], Alistair Mathie[2]
[1]The University of Western Australia, Australia , [2]University of Kent, UK, [3]University College London, London, UK

Tue-086 Abstract ID: 20 Dual-mode of action by InsP3R- triggered SR-Ca^{2+} release target ventricular Ca^{2+}-dependent arrhythmogenicity

Marcel Egger[1], Joaquim Blanch[1]
[1]University of Bern, Switzerland

Tue-087 Abstract ID: 75 Transient Receptor Potential Vanilloid 4 channels participate in mouse ventricular action potential

Sébastien Chaigne[1], Julien Louradour[1], Sabine Charron[1], Fabien Brette[1], Thomas Ducret[2], Romain Guinamard[3], Frédéric Sacher[1], Thomas Hof[1]
[1]IHU-Liryc, Electrophysiology and Heart Modeling Institute - Fondation Bordeaux Université F-33600 Pessac- Bordeaux, France., [2]Université Bordeaux, Centre de recherche Cardio-Thoracique de Bordeaux, U1045, F-33000, Bordeaux, France., [3]Normandie Université, UNICAEN, EA4650, Signalisation, Électrophysiologie et Imagerie des Lésions d'Ischémie-Reperfusion Myocardique, Caen, France

Tue-088 Abstract ID: 105 Effect of human epicardial adipose tissue on arrhythmias in human atrial myocardium

Aram A Babakr[1], Ingrid C Fomison-Nurse[1], Isabelle van Hout[1], Phillip Davis[2], Krishna Bhagwat[2], Richard W Bunton[2], Dominic Parry[2], Michael JA Williams[3], Sean Coffey[3], Peter P Jones[1], Regis R Lamberts[1]
[1]University of Otago, Dunedin, New Zealand, [2]Department of Cardiothoracic Surgery, Dunedin School of Medicine, Dunedin Hospital, Dunedin, New Zealand , [3]Department of Medicine, HeartOtago, Dunedin School of Medicine, Dunedin Hospital, Dunedin, New Zealand

Tue-089 Abstract ID: 148 Antiarrhythmic drugs – an updated classification after 50 years

Ming Lei[1], Christopher Huang[2]
[1]University of Oxford, UK, [2]Physiological Laboratory, University of Cambridge, Cambridge, UK

Tue-090 Abstract ID: 152 Investigation of ventricular arrhythmia mechanisms in hypertrophic cardiomyopathy in mice and men

Frederik Flenner[1,2], Christiane Jungen[2,3], Nadine Küpker[1], Antonia Ibel[1], Antonia T.L. Zech[1,2], Anna Rinas[1], Nele Warnecke[1,2], Marc Lemoine[1,2,3], Giulia Mearini[1,2], Monica Patten-Hamel[2,3], Christian Meyer[2,3], Thomas Eschenhagen[1,2], Torsten Christ[1,2], Lucie Carrier[1,2]
[1]University Medical Center Hamburg-Eppendorf, Hamburg, Germany, [2]DZHK (German Centre for Cardiovascular Research), partner site Hamburg/Kiel/Lübeck, Germany, [3]University Heart Center, University Hospital Hamburg-Eppendorf, Hamburg, Germany

Tue-091 Abstract ID: 158 A new method of transverse cardiac slicing and optical mapping of murine heart

S He[1], Q Wen[3], C O'Shea[4], R Mu-u-min[2], X Tan[1], X Ou[1], P Camelliti[5], P Pavlovic[4], M Lei[2]
[1]Institute of Cardiovascular Research at Southwest Medical University, [2]University of Oxford, Oxford, United Kingdom , [3]Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, [4]University of Birmingham, Birmingham, United Kingdom, [5]University of Surrey, Guildford, UK

Tue-092 Abstract ID: 170 Super-resolution microscopy reveals a loss of large ryanodine receptor clusters in the failing human heart

David Crossman[1], Yufeng Hou[2], Christian Soeller[3]
[1]University of Auckland, Auckland, New Zealand, [2]University of Oslo, Oslo, Norway, [3]University of Exeter, Devon, UK

Tue-093 Abstract ID: 175 KCa3.1 channels promote cardiac fibrosis through mediating inflammation and differentiation of monocyte into myofibroblast in angiotensin II treated rats

Gang She[1], Xiuling Deng[1]
[1]Xi'an Jiaotong University Health Science Center, China

Tue-094 Abstract ID: 205 Cardiac fatty acid binding protein binds to dopamine D1 receptor and promotes SR calcium leak in mouse cardiomyocytes

Wei Wang[1]
[1]Hebei Medical University, Shijiazhuang, China

Tue-095 Abstract ID: 248 Increase of late sodium current contributes to enhanced susceptibility to atrial fibrillation in diabetic mice

XueXin Jin[1], Yuan Jiang[1], GenLong Xue[1], Yin Yuan[1], Haixia Zhu[1], Linfeng Zhan[1], YuTing Zhuang[1], Qi-He Huang[1], Ling Shi[1], Yue Zhao[1], PengHui Li[1], YiLin Sun[1], WanZhen Su[1], Yang Zhang[1], BaoFeng Yang[1], YanJie Lu[1], Zhiguo Wang[1], ZhenWei Pan [1]
[1]Pharmacology, Harbin Medical University, Harbin, China

Theme 4: Signalling in Cardiac Disease & Therapy

Tue-096 Abstract ID: 146 * AngII promotes hypertension and vascular remodeling by activating HSF1-PPARγ-FAM3A pathway in VSMCs

Rui Xiang[1], Ji Chen[1], Jichun Yang[1]
[1]Peking University Health Science Center, Beijing, China

Tue-097 Abstract ID: 503 * Therapeutic effect of andrographolide on pulmonary artery hypertension

Xiaowei Nie[1], Chenyou Shen[1], Waishiu Fred Wong[2], Jin-Song Bian[2]
[1]Wuxi People's Hospital of Nanjing Medical University, Wuxi, China, [2]National University of Singapore, Singapore

Tue-098 Abstract ID: 521 * Gallic acid suppresses cardiac hypertrophic remodeling and heart failure through activating autophagy

Xiao Yan[1,2], Yunlong Zhang[1,2], Qiyu Zhang[1,2], Leixin Zou[1,2], Chen Chen[1,2], Huihua Li[1,2]
[1]Dalian Medical University, Dalian, China, [2]First Affiliated Hospital of Dalian Medical University, Dalian, China

Tue-099 Abstract ID: 62 * Human Relaxin-2 fusion protein treatment prevents and reverses isoproterenol-induced hypertrophy and fibrosis in mouse heart

Junhui Sun[1], Weidong Hao[2], Natasha Fillmore[1], Hanley Ma[1], Danielle Springer[1], Zuxi Yu[1], Agnieszka Sadowska[2], Andrew Garcia[2], Ruoyan Chen[2], Vanessa Muniz-Medina[2], Kim Rosenthal[2], Jia Lin[2], Denison Kuruvilla[2], Jane Osbourn[3], Sotirios Karathanasis[2], Jill Walker[2], Elizabeth Murphy[1]
[1]NHLBI/NIH, Bethesda, MD, USA, [2]MedImmune Research and Development, Gaithersburg, MD, USA, [3]MedImmune Research and Development, Cambridge, UK

Tue-100 Abstract ID: 66 * Lin28a regulates pathological cardiac hypertrophic growth through Pck2-mediated enhancement of anabolic synthesis

Hong Ma[1], Shuo Yu[1], Xiaojing Liu[3], Yingao Zhang[1], Thomas Fakadej[1], Ziqing Liu[1], Chaoying Yin[1], Weining Shen[4], Jason W. Locasale[3], Joan M. Taylor[1], Li Qian[1], Jiandong Liu[1]
[1]University of North Carolina at Chapel Hill, Chapel Hill, NC, USA, [2]University of North Carolina at Chapel Hill, Chapel Hill, NC, USA, [3]Duke University, Durham, NC, USA, [4]University of California at Irvine, Irvine, CA, USA

Tue-101 Abstract ID: 106 * Cardiosphere derived cell-induced cellular reprogramming of transcriptional and translational machinery in heart failure with preserved ejection fraction

Daniel Soetkamp[1], Romain Gallet[1], Sarah J. Parker[1], Ronald Holewinski[1], Peter Kilfoil[1], Joshua I. Goldhaber[1], Eduardo Marbán[1], Jennifer E. Van Eyk[1]
[1]Smidt Heart Institute, Cedars Sinai Medical Center, Los Angeles, CA, USA

Tue-102 Abstract ID: 187 * New FRET-based cyclic GMP biosensors measure low cGMP concentrations in cardiomyocytes and neurons

Gaia Calamera[1, 2], Dan Li[3], Andrea Hembre Ulsund[1, 2], Jeong Joo Kim[4], Oliver C Neely[3], Lise Román Moltzau[1, 2], Marianne Bjørnerem[1, 2], David Paterson[3], Choel Kim[4, 5], Finn Olav Levy[1, 2], Kejtil Wessel Andressen[1, 2]
[1]Institute of Clinical Medicine, university of Oslo and Oslo University Hospital, Oslo, Norway, [2]Center for Heart Failure Research, University of Oslo and Oslo University Hospital, Oslo, Norway, [3]Anatomy and Genetics, Oxford University, Oxford, UK, [4]Baylor College of Medicine, Houston, TX, USA, [5]Baylor College of Medicine, Houston, TX, USA

Tue-105 Abstract ID: 31 The activation of the G-Protein Coupled Estrogen Receptor (Gper) inhibits aldosterone-induced cardiac hypertrophy

Alejandro Orlowski[1], Romina Di Mattia[1], Paula Blanco[2], Enrique Portiansky[3], Alejandro Aiello[1]
[1]Centro de Investigaciones Cardiovasculares, Facultad de Ciencias Médicas, UNLP-CONICET, La Plata, Argentina, [2]Servicio de Cardiología, Facultad de Veterinaria, UNLP, La Plata, Argentina, [3]Laboratorio de Análisis de Imágenes, Facultad de Veterinaria, UNLP-CONICET, La Plata, Argentina

Tue-106 Abstract ID: 45 Alphav integrin regulates the contribution of PW1$^+$ cells to cardiac fibrosis

Marion Bouvet[1], Olivier Claude[1], Maguelonne Roux[2], Nathalie Mougenot[3], Vincent Duval[1], Sophie Nadaud[2], Clément Delacroix[1], Claire Perret[2], Elisa Yaniz-Galende[2], Mathilde Lemitre[1], David-Alexandre Trégouët[2], Giovanna Marazzi[1], Jean-Sébastien Silvestre[1], David Sassoon[1], Jean-Sébastien Hulot[1]
[1]Paris Cardiovascular Research Center PARCC, Inserm UMR970, Paris, France, [2]Sorbonne Université, UPMC Univ Paris 06, Inserm UMRS_1166, Institute of Cardio metabolism and Nutrition (ICAN), Paris, France, [3]Sorbonne-Université, UPMC Univ Paris 06, PECMV, UMS28, Paris, France

Tue-107 Abstract ID: 50 Mechanisms of cardiomyocyte senescence and functional effects in the ageing heart

Jeanne Mialet-Perez[1], Damien Maggiorani[1], Victorine Douin-Echinard[1], Joao Passos[3]
[1]INSERM Institute of Metabolic and Cardiovascular Diseases, Toulouse, France, [2]Ageing Research Laboratories, Institute for Ageing, Newcastle University, Newcastle upon Tyne, UK, [3]Department of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, MN, USA

Tue-109 Abstract ID: 110 Identification of a novel LncRNA-mediated angiogenesis and its essential role in superior cardioprotection of human pluripotent stem cell-derived mesenchymal stem cells

Rongrong Wu[1, 2], Wangxing Hu[1, 2], Huan Chen[1, 2], Yingchao Wang[1, 2], Qingju Li[1, 2], Xinyang Hu[1, 2], Jian'an Wang[1, 2]
[1]Zhejiang University, Hangzhou, China, [2] Cardiovascular Key Laboratory of Microbial Technology and Bioinformatics of Zhejiang Province, Hangzhou, China

Tue-110 Abstract ID: 182 Early cardiac dysfunction detection with Speckle tracking and treatment in juvenile dogs with Duchenne muscular dystrophy

Olivier Cazorla[1], Jinbo Su[4], Ines Barthelemy[2], Albano Meli[1], Valerie Chetboul[4], Valerie Scheuermann[1], Nicole Villeneuve[3], Jean-Paul Vilaine[3], Sylvain Richard[1], Stephane Blot[2], Bijan Ghaleb[4], Alain Lacampagne[1]
[1]PhyMedexp, CNRS, INSERM, Montpellier University, France, [2]Ecole Nationale Vétérinaire d'Alfort, UPR de Neurobiologie, Maisons-Alfort, France, [3]Institut de Recherches Servier, Cardiovascular Research Unit, Suresnes, France, [4]INSERM U 955, Créteil, France

Tue-111 Abstract ID: 186 Stress-induced protein S-glutathionylation and phosphorylation crosstalk in cardiac sarcomeric proteins - Impact on heart function

Nourdine Chakouri[1], Cyril Reboul[2], Doria Boulghobra[2], Adrien Kleindienst[2], Stephane Nottin[2], Sandrine Gayrard[2], François Roubille[1], Stefan Matecki[1], Alain Lacampagne[1], Olivier Cazorla[1]
[1]Phymedexp INSERM, CNRS, University of Montpellier, CHRU Montpellier, France, [2]Laboratoire de Pharm-Ecologie Cardiovasculaire, Avignon University, Avignon, France

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Tue-112 Abstract ID: 256 * Age and sex difference of prognostic value of CYP2C19 genotypes in coronary stenting

Wenyao Wang[1], Yida Tang[1]
[1]Fuwai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

Tue-113 Abstract ID: 101 * Role of the PP2A regulatory subunit B56α in regulation of cardiac responses to β-adrenergic stimulation

Alican Güran[1], Sarah-Lena Puhl[2], Antonella Ranieri[1], Kate Weeks[3], Metin Avkiran[1]
[1]School of Cardiovascular Medicine and Sciences, King's College London British Heart Foundation Centre of Research Excellence, St Thomas' Hospital, London, UK, [2]Institute for Cardiovascular Prevention, Ludwig-Maximilians-University, Munich, Germany, [3]Baker Heart and Diabetes Institute, Melbourne, VIC, Australia

Tue-114 Abstract ID: 243 * A novel mass spectrometric methodology facilitates quantification of testosterone and progesterone, but not estrogens in cardiac and adipose tissues

Gabriel B Bernasochi[1], Thusitha TW Rupasinghe[2], James R Bell[1], Ute Roessner[2], Wah Chin Boon[3], Lea MD Delbridge[1]
[1]School of Biomedical Sciences, The University of Melbourne, Australia, [2]Metabolomics Australia, School of BioSciences, The University of Melbourne, Australia , [3]The Florey Institute of Neuroscience and Mental Health, The University of Melbourne, Australia

Tue-115 Abstract ID: 28 Increased transcription and translation rates in cardiac hypertrophy are regulated by lncRNAs

Zhihua Wang[1]
[1]Wuhan University, Wuhan, China

Tue-116 Abstract ID: 82 Disease and phenotype relevant genetic variants identified from histone acetylomes in human hearts

George Anene[1], Wilson Tan[1], Eleanor Wong[1], Mick Lee[1], Roger Foo[1]
[1]National University of Singapore, Singapore

Tue-117 Abstract ID: 160 Control of cardiac hypertrophy by ATP-dependent chromatin remodeling mechanism

Salma Awad[1], Esra Zahid[1], Sara Al-Shalan[2], Ayodele Alaiya[3], Qamar Al-Tinawi[4], Ammar Al-Sheikh[2], Muhammed Kunhi[1], Kamar Al-Haffar[1], Jehad Al-Buraiki[5], Atli Eyjolsson[5], Waleed Al-Habib[6], Coralie Poizat[1, 7]
[1]Cardiovascular Research Program, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia, [2]College of Science, Al-Faisal University, Riyadh, Saudi Arabia, [3]Stem Cell & Proteomics Unit, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia, [4]College of Medicine, Al-Faisal University, Riyadh, Saudi Arabia, [5]Heart Centre, King Faisal Specialist Hospital and Research Centre,

Riyadh, Saudi Arabia, [6]6 King Saud University, Riyadh, Saudi Arabia, [7]Masonic Medical Research Laboratory, Utica, New York, USA

Tue-118 Abstract ID: 192 Monoamine oxidase A deletion leads to autophagy inhibition and impairment in cardiomyocyte differentiation from hiPSCs

Moises Di Sante[1], Salvatore Antonucci[1], Elisa Greotti[2], Fabio Mazza[1], Carmen Troiano[1], Soni Deshwal[1], Roberta Menabò[2], Fabio Di Lisa[1,2], Nina Kaludercic[2]
[1]University of Padova, Padova, Italy, [2]Neuroscience Institute, CNR, Italy

Tue-119 Abstract ID: 216 FTO-mediated mRNA demethylation regulates cardiac protein expression and function

Prabhu Mathiyalagan[1], Marta Adamiak[1], Joshua Mayourian[1], Yassine Sassi[1], Yaxuan Liang[1], Neha Agarwal[1], Divya Jha[1], Shihong Zhang[1], Erik Kohlbrenner[1], Elena Chepurko[1], Xiaoke Yin[2], Jiqiu Chen[1], Maria Trivieri[1], Rihab Bouchareb[1], Rajvir Singh[1], Kenneth Fish[1], Kiyotake Ishikawa[1], Manuel Mayr[2], Djamel Lebeche[1], Roger Hajjar[1], Susmita Sahoo[1]
[1]Icahn School of Medicine, Mount Sinai, NY, USA, [2]King's College London, London, UK

Theme 6: Regenerative Medicine for Heart Disease

Tue-121 Abstract ID: 163 * Human embryonic stem cell-derived cardiomyocyte therapy in mouse permanent ischemia and ischemic reperfusion models

You Yu[1], Nianci Qin[1], Xing-Ai Lu[1], Jingjing Li[1], Xinglong Han[1], Wei Lei[1], Shijun Hu[1], Zhen-Ao Zhao[1]
[1]Soochow University, Suzhou, China

Tue-122 Abstract ID: 100 * Inflammatory modulation plays a critical role in myocardial repair afforded by transplantation of human pluripotent stem cell-derived cardiovascular progenitors

Jinxi Wang[1,4], Meilan Liu[1], Qiang Wu[1,4], Qiang Li[1,4], Ling Gao[1], Yun Jiang[1,4], Boxiong Deng[2], Wei Bi[1,4], Zhongyan Chen[1,4], Y. Eugene Chin[2], Yigang Wang[3], Huang-Tian Yang[1,4]
[1]CAS Key Laboratory of Tissue Microenvironment and Tumor, Laboratory of Molecular Cardiology, SJTUSM & Institute of Nutrition and Health, SIBS, CAS, Shanghai, PR China, [2]CAS Key Laboratory of Tissue Microenvironment and Tumor, Laboratory of Tumor and Stem Cell, SIBS, CAS, Shanghai, PR China, [3]Department of Pathology and Laboratory Medicine, College of Medicine, University of Cincinnati Medical Center, Cincinnati, OH 45267, USA, [4]Institute for Stem Cell and Regeneration, CAS, Beijing 100101, China

Tue-123 Abstract ID: 501 * A single-cell roadmap of lineage bifurcation in human ESC models of embryonic heart development

Yingnan Liao[1], Hang Ruan[2], Leng Han[2], Li Wang[1]
[1]Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China, [2]University of Texas Health Science Center at Houston McGovern Medical School (L.H.), TA, USA

Tue-124 Abstract ID: 508 * Knockout of beta-2 microglobulin reduces stem cell-induced immune rejection and enhances ischemic hindlimb repair via exosome/miR-24/Bim pathway in mice

Yuqing Zhang[1], Yanli Wang[1], Lianbo Shao[1], Yu Zhang[1], Wenping Xie[1], Bing Yan[1], Feng liu[1], Chaoshan Han[1], Bao Zhu[1], Yangxin Li[1]
[1]First Affiliated Hospital of Soochow University, Suzhou, China

Tue-125 Abstract ID: 563 * Human umbilical cord mesenchymal stem cell derived exosomes encapsulated in functional peptide hydrogel promote cardiac repair

Chaoshan Han[1], Yu Zhang[1], Yanli Wang[1], Yuqing Zhang[1], Bing Yan[1], Wenping Xie[1], Feng Liu[1], Bao Zhu[1], Chaofan Wu[1], Yaohua Song[1], Yangxin Li[1]
[1]First Affiliated Hospital of Soochow University, Suzhou, China

Tue-127 Abstract ID: 53 * The Brain Natriuretic Peptide treatment improves cardiac vascularization in mouse infarcted adult hearts

Na LI[1], Christelle Bielmann[1], Stéphanie Rignault-Clerc[1], Nathalie Rosenblatt-Velin[1]
[1]Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland

Tue-128 Abstract ID: 129 * Integrin ligands improve human stem cell – derived cardiomyocyte excitation-contraction coupling efficiency

Brian Wang[1], Christopher Kane[1], Graziano Deidda[2], Christian Pinali[3], Laura Nicastro[1], Anna Mitraki[2], Kenneth MacLeod[1], Cesare Terracciano[1]
[1]National Heart and Lung Institute, London, UK, [2]Foundation for Research and Technology-Hellas, Heraklion, Greece, [3]Division of Cardiovascular Sciences, University of Manchester, Manchester, UK

Tue-129 Abstract ID: 139 * Functional evaluation of human bioengineered cardiac tissue using iPS cells derived from dilated cardiomyopathy patients with lamin variant

Koichiro Miura[1, 2], Katsuhisa Matsuura[1, 2], Yu Yamasaki[1], Daisuke Sasaki[1], Yoshiyuki Furutani[3], Emiko Hayama[3], Masamichi Ito[4], Hiroyuki Morita[4], Masashi Toyoda[5], Akihiro Umezawa[5], Toshio Nakanishi[3], Nobuhisa Hagiwara[2], Issei Komuro[4], Tatsuya Shimizu[1]
[1]Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University, Tokyo, Japan, [2]Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan, [3]Department of Pediatric Cardiology and Adult Congenital Cardiology, Tokyo Women's Medical University, Tokyo, Japan, [4]Department of Cardiovascular Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, [5]Department of Reproductive Biology, National Research Institute for Child Health and Development, Japan

Tue-130 Abstract ID: 157 * Improved gene delivery to the heart and evasion of pre-existing humoral immunity with exosomal AAVs

Marta Adamiak[1], Divya Jha[1], Yaxuan Liang[1], Prabhu Mathiyalagan[1], Neha Agarwal[1], Erik Kohlbrenner[1], Elena Chepurko[1], Dongtak Jeong[1], Delaine Ceholski[1], Nicole Dubois[2], Roger Hajjar[1], Susmita Sahoo[1]
[1]Cardiovascular Research Center, Icahn School of Medicine, Mount Sinai, New York, NY, USA, [2]The Black Family Stem Cell Institute, and The Mindich Child Health and Development Institute, New York, NY, USA

Tue-131 Abstract ID: 161 * Direct reprogramming of fibroblasts into cardiac mesoderm by defined factors

Taketaro Sadahiro[1], Mari Isomi[1], Fumiya Tamura[1], Nobuyuki Murakoshi[1], Kazuko Tajiri[1], DongZhu Xu[1], Fumi Yamagami[1], Yuta Okabe[1], Duo Feng[1], Saori Yonebayashi[1], Siqi Li[1], Zixun Yuan[1], Masaki Ieda[1]
[1]University of Tsukuba, Tsukuba, Japan

Tue-132 Abstract ID: 76 * Neonatal mice adapt to pressure overload by inducing cardiomyocyte proliferation and angiogenesis

Mona Malek Mohammadi[1,2,3], Amir Shirvani[3], Julio Cordero [4], Maren Engelhardt [5], Robert Geffers [6], Gergana Dobreva [4,2], Johann Bauersachs[3], Joerg Heineke [1,2,3]
[1]European Center for Angioscience, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany, [2]German Centre for Cardiovascular Research (DZHK), partner site Mannheim/ Heidelberg, [3]Hannover Medical School, Hannover, Germany, [4]Center for Biomedicine and Medical Technology Mannheim, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany, [5]Center for Biomedicine and Medical Technology Mannheim, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany, [6]Helmholtz-Center für Infection Research GmbH, Braunschweig, Germany

Tue-133 Abstract ID: 36 BNP modulates cardiomyocyte proliferation in vitro and in vivo

Anne-Charlotte Bon-Mathier[1], Stéphanie Rignault-Clerc[1], Christelle Bielmann[1], Nathalie Rosenblatt-Velin[1]
[1]Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland

Tue-134 Abstract ID: 40 P2X5 purinergic receptor: a novel regulator of human cardiac progenitor cell proliferation and survival

Waqas Kayani[1], Bingyan Wang[1], Kelli Korski[1], Alexander Stavropoulos[1], Mark Sussman[1], Farid Khalafalla[1,2]
[1]San Diego State University, San Diego, CA, USA, [2]College of Pharmacy, California Health Sciences University, Clovis, CA, USA

Tue-135 Abstract ID: 60 Effects of intramyocardial injection of human neonatal cardiac progenitor cells on cardiac function, circulating biomarkers and scar size post myocardial infarction in nude rats

Weike Bao[1], Rachana Mishra[2], Benji Gill[1], Nicholas Bhagroo[1], Sonja Hess[1], Jill Walker[1], Joseph Grimsby[1], Christopher Rhodes[1], Sunjay Kaushal[2], Sotirios Karathanasis[1], Emily Ongstad[1]
[1]Cardiovascular, Renal and Metabolism Research, MedImmune, Gaithersburg, MA, USA, [2]Pediatric and Adult Congenital Cardiac Surgery, University of Maryland Medical Center, Baltimore, CA,USA

Tue-136 Abstract ID: 102 Sustained delivery of stem cell secretome for cardiac repair

Andrew Kompa[1,2], Anne Kong[3], Ritika Saxena[3,4], Raymond Wong[2,5], Priyadharshini Sivakumaran[3], Andrew Newcomb[6], Cameron Kos[3], Lina Mariana[3], Tom Loudovaris[3], Derek Hausenloy[7,8,9, 10,11,12], Shiang Lim[2,3]
[1]Monash University, Victoria, Australia, [2]University of Melbourne, Victoria, Australia, [3]St Vincent's Institute of Medical Research, Victoria, Australia, [4]Deakin University, Victoria, Australia, [5]Royal Victorian Eye and Ear Hospital, East Melbourne, Victoria, Australia, [6]St Vincent's Hospital Melbourne, Victoria, Australia, [7]University College London, London, UK, [8]The National Institute of Health Research University College London Hospitals Biomedical Research Centre, UK, [9]Barts Heart Centre, St Bartholomew's Hospital, London, UK, [10]Duke-National University of Singapore Medical School, Singapore, [11]National Heart Research Institute Singapore, National Heart Centre, Singapore, [12]Yong Loo Lin School of Medicine, National University Singapore, Singapore

Tue-137 Abstract ID: 109 The long noncoding RNA LncHrt promotes heart regeneration after myocardial infarction

Ning Liu[1, 2], Feng Gao[1, 2], Xuyang Fu[1, 2], Feng Zhang[1, 2], Yingchao Wang[2], Xiaoxuan Dong[1, 2], Tian Liang[1, 2], Yitong Shen[2], Jing Zhao[2], Jinghai Chen[1, 2]

[1]Zhejiang University, Hangzhou, China, [2]Institute of Translational Medicine, Zhejiang University, Hangzhou, China

Theme 7: Cardiac Metabolism

Tue-138 Abstract ID: 145 * MiR-30c/PGC-1β protects against diabetic cardiomyopathy via PPARα

Zhongwei Yin[1], Chen Chen[1], Daowen Wang[1]
[1]Huazhong University of Science and Technology, Wuhan, China

Tue-139 Abstract ID: 180 * Impact of low T3 syndrome on adverse cardiovascular events in adult patients with acute myocarditis

Yan Zhao[1], Wenyao Wang[1], Jian Tian[1], Xuan Zhang[1], Min Yang[1], Jing Chen[1], Mu Mu[1], Yida Tang[1]
[1]Fuwai Hospital, Chinese Academy of Medical Sciences, National Center for Cardiovascular Diseases, Beijing, China

Tue-140 Abstract ID: 597 * The association between iodide-induced hypothyroidism and cardiac dysfunction described by utilizing echocardiography in the offspring of Wistar rats

Ying Wang [1], Yue Zhang[2], Guangping Li[2], Ciri Raguthu[1], Xiaomei Yao[1]
[1]Tianjin Medical University, Tianjin, China, [2]Tianjin Institute of Cardiology, the Second Hospital of Tianjin Medical University, Tianjin, China

Tue-141 Abstract ID: 598 * An assessment of cardiac risk factors on subclinical hypothyroidism in coronary heart disease patients

Li Miao[1], Yanni Feng[2], Xiyue Jing[2], Xiaomei Yao[2]
[1]Third Central Hospital of Tianjin, Tianjin, China , [2]Tianjin Medical University, Tianjin, China

Tue-142 Abstract ID: 15 * The CYP2C19 genetic polymorphisms in South Asian population: Impacts on heart medications

Mohitosh Biswas[1]
[1]University of Rajshahi, Rajshahi, Bangladesh

Tue-143 Abstract ID: 151 * Intracellular sodium elevation reprograms cardiac metabolism

Dunja Aksentijevic[1,2], Anja Karlstaedt[3], Marina Basalay[2], Brett A. O'Brien[2,4], David Sanchez-Tatay[2], Seda Eminaga[2], Alpesh Thakker[5], Daniel Tennant[5], William Fuller[6], Thomas R. Eykyn[4], Heinrich Taegtmeyer[3], Michael J. Shattock[2]
[1]Queen Mary University of London, London, UK, [2]The Rayne Institute, St Thomas Hospital, King's College London, London, UK, [3]The University of Texas Health Science Center at Houston, McGovern Medical School, Houston, Texas, USA, [4]King's College London, St Thomas' Hospital, London, UK, [5]University of Birmingham, Edgbaston, Birmingham, UK, [6]University of Glasgow, Glasgow, UK

Tue-144 Abstract ID: 195 * Opposing effects of fat sources in low carbohydrate diet on the progression of heart failure

Satoshi Bujo[1], Haruhiro Toko[1], Mutsuo Harada[1], Jiaxi Guo[1], Masato Ishizuka[1], Haruka Yanagisawa-Murakami[1], Issei Komuro[1]
[1]The University of Tokyo, Tokyo, Japan

Tue-145 Abstract ID: 67 Diabetes induced dysregulation of cardiac Non-Neuronal cholinergic system impairs heart metabolism

Eugene Eng Leng SawKatare[1], Shruti Rawal[1], James Pearson[3], Daryl Schwenke[1], Yoshihiko Kakinuma[2], Martin Fronius[1], Rajesh Katare[1]
[1]University of Otago, Dunedin, New Zealand, Nippon Medical School, Tokyo, Japan, [3]National Cerebral and Cardiovascular Centre, Osaka, Japan

Tue-146 Abstract ID: 70 Nuclear miR-320 mediates diabetes-induced cardiac dysfunction by activating transcription of fatty acid metabolic genes to cause lipotoxicity in the heart

Huaping Li[1], Jiahui Fan[1], Chen Chen[1], Dao Wen Wang[1]
[1]Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Tue-147 Abstract ID: 127 Pre-diabetic state impairs myocardial mitochondrial calcium handling and excitation-oxidative metabolism coupling

Mathilde Lacôte[1], Claire Angebault[1], Lucile Fossier[1], Pierre Sicard[1], Jerome Thireau[1], Alain Lacampagne[1], Jeremy Fauconnier[1]
[1]Montpellier University, France

Tue-148 Abstract ID: 128 MiR-21 protected against diabetic cardiomyopathy induced diastolic dysfunction by targeting gelsolin

Chen Chen[1]

[1] Huazhong University of Science and Technology, Wuhan, China

Tue-149 Abstract ID: 167 Mitochondrial function, location and abundance in ventricular tissue from neonatal and young adult rat hearts

Sarbjot Kaur[1], Amelia Power[2], Marie Ward[1]
[1]The university of Auckland, Auckland, New Zealand

Theme 8: Vascular Dysfunction, Inflammation and Remodeling

Tue-151 Abstract ID: 73 * Macrophage-specific deletion of PPARα promotes angiotensin II induced hypertension in mice

Guomin Xie[1], Yanting Song[1], Xia Wang[1], Dan Qi[1], Ye Liu[1], Yanyu Sun[1], Baoqi Yu[1], Aijuan Qu[1]
[1]Capital Medical University, China

Tue-152 Abstract ID: 81 * Peroxisome proliferator-activated receptor α deficiency accelerated vascular smooth muscle cell senescence and vascular aging

Ye Liu[1], Yanting Song[1], Xia Wang[1], Dan Qi[1], Baoqi Yu[1], Aijuan Qu [1]
[1]Capital Medical University, China

Tue-153 Abstract ID: 108 * Annexin A2 mediates endothelial cell activation through integrin α5 translocation in oscillatory flow

Chenghu Zhang[1]
[1]Collaborative Innovation Center of Tianjin, Tianjin, China

Tue-154 Abstract ID: 131 * Hypoxia inducible factor 2α inhibition in vascular smooth muscle cells abolishes abdominal aortic aneurysm in ApoE-/- Mice

Yanting Song[1], Dan Qi[1], Xia Wang[1], Ye Liu[1], Guomin Xie[1], Baoqi Yu[1], Qingbo Xu[2], Frank J Gonzalez[3], Jie Du[1,4], Aijuan Qu[1]
[1]Capital Medical University, China [2]King's College British Heart Foundation Centre, London, United Kingdom, [3]Laboratory of Metabolism, National Cancer Institute, National Institutes of Health, USA, [4]Beijing Anzhen Hospital of Capital Medical University and Beijing Institute of Heart Lung and Blood Vessel Diseases, Beijing, China

Tue-155 Abstract ID: 172 * Cartilage oligomeric matrix protein inhibits endothelial cell activation through interaction with integrinα5β1

Huizhen Lv[1], Hui Wang[1], Yi Fu[2], Wei Kong[2], Yi Zhu[1]
[1]Tianjin Medical University, Tianjin, China, [2]Peking University, Beijing, China

Tue-156 Abstract ID: 176 * SUMOylated NICD in endothelial cell suppresses tumor angiogenesis

Yiran Wang[1], Xiaolong Zhu[1], Cong Qiu[1], Luyang Yu[1]
[1]Zhejiang University, Hangzhou, China

Tue-157 Abstract ID: 635 * Role of endothelial exosomes in pharmacological cardioprotection

Jaime Riquelme[1], Kaloyan Takov[2], Xavier Rosselló[2], Derek Yellon[2], Sean Davidson[2], Sergio Lavandero[1]
[1]Advanced Center for Chronic Diseases (ACCDiS), Faculty of Chemical & Pharmaceutical Sciences and Faculty of Medicine, University of Chile, Santiago, Chile., [2]The Hatter Cardiovascular Institute, University College London, London, UK

Tue-158 Abstract ID: 255 * A2A receptor activation mediate Ang II induced aortic remodeling by regulating CCR7-macrophages retention axis

Zuowen He[1], Daowen Wang[1]
[1]Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Tue-159 Abstract ID: 276 * miR-499 released during myocardial infarction causes endothelial injury by targeting α7-nAchR

Rui Zhou[1], Yu Jiang[1], Haiyang Yuan[1], Yuanshu Liu[1], Xitong Dang[1]
[1]Southwest Medical University, Luzhou, China

Tue-160 Abstract ID: 281 * Apelin increased renal blood flow through eNOS and ET-1 in endothelial cells of diabetic mice

Yangjia Wang[1], Jia Zhang[1], Bin Li[1], Huihua Li[2], Xiangjun Zeng[1]
[1]Capital Medical University, Beijing, China, [2]Affiliated Hospital of Dalian Medical University, Beijing, China

Tue-161 Abstract ID: 531 * Cyclic stretch induces vascular smooth muscle cell-derived connective tissue growth factor secretion and promotes endothelial progenitor cell differentiation and angiogenesis

Wenbin Wang[1], Zonglai Jiang[1], Yingxin Qi[1], Yue Han[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Tue-162 Abstract ID: 532 * A single-cell survey of human aortic dissection

Yinan Chen[1], Fang Yao[1], Fei Liu[1], Lin Mao[1], Tao Zhang[2], Wei Guo[3], Li Wang[1]
[1]Fuwai Hospital, Beijing, China, [2]People's Hospital of Peking University, Beijing, China, [3]General Hospital of the People's Liberation Army, Beijing, China

Tue-163 Abstract ID: 542 * T cell-derived extracellular vesicles regulate B cell IgG production via pyruvate kinase muscle isozyme 2

Juan Yang[1], Xian Wang[1], Juan Feng[1]
[1]Peking University, Beijing, China

Tue-164 Abstract ID: 544 * Calcilytic NPS2143 promote proliferation and inhibit apoptosis via activating renin-angiotensin system activity in spontaneously hypertensive rats vascular smooth muscle cells

Zhen Huang[1]
[1]Medical College of Shihezi University, Shihezi, China

Tue-165 Abstract ID: 491 * Sulfur dioxide maintains the contractile phenotype of vascular smooth muscle cells by promoting the binding of SRF to myocardin

Zhigang Zhu[1], Yaqian Huang[1], Hongfang Jin[1], Junbao Du[1]
[1]Peking University First Hospital, Beijing, China

Tue-166 Abstract ID: 56 * The role of lymphangiogenesis in ischemia-induced angiogenesis for peripheral artery disease

Zhongyue Pu[1], Yuuki Shimizu [1], Toyoaki Murohara[1]
[1]Nagoya University Graduate School of Medicine, Nagoya, Japan

Tue-167 Abstract ID: 162 * Cavin-2/SDPR in cardiac fibroblasts regulates cardiac fibrosis and function via TGF-β/Smad signaling in pressure-overloaded hearts

Yusuke Higuchi[1], Takehiro Ogata[1,2], Masahiro Nishi[1], Naohiko Nakanishi[1], Akira Sakamoto[1], Yumika Tsuji[1], Satoaki Matoba[1]
[1]Department of Cardiovascular Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan, [2]Department of Pathology and Cell Regulation, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan

Tue-168 Abstract ID: 6 Influence of combined therapy with rosuvastatin and ezetimibe on inflammatory state and pro-inflammatory cytokines in dyslipidemic patients with coronary heart disease and metabolic syndrome

Jamol Uzokov[1], Baxrom Alyavi[1], Akbar Abdullaev[1]
[1]Cardiology department, Republican specialized scientific practical medical center of therapy and medical rehabilitation, Tashkent, Uzbekistan

Tue-169 Abstract ID: 9 Targeting CCL5 to treat vascular remodeling in pulmonary hypertension

Xiaowei Nie[2], Jinsong Bian[1]
[1]National University of Singapore, Singapore, [2]Wuxi People's Hospital, Wuxi, China

Tue-170 Abstract ID: 32 Regulation of small-conductance calcium-activated potassium channels by AMP-activated protein kinase in vascular endothelium

Zhengda Pang[1], Zheng Song[1], Yan Wang[1], Gang She[1], Xiao-Zhen Ma[1], YJ. Shyy[1], Xiuling Deng[1]
[1]Xi'an Jiaotong University, Health Science Center, Xi'an, China

Tue-171 Abstract ID: 38 How fat-rich and cholesterol-rich diet affects the SCFA profile and lipopolysaccharide (LPS) concentration?

Dominika Maciejewska[1], Małgorzata Szczuko[1], Joanna Palma[1], Daniel Styburski[1], Marta Skórka-Majewicz[1], Ewa Stachowska[1]
[1]Pomeranian Medical University in Szczecin, Department of Biochemistry and Human Nutrition, Poland

Tue-172 Abstract ID: 41 Comparison of fatty acids profile in group of female patients with metabolic syndrome and kidney diseases–similar trend of changes

Małgorzata Szczuko[1], Dominika Maciejewska[1], Małgorzata Kaczkan[2], Sylwia Małgorzewicz[2], Arleta Drozd[1], Joanna Palma[1]
[1]Pomeranian Medical University in Szczecin, Poland, [2]Medical University of Gdańsk, Poland

Tue-173 Abstract ID: 42 Differences in the synthesis of eicosanoids in CKD are the cause of inflammention and vascular dysfunctionion

Małgorzata Szczuko[1], Dominika Maciejewska[1], Małgorzata Kaczkan[1], Sylwia Małgorzewicz[1], Joanna Palma[1], Arleta Drozd[1]
[1]Pomeranian Medical University in Szczecin, Poland

Tue-174 Abstract ID: 51 Sex differences in the cardiac inflammatory response in rats with experimental autoimmune myocarditis

Maria Luisa Barcena de Arellano[1,2], Maximiliam Niehues[1,2], Sarah Jeuthe[4], Daniel Messroghli[2,3,4], Vera Regitz-Zagrosek[1,2]
[1]Institute of Gender in der Medicine, Center of Cardiovascular Research, Charité – Universitätsmedizin Berlin, Germany, [2]DZHK (German Centre for Cardiovascular Research), partner site Berlin, Germany, [3]Department of Internal Medicine and Cardiology, Deutsches Herzzentrum Berlin, Berlin, Germany, [4]DZHK (German Centre for Cardiovascular Research), partner site Berlin, Germany

Tue-175 Abstract ID: 84 The identification of differential roles of microRNA-33a and -33b during atherosclerosis progression with genetically modified mice

Takahiro Horie[1], Satoshi Koyama[1], Takeshi Kimura[1], Koh Ono[1]
[1]Kyoto University, Kyoto, Japan

Tue-176 Abstract ID: 103 Regulation of lipid metabolism and inflammatory response decreases Cardiovascular Disease (CVD) risks associated with Non-alcoholic Fatty Liver Disease (NAFLD)

Karmin O[1,2,3], Susara Madduma Hewage[2,4], Victoria Sid[1,2], Yue Shang[1,3], Yaw L Siow[2,4]
[1]St. Boniface Hospital Research Centre, Winnipeg, Canada, [2]University of Manitoba, Winnipeg, Canada, [3]University of Manitoba, Winnipeg, Canada, [4]Agriculture and Agri-Food Canada, Winnipeg, Canada

Tue-177 Abstract ID: 112 Lipoxin A4 as a novel therapeutic approach to limit diabetes-induced cardiac remodelling

Cheng Xue Qin[1,2,3], Eoin P. Brennan[2,4], Cao Uyen H. Lam[1,2], Muthukumar Mohan[2], Minh Deo[1], Nithya Matthew[1,5], Marianne Tare[6], Mark E Cooper[2], Catherine Godson[4], Karin Jandeleit-Dahm[2], Phillip Kantharidis[2], Rebecca H. Ritchie[1,2,3]
[1]Baker Heart and Diabetes Institute, Melbourne, VIC, Australia, [2]Central Clinical School, Monash University, Clayton, VIC, Australia, [3]University of Melbourne, Parkville, VIC, Australia, [4]University College, Dublin, Dublin, Ireland, [5]Department of Physiology, Monash University, Clayton, VIC, Australia, [6]Monash Rural Health, Monash University, Churchill, VIC, Australia

Tue-178 Abstract ID: 116 Characterization of long noncoding RNA in spontaneously hypertensive rats: NONRATT011842 regulates the function of vascular smooth muscle cells during hypertension

Yilin Xie[2], Lei Li[3], Li Shen[4], Xiaoqin Zhang[5], Chunfang Xu[6], Yingchun Qin[7], Juanjuan Tan[1]
[1]School of Chemistry and Chemical Engineering, Shanghai Jiao Tong University, Shanghai, China, [2]School of Life Sciences and Biotechnology, Shanghai Jiao Tong University, Shanghai,China, [3]The Third School of Clinical Medicine, Southern Medical University, Guangzhou, China, [4]Southern Medical University affiliated Fengxian Hospital, Shanghai, China, [5]Shanghai University of Medicine&Health Sciences ,Shanghai University of Traditional Chinese Medicine, Shanghai, China

Tue-179 Abstract ID: 118 Hydroxymethylation of miR-3571 involved in modulating the function of vascular smooth muscle cells

Yilin Xie[1], Juanjuan Tan[2], Lei Li[3], Li Shen[3], Yingchun Qin[4], Xiaoqin Zhang[5], Chunfang Xu[5], Zhiqiang Yan[5]
[1]School of Life Science and Biotechnology, Shanghai Jiao Tong University, Shanghai, China, [2]School of Chemistry and Chemical Engineering,Shanghai Jiao Tong University, Shanghai, China, [3] The Third School of Clinical Medicine, Southern Medical University, Guangzhou, China, [4]Shanghai University of Medicine&HealthSciences, Shanghai University of Traditional Chinese Medicine, shanghai, China, [5]Southern Medical University affiliated fengxian Hospital, Guangzhou, China

Tue-180 Abstract ID: 126 Repeated remote ischemic conditioning improves left ventricular function and microcirculation in rat model of chronic myocardial infarction

Attila Kiss[1], Patrick M Pilz[1], Ouafa Hamza[1]
[1]Center for Biomedical Research, Ludwig Boltzmann Cluster for Cardiovascular Research, Medical University of Vienna, [2]Ludwig Boltzmann Cluster for Cardiovascular Research, Vienna, Austria

Tue-181 Abstract ID: 130 MiR-320a targets MafB to aggravate podocyte loss and dysfunction in diabetic nephropathy

Chen Chen[1]
[1]Huazhong University of Science and Technology, Wuhan, China

Tue-182 Abstract ID: 141 Nicotinate-curcumin stimulates reverse cholesterol transport by upregulation of autophagy and LDL receptor

Duanfang Liao[1], Debiao Xiang[1], Hongfeng Gu[2], Caiping Zhang[2], Shaowei Sun[2], Buohou Xia[1], Zhe Shi[1], Li Qin[1], Limei Lin[1], Qinhui Tuo[1]
[1]Hunan University of Chinese Medicine, Changsha, China, [2]University of South China, Hengyang, China

Tue-183 Abstract ID: 171 Inhibition of Polycomb Repressor Complex 2 protects against restenosis via suppressing tri-methylation of H3K27 in vascular smooth muscle cells

Jing Liang[1]
[1]*Tianjin Key laboratory of Medical Epigenetics and Department of physiology and pathophysiology , Tianjin, China*

Tue-184 Abstract ID: 202 Chronic stimulation of angiotensin II accelerates vascular senescence and dysfunction

Rongxia Li[1], *Shujun Yang*[1], *Yunyun Yang*[1], *Shuyuan Zhang*[1], *Rutai Hui*[1], *Yu Chen*[1], *Weili Zhang*[1]
[1]*FuWai Hospital, National Center for Cardiovascular Diseases, Peking Union Medical College & Chinese Academy of Medical Sciences, Beijing, China*

Poster Session 2

Wednesday, June 5, 12:30-14:00

Theme 1: New Mechanisms of Cardioprotection & Injury

Wed-001 Abstract ID: 337 * Ginsenoside Rb1 protects against the cardiac toxicity induced by anti-tumor drug vandetanib

Juan Ahang[1], Rongfang He[1], Xiaoli Gao[1], Dan Luo[1], Miaoling Li[1]
[1]Southwest Medical University, luzhou, China

Wed-002 Abstract ID: 367 * Mitochondrial regulation of postnatal cardiac regeneration

Moshi Song[1]
[1]Chinese Academy of Sciences, Beijing, China

Wed-003 Abstract ID: 377 * Mitochondrial aldehyde dehydrogenase (ALDH2) protects against HySu-induced pulmonary hypertension induced right heart failure through autophagy pathway

Suchi Chang[1], Aijun Sun[1], Junbo Ge[1]
[1]Fudan University, Shanghai, China

Wed-004 Abstract ID: 397 * SUMOylation mediates liver-X-receptor α-induced cardioprotection against myocardial Ischemia/reperfusion injury by regulating glucose metabolism via pentose phosphate pathway

Qingqi Ji[1], Ancai Yuan[2], Yichao Zhao[2], Yi Gao[2], Ben He[1]
[1]Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China, [2]Ren Ji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China

Wed-005 Abstract ID: 405 * Exogenous spermine inhibits hypoxia/ischemia-induced myocardial apoptosis via regulation of mPTP and associated pathways

Can Wei[1], Hongzhu Li[1], Yuehong Wang[1], Xue Peng[1], Hongjiang Shao[1], Hongxia Li[1], Shuzhi Bai[1], Changqing Xu[1]
[1]Harbin Medical University, Harbin, China

Wed-006 Abstract ID: 423 * Nicorandil alleviates myocardial fibrosis by upregulating autophagy in acute myocardial infarction

Huafei Deng[1,2], Jiang Zou[1,2], Heng MA[1,2], Li-li ZHU[1,2], Wenmei Weng[1,2], Meng Meng[1,2], Xian-zhong Xiao[1,2], Nian Wang[1,2], Kangkai Wang[1,2,3]
[1]Central SouthUniversity, Changsha, China, [2]Key Laboratory of Sepsis Translational Medicine of Hunan, Central South University,Changsha, China, [3]Hunan Key Laboratory of Animal models for Human Diseases, Xiangya School of medicine, Central south university, Changsha, China

Wed-007 Abstract ID: 425 * PTP1B promotes lipopolysaccharide-induced mitochondrial dysfunction in the cardiomyocytes through inhibiting mitophagy

Heng Ma[1], Liu Yang[1], Jiang Zou[1], Lili Zhu[1], Huafei Deng[1], Wenmei Wang[1], Nian Wang[1], Kangkai Wang[1,2,3]
[1]School of Basic Medical Science, Central South University, Changsha, China, [2]Key Laboratory of Sepsis Translational Medicine of Hunan, Central South University, Changsha, China, [3]Hunan Key Laboratory of Animal models for Human Diseases, Xiangya School of medicine, Central south university, Changsha, China

Wed-008 Abstract ID: 426 * Metformin alleviates inflammatory response via enhancing autophagy and suppressing NLRP3 inflammasome activation in infiltrated macrophages in MI mice

Qin Fei[1,2], Jiang Zou[1,2], Wengmei Wang[1,2], Heng Ma[1,2], Lili Zhu[1,2], Huafei Deng[1,2], Sipin Tan[1,2], Huali Zhang[1,2], Xiaozhong Xiao[1,2], Nian Wang[1,2], Kangkai Wang[1,2,3]
[1]School of basic medical science, Central south university, Changsha, China, [2]Key laboratory of Sepsis Translational Medicine of Hunan, Central south university, Changsha, China, [3]Hunan Key Laboratory of Animal models for Human Diseases, Xiangya School of medicine, Central south university, Changsha, China

Wed-009 Abstract ID: 439 * A link between ATP and SUR2A: A novel mechanism explaining cardioprotection at high altitude

Khaja Shameem Mohammed Abdul[1], Aleksandar Jovanovic[2, 3]

[1]Institute of Biomedical and Pharmaceutical Science, Guangdong University of Technology, Guangzhou, China, [2]University of Nicosia Medical School, Nicosia, Cyprus, [3]Center for Neuroscience and Integrative Brain Research (CENIBRE), University of Nicosia Medical School, Nicosia, Cyprus

Wed-010 Abstract ID: 441 * The Cyclooxygenase-1/mPGES-1/Endothelial prostaglandin EP4 receptor pathway constrains myocardial ischemia-reperfusion injury

Liyuan Zhu[1], Chuansheng Xu[1]
[1]State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, Beijing, China

Wed-011 Abstract ID: 451 * An EP4 receptor agonist inhibits cardiac fibrosis through activation of PKA signaling in hypertrophied heart

Qi Wang[1], Yunzeng Zou[1]
[1]The Cardiology Department, Shanghai Zhongshan Hospital, Shanghai, China

Wed-012 Abstract ID: 465 * Glucagon-like peptide-1 analogue liraglutide attenuates abdominal aortic constriction-induced cardiac fibrosis and dysfunction by inhibiting angiotensin II AT1 receptor in rat

Ronghua Zheng[1,2], Xiaojie Bai[1], Weiwei Zhang[1], Jing Wang[1], Feng Bai[1], Erskine A. James[3], Himangshu Bose[4], Ningping Wang[1,4], Zhiqing Zhao[1,4]
[1]Shanxi Medical University, Taiyuan, Shanxi, China, [2]Linfen Vocational and Technical College, Linfen, Shanxi, China, [3]Navicent Health, Macon, Georgia, USA , [4]Mercer University School of Medicine, Savannah, Georgia, USA

Wed-013 Abstract ID: 479 * Zinc involved in resveratrol-induced cardioprotection through inhibition of ERS and mPTP via ERK/GSK-3β

Yifei He[1], Yu Fu[1], Yuliu Liu[1], Yi Zheng[1], Jinkun Xi[1]
[1]Heart Institute, North China University of Science and Technology, Tangshan, China

Wed-014 Abstract ID: 512 * Estrogen modulates sex cardiac differences in basal contraction and responses to β2AR-mediated stress through cAMP-L-type Ca^{2+} pathway

Jeremiah Ong'achwa Machuki[1], Gabriel Komla Adzika[1], Juan Geng[1], Xide Hu[1], Hong Sun[1]
[1]Xuzhou Medical University, Xuzhou, Jiangsu, China

Wed-015 Abstract ID: 513 * Macrophage migration inhibitory factor plays an essential role in ischemic preconditioning mediated cardioprotection

Amanguli Ruze[1,2,4,5], Bangdang Chen[1,3,5], Fen Liu[1,3,5], Xiaocui Chen[1,3,5], Mintao Gai[1,3,5], Xiaomei Li[4,5], Yitong Ma[1,4,5], Xiaojun Du[6], Yining Yang[1,4,5], Xiaoming Gao[1,2,3,4,5,6]
[1]State Key Laboratory of Pathogenesis, Prevention and Treatment of High Incidence Diseases in Central Asia, Urumqi, China, [2]Xinjiang Key Laboratory of Medical Animal Model Research, The First Affiliated Hospital of Xinjiang Medical University, Urumqi, China, [3]Clinical Medical Research Institute of Xinjiang Medical University, Urumqi, China, [4]Department of Cardiology, First Affiliated Hospital of Xinjiang Medical University, Urumqi, China, [5]Xinjiang Key Laboratory of Cardiovascular Research, Urumqi, Xinjiang, China, [6]Baker Heart and Diabetes Institute, Melbourne, Australia

Wed-016 Abstract ID: 515 * The fibrotic effect and mechanism from hypoxic cardiomyocyte-derived exosomes on $Gli1^+$ cells

Chaojin Lin[1], Xiyong Yu[1]
[1]Guangzhou Medical University, Guangzhou, China

Wed-017 Abstract ID: 522 * Pressure overload promotes Cystatin C (CysC) secretion of cardiomyocyte to regulate MAPK signaling pathway and mediate cardiac hypertrophy

Yi Shen[1], Xiaoyi Zhang[1], Chenguang Li[1], Xiang Wang[1], Jie Yuan[1], Hui Gong[1], Yunzeng Zou[1]
[1]Zhongshan Hospital, Fudan University, Shanghai, China

Wed-018 Abstract ID: 586 * Melatonin ameliorates cardiomyocytes apoptosis via JNK/p53 pathway in diabetic mice post-infarction

Jipeng Ma[1]
[1]Xijing Hospital, Air Force Medical University, Xi'an, China

Wed-019 Abstract ID: 349 * Disruption of the cardio-renal axis via radiofrequency renal denervation represents a novel therapeutic strategy for the treatment of heart failure with reduced ejection fraction

Thomas Sharp[1], Amy Scarborough[1], David Polhemus[1,2], Zhen Li[1,2], Pablo Spaletra[1], Stephen Jenkins[3], John Reilly[3], Christopher White[3], Daniel Kapusta[1,2], David Lefer[1,2], Traci Goodchild[1,2]
[1]Cardiovascular Center of Excellence, School of Medicine, Louisiana State University Health Science Center, New Orleans, LA, USA , [2]Louisiana State University Health Science Center, New Orleans, LA, USA, [3]Heart and Vascular Institute, Ochsner Medical Center, New Orleans, LA, USA

Wed-020 Abstract ID: 360 * Hormesis in ischaemia/reperfusion injury: cardioprotection by mitochondrial superoxide

John Mulvey[1], Salvatore Antonucci[2], Nils Burger[3], Moises Di Sante[2], Andrew Hall[3], Elizabeth Hinchy[3], Stuart Caldwell[4], Anja Gruszczyk[3], Soni Deshwa[2], Richard Hartley[4], Nina Kaludercic[5], Michael Murphy[3], Fabio Di Lisa[2], Thomas Krieg[1]
[1]University of Cambridge, UK, [2]University of Padova, Italy, [3]Mitochondrial Biology Unit, University of Cambridge, UK, [4]School of Chemistry, University of Glasgow, UK, [5]Neuroscience Institute, National Research Council of Italy (CNR), Italy

Wed-021 Abstract ID: 369 * The effect of chronic hypoxia on RNA demethylase FTO expression in rat heart

Daniel Benak[1], Dita Sotakova-Kasparova[1], Michaela Cyprova[1], Kristyna Holzerova[1], Petr Telensky[2], Zdenka Bendova[2], Jan Neckar[1], Frantisek Kolar[1], Marketa Hlavackova[1]
[1]Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic, [2]Department of Physiology, Faculty of Science, Charles University, Prague, Czech Republic

Wed-022 Abstract ID: 371 * Aldehyde dehydrogenase 2 contributes to nitrite-mediated cardioprotection during ischaemia reperfusion injury

Kayleigh Griffiths[1], Eakkapote Prompunt[1], Joanna J Goodwin[1], Martin Feelisch[2], Michael P Frenneaux[3], Melanie Madhani[1]
[1]Institute for Cardiovascular Sciences, University of Birmingham, Birmingham, UK, [2]Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, Southampton, UK, [3]Norwich Medical School, University of East Anglia, Norwich, UK

Wed-023 Abstract ID: 380 * Protein kinase G phosphorylates chip to protect against myocardial infarction

Mark Ranek[1], Christian Oeing[1], Kristen Kokkonen-Simon[1], Virginia Shalky-Hahn[1], Rebekah Sanchez-Hodge[2], Brittany Dunkerly-Ehring[1], Ronald Holewinski[3], Vineet Agrawal[1], Masayuki Sasaki[1], Peter Rainer[1], Manling Zhang[1], Dong Lee[1], Richard Page[4], Jonathan Schisler[2], Jennifer Van Eyk[3], David Kass[1]
[1]Johns Hopkins University, Department of Medicine, Division of Cardiology, Baltimore, MD, USA, [2]University of North Carolina, McAlister Heart Institute, Chapel Hill, NC, USA, [3]Cedars Sinai Medical Center, Los Angeles, CA, USA, [4]Miami University, Department of Biochemistry, Miami, OH, USA

Wed-024 Abstract ID: 389 * Cardioprotection induced by hypothermic, oxygenated perfusion in an in-situ rat heart model of donation after circulatory death

Rahel Kathrin Wyss[1, 2], Natalia Méndez-Carmona[1, 2], Maria Arnold[1, 2], Thierry Carrel[1, 2], Hendrik Tevaearai[1, 2], Sarah Longnus[1, 2]
[1]Department of Cardiovascular Surgery, Inselspital, University Hospital Bern, Bern, Switzerland, [2]Department for BioMedical Research, University of Bern, Bern, Switzerland

Wed-025 Abstract ID: 646 * Adenoviral-mediated knock-down of Runx1 in the border zone region following myocardial infarction preserves cardiac contractility

Tamara Martin[1], Ashley Bradley[1], Ewan Cameron[2], Stuart Nicklin[1], Christopher Loughrey[1]
[1]Glasgow Cardiovascular Research Centre, Institute of Cardiovascular and Medical Sciences, University of Glasgow, UK, [2]School of Veterinary Medicine, University of Glasgow, UK

Wed-026 Abstract ID: 407 * Involvement of the mitochondrial permeability transition pore in cardioprotection induced by chronic hypoxia

Petra Alanova[1,2], Jan Neckar[1], Frantisek Kolar[1], Fabio Di Lisa[2]
[1]Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic, [2]Department of Biomedical Sciences, University of Padova, Padova, Italy

Wed-028 Abstract ID: 314 Discovery of small molecule activators of Sirtuin1 (SIRT1) for cardioprotection

Mukesh Nandave[1]
[1]Delhi Pharmaceutical Sciences and Research University (DPSRU), New Delhi, India

Wed-029 Abstract ID: 323 PUMA regulates mitophagy and cardiomyocyte injury during ischemia and reperfusion

Yuzhen Li[1], Xiuhua Liu [1], Dandan Song [1]
[1]Institute of Basic Medical Science, PLA General Hospital, Beijing, China

Wed-030 Abstract ID: 330 NLRP3 inflammasomes-mediated pyroptosis contributes to dilated cardiomyopathy and doxorubicin-induced cardiotoxicity

Cheng Zeng[1]
[1]Sun Yat-sen University, Guangzhou, China

Wed-031 Abstract ID: 335 Hypoxia inducible factor-1 plays a major role in cyclosporine A-induced cardioprotection through the regulation of cyclophilin D acetylation

Elise Belaidi[1], Delphine Baetz[2], Jonathan Gaucher[1], Camille Villedieu[2], Lionel Augeul[2], Bruno Pillot[2],

Abdallah Gharib[2], Diane Godin-Ribuot[1], Michel Ovize[2]
[1]UGA-Laboratoire HP2-U1042-Grenoble, France, [2]CaRMeN-U1060-Lyon, France

Wed-032 Abstract ID: 357 The role of the phosphatase PHLPP2 in cardiac physiology and injury

Szu-Tsen Yeh[1]
[1] University of California, San Diego, CA, USA

Wed-034 Abstract ID: 368 Targeting autophagy in the management of obesity and metabolic diseases

Jun Ren[1], Yingmei Zhang[1]
[1]Zhongshan Hospital Fudan University, Shanghai, China

Wed-035 Abstract ID: 373 Participation of cardiac sympathetic nervous and renin-angiotensin systems on the renal ischemia/reperfusion-induced inflammatory profile in the heart

Karine Panico[1], Mariana Abrahão[1], Mayra Trentin-Sonoda[2], Humberto Muzi-Filho[3, 4], Adalberto Vieyra[3,4,5,6], Marcela Carneiro-Ramos[1]
[1]Center for Natural and Human Sciences, Federal University of ABC, Santo André, São Paulo, Brazil, [2]Cellular and Molecular Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Ontario, Canada, [3]Carlos Chagas Filho Institute of Biophysics, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, [4]National Center of Structural Biology and Bioimaging/CENABIO, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, [5]National Institute in Science and Technology for Regenerative Medicine/REGENERA, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, [6]Graduate Program in Translational Biomedicine/BIOTRANS, Grande Rio University, Duque de Caxias, Brazil

Wed-036 Abstract ID: 375 PERK inhibition of the unfolded protein response reduces arrhythmic risk after myocardial infarction

Man Liu[1], Hong Liu[1], Guangbin Shi[2], Anyu Zhou[2], Samuel Dudley[1]
[1]University of Minnesota, Minneapolis, MN, USA, [2]Division of Cardiology, Dept. of Medicine, The Warren Alpert School of Medicine, Brown University; Lifespan Cardiovascular Research Center, Providence, RI, USA

Wed-037 Abstract ID: 379 MR-1 promotes cardiomyogenic differnentiation of H9c2 cells via the myogenin mediated pathway

Xiaoreng Wang[1], Dandan Song[1], Tianqi Tao[1], Xiuhua Liu[1]
[1]Chinese PLA General Hospital, Beijing, China

Wed-038 Abstract ID: 383 Myocardial protection with nanomaterials formulated with CHIR99021 and FGF1

Wuqiang Zhu[1], Chengming Fan[2], Jianyi Zhang[1]
[1]University of Alabama at Birmingham, Birmingham, Alabama, USA, [2]The Second Xiangya Hospital, Central South University, Changsha, China

Wed-039 Abstract ID: 384 Cardiac electrical, mechanical and metabolic study of a Type 2 diabetes experimental mice model

Ainhoa Rodriguez de Yurre[1], Oscar Loaiza[1], Micaela Lopez-Alarcon[1], Eduarda Martins[1], Isalira Ramos[1], Ygor Schleier[1], Bruno Cabral[1], Oscar Casis[2], Emiliano Medei[1]
[1]Federal University of Rio de Janeiro, Brazil, [2]Universidad del País Vasco (UPV/EHU), Vitoria-Gasteiz, Spain

Wed-040 Abstract ID: 387 Diabetes-induced renal susceptibility to type 1 cardiorenal syndrome was attenuated by canagliflozin, an SGLT2 inhibitor, through reduction of oxidative stress

Yukishige Kimura[1], Takayuki Miki[1], Atsushi Kuno[2], Tatsuya Sato[3], Toshiyuki Yano[1], Masaya Tanno[1], Tetsuji Miura[1]
[1]Department of Cardiovascular, Renal and Metabolic Medicine, Sapporo Medical University School of Medicine, Sapporo, Japan, [2]Department of Pharmacology, Sapporo Medical University School of Medicine, Sapporo, Japan, [3]Department of Cellular Physiology and Signal Transduction, Sapporo Medical University School of Medicine, Sapporo, Japan

Wed-041 Abstract ID: 392 Nox4 participates in apoptosis of endothelial cells induced by homocysteine through NLRP3 signaling pathway

Xuehui Wang[1]
[1]The First Affiliated Hospital of Xinxiang Medical University, Xinxiang, China

Wed-042 Abstract ID: 424 ZNF667 promotes angiogenesis through negative transcriptional regulation of VASH1 in the endothelial cell during acute myocardial infarction

Wenmei Wang[1,2], Jiang Zou[1], Qin Fei[1], Ke Liu[1], Meidong Liu[1], Nian Wang[1,2], Kangkai Wang[1,2,]
[1]Department of Pathophysiology, Xiangya School of Medicine, Central South University, Changsha, China, [2]Key Laboratory of Sepsis Translational Medicine of Hunan, Central South University,Changsha, Hunan, China, [3]Department of laboratory animals, Hunan Key Laboratory of Animal models for Human Diseases, Xiangya School of medicine, Central south university, Changsha, China

Wed-043 Abstract ID: 429 A new heart-enriched long noncoding RNA ANP regulates pathological cardiac hypertrophy by initiating a GATA4-feedback loop

Yang Yang[1]
[1]The Third Military Medical University, Chongqing , China

Wed-044 Abstract ID: 430 The role of G protein-coupled receptor kinase 4 in cardiomyocyte injury after myocardial infarction

Liangpeng Li[1], Luxun Tang[1], Shuang Qu[1], Dezhong Yang[1], Qiao Liao[1], Wenbin Fu[1], Xuewei Xia[1], Pedro.A Jose[2], Wei Eric Wang[1], Chunyu Zeng[1]
[1]Third Milltary Medical University, Chongqing, China, [2]University of Maryland School of Medicine, Baltimore, MD, USA

Wed-045 Abstract ID: 433 Chemokine CXCL1–receptor CXCR2 axis mediates angiotensin II-induced hypertension and cardiac remodeling through regulation of monocyte infiltration

Lei Wang[1], YunLong Zhang[1], HuiHua Li[1], Jie Du[2]
[1]First Hospital of Dalian Medical University, [2] Capital Medical University, Beijing Institute of Heart Lung and Blood Vessel Diseases

Wed-046 Abstract ID: 437 CB2 receptor activation by β-Caryophyllene, a natural bicyclic sesquiterpene protects against isoproterenol-induced myocardial infarction in rats

Shreesh Ojha[1], MFN Meeran[1], Farah Laham[1], Sheikh Azimullah[1], Saeed Tariq[1], Ernest Adeghate[1]
[1]United Arab Emirates University, United Arab Emirates

Theme 2: New Insights into Cardiac Dysfunction

Wed-047 Abstract ID: 252 * Chronic dantrolene treatment attenuates cardiac dysfunction and reduces atrial fibrillation inducibility in a rat myocardial infarction heart failure model

Kuo Zhang[1], Colleen Nofi[2], Wenyao Wang[1], A. Martin Gerdes[2], Youhua Zhang[2], Yida Tang[1]
[1]Fuwai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China, [2]New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY, USA

Wed-048 Abstract ID: 254 * A pilot study observing the characteristics and intervention of microvascular abnormality in NSTEMI patients

Jian Tian[1], Shijie You[1], Yida Tang[1]
[1]Fu Wai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences, Beijing, China

Wed-049 Abstract ID: 288 * Altered regulatory T cell suppression: a novel mechanism for cardiac dysfunction induced by beta1-adrenoceptor autoantibody

Wenli Xu[2], Ye Wu[1], Suli Zhang[1], Yang Li[1], Ning Cao[2], Youyi Zhang[2,3], Huirong Liu[1,4]
[1]School of Basic Medical Sciences, Capital Medical University, Beijing, China, [2]Peking University Third Hospital, Beijing, China, [3]Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing, China, [4]Beijing Key Laboratory of Cardiovascular Diseases Related to Metabolic Disturbance, Beijing, China

Wed-050 Abstract ID: 418 * The immunoproteasome catalytic β5i subunit regulates cardiac hypertrophy by targeting the autophagy protein ATG5 for degradation

Xin Xie[1], Hailian Bi[1], Huihua Li[1]
[1]First Affiliated Hospital of Dalian Medical University, Dalian, China

Wed-051 Abstract ID: 493 * Miro2 regulates inter-mitochondrial communication in the heart and protects against TAC-induced cardiac dysfunction

Yangpo Cao[1], Chunling Xu[1], Jingjing Ye[1], Qihua He[2], Xingzhong Zhang[1], Shi Jia[1], Xue Qiao[1], Chenglin Zhang[1], Ruxia Liu[1], Lin Weng[1], Yingying Liu[1], Limei Liu[1], Ming Zheng[1]
[1]School of Basic Medical Sciences, Peking University, Beijing, China, [2]Medical and Health Analysis Center, Peking University, Beijing, China

Wed-052 Abstract ID: 240 * Chronic alcohol exposure exacerbates cardiac dysfunction in TTNtv-related dilated cardiomyopathy

Celine Santiago[1,2], Inken Huttner[1,2,3], Diane Fatkin[1,2,3]
[1]Molecular Cardiology, Victor Chang Cardiac Research Institute, NSW Australia, [2]Faculty of Medicine, University of New South Wales, NSW Australia, [3]St. Vincent's Hospital, Darlinghurst, NSW, Australia

Wed-053 Abstract ID: 270 * SERCA loss causes remodeling of the sarcoplasmic reticulum during heart failure

Terje Kolstad[1,2], Espen Stang[3], Åsmund Treu Røe[1,2], Einar Sjaastad Nordèn[1,2], Mathis Korsberg Stokke[4],

Andreas Brech[5], Sverre Henning Brorson[3], Alessandro Cataliotti[1,2], Geir Christensen[1,2], Ole Mathias Sejersted[1,2], William Edward Louch[1,2]
[1]Institute for Experimental Medical Research, Oslo University Hospital Ullevål and University of Oslo, Oslo, Norway , [2]KG Jebsen Cardiac Research Center and Center for Heart Failure Research, Oslo, Norway, [3]Department of Pathology, Oslo University Hospital, Rikshospitalet, Oslo, Norway , [4]Clinic for Internal Medicine, Lovisenberg Diakonale Hospital, Oslo, Norway, [5]Department of Molecular Cell Biology, Institute for Cancer Research, Oslo University Hospital, Oslo, Norway

Wed-054 Abstract ID: 272 * Hiperactivity of the NHE1 Na^+/H^+ exchanger in a mouse model of type 2 diabetic cardiomyopathy

Carolina Jaquenod De Giusti[1], Fernanda E. Carrizo Velasquez[1], Bernardo V. Alvarez[1]
[1]Centro de Investigaciones Cardiovasculares, Facultad de Ciencias Médicas, UNLP-CONICET, La Plata, Argentina

Wed-055 Abstract ID: 317 * Evidence of calcineurin inhibition mediating the downregulation of beta-adrenoceptor pathway activity via cAMP/PKA suppression, leading to an early cardiac contractile dysfunction

Bernadin Ndongson Dongmo[1], Kjetil Wessel Andressen[1], Lise Roman Moltzau[1], Marie-Victoire Cosson[1], Christophe Erneux[4], Emilio Hirsch[3], Reinhard Bauer[2], Finn Olav Levy[1]
[1]Department of Pharmacology, University of Oslo and Oslo University Hospital, Oslo, Norway , [2]Institute of Molecular Cell Biology, University Hospital of Jena, Jena, Germany, [3]Center of Molecular Biotechnology, University of Turin, Turin, Italy, [4]Interdisciplinary Research in human and molecular Biology, Université Libre de Bruxelles, Brussels, Belgium

Wed-056 Abstract ID: 321 * Diabetic cardiomyocyte stiffness and defective length-dependence of Ca^{2+} sensitivity – a myofilament 'AGE' burden?

Johannes V Janssens[1], Antonia JA Raaijmakers[1], Parisa Koutsifeli[2], Kimberley M Mellor[1,2], Claire L Curl[1], Lea MD Delbridge[1]
[1]University of Melbourne, Victoria, Australia, [2]University of Auckland, New Zealand

Wed-057 Abstract ID: 322 * Dual transcriptional role of the histone methyltransferase Smyd1 in the heart

Marta Szulik[1], Li Wang[1], Junco Warren [1], Steven Valdez[1], June Garcia-Llano[1], Stavros Drakos[1], Christopher Conley[2], Timothy Parnell[2], Sarah Franklin[1]
[1]Nora Eccles Harrison Cardiovascular Research & Training Institute, University of Utah, Salt Lake City, Utah, USA, [2]High-Throughput Genomics and Bioinformatics Analysis Shared Resource, Huntsman Cancer Institute, University of Utah, Salt Lake City, Utah, USA

Wed-058 Abstract ID: 350 * Genetic deficiency of the H_2S producing enzyme, 3-mercaptopyruvate sulfurtransferase, worsens the outcomes of pressure overload induced heart failure

Zhen Li[1], Thomas Sharp[1], Huijing Xia[1], Jean Carnal[1], Noriyuki Nagahara[2], David Lefer[1]
[1]Cardiovascular Center of Excellence, LSU Health Science Center, New Orleans, LA, USA, [2]Isotope Research Center, Nippon Medical School, Tokyo, Japan

Wed-059 Abstract ID: 217 CaMKII oxidation is a performance-disease tradeoff in vertebrate evolution

Qinchuan Wang[1], Erick O. Hernandez-Ochoa[2], Ian D. Blum[3], Jonathan M. Granger[1], Jinying Yang[1], Meera C. Viswanathan[1], Susan Aja[4], Naili Liu[5], Corina M. Antonescu[10], Liliana D. Florea[10], C. Conover Talbot Jr.[11], David Mohr[9], Kathryn R. Wagner[5], Sergi Regot[6], Richard M. Lovering[7], Mark N. Wu[3], Anthony R. Cammarato[1], Martin F. Schneider[2], Gabriel S. Bever[8], Mark E. Anderson[1]
[1]Johns Hopkins School of Medicine, Baltimore, USA, [2]University of Maryland School of Medicine, Baltimore, USA, [3]Johns Hopkins School of Medicine, Baltimore, USA, [4]Center for Metabolism and Obesity Research, Johns Hopkins School of Medicine, Baltimore, USA, [5]Center for Genetic Muscle Disorders, Kennedy Krieger Institute, Baltimore, USA, [6]Johns Hopkins School of Medicine, Baltimore, USA, [7]University of Maryland School of Medicine, Baltimore, USA, [8]Center for Functional Anatomy & Evolution, Johns Hopkins School of Medicine, Baltimore, USA, [9]Johns Hopkins School of Medicine Genetic Resources Core Facility, Baltimore, USA, [10]Johns Hopkins Computational Biology Consulting Core, Baltimore, USA, [11]Johns Hopkins Deep Sequencing & Microarray Core Facility, Baltimore, USA

Wed-061 Abstract ID: 246 Virus-directed deletion of ErbB4 receptors from cardiomyocytes in neonates limits their growth and cardiac function

Melissa Reichelt[1], Zhen Wang[2], Chloe Thorn[3], Tamara Paravicini [4], Walter Thomas[1]
[1]School of Biomedical Sciences, University of Queensland, St Lucia, Australia, [2]University of California, Davis, USA, [3]University of Oxford, Oxford, UK, [4]Biomedical Science Cluster, Human Biosciences, RMIT, Melbourne, Australia

Wed-063 Abstract ID: 257 Identification of the POU4F2/Brn-3b transcription factor as a novel regulator of adaptive hypertrophic response in the heart

Vishwanie Budhram-Mahadeo[1], Lauren Maskell[1], Richard Heads[2]
[1]University College London, London, UK

Wed-064 Abstract ID: 259 The evaluation of clinical efficacy with radiofrequency ablation of thoracic sympathetic nerve in the treatment of cardiac dysfunction

Min Luo[1], Hongli Zhou[1], Xinyang Li[1], Yujie Shen[1], Wei Guo[1], Fengxia Hou[1]
[1]Orthopedics Department, China-Japan Union hospital of Jilin University, Changchun, China

Wed-065 Abstract ID: 289 Redox imbalance drives ER dysfunction and proteotoxic cardiac remodeling

Rajasekaran Namakkal Soorappan[1, 4], Gobinath Shanmugam[1], Ding Wang[2], Jolyn Fernandez[3], Dean Jones[3], Peipei Ping[2]
[1]Divsion of Molecular and Cellular Pathology, Department of Pathology, University of Alabama at Birmingham, AL, USA, [2]NIH BD2K Center of Excellence for Biomedical Computing at UCLA, Department of Physiology, University of California, Los Angeles, CA, USA, [3]Division of Pulmonary, Allergy, Critical Care and Sleep Medicine, Emory University, Atlanta, GA., USA, [4]Division of Cardiovascular Medicine, Department of Medicine, University of Utah, SLC, UT, USA

Wed-066 Abstract ID: 291 Transmural absorbance spectroscopy in an integrating sphere used to evaluate murine mitochondria redox status during ischemia/reperfusion

Tyler M Bauer[1], Abigail Giles[1], Junhui Sun[1], Armel Fenmou[1], Elizabeth Murphy[1], Robert S Balaban[1]
[1]National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MA, USA

Wed-067 Abstract ID: 299 New mechanisms for regulation of cell endocytosis and cardiovascular diseases

Zijian Li[1]
[1]Institute of Vascular Medicine of Peking University Third Hospital, Beijing, China

Wed-069 Abstract ID: 320 LRP6 is required to maintain intercalated disc integrity

Wang Ying[1], Yin Chao[1], Zou Yan[1], Gong Hui[1]
[1]Zhongshan Hospital, Fudan University, Shanghai, China

Wed-070 Abstract ID: 326 Targeted ablation of zinc finger protein ZBTB20 in cardiomyocytes results in increased cardiac contractility

An-Jing Ren[1], Menna Liu[1], Kai Wang[1], Sha Zhang[1,2], Xianhua Ma[1], Hong Wu[2], Zhifang Xie[1,3], Huangtian Yang[4], Youyi Zhang[5], Weiping J Zhang[1]
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Wed-071 Abstract ID: 339 Inhibition of monoamine oxidase A in pulmonary artery banding-induced right ventricular failure

Eva Peters[1,2], Xiaoqing Sun[1,2], Stine Andersen[3], Julie Birkmose Axelsen[3], Ingrid Schalij[1,2], Willem van der Laarse[2], Asger Andersen[3], Harm Jan Bogaard[1], Frances Handoko - de Man[1], Anton Vonk Noordegraaf[1]
[1]Amsterdam Cardiovascular Sciences, Amsterdam UMC, Amsterdam, The Netherlands, [2]Amsterdam Cardiovascular Sciences, Amsterdam UMC, Amsterdam, The Netherlands, [3]Aarhus University Hospital, Aarhus, Denmark

Wed-072 Abstract ID: 345 Anti-tumor drug lenvatinib induced cardiotoxicity via mitochondrial oxidative stress and apoptosis

Xiaoli Gao[1], Juan Zhang[1], Zhihong Dai[1], Dan Luo[1], Rongfang He[1], Miaoling Li[1]
[1]Key Laboratory of Medical Electrophysiology, Ministry of Education, Institute of Cardiovascular Research, Southwest Medical University, Luzhou, China

Wed-073 Abstract ID: 359 Loss of obscurin/Obsl1 results in diastolic dysfunction and HFpEF

Patrick Desmond[1], Valeria Marrocco[1], Eric Esteve[1], Anush Velmurugan[1], Jordan Blondelle[1], Yunghang Chan[1], Matthew Wright[1], Stephanie Myers[1], Yusu Gu[1], Nancy Dalton[1], Majid Ghassemian[1], Matthew Klos[1], Kirk Peterson[1], Stephan Lange[1,2]
[1]School of Medicine, UC San Diego, La Jolla, USA, [2]Department of Molecular and Clinical Medicine, Institute of Medicine, University of Gothenburg, Gothenburg, Sweden

Wed-074 Abstract ID: 374 Cardiomyocyte PKA ablation eliminates cardiac β-adrenergic response without adverse effects on the heart

Ying Zhang[1, 2], Xiaoying Zhang[1], Ying Li[1, 3], Wei Wang[1, 4], Biyi Chen[5], Chong Liu[1, 6], Xiaojie Ai[1, 7], Xiaoxiao Zhang[1, 8], Ying Tian[9], Chen Zhang[1], Mingxin Tang[1], Christopher Szeto[1], Xiang Hua[10], Mingxin Xie[8], Chunyu Zeng[4], Yingjie Wu[11], Lin Zhou[4], Steven Houser[1], Xiongwen Chen[1]
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University, Shanghai, China, [8]Union Hospital Tongji Medical College of Huazhong University of Science and Technology Wuhan, China, [9]Department of Pharmacology & Center for Translational Medicine Temple University School of Medicine, Philadelphia, PA, USA, [10]Fox Chase Cancer Center, Philadelphia, PA, USA, [11]National Center of Genetically Engineered Animal Models for International Research, Dalian Medical Univ, Dalian, Liaoning, China

Wed-075 Abstract ID: 376 T-tubule disruption is a prominent feature of HFrEF but not HFpEF

Michael Frisk[1], Christopher Le[1], Yufeng Hou[1], Åsmund Røe[1], Christen Dahl[2,3], Xin Shen[1], Ivar Sjaastad[1], Ida Lunde[1], Lars Gullestad[2,3], Theis Tønnessen[1,4], Ole Sejersted[1], Peter Jones[5], William Louch[1]
[1]Institute for Experimental Medical Research, University of Oslo, Norway, [2]Oslo University Hospital, Norway, [3]Research Insititute for Internal Medicine, Oslo University Hospital, Norway, [4]Oslo University Hospital, Norway, [5]Department of Physiology, University of Otago, New Zealand

Wed-076 Abstract ID: 382 FSTL3 release occurs synchronously with onset of doxorubicin-induced cardiotoxicity in an isolated myocardial cell model

Dongqing Chen[1], Dr. Saifei Liu[2], Prof. John Horowitz[2], Aprof. Aaron Sverdlov[1], Aprof. Doan Ngo[1]
[1]Univeristy of Newcastle, NSW, Australia, [2]University of Adelaide, Adelaide, Australia

Theme 3: Ion Channel Mechanisms & Arrhythmias

Wed-077 Abstract ID: 414 * T-type Ca^{2+} channel blocker mibefradil inhibits ORAI store-operated channels

Pengyun Li[1,2], Hussein N Rubaiy[1], Guilan Chen[2], Thomas Hallett[1], Nawel Zaibi[1], Bo Zeng[2], Rahul Saurabh[1], Shangzhong Xu[1]
[1]Centre for Atherothrombosis and Metabolic Disease, Hull York Medical School, University of Hull, Hull, UK, [2]Key Laboratory of Medical Electrophysiology, Ministry of Education, and Institute of Cardiovascular Research, Southwest Medical University, Luzhou , China

Wed-078 Abstract ID: 618 * The efficacy and safety of Dingji Fumai Decoction combined with metoprolol in premature ventricular contractions: a randomized controlled clinical trial

Bo Liang[1], Ling Fu[2], Feihu Zou[3], Huiling Liao[1]
[1]Southwest Medical University, Luzhou, China, [2]Chongqing Traditional Chinese Medicine Hospital, Chongqing, China, [3]Traditional Chinese Medicine Hospital, Tongliang, China

Wed-079 Abstract ID: 282 * Aging results in a near-complete loss of normal diurnal variation in cardiac electrophysiology and Ca^{2+} handling properties

Zhen Wang[1], Lianguo Wang[1], Samantha Francis Stuart[1], Srinivas Tapa Tapa[1], Crystal Ripplinger[1]
[1]University of California, Davis, USA

Wed-080 Abstract ID: 361 * Increased alternans susceptibility in heart failure is linked to action potential morphology

George Madders[1], Nathan Denham[1], Charles Pearman[1], David Hutchings[1], Lori Woods[1], Caitlin Waddell[1], Matthew Smithen[1], Andrew Trafford[1], David Eisner[1], Katharine Dibb[1]
[1]Cardiovascular Sciences, University of Manchester, Manchester, UK

Wed-081 Abstract ID: 340 * PDE4 regulates cardiac pacemaker function

Ana Maria Gomez[1], Grégoire Vandecasteele[1], Rodolphe Fischmeister[1], Delphine Mika[1]
[1]INSERM UMR-S 1180, France

Wed-082 Abstract ID: 393 * Dyadic composition in rat cardiomyocytes revealed by dual colour dSTORM imaging

Ornella Manfra[1], Xin Shen[1], Johannes W. Hell[2], Christian Soeller[3], William E. Louch[1]
[1]Institute for Experimental Medical Research, Oslo University Hospital and University of Oslo, Oslo, Norway, [2]University of California Davis, Davis, CA, USA, [3]University of Exeter, Exeter, UK

Wed-083 Abstract ID: 324 Cardiomyocyte functional screening reveals distinct electrophysiological properties across different cardiac cell cultures

Helen M Waddell[1], Simon P Wells[1,2], Choon Boon Sim[3], Enzo R Porrello[1,3], Lea MD Delbridge[1], James R Bell[1]
[1]University of Melbourne, Melbourne, Australia, [2]Institute of Cardiovascular Sciences, University of Birmingham, Birmingham, United Kingdom, [3]Murdoch Children's Research Institute, Melbourne, Australia

Wed-084 Abstract ID: 258 Hypercalcemia impairs sino-atrial automaticity through Cav1.2-mediated Ca^{2+} influx

Angelo Torrente[1], Lucille Fossier[1], Matthias Baudot[1], Eleonora Torre[1], Isabelle Bidaud[1], Pietro Mesirca[1], Matteo Mangoni[1]
[1]University of Montpellier, France

Wed-085 Abstract ID: 331 Inhibition of Nav1.5 current in CHO cells by Dingji Fumai Decoction(DFD)

Bo Liang[1], Huiling Liao[1]
[1]Affiliated Hospital to Southwest Medical University, Luzhou, China

Wed-086 Abstract ID: 388 Longitudinal impact of dapagliflozin treatment on ventricular repolarization heterogeneity in patients with type 2 diabetes

Tatsuya Sato[1, 2], Takayuki Miki[1], Shinya Furukawa[3], Hirofumi Ohnishi[1, 4], Masaya Tanno[1], Tetsuji Miura[1]
[1]Renal and Metabolic Medicine, Sapporo Medical University School of Medicine, Sapporo, Japan, [2]Sapporo Medical University School of Medicine, Sapporo, Japan, [3]Ehime University Graduate School of Medicine, Ehime, Japan, [4]Sapporo Medical University School of Medicine, Sapporo, Japan

Wed-087 Abstract ID: 400 Clock changes in the type 2 diabetic sinoatrial node

Sajida Parveen[1], Regis Lamberts[1], Pete Jones[1]
[1]University of Otago, Dunedin, New Zealand

Theme 4: Signalling in Cardiac Disease & Therapy

Wed-088 Abstract ID: 229 * β-adrenoceptor stimulation upregulates cardiac expression of galectin-3 through the Mst1(Hippo) signalling pathway

Weibo Zhao[1,2], Qun Lu[1,3], Mynhan Nguyen[1], Yidan Su[1], Mark Ziemann[4], Lina Wang[1], Helen Kiriazis[1], Junichi Sadoshima[5], Houyuan Hu[2], Xiaojun Du[1,3]
[1]Baker Heart and Diabetes Institute, Melbourne, Victoria, Australia, [2]Department of Cardiology, Southwest Hospital, Third Military Medical University, Chongqing, China, [3]Health Science Center, Xi'an Jiaotong University, Xi'an, China, [4]School of Life and Environmental Sciences, Deakin University, Geelong, Australia, [5]New Jersey Medical School, Department of Cell Biology and Molecular Medicine Rutgers, New Jersey, USA

Wed-089 Abstract ID: 315 * β-adrenergic receptor transactivation of transforming growth factor β receptor signaling pathways restricts cardiac contractility

Yenan Feng[1], Han Xiao[1], Youyi Zhang[1]
[1] Peking University Third Hospital, Beijing, China

Wed-090 Abstract ID: 431 * Therapeutic effect of a novel small-molecule compound on cardiac hypertrophy via inhibition of both canonical and non-canonical Wnt pathways

Cong Lan[1], Jiahui Jiang[1], Liangpeng Li[1], Dezhong Yang[1], Xuewei Xia[1], Qiao Liao[1], Rongchuan Yue[1], Xiongwen Chen[2], Songzhu An[3], Chunyu Zeng[1], Wei Eric Wang[1]
[1]Daping Hospital, Third Military Medical University, Chongqing, China, [2]Cardiovascular Research Center, Temple University School of Medicine, Philadelphia, PA, USA, [3]Guangzhou Curegenix Co. Ltd., International Business Incubator, Guangzhou, China

Wed-091 Abstract ID: 219 * Beneficial effects of A cardiac gene therapy with phosphodiesterases Pde4b And Pde2a in a mouse model of heart failure

Aurélia Bourcier[1], Jean Piero Margaria[2], Audrey Varin[1], Alessandra Ghigo[2], AgnèS Hivonnait[1], Flavien Charpentier[1], Vincent Algalarrondo[1], GréGoire Vandecasteele[1], Emilio Hirsch[2], Rodolphe Fischmeister[1], JéRôMe Leroy[1]
[1]INSERM UMR-S 1180, Univ. Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France, [2]Molecular Biotechnology Center, Department of Molecular Biotechnology and Health Sciences, University of Torino, Torino, Italy

Wed-092 Abstract ID: 221 * A cytosolic histone deacetylase regulates cardiac diastolic function

Jennifer L. Major[1], Ying H. Lin[1,2], Maria Cavasin[1,2], Sara Wennersten[1,2], Korey Haefner[1], Kathleen C. Woulfe[1], Timothy A. McKinsey[1,2]
[1]Division of Cardiology, Department of Medicine, University of Colorado Anschutz Medical Campus, United States of America, [2]Consortium for Fibrosis Research and Translation, University of Colorado Anschutz Medical Campus, United States of America

Wed-093 Abstract ID: 273 * The protective effects of pro-atrial-natriuretic-peptide (31-67) on hypertension induced cardiac and renal adverse remodeling

Raffaele Altara[1, 2, 3], Gustavo J.J. da Silva[1, 2], Michael Frisk[1, 2], Einar S. Norden[1, 2, 4], Francesco Spelta[5], Emil K. S. Espe[1, 2], Ivar Sjaastad[1, 2], Fouad A. Zouein[6], William E. Louch[1, 2], George W. Booz[7], Alessandro Catalioti[1, 2]
[1]Oslo University Hospital and University of Oslo, Oslo, Norway, [2]University of Oslo, Oslo, Norway, [3]University of Mississippi Medical Center, Jackson, MS, USA, [4]Bjørknes University College, Oslo, Norway, [5]University of Verona, Verona, Italy, [6]American University of Beirut Medical Center, Faculty of Medicine, Riad El-Solh, Beirut-Lebanon, [7]School of Medicine, University of Mississippi Medical Center, Jackson, MS, USA

Wed-094 Abstract ID: 279 * A tale of two tissues in cardiometabolic disease: HDAC11 in adipose tissue and the myocardium

Rushita A. Bagchi[1,2], Tianjing Hu[1,2], Maria A. Cavasin[1,2], Timothy A. McKinsey[1,2]
[1]University of Colorado Anschutz Medical Campus, Aurora, CO, USA, [2]Consortium for Fibrosis Research & Translation, University of Colorado Anschutz Medical Campus, Aurora, CO, USA

Wed-095 Abstract ID: 403 * MBNL1 regulates cardiac fibrosis by stabilizing key transcripts involved in epicardial cell differentiation

Darrian Bugg[1], Ambika Gunaje[1], Kylie Beach[1], Galina Flint[2], Christina Jones[3], Jennifer Davis[1,2]
[1]Department of Pathology, [2]Department of Bioengineering, [3]Department of Pharmacology

Wed-096 Abstract ID: 613 * Ischemia/Reperfusion-Induced mitochondrial instability and arrhythmogenicity

Soroosh Solhjoo[1], Ting Liu[1], Dong Lee[1], Barbara Roman[1], Sam Das[1], Brian O'Rourke[1], Charles Steenbergen[1]
[1]Johns Hopkins University School of Medicine, Baltimore, MD, USA

Wed-097 Abstract ID: 183 * IL-6 promotes atrial autonomic remodeling associated with atrial fibrillation

Fumi Yamagami[1], Kazuko Tajiri[1], Duo Feng[1], Rujie Qin[1], Saori Yonebayashi[1], Yuta Okabe[1], Siqi Li[1], Zi Xun Yuan[1], Dongzhu Xu[1], Nobuyuki Murakoshi[1], Kazutaka Aonuma[1], Masaki Ieda[1]
[1]Faculty of Medicine, University of Tsukuba

Wed-098 Abstract ID: 402 RELM mediated inflammatory signal in right heart dysfunction

Xiaomei Yang[1,2], Xiaoxu Shen[1], Xiaojun He[1], John T. Skinner[1], Qing Lin[1], Djahida Beja[1], Chunling Fan[1], Kazuyo Yamaji-Kegan[1], Roger Johns[1], Weidong Gao[1]
[1]Johns Hopkins University School of Medicine, Baltimore, MD, USA, [2]Qilu Hospital of Shandong University, Jinan, China

Wed-099 Abstract ID: 215 Collagen receptor crosstalk in cardiac fibroblast response to injury

Harikrishnan V[1], Shivakumar K[1]
[1]Division of Cellular and Molecular Cardiology, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India

Wed-101 Abstract ID: 277 IP3 receptors regulate post-ischemic cardiac fibrosis

Gaetano Santulli[1, 2], Jun Shu[1]
[1]Albert Einstein College of Medicine, Bronx, NY, USA, [2]Albert Einstein College of Medicine, Wilf Family Cardiovascular Research Center, Bronx, NY, USA

Wed-102 Abstract ID: 286 Enhancement of endogenous EET production ameliorates heart function via increased PGC 1-mitochondrial functions in metabolic syndrome

Lu Liu[1] Jian Cao[1]
[1]Second Medical Center, Chinese PLA General Hospital, Beijing, China

Wed-103 Abstract ID: 353 Global single cell sequencing reveals extensive cell-cell crosstalk and specific regulation of macrophage inflammatory polarisation by cardiac fibroblasts following myocardial injury

Matthew Ackers-Johnson[1,2], Motakis Efthymios[1,2], Justus Stenzig[3], Rongrong Zhao[1,2], Zenia Tiang[2], Wilson Tan[2], Tuan Luu[1], Peter Li[1], Roger Foo[1,2]
[1]National University of Singapore, Singapore, [2]Genome Institute of Singapore, Singapore, [3]Universitätsklinikum Hamburg-Eppendorf, Hamburg, Germany

Wed-104 Abstract ID: 409 Ablation of miR-144 modifies cardiac cAMP signaling in response to remote ischemic preconditioning

Fangfei Wang[1], Quan He[1], Andrew Redington[1]
[1]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA

Wed-105 Abstract ID: 432 Keeping mitochondria in shape: a matter of life and death

Luca Scorrano[1]
[1]Venetian Institute of Molecular Medicine, University of Padua, Padua, Italy

Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Wed-106 Abstract ID: 262 * Novel features based on CCTA images for evaluating significant ischemic lesions on the left anterior descending branch with radiomics

Wenchao Hu[1], Di Dong[2], Min Jiang[1], Jibin Zhang[1], Yabin Wang[1], Hongyu Zhou[2], Jie Tian[2], Feng Cao[1]
[1]Chinese PLA General Hospital, Beijing, China, [2]Chinese Academy of Sciences, Beijing, China

Wed-107 Abstract ID: 280 * Catalytically active HDAC5 suppresses oxidative stress and NRF2-dependent transcription in cardiomyocytes

Tianjing Hu[1], Friederike C. Schreiter[2], Rushita A. Bagchi[1], Philip D. Tatman[3], Mark Hannink[4], Timothy A. McKinsey[1]
[1]Division of Cardiology and Consortium for Fibrosis Research & Translation, University of Colorado Anschutz Medical Campus, Aurora, CO, USA , [2]Heidelberg University, Heidelberg, Germany, [3]Medical Scientist Training Program, University of Colorado Anschutz Medical Campus, Aurora, CO, USA, [4]Bond Life Sciences Center and the Department of Biochemistry, University of Missouri, Columbia, MO, USA

Wed-108 Abstract ID: 471 * DNA methyl transferase 3A loss in human engineered heart tissue induces distinct alterations of contractility

Justus Stenzig[1,2], Alexandra Löser[1,2], Julia Krause[2,3], Arne Hansen[1,2], Grit Höppner[1,2], Roger Foo[4], Thomas Eschenhagen[1,2]
[1]University Medical Center Hamburg-Eppendorf, Hamburg, Germany, [2]DZHK (German Center for Cardiovascular Research), partner site Hamburg/Kiel/Lübeck, Hamburg, Germany, [3]University Heart Center Hamburg, Hamburg, Germany, [4]Genome Institute of Singapore, Singapore

Wed-109 Abstract ID: 263 Circulating muscle-derived miR-206 links skeletal muscle dysfunction to cardiac autonomic denervation

Valentina Prando[1], Silvia Bertoli [1], Giulia Favaro[1], Vittoria Di Mauro[2], Michele Guescini[3], Francesca Lo Verso[1], Ricardo Soares[1], Anna Di Bona[1], Paula Da Costa Martins[4], Daniele Catalucci[2], Marco Mongillo[1], Marco Sandri[1], Tania Zaglia[1]
[1]University of Padova, Padova, Italy, [2]Humanitas Research Hospital, Rozzano, Milan, Italy, [3]University of Urbino Carlo Bo', Urbino, Italy, [4]University of Maastricht, Maastricht, The Netherlands

Wed-110 Abstract ID: 266 Cardiac sympathetic innervation network shapes the myocardium by locally controlling cardiomyocyte size through the cellular proteolytic machinery

Nicola Pianca[1], Anna Di Bona[1], Erica Lazzeri[2], Irene Costantini[2], Mauro Franzoso[1], Valentina Prando[1], Annalisa Angelini[1], Cristina Basso[1], Michael Rubart[3], Leonardo Sacconi[2], Tania Zaglia[1], Marco Mongillo[1]
[1]University of Padova, Padova, Italy, [2]National Research Council, LENS, Firenze, Italy, [3]Indiana University, IN, USA

Wed-111 Abstract ID: 274 Long noncoding RNA H19 regulates cardiac function by epitranscriptomic regulation

Divya Jha[1], Prabhu Mathiyalagan[1], Marta Adamiak[1], Yassine Sassi[1], Delaine Ceholski[1], Francesca Stillitano[1], Elena Chepurko[1], Joshua Mayourian[1], Erik Kohlbrenner[1], Roger J Hajjar[1], Susmita Sahoo[1]
[1]CVRC, Ichan School of Medicine At Mount Sinai, New York, US

Wed-112 Abstract ID: 278 Human CD34$^+$ stem cell-derived exosomes mediate their therapeutic potential by modulating epitranscriptome

Divya Jha[1], Prabhu Mathiyalagan[1], Yaxuan Liang[1], Douglas W. Losordo[1], Roger J. Hajjar[1], Susmita Sahoo[1]
[1]CVRC, Ichan School of Medicine At Mount Sinai, New York, US

Wed-114 Abstract ID: 398 Altered cardiac protein turnover behavior and O-PTM signatures of cellular protein degradation machineries in oxidative stress

Dominic Ng[1], Bilal Mirza[1], Howard Choi[1], Jennifer Polson[1], Yibin Wang[2], John R. Yates, III[3], Peipei Ping[4], Ding Wang[1]
[1]Department of Physiology, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA, [2]Department of Anesthesiology, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA, [3]Department of Molecular Medicine, Department of Neuroscience, The Scripps Research Institute, [4]Departments of Physiology, Medicine/Cardiology, & Bioinformatics IDP, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Wed-115 Abstract ID: 412 Parental renovascular hypertension-induced autonomic dysfunction in offspring is improved by prenatal or postnatal treatment with hydrogen sulfide

Xiaohong Feng[2], Hongmei Xue[3], Sheng Jin[4], Xiaocui Duan[5], Qi Guo[1], Yuming Wu[6]
[1]Hebei Medical University, Shijiazhuang, China

Wed-116 Abstract ID: 652 MCU phosphorylation regulates cardiac mitochondrial calcium uptake

Jin O-Uchi[1], Bong Sook Jhun[1], Ulrike Mende[2], Shey-Shing Sheu[3]
[1]University of Minnesota, Minneapolis, MN, USA, [2]Rhode Island Hospital and Brown University, Providence, RI, USA, [3]Thomas Jefferson University, Philadelphia, PA, USA

Theme 6: Regenerative Medicine for Heart Disease

Wed-117 Abstract ID: 300 * Fibroblast subtype switching dominates microenvironmental control over

cardiac maturation

Yin Wang[1], Li Wang[1]
[1]State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

Wed-118 Abstract ID: 422 * Engineering human ventricular heart tissues based on macroporous iron oxide scaffolds

Hui Yang[1], Weiyi Zhong[2], Lai Wei[1], Wenshuo Wang[1]
[1]Fudan University, Shanghai, China, [2]Department of Physiology and Pathophysiology School of Basic Medical Sciences, Shanghai, China

Wed-119 Abstract ID: 427 * Loss of long non-coding RNA ANP promotes cardiomyocyte proliferation and heart regeneration

Wenbin Fu[1]
[1]Daping Hospital, Third Military Medical University, Chongqing, China

Wed-120 Abstract ID: 534 * Homotypic targeting delivery of siRNA for the precise lung cancer therapy

Deng Sai[1], Zhang Lingmin[1], Fu Xiaomei[1], Lin Chaojin[1], Zhang Yanfen[1], Qin Aiping[1]
[1]Key Laboratory of Molecular Target & Clinical Pharmacology and the State Key Laboratory of Respiratory Disease, School of Pharmaceutical Sciences, Guangzhou, China, [2]the Fifth Affiliated Hospital of Guangzhou Medical University, Guangzhou, China, [3]Guangzhou Medical University, Guangzhou, China

Wed-121 Abstract ID: 209 * Time-dependent maturation enhances caveolar-microdomain development and compartmentation of β2AR-cAMP signalling in iPSC-CMs

Alveera Hasan[1], Aisha Nawaz[1], Xizhe Sun[1], Ivan Diakonov[1], Thusharika Kodagoda[1], Sian Harding[1], Julia Gorelik[1]
[1]National Heart and Lung Institute, Imperial College London, London, UK

Wed-122 Abstract ID: 224 * The impact of glucocorticoids on Neuregulin-1/ERBB2 signalling in cardiomyocyte proliferation and heart regeneration

Nicola Pianca[1], Francesca Pontis[1], Alla Aharonov[2], Chiara Bongiovanni[1], Martina Mazzeschi[3,4], Mattia Lauriola[3,4], Eldad Tzahor[2], Gabriele D'Uva[1]
[1]Scientific and Technological Pole, MultiMedica IRCCS, Milan, Italy, [2]Weizmann Institute of Science, Rehovot, Israel, [3]Department of Experimental, Diagnostic and Specialty Medicine, University of Bologna, Bologna, Italy, [4]Center for Applied Biomedical Research (CRBA) S. Orsola-Malpighi University Hospital, University of Bologna, Bologna, Italy

Wed-123 Abstract ID: 316 * BNC1: a master regulator of human epicardial heterogeneity and function

Sophie McManus[1], Laure Gambardella[1], Victoria Moignard[1], Derya Sebukhan[2], Agathe Delaune[2], William Bernard[1], Vincent Knight-Schrijver[1,2], Maura Morrison[1], Paul Riley[3], Berthold Göttgens[1], Nicholas Le Novère[2], Sanjay Sinha[1]
[1]Cambridge Stem Cell Institute, University of Cambridge, [2]Babraham Institute, Cambridge, [3]Department of Physiology, Anatomy and Genetics, University of Oxford, Oxford, UK

Wed-124 Abstract ID: 362 * Endothelial nitric oxide synthase plays a protective role in endothelial cells and cardiomyocytes against myocardial infarction

Carmine Gentile[1, 2], Scott Kesteven[2], Jianxin Wu[2], Michael J. Davies[5], Christina Bursill[4], Michael Feneley[2], Gemma Figtree[1]
[1]Sydney Medical School, The University of Sydney, Sydney, Australia, [2]Harvard Medical School, [3]Victor Chang Cardiac Research Institute, Sydney, Australia, [4]The University of Adelaide, Adelaide, Australia, [5]The University of Copenhagen, Copenhagen, Denmark

Wed-125 Abstract ID: 292 Surface biofunctionalization of the decellularized porcine aortic valve with VEGF-loaded nanoparticles for accelerating endothelialization

Zhigang Zhu[1]
[1]Peking University First Hospital, Beijing, China

Wed-126 Abstract ID: 207 Micro-RNA therapy stimulates endogenous cardiac regeneration after myocardial infarction in large animals

Khatia Gabisonia[1, 3], Giulia Prosdocimo[2], Giovanni Aquaro[3], Lucia Carlucci[1], Lorena Zentilin[2,7], Ilaria Secco[2,7], Luca Braga[2,7], Nikoloz Gorgodze[1], Fabio Bernini[1], Silvia Burchielli[3], Chiara Collesi[2,4], Gianfranco Sinagra[4], Rossana Bussani[4], Fabio Recchia[1,6], Mauro Giacca[2,4,7]
[1]Institute of Life Sciences, Scuola Superiore Sant'Anna, Pisa, Italy, [2]Molecular Medicine Laboratory, International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy, [3]Fondazione Toscana Gabriele Monasterio, Pisa, Italy, [4]Department of Medical, Surgical and Health Sciences, University of Trieste, Trieste, Italy, [5]Cardiovascular Biology Laboratory, International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy, [6]Cardiovascular Research Center, Lewis Katz School

of Medicine at Temple University, Philadelphia, PA, USA, [7]School of Cardiovascular Medicine & Sciences, King's College London, London, UK

Wed-127 Abstract ID: 210 Effects of inflammatory microenvironment on senescence of bone marrow mesenchymal stem cells and its mechanisms

Xiaolin Xie[1], Yinping LI[1]
[1]Wuhan University, Wuhan, China

Wed-130 Abstract ID: 336 Direct stimulation of cardiac regenerative plasticity by paracrine factors and systemic cues

Nicola Pianca[1], Francesca Pontis[1], Chiara Bongiovanni[2], Alla Aharonov[3], Martina Mazzeschi[4,5], Valerio Gelfo[4,5], Mattia Lauriola[4,5], Eldad Tzahor[3], Gabriele D'Uva[1,2]
[1]Scientific and Technological Pole, IRCCS MultiMedica, Milan, Italy, [2]Fondazione MultiMedica Onlus, Milan, Italy, [3]Weizmann Institute of Science, Rehovot, Israel, [4]Department of Experimental, Diagnostic and Specialty Medicine, University of Bologna, Bologna, Italy;, [5]Center for Applied Biomedical Research (CRBA) S. Orsola-Malpighi University Hospital, University of Bologna, Bologna, Italy

Wed-131 Abstract ID: 341 Critical regulations of cardiac niche on stem cell fate

Xiyong Yu[1]
[1]Guangzhou Medical University, Guangzhou, China

Wed-132 Abstract ID: 342 Acute inflammation contributes to regeneration in the neonatal porcine heart

Zhonghao Tao[1], Szejie Loo[1], Liping Su[1], Shihua Tan[1], Desiree Abdurrachim[2], Janise Lalic[2], Teck Hock Lee[2], Rusan Tan[1], Stuart Cook[1], Lei Ye[1]
[1]National Heart Center Singapore, Singapore, [2]Singapore Bioimaging Consortium, Singapore

Theme 7: Cardiac Metabolism

Wed-133 Abstract ID: 311 * The intracellular and transmembrane part of Oxidized low-density lipoprotein receptor 1 is not indispensable for receptor expressing to cell membrane

Zhen Ma[1], Yunzeng Zou[1]
[1]Institutes of Biomedical Sciences, Shanghai, China

Wed-134 Abstract ID: 365 * Early aerobic exercise improves cardiac function and glucose metabolism in heart failure mice by upregulating GLUT1 through HDAC4 phosphorylation

Hao Jiang[1], Xiaolei Sun[1], Daile Jia[1], Wenlong Yang[1], Beijian Zhang[1], Zhen Dong[1], Jian Wu[1], Kai Hu[1], Aijun Sun[1,2], Junbo Ge[1,2]
[1]Zhongshan Hospital, Fudan University. Shanghai Institute of Cardiovascular Diseases, Shanghai, China, [2]Institutes of Biomedical Sciences, Fudan University, Shanghai, China

Wed-135 Abstract ID: 632 * Intrauterine exposure to angiotensin II type 1 receptor autoantibody induces left ventricular hypertrophy and metabolic disorders in offspring mice

Lina Bai[1], Suli Zhang[1], Mingming Yue[1], Yan Sun[1], Meili Wang[1], Ye Wu[1], Huirong Liu[1]
[1]School of Basic Medical Sciences, Capital Medical University, Beijing, China

Wed-136 Abstract ID: 227 * Deletion of cardiomyocyte tetrahydrobiopterin leads to dilated cardiomyopathy

Sandy Chu[1], Gillian Douglas[1], Jenny Bendall[1], Surawee Chuaiphichai [1], Ricardo Carnicer[1], Ashley Hale[1], Mark Crabtree[1], Keith Channon[1]
[1]BHF Centre of Research Excellence, Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, Roosevelt Drive, Oxford, UK

Wed-137 Abstract ID: 237 * Glycogen autophagy is mediated by GABARAPL1 in cardiomyocytes

Parisa Koutsifeli[1,2], Upasna Varma[2], Lorna J. Daniels[1], Eleia Chan[2], Marco Annandale[1], Lea M.D. Delbridge[2,1], Kimberley M. Mellor[1,2]
[1]University of Auckland, Auckland, New Zealand, [2]University of Melbourne, Melbourne, Australia

Wed-138 Abstract ID: 303 * Anaplerosis from asparagine increases ketone oxidation in isolated rat hearts in the absence of pyruvate precursors

Azrul Abdul Kadir[1], CherRin Chong[1], Kieran Clarke[1], Rhys Evans[1]
[1]University of Oxford, Oxford, UK

Wed-139 Abstract ID: 363 * Cardiomyocyte fructose exposure in vitro impacts on glycolytic metabolic flux

Lorna Daniels[1], Marco Annandale[1], Parisa Koutsifeli[1,2], Lea Delbridge[1,2], Kim Mellor[1,2,3]
[1]University of Auckland, Auckland, New Zealand, [2]University of Melbourne, Melbourne, Australia, [3]Auckland Bioengineering Institute, University of Auckland, Auckland, New Zealand

Wed-140 Abstract ID: 200 * Glucocorticoids promote mitochondrial fatty acid oxidation in fetal cardiomyocytes

Jessica R Ivy[1], Roderick N Carter[1], Jin-Feng Zhao[2], Emma J Agnew[1], Charlotte B Buckley[1], Ian G Ganley[2], Nicholas M Morton[1], Karen E Chapman[1]
[1]Centre for Cardiovascular Science, The University of Edinburgh, Edinburgh, UK, [2]School of Life Sciences, University of Dundee, Dundee, Scotland, UK

Wed-142 Abstract ID: 319 Dietary ketone ester lowers cardiac mRNA levels of uncoupling protein 3 in Zucker diabetic fatty rat

CherRin Chong[1], Rita Alonaizan[1], Kerstin Timm[1], Azrul Kadir[1], Rhys Evans[1], Kieran Clarke [1]
[1]Anatomy & Genetics, University of Oxford, Oxford, UK

Wed-144 Abstract ID: 348 Therapeutic effect of targeting branched-chain amino acid catabolic flux in pressure-overload induced heart failure

Jiayu GaoYu[1]
[1]Shanghai Jiao Tong University School of Medicine, Shanghai, China

Wed-145 Abstract ID: 358 Troponin T mutation causes cellular energy deprivation in human iPSC-derived cardiomyocyte model of hypertrophic cardiomyopathy

Lili Wang[1], Christy Moore[1], Joshua Fessel[1], Bjorn Knollmann[1]
[1]Vanderbilt University Medical Center, Nashville, TN, USA

Wed-146 Abstract ID: 396 Changes in the stoichiometry of mitochondrial calcium uniporter contribute to tolerance of cardiac ischemia-reperfusion injury in hypothyroidism

Hector Chapoy-Villanueva[1], Gerardo García-Rivas[1]
[1]Medicina Cardiovascular, Escuela de Medicina, Tecnologico de Monterrey, Mexico

Theme 8: Vascular Dysfunction, Inflammation and Remodeling

Wed-147 Abstract ID: 329 * Nucleolin involved in atherosclerosis by regulating phenotypic switching of vascular smooth muscle cells

Hui Sun[1,2], Bimei Jiang[1], Pengfei Liang[3], Yuting Tang[1], Cheng chen[1], Xiaofang Lin[1], Xianzhong Xiao[1]
[1]Sepsis Translational Medicine Key Lab of Hunan Province, Xiangya School of Medicine, Central South University, Changsha, China, [2]Institute of Cardiovascular Disease and Key Lab for Arteriosclerology of Hunan Province, University of South China, Hengyang, China, [3]Xiangya Hospital, Central South University, Changsha, China

Wed-148 Abstract ID: 343 * Study on autophagy increased and cholesterol efflux from macrophages induced by sonodynamic therapy in vitro

Jiayuan Kou[1], Yinghong Zheng[1], Zhongni Liu[1], Ziyu Gao[1], Lin Cong[1], Zitong Wang[1], Ting Ye[1]
[1]Harbin Medical University, Harbin, China

Wed-149 Abstract ID: 390 * Vascular adhesion protein-1 deficiency induces the synthetic vascular smooth muscle cells and enhances the stability of atherosclerotic lesions

Panpan Niu[1], Ya Peng[2], Yunwen Tao[1], Miao Zhang[1], Mengya Yang[1], Lili Zhang[1], Jun Wang[3], Ying Zhao[1]
[1]School of Biology & Basic Medical Sciences, Soochow University, Suzhou, China, [2]Modern Medical Research Center, Third Affiliated Hospital of Soochow University, Changzhou, China, [3]Institutes of Biology & Medical Sciences, Soochow University, Suzhou, China

Wed-150 Abstract ID: 404 * Inhibition of endoplasmic reticulum stress by intermedin1-53 attenuates angiotensin II–induced abdominal aortic aneurysm in ApoE -/- Mice

Weiwei Lu[1], Jinsheng Zhang[1], Ya Rong Zhang[1], Chao Shu Tang
[1]Key Laboratory of Molecular Cardiovascular Science, Beijing, China

Wed-151 Abstract ID: 406 * Low shear stress induced endothelial dysfunction via the feed forward loop of endothelial mTORC2/PKC and autophgic flux inhibition

Junxia Zhang[1]
[1]Nanjing First Hospital, Nanjing, China

Wed-152 Abstract ID: 411 * Low shear stress induces endothelial reactive oxygen species via the AT1R/eNOS/NO pathway

Yuelin Chao[1]
[1]Nanjing First Hospital, Nanjing, China

Wed-153 Abstract ID: 413 * Angiotensin II downregulates vascular endothelial cell hydrogen sulfide production by enhancing cystathionine-γ-lyase degradation through ROS-activated ubiquitin

pathway

Lu Bai[1], Yaqian Huang[1], Yongfen Qi[2], Chaoshu Tang[3], Junbao Du[1,2], Hongfang Jin[1]
[1]Peking University First Hospital, Beijing, China, [2]Key Laboratory of Molecular Cardiology, Ministry of Education, Beijing, China, [3]Peking University Health Science Center, Beijing, China

Wed-154 Abstract ID: 416 * L-arginine alleviates doxorubicin-induced endothelium-dependent dysfunction by promoting nitric oxide generation and inhibiting apoptosis

Xiaolei Yang[1], Jie Gu[1], Yunlong Xia[1], Yang Liu[1]
[1]First Affiliated Hospital of Dalian Medical University, Dalian, China

Wed-155 Abstract ID: 417 * Clinical profile and risk factors of childhood takayasu's arteritis with an initial presentation of heart failure: in comparison with patients out of heart failure

Luyun Fan[1], Huimin Zhang[1], Jun Cai[1]
[1]Fuwai Hospital, CAMS&PUMC, Beijing, China

Wed-156 Abstract ID: 434 * Peroxisome proliferator-activated receptor-γ coactivator-1α inhibits vascular calcification through sirtuin 3–mediated reduction of mitochondrial oxidative stress

Han Feng[1], Jinyu Wang[1], Bo Yu[2], Xin Cong[1], Weiguang Zhang[3], Li Li[1], Limei Liu[1], Yun Zhou[4], Chenglin Zhang[1], Peiliang Gu[3], Liling Wu[1]
[1]Peking University School of Basic Medical Sciences, Beijing, China, [2]University of California, Los Angeles, CA, USA, [3]Peking University School of Basic Medical Sciences, Beijing, China, [4]China-Japan Friendship Hospital, Beijing, China

Wed-157 Abstract ID: 435 * Inhibition of phosphodiesterase-4 protects against myocardial ischemia-reperfusion injury via improving the microcirculation

Qing Wan[1], Liyuan Zhu[2], Miao Wang[1]
[1]State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, National Center For Cardiovascular diseases, Chinese Academy of Medical Sciences And Peking Union Medical College, Beijing, China

Wed-158 Abstract ID: 446 * Sirtuin 3 regulates the endothelial-to-mesenchymal transition

Jing Gao[1], Tong Wei[1], Chenglin Huang[1], Weili Shen[1]
[1]Shanghai Institute of Hypertension, Shanghai, China

Wed-159 Abstract ID: 447 * SIRT3-deacetylated pyruvate dehydrogenase kinase 1a regulates hypertensive perivascular adipose tissue remodeling

Tong Wei[1], Jing Gao[1], Chenglin Huang[1], Weili Shen[1]
[1]Shanghai Institute of Hypertension, Shanghai, China

Wed-160 Abstract ID: 448 * DP1 activation supresses vascular remodeling through regulation of VSMC autophagy

Zhang Jian[1]
[1]School of Basic Medical Sciences, Tianjin Medical University, Tianjin, China

Wed-161 Abstract ID: 552 * Mechanism of α1-adrenergic receptor-induced increased contraction of rat mesenteric artery in aging and hypertension

Yuanqun Zhou[1], Jun Cheng[1], Jing Wen[1], Pengyun Li[1], Na Wang[1], Xiaorong Zeng[1], Yan Yang[1]
[1]Southwest Medical University, Wuhan, China

Wed-162 Abstract ID: 420 * Macrophage autophagy regulates mitochondria-mediated apoptosis and inhibits necrotic core formation in vulnerable plaques

Qingqing Xiao[1], Qin Shao[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Wed-163 Abstract ID: 307 * Cardiac microvascular endothelial cells improve cardiomyocyte contractile function: The role of pro-inflammatory stimulation and Empagliflozin treatment

Rio Juni[1], Diederik Kuster[1], Max Goebel[1], Michiel Helmes[2], René Musters[1], Pieter Koolwijk[1], Jolanda van der Velden[1], Walter Paulus[1], Victor van Hinsbergh[1]
[1]Amsterdam University Medical Center, Amsterdam Cardiovascular Science, Amsterdam, The Netherlands, [2]CytoCypher B.V., Wageningen, The Netherlands

Wed-164 Abstract ID: 378 * The role of estrone in endothelial progenitor cell proliferation and function

Andrew Greene[1]
[1]Medical College of Wisconsin, Milwaukee, WI, USA

Wed-165 Abstract ID: 370 Galectin-3 inhibitors LacNAc and LacdiNAc do not affect pulmonary hypertension and right ventricle remodeling induced by chronic hypoxia

Michaela Cyprová[1], Markéta Hlaváčková[1], Pavla Bojarová[2], Kristýna Holzerová[1], Daniel Benák[1], Jan

Neckář[1], Vladimír Křen[2], František Kolář[1]
[1]Institute of Physiology CAS, Prague, Czech Republic, [2]Institute of Microbiology CAS, Prague, Czech Republic

Wed-166 Abstract ID: 421 Atorvastatin ameliorates LPS-induced inflammatory response by autophagy via AKT/mTOR signaling pathway

Qingqing Xiao[1], Qin Shao[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Wed-167 Abstract ID: 302 Deubiquitinase BRCC36 inhibits hypoxia-induced pulmonary arterial hypertension and remodeling

Hui Shen[1], Deshan Yao[1], Lina Zhang[1], Zhengang Zhang[1], Kaizheng Gong[1]
[1]Yangzhou University, Yangzhou, China

Wed-168 Abstract ID: 338 Antagonizing EP3 uncovers the dilator action of native prostacyclin in atherosclerotic aorta of TP deficient mice

Bin Liu[1], Yingbi Zhou[1]
[1]Shantou University Medical College, Shantou, China

Wed-169 Abstract ID: 344 Endothelial cell Nox4 is an important regulator of cardiac ROS signalling and adverse remodelling in experimental diabetes

Eleanor Gill[1], Kevin Edgar[1], Ciaran Hargey[1], Arya Moez[1], Adam Wilson[1], Ellen Patterson[1], Xin Ni June Wong[1], Tim Curtis[1], David Grieve[1]
[1]Queen's University Belfast, Belfast, Ulster, UK

Wed-170 Abstract ID: 347 Remodeling of arterial CFTR chloride channels in high-fructose and salt-diet - induced hypertension

Lingyu Linda Ye[2], Dayue Darrel Duan[2]
[1]Capital Medical University, Beijing, China, [2]Center for Phenomics of Traditional Chinese Medicine, Beijing, China

Wed-171 Abstract ID: 351 Disruption of RacGAP ArhGAP15 leads to aortic valve disease in mice

Mingchuan Li[1], James Cimino[1], Paola Cappello[2], Luca Rossi[1], Valentina Sala[1,3], Fulvio Morello[3], Emilio Hirsch[1], Alessandra Ghigo[1]
[1]Molecular Biotechnology Center, University of Torino, Torino, Italy, [2]Azienda Ospedaliera Universitaria Città della Salute e della Scienza di,Torino, Italy, [3]A.O.U. Città della Salute e della Scienza di Torino, S.C. Emergency Medicine, Torino, Italy

Wed-172 Abstract ID: 381 Deregulation of microRNA-92a mediated endothelial to mesenchymal transition suppresses vein graft neointimal hyperplasia

Song Li[1], Changming Zhong[1], Xiaowen Wang[1,2], Bojun Cao[3], Cheng Zhang[1,4], Xiangjun He[2], Chun Huang[1], Xiaoyong Xiang[1]
[1]The First Affiliated Hospital of Chongqing Medical University, Chongqing, China, [2]The Chinese University of Hong Kong, Hong Kong, China, [3]Shanghai Sixth People's Hospital, Shanghai Jiao Tong University, Shanghai, China, [4]William Harvey Research Institute, Queen Mary University of London, London, UK

Wed-173 Abstract ID: 385 Progression of cardiac and vascular dysfunction in a mice model of Duchenne Muscular Dystrophy

Lujza Szabo[1], Bruno Podesser[1], Ouafa Hamza[1], Janine Ebner[1], Karlheinz Hilber[1], Attila Kiss[1]
[1] Medical University of Vienna, Austria

Wed-174 Abstract ID: 395 Oxidative stress induced by palmitic acid modulates KCa2.3 channels in vascular endothelium

Yan Wang[1], Xiaojing Wang[1], Limei Zhao[1], Zhengda Pang[1], Gang She[1], Xiaojun Du[1], Xiuling Deng[1]
[1]Xi'an Jiaotong University Health Science Center, Xi'an, China

Wed-175 Abstract ID: 401 Berberine protects human coronary artery endothelial cells from kawasaki disease through inhibition of endoplasmic reticulum stress

Mingguo Xu[1]
[1]Shenzhen Children's Hospital, Shenzhen, China

Wed-176 Abstract ID: 415 Generation of patient-specific induced pluripotent stem cells from aortic dissection tissue

Sixian Wang[1], Peifeng Jin[1], Xu Jiang[1], Yingyi Quan[1], Tianci Zhang[1], Xiaoqiong Shan[1], Xiaofang Fan[1], Yongsheng Gong[1], Yongyu Wang[1]
[1]Wenzhou Medical University, Wenzhou, China

Wed-177 Abstract ID: 459 MiRNA-122 is a negative regulator of apelin-mediated cellular protective roles

in rat aortic adventitial fibroblasts

Jiuchang Zhong[1], Juanjuan Song[1], Chen Fang[1], Lei Zhao[1], Kun Zuo[1], Mei Yang[1], Yuwen Cheng[2], Zheng Ma[1], Xiaoyan Liu[1], Jing Li[1], Yingle Xu[2], Xinchun Yang[1]
[1]Beijing Chaoyang Hospital Affiliated to Capital Medical University, Beijing, China, [2]Ruijin Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China

Wed-178 Abstract ID: 462 Preservation of glucagon-like peptide-1 level with liraglutide and linagilptin protects against angiotensin II-induced renal fibrosis via inhibiting AT1 receptor mediated signaling pathways

Feng Bai[1], Li-Hui Zhang[2], Wei-Wei Zhang[2], Joshua Robert Eskew[2], Ning-Ping Wang[2], Erskine A. James[3], Zhi-Qing Zhao[1,2]
[1]The First Affiliated Hospital of Shanxi Medical University, Taiyuan, China, [2]Mercer University School Medicine, Savannah, GA, USA, [3]Navicent Health, Macon, GA, USA

Wed-179 Abstract ID: 480 Effect of β-estrogen on BKCa in mesenteric artery smooth muscle cells of women

Jun Cheng[1], Xiongrong Zeng[1], Xiaoqiu Tan[1], Pengyun Li[1], Jing Wen[1], Yan Yang[1]
[1]Institute of Cardiovascular Research, Southwest Medical University, Luzhou, China

Wed-180 Abstract ID: 483 Role of mir-140-5p in myofibroblast differentiation of cardiac fibroblasts

Sanskriti Khanna[2], Nilambra Dogra[3], Satish Rout[4], Bishan Das Radotra[5], Madhu Khullar[6], Uma Nahar Saikia[1]
[1]PGIMER, Chandigarh, India

Wed-181 Abstract ID: 494 Steroidogenic acute regulatory protein/aldosterone synthase participates in signaling of angiotensin II/aldosterone-induced aortic remodeling and hypertension

Lina Zheng[1], Ronghua Zheng[2], Feng Bai[2], Ningping Wang[3], Katelyn Sturdivant[3], Himangshu Bose[3]
[1]Shanxi Provincial People's Hospital, Taiyuan, China, [2]Shanxi Medical University, Taiyuan, Shanxi, China, [3]Mercer University School of Medicine, Savannah, GA, USA

Wed-182 Abstract ID: 211 IL-18 aggravated inflammation and diastolic dysfunction of myocardial tissue in mice with viral myocarditis

Chen Chen[1]
[1]Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Wed-183 Abstract ID: 247 Macrophage major vault protein suppresses atherogenesis by inhibiting NF-κB signaling mediated inflammation

Jingjing Ben[1], Bin Jiang[1], Qingling Liu[1], Qi Chen[1]
[1]Nanjing Medical University, Nanjing, China

Poster Session 3

Thursday, June 6, 13:00-14:30

Theme 1: New Mechanisms of Cardioprotection & Injury

Thur-001 Abstract ID: 523 * Sanguinarine upregulated miR-210 expression level by stabilizing G-quadruplex to protect against myocardial ischaemia/reperfusion injury

Xiuxiu Zhang[1], Min Zhu[1], Shiqin Zhang[1], Lulu Zhang[2], Fangyuan Li[2], Jiang Zhou[2], Ming Xu[1,3]
[1]Peking University Third Hospital. Beijing, China, [2]College of Chemistry and Molecular Engineering, Peking University, Beijing, China, [3]School of Pharmaceutical Sciences, Peking University, Beijing, China

Thur-002 Abstract ID: 543 * Inhibition calpian activity protects against mitochondrial fragmentation in CVB3-induced acute myocarditis

Hui Shi[1], Xiaoxiao Liu[1], Yong Yu[1], Qi Guo[1], Ruizhen Chen[1]
[1]Fudan University, Shanghai, China

Thur-003 Abstract ID: 545 * Rab9-dependent autophagy mediates the secretion of macrophage migration inhibition factor from cardiomyocytes upon serum-starvation

Jimin Wu[1,2,3,4], Xiangning Deng[1,2,3,4], Juan Gao[1,2,3,4], Wei Gao[1,2,3,4], Han Xiao[1,2,3,4], Xinyu Wang[1,2,3,4], Youyi Zhang[1,2,3,4]
[1]Peking University Third Hospital, Beijing, China, [2]Key Laboratory of Cardiovascular Molecular Biology and Regulatory Peptides, Beijing, China, [3]Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing, China, [4]Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing, China

Thur-004 Abstract ID: 565 * Homo-oxidized HSPB1 protects cardiomyocytes against oxidative stress via targeting Keap1/Nrf-2 signaling pathway

Xiehong Liu[2,4], Yanjuan Liu[1,3], Yu jiang[2,4], Lianhong zou[2,4], Ke Liu[1,3], Meidong liu[1,3], Jiang zou[1,3], Sipin tan[1,3], Kangkai Wang[1,3], Fang Chen[2,4], Huali Zhang[1,3]
[1]Xiangya School of Medicine, Central South University, China, [2]Hunan Provincial People's Hospital, Changsha, China, [3]Sepsis Translational Medicine Key Lab of Hunan Province, Central South University, China, [4]Hunan Provincial Key Laboratory of Emergency and Critical Care Metabonomics, Changsha, China

Thur-005 Abstract ID: 587 * Galectin-3 mediates the cardiac injury induced by β- adrenergic receptor activation

Guomin Hu[1,2,3,4], Youyi Zhang[1,2,3,4], Han Xiao[1,2,3,4]
[1]Peking University Third Hospital, Beijing China [2]NHC Key Laboratory of Cardiovascular Molecular Biology and Regulatory Peptides, Beijing China, [3]Key Laboratory of Molecular Cardiovascular Sciences Ministry of Education, Beijing China, [4]Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing China

Thur-006 Abstract ID: 591 * Mitochondrial uncoupling protein 3 protects hearts against I/R injury via regulating mitophagy

Shenyan Liu[1], Shanshan Gu[1], Yajun Wang[1], Huangtian Yang[1]
[1]Laboratory of Molecular Cardiology, CAS Key Laboratory of Tissue Microenvironment and Tumor, Shanghai Institute of Nutrition and Health, SIBS, CAS, Shanghai, China

Thur-007 Abstract ID: 592 * Circular RNA 3792 is a novel circular RNA involved in Myocardial Ischemia/Reperfusion

Jiliang Tan[1], Jie Min[2], Shanshan Gu[1], Jinxi Wang[1], Zhinong Wang[2], Huangtian Yang[1]
[1]CAS Key Laboratory of Tissue Microenvironment and Tumor, Laboratory of Molecular Cardiology, Shanghai Institute of Nutrition and Health, SIBS, CAS, Shanghai, China, [2]Changzheng Hospital, Second Military Medical University, Shanghai, China

Thur-008 Abstract ID: 596 * MicroRNA-124 regulates cardiomyocyte apoptosis and myocardial infarction through targeting Dhcr24

Fei Han[1], Qishan Chen[1], Ancheng Zheng[1], Kai Chen[1], Shasha Sun[1], Luijun Jiang[1], Xiaolei Xu[1], Li Zhang[1]
[1]The First Affiliated Hospital of Zhejiang University, Hangzhou, China

Thur-009 Abstract ID: 622 * Heat shock factor 1-mediated transcription activation of Omi/HtrA2 induces myocardial mitochondrial apoptosis in the aging heart

Dan Liu[1], Linguo Wu[2], Ye Wu[3,4], Jing Li[5], Huirong Liu[3,4]

[1]Capital Medical University, Beijing, China, [2]Beijing LuHe Hospital of Capital Medical University, Beijing, China, [3]School of Basic Medical Sciences, Capital Medical University, Beijing, China, [4]Beijing Key Laboratory of Metabolic Disturbance Related Cardiovascular Disease, Beijing, China, [5]XuanWu Hospital Capital Medical University, Beijing , China

Thur-010 Abstract ID: 624 * Targeting glycogen synthase kinase-3β inhibition alleviates acute myocardial infarction through reduction of NLRP3 inflammasome activation

Shuhui Wang[1], Lina Xu[1], Cheng Chang[1], Yu Yao[2], Xueling Su[1], Xuexiang Cha[1], Sumra Komal[1], Peng Wang[3], Xinshou Ouyang[4], Lirong ZHANG[1], Shengna Han[1]
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Thur-011 Abstract ID: 625 * DBC-1 contributes to the cardiomyocyte apoptosis via increasing TNF-α-induced activation of p38-caspase8 pathways after myocardium ischemia reperfusion

Rulin Zhuang[1,2], Jinjun Tie[1,2], Qingshu Meng[2,3], Zhongmin Liu[1,2,3], Xiaohui Zhou[2,3], Huimin Fan[1,2,3,4]
[1]Department of Cardiovascular Surgery, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China, [2]Research Center for Translational Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China, [3]Shanghai Heart Failure Research Center, Shanghai, China, [4]Department of heart failure, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China

Thur-012 Abstract ID: 634 * A viscoelastic adhesive epicardial patch for treating myocardial infarction

Xiao Lin[2], Yue Liu[3], Aobing Bai[1], Huanhuan Cai[1], Yanjie Bai[2], Huilin Yang[2], Xinhong Wang[1], Lei Yang[2], Ning Sun[1], Huajian Gao[3]
[1]School of Basic Medical Sciences, Fudan University, Shanghai, China, [2]Soochow University, Suzhou, China, [3]School of Engineering, Brown University, Providence, RI, USA

Thur-013 Abstract ID: 645 * The intragenic G-quadruplex in controlling miR-24-1 expression and cardiac function

Ming Xu, Xianjuan Lin, Juan Gao, Min Zhu
[1]Peking University Third Hospital, Peking, China

Thur-014 Abstract ID: 99 * Inhibition of p16INK4a protects against myocardial ischemia/reperfusion injury

Qiulian Zhou[1], Yihua Bei[1], Xiangmin Meng[1], Junjie Xiao[1]
[1]Shanghai University, Shanghai, China

Thur-015 Abstract ID: 657 * Effects of inhibitors targeting DCN1-UBC12interaction on myocardial fibrosis and its mechanism

Bingfei Wei[1], Hui Qiao[1], Qi An[1], Haomiao Jiao[1]
[1]Zhengzhou University Pharmaceutical Research Institute, Zhengzhou, China

Thur-016 Abstract ID: 662 * Baicalin aggravates isoproterenol-induced myocardial fibrosis by increasing TGFβ1 levels

Xiuying Chen[1], Xiangkun Xu[2], Yuchen Zhang[3]
[1]School of Pharmaceutical Science, Zhengzhou University, Zhengzhou, China

Thur-017 Abstract ID: 663 * Growth differentiation factor 11 is essential to maintain cardiac function under pressure overload

Jinyun Zhu[1,2], Yun Zhao[1,2], Ning Zhang[1,2], Yingchao Wang[1,2], Qi Liu[1,2], Hong Yu[1,2]
[1]Department of Cardiology, Second Affiliated Hospital, College of Medicine, Zhejiang University, Hangzhou, China, [2]Cardiovascular Key Laboratory of Zhejiang Province, Hangzhou, China

Thur-018 Abstract ID: 665 * Effect of hypoxic stress on left ventricular function in rats by pressure-volume catheter system

Zhouyang Yuan[1], Yu Zhang[1], Qiaorong Ji[1], Jie Liu[1], Chengzhu Cao[1], Qianqian Ma[1], Wei Zhang[1,2]
[1]Medical College of Qinghai University, Xining, Qinghai,China [2] High Altitude Medical Research Center of Qinghai University, Xining, Qinghai, China

Thur-019 Abstract ID: 312 * Assessing the effect of dendrimer concentration on cardiomyocyte uptake and clearance

Ashay Shah[1], Helena Viola[1], Jessica Kretzmann[2], Marck Norret[2], K.Swaminathan Iyer[2], Livia Hool[1,3]
[1]School of Human Sciences, The University of Western Australia, Crawley, WA, Australia, [2]School of Molecular Sciences, The University of Western Australia, Crawley, WA, Australia, [3]Victor Chang Cardiac Research Institute, Sydney, NSW, Australia

Thur-020 Abstract ID: 346 * Hypoxia-dependent Zeb2 transcription factor regulates cardiac repair after

ischemic injury

Monika Gladka[1], Anne de Leeuw[1], Arwa Kohela[1], Bas Molenaar[1], Danielle Versteeg[1,2], Lieneke Kooijman[1], Mariska van Geldorp[1], Rusty Montgomery[3], Eva van Rooij[1,2]
[1]Molecular Cardiology, Hubrecht Institute, Utrecht, The Netherlands, [2]Department of Cardiology, University Medical Centre, Utrecht, The Netherlands, [3]Miragen Therapeutic, Inc., Boulder CO, USA

Thur-021 Abstract ID: 477 * α-bisabolol, a dietary sesquiterpene confers cardioprotection against isoproterenol induced myocardial infarction in rats

Nagoor Meeran[1], Sheikh Azimullah[2], Farah Laham[3], Saeed Tariq[4], Sameer Goyal[5], Shreesh Ojha[6]
[1]United Arab Emirates University, United Arab Emirates

Thur-022 Abstract ID: 583 * Empagliflozin (Empa) as a sodium-hydrogen exchange inhibitor (NHEI) for donor heart preservation

Jeanette Villanueva[1], Ling Gao[1], Sarah Scheuer[1, 2], Aoife Doyle[1], Kim Bokkers[1], Mark Hicks[1, 3], Peter Macdonald[1, 2]
[1]Cardiac Physiology and Transplantation, Victor Chang Cardiac Research Institute, Sydney Australia, [2]Heart and Lung Transplant Unit, St Vincent's Hospital, Sydney Australia [3]Clinical Pharmacology and Toxicology, St Vincent's Hospital, Sydney Australia.

Thur-023 Abstract ID: 616 * Novel AT2 receptor ligands reduced cardiac fibrosis in vitro and in vivo

Yan Wang[1,2], Mark Del Borgo[1,3], Baydaa Hirmiz[1,3], Mibel Aguilar[1,3], Chrishan Samuel[1,2], Robert Widdop[1,2]
[1]Cardiovascular Disease Program, Biomedicine Discovery Institute, Monash University, Melbourne, Australia, [2]Department of Pharmacology, Monash University, Melbourne, Australia, [3]Department of Biochemistry and Molecular Biology, Monash University, Melbourne, Australia

Thur-025 Abstract ID: 590 FSTL1 attenuates high glucose-induced cell apoptosis via activating Sirt1/PHB2 mitophagy in H9c2 cardiomyocytes

Jinping Ma[1], Linhe Lu[1], Jian Yang[1]
[1]Xijing Hospital, Air Force Medical University, Xi'an, China

Thur-026 Abstract ID: 295 Impact of acutely increased LV load on post-MI heart

kiyotake ishikawa[1], carlos santos-gallego[1], olympia bikou[1], roger hajjar[1]
[1]Cardiovascular Research Center, Icahn School of Medicine at Mount Sinai, New York, USA

Thur-027 Abstract ID: 308 Inhibition of prostaglandin E2 receptor 4 by lnc000908 to promote the endothelial–mesenchymal transition participation in cardiac remodeling

Wenhua Ge[2]
[1]Department of Cardiology, the First Affiliated Hospital of Wenzhou Medical University, Wenzhou, China

Thur-028 Abstract ID: 310 Integrated stress response in cardiovascular diseases

Xiuhua Liu[1]
[1]Pathophysiology Determent, Chinese PLA General Hospital, Beijing, China

Thur-029 Abstract ID: 528 Urea transporter B gene knockout promote cardiac hypertrophy induced by pressure over-load via NO and ROS imbalance

Yanwei Du[1,2], Zhixia Sun[4], Yuxin Sun[4], Shuang Fu[2], Yan Meng[1], Xuejiao Lv[3], Baoxue Yang[1]
[1]Key Laboratory of Pathobiology, Ministry of Education and College of Basic Medicine, Jilin University, Changchun, China, [2]Changchun University of Chinese Medicine, Changchun, China, [3]The Second Affiliated Hospital of Jilin University, Changchun, Jilin, China, [4]China–Japan Union Hospital of Jilin University, Jilin University, Changchun, China

Thur-030 Abstract ID: 558 The SORBS2 colocalize with actinin affects the contractile function of calcium in left ventricular noncompaction cardiomyopathy

Chunyan Li[1]
[1]State Key Laboratory of Cardiovascular Disease, National Center for Cardiovascular Disease and Fuwai Hospital, Chinese Academy of Medical Sciences, Beijing, China

Thur-031 Abstract ID: 560 B cell-derived anti-beta 2 glycoprotein I antibody mediates hyperhomocysteinemia-aggravated abdominal aortic aneurysm

Fangyu Shao[1], Yutong Miao[1], Juan Feng[1], Xian Wang[1]
[1]School of Basic Medical Sciences, Peking University, Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing, China

Thur-032 Abstract ID: 568 The influence of oral carbon adsorbent, AST-120, on the production of Soluble Flt-1 and the progression of atherosclerosis

Yasuki Nakada[1], Kenji Onoue[1], Takuya Kumazawa[1], Satomi Ishihara[1], Tomoya Nakano[1], Hitoshi Nakagawa[1], Yoshihiko Saito[1]

[1]Cardiovascular Medicine, Nara Medical University, Nara, Japan

Thur-033 Abstract ID: 585 Intercellular transfer of inflammasome via membrane nanotubes induced cardiac fibroblasts pyroptosis upon acute β-adrenergic receptors over-activation

Han Xiao[1,2,3,4]
[1]Department of Cardiology and Institute of Vascular Medicine, Peking University Third Hospital, Beijing, China, [2]NHC Key Laboratory of Cardiovascular Molecular Biology and Regulatory Peptides, Beijing, China, [3]Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing, China, [4]Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing, China

Thur-035 Abstract ID: 603 Protective effect of treatment with a continuous erythropoietin receptor activator on CKD-induced myocardial intolerance to ischemia/reperfusion injury is lost by use of its excessive dose

Tatsuya Sato[1,2], Toshiyuki Yano[1], Keitaro Nishizawa[1], Yukishige Kimura[1], Takayuki Miki[1], Masaya Tanno[1], Atsushi Kuno[1], Michinori Hirata[3], Ryohei Kawasaki[3], Tetsuji Miura[1]
[1]Renal, and Metabolic Medicines, Sapporo Medical University School of Medicine, Sapporo, Japan, [2]Sapporo Medical University School of Medicine, Sapporo, Japan, [3]Product Research Department, Chugai Pharmaceutical Co., Ltd. Kanagawa, Japan

Thur-036 Abstract ID: 609 Drug-induced oxidation of protein kinase G Iα as a novel therapy for age-related diastolic dysfunction of the heart

Oleksandra Prysyazhna[1], Philip Eaton[1]
[1]King's College London, London, UK

Thur-037 Abstract ID: 626 Myeloperoxidase aggravated the myocardial vulnerability by interfering the NO- cGMP pathway after ischemia/reperfusion in Hypercholesterolemia rats

Ye Wu[1,2], Huirong Liu[1,2]
[1]School of Basic Medical Sciences, Capital Medical University, Beijing, China, [2]Beijing Key Laboratory of Metabolic Disorders Related Cardiovascular Disease, Capital Medical University, Beijing, China

Thur-038 Abstract ID: 640 An interaction between CaMKII and calpain mediates myocardial ischemia/reperfusion injury

Hongting Lu[1], Lingheng Kong[1], Renqian Feng[1], Jiakun Tang[1], Jinqjun Zhou[1], Feng Gao[1], Jun Ren[1]
[1]Fourth Military Medical University, Xi'an, China

Thur-039 Abstract ID: 641 Cardiac macrophages contributes to dynamic cardiac homeostasis

Katsuhito Fujiu[1], Ichiro Manabe[2], Issei Komuro[1]
[1]The University of Tokyo, Tokyo, Japan, [2]Chiba University, Chiba, Japan

Thur-040 Abstract ID: 650 Hidden cardiotoxic effect of rofecoxib can be unmasked in an ex vivo model of simulated ischemia/reperfusion injury

Gábor B Brenner[1], András Makkos[1], Zsófia Onódi[1], Anikó Görbe[1,2], Zoltán S. Zádori[1], Bernadette Lázár[1], Richárd S Varga[4], Zoltán Husti[4], András Varró[4], István Baczkó[4], László Tóthfalusi[5], Rainer Schulz[3], Zoltán Giricz[1,2], Péter Ferdinandy[1,2]
[1]Semmelweis University, Budapest, Hungary, [2]Pharmahungary Group, Szeged, Hungary, [3]Justus-Liebig University, Giessen, Germany, [4]University of Szeged, Szeged, Hungary, [5]Semmelweis University, Budapest, Hungary

Thur-041 Abstract ID: 664 Evaluation of the effect of β-adrenergic receptors on left ventricular function in hypoxic stress rats by pressure-volume catheter system

Qiaorong Ji[1], Yu Zhang[1], Jie Liu[1], Huan Zhang[3], Chengzhu Cao[1], Zhouyang Yuan[1], Qianqian Ma[1], Wei Zhang[1,2]
[1]Medical College of Qinghai University, Xining, Qinghai, China [2]High Altitude Medical Research Center of Qinghai University, Xining, Qinghai, China, [3]Weinan Central Hospital, Weinan, China

Thur-042 Abstract ID: 670 Ischaemic preconditioning and postconditioning - underlying signalling pathways, mechanisms and clinical application

Hausenloy Hausenloy[1]
[1]Duke-NUS Medical Scgool, Singapore

Thur-043 Abstract ID: 468 Acacetin alleviates myocardial fibrosis via TGF-β1/Smad3 signaling pathway

Rongfang He [1], Juan Zhang[1], Dan Luo[1]
[1]Key Laboratory of Medical Electrophysiology of the Ministry of Education and Sichuan Province, Institute of Cardiovascular Research, Southwest Medical University, Luzhou, China

Thur-044 Abstract ID: 290 Ex-vivo testing of a novel small molecule inhibitor of the mitochondrial permeability transition pore

Tyler M Bauer[1], Junhui Sun[1], Salvatore Antonucci[2], Georgios Amanakis[1], Roberta Menabò[2], Moises di

Sante[2], Justina Sileikyte[3], Jordan Devereaux[4], Michael S. Cohen[4], Michael Forte[3], Paolo Bernardi[2], Fabio Di Lisa[2], Elizabeth Murphy[1]
[1]National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Maryland, USA, [2]University of Padova, Padova, Italy, [3]Vollum Institute, Oregon Health and Science University, Portland, OR, USA, [4]School of Medicine, Oregon Heath and Science University, Portland, OR, USA

Thur-046 Abstract ID: 443 Relaxin alleviated microvascular damage and inflammation following cardiac ischemia-reperfusion

Xiaoming Gao[1, 2], Yidan Su[2], Shirely Moore[2], Li-Ping Han[2], Helen Kiriazis[2], Qun Lu[2], Weibo Zhao[2], Amanguli Ruze[1], Bin-Bin Fang[1], Mingjun Duan[1], Xiaojun Du[2]
[1]Clinical Medical Research Institute, Xinjiang Medical University, Urumqi, China, [2]Baker Heart and Daibates Institute, Melbourne, Australia

Thur-047 Abstract ID: 440 Calcium-containing cardioplegia aggravates ischemic calcium overload damage through pre-activated reverse mode NCX1 and LTCC in hypertrophic cardiomyocyte

Hao Zhang[1,2], Hao Tang[1], Wei Wei[1]
[1]Key Laboratory of Cardiac Regenerative Medicine, National Health Commission, Zhengzhou 451464, China, [2]Heart Center, Shanghai Children's Medical Center, School of Medicine, Shanghai Jiao Tong University School of Medicine, Shanghai, China

Theme 2: New Insights into Cardiac Dysfunction

Thur-048 Abstract ID: 502 * Nogo-C causes post-MI arrhythmia through increasing calcium leakage from sarcoplasmic reticulum

Shi Jia[1], Lin Weng[1], Ming Zheng[1]
[1]Department of Physiology and Pathophysiology, School of Basic Medical Sciences, Peking University Health Science Center, Beijing, China

Thur-049 Abstract ID: 525 * Single-Cell reconstruction of progression trajectory reveals intervention principles in pathological cardiac remodeling

Zongna Ren[1], Peng Yu[1], Zheng Li[1], Yingnan Liao[1], Yin Wang[1], Bingying Zhou[1], Li Wang[1]
[1]Chinese Academy of Medical Sciences, Beijing, China

Thur-050 Abstract ID: 579 * Comparative study of circulating microRNAs as biomarkers for heart failure and bioinformatics analysis

Xiaoyi Zhang[1], Jian Wu[1], Xuan Li[1], Fangjie Dai[1], Yingnan Bai[1], Juan Peng[1], Yi Shen[1], Jie Yuan[1]
[1]Zhongshan Hospital, Fudan University, Shanghai, China

Thur-051 Abstract ID: 654 * β1-adrenoceptor autoantibodies induce the senescence of CD4$^+$ T cell through β1-AR

Haojie Wei[1,2], Xinliang Ma[1,2], Huirong Liu[1,2]
[1]Department of Physiology and Pathophysiology, School of Basic Medical Sciences, Beijing , China, [2]Beijing Key Laboratory of Metabolic Disorders Related Cardiovascular Disease, Beijing, China

Thur-052 Abstract ID: 672 * Comparing the protective function of autophagy and mitophagy in myocardial infarction

Chunling Xu[1,2], Yangpo Cao[1,2], Ruxia Liu[1,2], Lei Liu[3,4], Weilin Zhang[3], Jingjing Ye[1,2], Shi Jia[1,2], Xuan Fang[1,2], Lifang Zhao[1,2], Xue Qiao[1,2], Lin Weng[1,2], Yingying Liu[1,2], Bo Li[1,2], Ming Zheng[1,2]
[1]Peking University, Beijing, China, [2]Ministry of Education, Beijing, China, [3]Chinese Academy of Sciences, Beijing, China, [4]University of Chinese Academy of Sciences, Beijing, China

Thur-053 Abstract ID: 47 * Successful establishment of a cardiac reverse remodeling failure model

Tatsuyuki Sato[1], Norihiko Takeda[1], Yu Nakagama[2], Issei Komuro[1]
[1]Department of Cardiovascular Medicine, The University of Tokyo Graduate School of Medicine, Tokyo, Japan, [2]Department of Pediatrics, The University of Tokyo Graduate School of Medicine, Tokyo, Japan

Thur-054 Abstract ID: 454 * A magnetics-based approach for fine-tuning afterload in engineered heart tissues

Marc Hirt[1,2], Marita Rodriguez[1,2], Tessa Werner[1,2], Benjamin Becker[1,2], Thomas Eschenhagen[1,2]
[1]Institute of Experimental Pharmacology and Toxicology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, [2]DZHK (German Center for Cardiovascular Research), Partner site Hamburg/Kiel/Lübeck, Germany

Thur-055 Abstract ID: 571 * Dynamic calcium handling abnormalities in rats with diastolic impairment and preserved ejection fraction: evidence for chronotropic incompetence

Rafael Shimkunas[1], Brian S. Ferguson[1], Fiona Wong[1], Nikki Bennett[1], Christopher Zambataro[1], Carlos L. del Rio[1], Marcus Henze[1]

[1]MyoKardia, Inc., South San Francisco, CA, USA

Thur-056 Abstract ID: 120 Successful establishment of a long-term culture method of primary adult mouse ventricular cardiomyocytes

Tatsuyuki Sato[1], Norihiko Takeda[1], Yu Nakagama[2], Issei Komuro[1]
[1]The University of Tokyo, Department of Cardiovascular Medicine, Tokyo, Japan, [2]The University of Tokyo, Department of Pediatrics, Tokyo, Japan

Thur-058 Abstract ID: 482 Molecular crosstalk between cardiac myosin switching, apoptosis/necroptosis and altered calcium handling in heart failure

Jan Kyselovic[1]
[1]Comenius University, University Hospital Bratislava, Slovakia

Thur-059 Abstract ID: 488 Biochemical and molecular basis for the pro-atherogenic property of dysfunctional high density lipoprotein in relevance with cardiac dysfunction

Sini Sunny[1], Jayakumari Narayani[2], Jayamurthy Purushothaman[1]
[1]CSIR NIIST, Agroprocessing & Technology Division, Thiruvananthapuram, Kerala, India, [2]SCTIMST, Biochemistry Division, Thiruvananthapuram, Kerala, India

Thur-060 Abstract ID: 551 Reduction of global longitudinal strain in rats with diastolic dysfunction and preserved ejection fraction: comparison against post-MI rats with reduced ejection fraction

Christopher A. Zambataro[1], Brian S. Ferguson[1], Rafael Shimkunas[1], Steven Tobia[1], Marcus Henze[1], Carlos L. Del Rio[1]
[1]Buck Institute for Research on Aging, USA

Thur-061 Abstract ID: 559 Ang II induces DNA methylation and p53 activation to regulate miR-150-5p in hypertension progression

Bingjun Qian[1,2], Zhiwen Ding[2], Ran Xu[2], Jing Zhao[1], Yunzeng Zou[2]
[1]Jiangsu Vocational College of Medicine, Jiangsu, China, [2]Zhongshan Hospital, Fudan University, Shanghai, China

Thur-062 Abstract ID: 589 Cardiac-specific inactivation of LSD1 in mice leads to myocardial hypertrophy and heart failure

Jinling Huo[1], Qi An[1], Xiuying Chen[1], Zhiyan Qin[1], Erhe Gao[2], Dong Chen[3], Cong Wang[1], Hong-Min Liu[1], Wen Zhao[1]
[1]Zhengzhou University School of Pharmaceutical Sciences, Zhengzhou, Henan, China, [2]Temple University School of Medicine, Philadelphia, PA, USA, [3]Capital Medical University, Beijing, China

Thur-064 Abstract ID: 610 Electrophysiological alterations and intracellular calcium mishandling in iron-overloaded cardiomyocytes

Laihua Xie[1], Natthaphat Siri-Angkul[1,2,4], Nadezhda Fefelova[1], udith Gwathmey[1], Siriporn Chattipakorn[2,3], Nipon Chattipakorn[2,4]
[1]Rutgers University - New Jersey Medical School, Newark, New Jersey, USA, [2]Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand, [3]Chiang Mai University, Chiang Mai, Thailand, [4]Chiang Mai University, Chiang Mai, Thailand

Thur-065 Abstract ID: 617 The SRSF4/GAS5 lncRNA axis regulates left ventricular hypertrophy by inhibiting the glucocorticoid receptor

Javier Larrasa-Alonso[1], Enrique Lara-Pezzi[1]
[1]Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, Spain

Thur-066 Abstract ID: 623 Circular RNA expression alterations in extracellular vesicles isolated from murine heart post ischemia/reperfusion injury

Xinyu Ge[1-4], Qingshu Meng[1-3], Rulin Zhuang[1-4], Dongsheng Yuan[1-4], Jing Liu[1-4], Qianqian Zhang[1], Zhican Xu[4,6], Liang Zheng[1-3], Xin Gong[5], Yuanfeng Xin[4], Zhongmin Liu[1-5], Xiaohui Zhou[1-3], Huimin Fan[1-5]
[1]Research Center for Translational Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, P.R. China, [2]Shanghai Heart Failure Research Center, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, P.R. China, [3]Institute of Integrated Traditional Chinese and Western Medicine for Cardiovascular Chronic Diseases, Tongji University School of Medicine, Shanghai, China, [4]Department of Cardiovascular Surgery, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China, [5]Department of Heart Failure, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China, [6]The First Affiliated Hospital, Dalian Medical University, Dalian, China

Thur-067 Abstract ID: 629 Length dependent activation in cardiac myofilaments from healthy and MyBPC deficient mini-pigs; mechanistic effects of MyBPC and mavacamten

Marcus Henze[1], Weikang Ma[2], Fiona Wong[1], Carlos L. del Rio[1], Zhihong Yang[1], Henry Gong[2], Robert Anderson[1], Thomas Irving[2]

[1]MyoKardia, South San Francisco, CA, USA, [2]Illinois Institute of Technology, Chicago, IL, USA

Thur-068 Abstract ID: 630 Excitation-contraction coupling in HFpEF versus HFrEF: role of transverse-axial tubule system

Xin Yue[1], Peter Kilfoil[2], Rui Zhang[2], Stephan Aynaszyan[2], Yushun Zhang[1], Eduardo Marban[2], Joshua I Goldhaber[2]
[1]Department of Cardiovascular Medicine, First Affiliated Hospital of Xi'an Jiaotong University, Xi'an, China, [2]Smidt Heart Institute, Cedars-Sinai Medical Center, Los Angeles, CA, USA

Thur-069 Abstract ID: 644 Comparative analysis of cardiac dyssynchrony using high-frequency speckle tracking echocardiography in mice subjected to severe transverse aortic constriction or aortic regurgitation

Ran Xu[1], Jian Wu[1], Zhiwen Ding[1], Chunjie Yang[1], Bingjun Qian[1,2], Yunzeng Zou[1]
[1]Zhongshan Hospital, Fudan University, Shanghai, China, [2]Biomedical Research Institute, Jiangsu Vocational College of Medicine, Jiangsu, China

Thur-070 Abstract ID: 648 Effect of LSD1 overexpression on adriamycin-induced myocardial injury

Qi An[1], Jinling Huo[1], Bingfei Wei[1], Jiajia Xu[1], Haomiao Jiao[1], Hui Qiao[1], Zhiyan Qin[1], Wen Zhao[1]
[1]Zhengzhou University School of Pharmaceutical Sciences, Zhengzhou, China

Thur-072 Abstract ID: 667 Acute high glucose perfusion induces arrhythmogenic events through CaMKII pathway in mouse cardiomyocytes

Sofía López[1], Marilén Federico[1], Guillermina Nuozzi[1], Matilde Said[1], Alicia Mattiazzi[1], Julieta Palomeque[1]
[1]Cardiovascular Reseach Center, School of Medicine, UNLP, CONICET, La Plata, Argentina

Thur-073 Abstract ID: 669 In pre-diabetic hearts, Sarcoplasmic Reticulum (SR) Ca^{2+} leak, mitochondria Ca^{2+} overload, and SR-mitochondria miscommunication culminate in apoptosis

Marilen Federico[1], Lopez Sofia[1], Enrique Portiansky[2], Maite Zavala[1], Celeste Villa Abrille[1], Alicia Mattiazzi[1], Julieta Palomeque[1]
[1]Cardiovascular Research Center, School of Medicine, UNLP, CONICET, Argentina, [2]Image Analysis Lab, School of Veterinary, UNLP, CONICET, La Plata, Argentina

Thur-074 Abstract ID: 671 The impact of diabetes on intracellular calcium dynamics in isolated right atrial trabeculae from consenting patients undergoing routine surgery

Marie-Louise Ward[1], Timothy L. M. Jones[1], Sarbjot Kaur[1], Nicholas Kang[3], Peter N. Ruygrok[2]
[1]Department of Physiology, University of Auckland, Auckland, New Zealand, [2]Department of Cardiology, Auckland City Hospital, Auckland, New Zealand, [3]Greenlane Cardiothoracic Surgical Unit, Auckland City Hospital, Auckland, New Zealand

Thur-075 Abstract ID: 391 Analysis of gender differences in coronary heart disease by homocysteine and lipoprotein (a)

Xuehui Wang[1], Wenge Zhao[2]
[1]The First Affiliated Hospital of Xinxiang Medical University, Xinxiang, China

Thur-076 Abstract ID: 394 (-)-Noradrenaline sensitivity, contractility and mitochondrial function in an ovine model of brain stem death and transplantation

Matthew Wells[1,2], Peter Molenaar[3], Louise See Hoe[2,4], Nchafatso Obonyo[2], Lynette James[6], Mahe Bouquet[2,4], Nicole Bartnikowski[2,3], Margaret Passmore[2,4], Connie Boone[2,4], Karin Wilde[2], Mo Weilan[3], Kieran Hyslop[2,4], Charles McDonald[5], Sanne Pedersen[5], Jacky Suen[2,4], Jason Peart[1,2], David McGiffin[2,7], John Fraser[1,2,4,5,8]
[1]Griffith University, Brisbane, Queensland, Australia, [2]The Prince Charles Hospital, Brisbane, Queensland, Australia, [3]Queensland University of Technology, Brisbane, Australia, [4]University of Queensland, Brisbane, Australia, [5]The Prince Charles Hospital, Brisbane, Queensland, Australia, [6]The Princess Alexandra Hospital, Brisbane, Queensland, Australia, [7]Cardiothoracic Surgery, The Alfred Hospital, Melbourne, Victoria, Australia, [8]Intensive Care Unit, Saint Andrews War Memorial Hospital, Brisbane, Queensland, Australia

Theme 3: Ion Channel Mechanisms & Arrhythmias

Thur-077 Abstract ID: 452 * TWIK-1 channels contribute to hypokalemia induced paradoxical depolarization in cardiac myocytes

Dongchuan Zuo[1]
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Thur-078 Abstract ID: 584 * Contribution of IP3R2 to the function of human embryonic stem cell-derived cardiomyocytes

Peng Zhang[1], Jijun Huang[1], He Liang[1], Yijie Wang[1], Huangtian Yang[1]
[1]CAS Key Laboratory of Tissue Microenvironment and Tumor, Laboratory of Molecular Cardiology, Shanghai Institute of Nutrition and Health, SIBS, CAS, Shanghai, China

Thur-080 Abstract ID: 444 * Contribution of the Soluble Adenylyl Cyclase(SAC) to the regulation of basal cardiac contractility

Alejandro Orlowski[1], María Sofía Espejo[1], Alejandro Ibañez[1], Romina Di Mattía[1], Noelia Rossetti[1], María Carolina Ciancio[1], Verónica De Giusti[1], Ernesto Alejandro Aiello[1]
[1]Centro de Investigaciones Cardiovasculares, La Plata, Argentina

Thur-081 Abstract ID: 499 * Correlation of calcium sparks with nanoscale ryanodine receptor configuration in cardiomyocytes

Yufeng Hou[1], Jia Li[1], Ornella Manfra[1], Xin Shen[1], Peter Jones[2], Christian Soeller[3], William Louch[1]
[1]Institute for Experimental Medical Research, Oslo, Norway, [2]Department of Physiology, University of Otago, Dunedin, New Zealand , [3] Living Systems Institute, University of Exeter, Exeter, UK

Thur-082 Abstract ID: 510 * Impact of voltage-gated Na^+ channel biophysical properties on action potential overshoot

Natália F. Oshiyama[1], Rosana A. Bassani[1], José W.M. Bassani[1,2]
[1]Center for Biomedical Engineering, University of Campinas, Campinas, Brazil, [2]Department of Biomedical Engineering/School of Electrical and Computer Engineering, University of Campinas, Campinas, Brazil

Thur-083 Abstract ID: 408 Phosphorylation of cardiac ryanodine receptors by protein kinase G: evaluation of its impact on store overload-induced calcium release

Luis A. Gonano[1,2], Akash D. Chakraborty[2], Hamish Aitken-Buck [2], Martín Vila Petroff[1], Peter P. Jones[2]
[1]Centro de investigaciones cardiovasculares Horacio E. Cingolani, CONICET-UNLP, La Plata, Argentina, [2]Department of Physiology and HeartOtago, School of Biomedical Sciences, University of Otago, New Zealand

Thur-084 Abstract ID: 497 Activation of RyR2 by class I kinase inhibitors

Akash Deep Chakraborty[1], Luis Gonano[1,2], Michelle Munro[1], C Thekkedam[3], V Staudacher[4], A B Gamble[4], N Macquaide[5], A F Dulhunty[3], Peter Jones[1]
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Thur-085 Abstract ID: 500 Acute alcohol consumption and effects on cardiac excitation, conduction, and repolarization

Stefan Brunner[1]
[1]LMU Munich – Cardiology, Munich, Germany

Thur-086 Abstract ID: 527 The use of living myocardial slices as a novel disease model to study cardiac arrhythmogenicity in vitro

Ifigeneia Bardi[1], Eef Dries[1], Raquel Nunez-Toldra[1], Fotios Pitoulis[1], Carolyn Carr[2], Cesare M. Terracciano[1]
[1]National Heart and Lung Institute, Imperial College London, London, UK, [2]Anatomy and Genetics, University of Oxford, Oxford, UK

Thur-087 Abstract ID: 602 Loss of myocardial nNOS abolishes the physiological atrial APD gradient in human: implications for atrial fibrillation

Xing Liu[1], Anna Muszkiewicz[3], Jillian Simon[1], Alfonso Bueno-Orovio[3], Carlos Sanchez[4,5], Jose Rodriguez[6], Mary Norris[1], Hannah Boycott[1], Parag Gajendragadkar[1], Besarte Vrellaku[1], Rana Sayeed[2], George Krasopoulos[2], Blanca Rodriguez[3], Barbara Casadei[1]
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Thur-088 Abstract ID: 661 Nucleoside diphosphate kinase B increases the pacemaker activity in hiPSC derived cardiomyocytes by activating the intermediate-conductance calcium-activated potassium channels

Huan Lan[1,2,3], Fanis Buljubasic[2,3], Xin Li[2], Ibrahim El-Battrawy[2,3], Siegfried Lang[2,3], Thomas Wieland[3,4], Xiaobo Zhou[2,3,1]
[1]KeyLaboratory of Medical Electrophysiology of Ministry of Education, Institute of Cardiovascular Research, Southwest Medical University, Luzhou, Sichuan, China, [2]FirstDepartment of Medicine, Faculty of Medicine, University Medical Centre Mannheim (UMM), University of Heidelberg, Mannheim,

Germany, [3]DZHK(GermanCenter for Cardiovascular Research), Partner Site, Heidelberg-Mannheim and Göttingen, Mannheim, Germany, [4]fInstituteof Experimental and Clinical Pharmacology and Toxicology, Medical Faculty Mannheim, University of Heidelberg, Mannheim, Germany

Thur-089 Abstract ID: 181 Evidence for significance of serine 1487 in β-adrenergic regulation of Cav1.2 channel protein function in genetically engineered mice

Henrietta Cserne Szappanos[1], Livia Hool[1,2]
[1]School of Human Sciences, The University of Western Australia, Crawley, WA, Australia, [2]Victor Chang Cardiac Research Institute, Sydney, NSW, Australia

Theme 4: Signalling in Cardiac Disease & Therapy

Thur-090 Abstract ID: 578 * β1-adrenergic receptor autoantibody leads to sustained activation of β1-adrenergic receptor by inhibiting the β2-adrenergic receptor/Gi signal pathway

Cao Ning[1,2,3,4,5,6], Zhang Suli[1,2], Wang Wen[1,2], Xiao Han[3,4,5,6], Zhang Youyi[3,4,5,6], Liu Huirong[3,4,5,6]
[1]School of Basic Medical Sciences, Capital Medical University Capital Medical University, Beijing, China, [2]Capital Medical University, Beijing, PR China, [3]Peking University Third Hospital, Beijing, China, [4]NHC Key Laboratory of Cardiovascular Molecular Biology and Regulatory Peptides, Beijing, China, [5]Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing, China, [6]Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing, China

Thur-091 Abstract ID: 608 * A circRNA–miRNA–mRNA network identifcation for exploring underlying pathogenesis of heart failure of human

Ran Xu[1], Bingjun Qian[1,2], Chunjie Yang[1], Jie Yuan[1], Zhenzhong Zhang[1], Zhen Ma[1], Yunzeng Zou[1], Jian Wu[1], Zhiwen Ding[1]
[1]Zhongshan Hospital, Fudan University, Shanghai, China, [2]Jiangsu Vocational College of Medicine, Jiangsu, China

Thur-092 Abstract ID: 633 * Transcription factor SOX5 regulate warfarin induced aoctic interstitial cells calcification by binding SOX9

Ming Qiu[1,2], Lu Yan[2], Jia Gu[2,3], Wei Sun[2], Xiangqing Kong[2]
[1]Southeast University, Nanjing, China, [2]The First Affiliated Hospital of Nanjing Medical University, Nanjing China, [3]Graduate Institution of Integrated Medicine, Nanjing Medical University, Nanjing, China

Thur-093 Abstract ID: 649 * GDF11 enhances therapeutic efficacy of cardiac mesenchymal stem cells for myocardial infarction via Smad2/3-YME1L-OPA1 signaling

Yun Zhao[1], Jinyun Zhu[1]
[1]Zhejiang University, Hangzhou, China

Thur-094 Abstract ID: 456 * A simple method to improve maturity of human induced pluripotent stem cell derived cardiomyocytes as a platform for modeling cardiovascular disease

Walter Knight[1,2,3], Yin-Hsi Lin[1], Yingqiong Cao[1,2], Yuanbiao Zhao[1,2], Congwu Chi[1,2], Benjamin Brown[5], Pilar Londono[1,2], Lori Walker[1], Amrut Ambardekar[1], Peter Buttrick[1], Hongyan Xu[6], Angelo D'Alessandro[5], Timothy McKinsey[1,2,3,4], Mark Jeong[1,3], Kunhua Song[1,2,3]
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Thur-095 Abstract ID: 582 * The hypoxic mimetic cobalt chloride induces Runx1 expression in neonatal rat cardiomyocytes

Alexandra Riddell[1], Stuart Nicklin[1], Ewan Cameron[1], Christopher Loughrey[1]
[1]Institute of Cardiovascular and Medical Sciences, University of Glasgow, Glasgow, UK

Thur-096 Abstract ID: 614 * Quantification of DNA damage in heart tissue as a novel prediction tool for therapeutic prognosis

Toshiyuki Ko[1], Issei Komuro[1]
[1]Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Thur-097 Abstract ID: 57 * DNA damage-induced PARP1 activation confers cardiomyocyte dysfunction through NAD^+ depletion in Atrial Fibrillation

Deli Zhang[1], Xu Hu[1], Jin Li[1], Jia Liu[2], Luciënne Baks-te Bulte[1], Marit Wiersma[1], Noor-ul-Ann Malik[1], Denise MS van Marion[1], Marziyeh Tolouee[3], Femke Hoogstra-Berends[4], Eva AH Lanters[4], Arie M van Roon[5],

Antoine AF de Vries[2], Daniël A Pijnappels[2], Natasja MS de Groot[4], Robert H Henning[3], Bianca JJM Brundel[1]
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Thur-098 Abstract ID: 58 * Transient desensitization of Beta-Adrenoreceptors plays a key role in left ventricular apical dysfunction in takotsubo syndrome

Tomoya Nakano[1], Kenji Onoue[1], Yasuki Nakada[1], Hitoshi Nakagawa[1], Takuya Kumazawa[1], Yasuhiro Sakaguchi[1], Yoshihiko Saito[1]
[1]The Department of Cardiovascular Medicine, Nara Medical University, Kashihara, Japan

Thur-099 Abstract ID: 463 Hydrogen sulfide exerts cardioprotection in sepsis-induced myocardial dysfunction by inhibiting inflammation and endoplasmic reticulum stress

Yuhong Chen[1], Sheng Jin[1], Xu Teng[1], Yuming Wu[1]
[1]Hebei Medical University, Hebei, China

Thur-100 Abstract ID: 481 Synergic Pde3 and Pde4 control intracellular camp and cardiac excitation-contraction coupling in a porcine model

Delphine Mika[1], Pierre Bobin[1], Marta Lindner[1], Angèle Boet[2], Amir Hodzic[2], Florence Lefebvre[1], Vincent Algalarrondo[1], Catherine Rucker-Martin[2], Virginie Lambert[2], Rodolphe Fischmeister[1], Grégoire Vandecasteele[1], Jérôme Leroy[1]
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Thur-101 Abstract ID: 524 Chemokine receptor CXCR2 triggers monocyte mobilization and initiates experimental atrial fibrillation

Yunlong Zhang[1], Xiao yan[1], Jing Li[2], Shubin Guo[3], Huihua Li[1]
[1]First Affiliated Hospital of Dalian Medical University, Dalian, China, [2]Second Affiliated Hospital of Dalian Medical University, Dalian, China, [3]Beijing Key Laboratory of Cardiopulmonary Cerebral Resuscitation, Beijing Chaoyang Hospital, Capital Medical University, Beijing, China

Thur-102 Abstract ID: 553 Investigating the molecular mechanisms on nitroxyl-mediated positive inotropy

Konstantina Stathopoulou[1,2], Simon Diering[1,2], Mara Goetz[1,2], Sophie Schobesberger[2,3], Angelika Piasecki[1,2], Viacheslav O. Nikolaev[2,3], Friederike Cuello[1,2]
[1]Institute of Experimental Pharmacology and Toxicology, Cardiovascular Research Center, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, [2]DZHK (German Center for Cardiovascular Research), partner site Hamburg/Kiel/Lübeck, Germany, [3]Institute of Experimental Cardiovascular Research, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Thur-104 Abstract ID: 653 Cardiac CIP protein modulates dystrophic cardiomyopathy

Zhanpeng Huang[1], Jianming Liu[2], Dazhi Wang[2]
[1]The First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China, [2]Boston Children's Hospital, Harvard Medical School, Boston, MA, USA

Thur-105 Abstract ID: 660 Obesity inhibits effects of selegiline on cardiac mitochondrial function and quality control

Zoltán Giricz[1], Csilla Nagy[1], Csilla Pelyhe[1], Gábor Koncsos[1], Zoltán Varga[1], Tímea Komlódi[2], Tamás Radovits[3], László Tretter[2], Péter Ferdinandy[1,4]
[1]Semmelweis University, Budapest, Hungary, [2]Semmelweis University, Budapest, Hungary, [3]Semmelweis University, Budapest, Hungary, [4]Pharmahungary Ltd, Szeged, Hungary

Thur-106 Abstract ID: 198 Celastrol alleviates aortic valve calcification via inhibition of NADPH oxidase-2 in valvular interstitial cells

Huibing Liu[1], Libo Wang[1], Yating Pan [1], Xuehui Wang[1], Yuan Ding[2], Chaoyuan Zhou[3], Ajay M Shah[4], Guoan Zhao[1], Min Zhang [4]
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Thur-107 Abstract ID: 199 Inhibition of the cardiac cardiomyocytes miRNA-320a protects against the development of heart failure

Chen Chen[1]

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Theme 5: Emerging Concepts for Cardiac Regulation: Beyond the Genome

Thur-108 Abstract ID: 449 * RNA-Binding Protein QKI is a critical pre-RNA splicing regulator for cardiac development and function

Xinyun Chen[1], Chen Xu[1], Ying Liu[2], Zhuo Liu[2], Ed Simpson[3], Lina Ba[2], Hanping Qi[2], Yunlong Liu[3], Hanying Chen[2], Wei Sheng[4], Guoying Huang[4], Weinian Shou[2], Ning Sun[1]
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Thur-109 Abstract ID: 419 * A Novel α-Tropomyosin Mutation (D55N) associated with familial dilated cardiomyopathy increases tropomyosin binding to actin

Xiaomei Yang[1, 2], Xinyu Zhang[1, 2], Michelle A. Recto[1], Yuejin Li[1], Genaro A. Ramirez Correa[1, 3], William M. Schmidt[4], Brittney Murray[4], Kevin Christian Bermea[1], Anthony Cammarato [4], Anne M. Murphy[1]
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Thur-110 Abstract ID: 538 * Targeted DNA methylation manipulation in human engineered heart tissue

Bangfen Pan[1,2,3], Tessa Werner[1,2], Alexandra Löser[1,2], Ingke Braren[1,2], Grit Höppner[1,2], Matias Autio[4], Roger Sik Yin Foo[3,4], Marc Hirt[1,2], Thomas Eschenhagen[1,2], Jutus Stenzig[1,2]
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Thur-111 Abstract ID: 581 * Integrative analysis of oxidative stress-sensitive post-translational modifications in cardiovascular medicine using machine learning

Howard Choi[1,2,3], Bilal Mirza[1,2], Jie Wang[1,2], Dominic Ng[1,2], Neo Christopher Chung[1,4], Ding Wang[1,2], David A. Liem[1,2], Henning Hermjakob[1,5], Wei Wang[1,3,6], John R. Yates III[1,7], Peipei Ping[1,2,3,6]
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Thur-113 Abstract ID: 457 Myosin regulatory light chain: a major player in regulating the 'off' state of cardiac myosin

Na Sa[1], Ivan Tomasic[1], Sampath Gollapudi[1], Suman Nag[1]
[1]Department of Biology, MyoKardia Inc., South San Francisco, CA, USA

Thur-114 Abstract ID: 498 Stretch synchronizes sarcomere shortening in isolated cardiomyocytes

Jia Li[1], Marianne Ruud[1], Yufeng Hou[1], Michael Frisk[1], Per Andreas Norseng[1], Fuyu Kobirumaki-Shimozawa[2], Terje Kolstad[1], Ingunn Setterberg[1], Pieter Tombe[3], Norio Fukuda[2], William Louch[1]
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Thur-115 Abstract ID: 548 Crtc1-deficiency leads to elevated heart rate and hypertenison in mice

Karoline Morhenn[1,2,3], Anika Seniuk[1,2], Helga Vitzthum[1,2], Elke Oetjen[2,3,4], Heimo Ehmke[1,2]
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Theme 6: Regenerative Medicine for Heart Disease

Thur-116 Abstract ID: 460 * A collagen hydrogel loaded with HDAC7-derived peptide promotes the regeneration of infarcted myocardium with functional improvement in a rodent model

Yue Zhang[1], Yongzhen Wei[2], Dashuai Zhu[2], Linfang Zeng[3], Qiang Zhao[2]
[1]Department of Physiology & Pathophysiology, Tianjin Medical University, Tianjin, China, [2]State Key Laboratory of Medicinal Chemical Biology, Key Laboratory of Bioactive Materials, Ministry of Education, College of Life Sciences, Nankai University, Tianjin, China, [3]Cardiovascular Division, Faculty of Life

Sciences & Medicine, King's College London, London, UK

Thur-117 Abstract ID: 464 * Lineage reprogramming of fibroblasts into expandable cardiac progenitor cells by defined small molecules

Jia Wang[1], Nan Cao[1]
[1]Sun Yat-sen University, Guangzhou, China

Thur-118 Abstract ID: 490 * Repair of adult mammalian heart after damages by oral intake of Gu Ben Pei Yuan San

Baiping Cui[1]
[1]Fudan University, Shanghai, China

Thur-119 Abstract ID: 567 * Bach1 regulates self-renewal and impedes mesendodermal and cardiovascular differentiation of human embryonic stem cells

Xiangxiang Wei[1], Jieyu Guo[2], Qinhan Li[3], Xinyue Zhang[4], Mengping Jia[5], Cong Niu[6], Dan Meng[7]
[1]Fudan University, Shanghai, China

Thur-120 Abstract ID: 438 * Non-viral vector based gene transfection with human induced pluripotent stem cells derived cardiomyocytes

Shihua Tan[1], Zhonghao Tao[2], Szejie Loo[1], Liping Su[1], Lei Ye[1]
[1]National Heart Centre Singapore, Singapore, [2]Nanjing First Hospital, Nanjing Medical University, Nanjing, Jiangsu, China

Thur-121 Abstract ID: 445 * TGF-β signaling impairs cardiomyogenesis by disrupting interactions between GATA4 and epigenetic modifiers

Andrew Riching[1, 2], Yuanbiao Zhao[1], Pilar Londono[1], Hongyan Xu[3], Peter Buttrick[1], Kunhua Song[1, 2]
[1]Medicine Division of Cardiology, University of Colorado, Aurora, CO, USA, [2]Pharmacology, University of Colorado, Aurora CO, USA, [3]Biostatistics & Epidemiology, Georgia Regents University, Augusta,GA, USA

Thur-122 Abstract ID: 554 * Evaluation of cardiomyocyte proliferation after transplantation of engineered heart tissue patches

Eva Querdel[1,2], Liesa Castro[2,3], Marina Reinsch[1,2], Birgit Geertz[1,2], Maria Köhne[1,2], Tim Stüdemann[1,2], Thomas Eschenhagen[1,2], Florian Weinberger[1,2]
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Thur-123 Abstract ID: 201 * Development of a PHA-based patch for delivery of pluripotent stem cell-derived cardiomyocytes and endothelial cells to the heart

Qasim A. Majid [1], Gabor Foldes [1], Thusharika Kodagoda[1], Pooja Basnett [2], Christopher L. Grigsby[3], Molly M. Stevens[3,4,5], Ipsita Roy [1,2], Sian E. Harding[1]
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Thur-125 Abstract ID: 34 3D bioprinting of iPSC cardiac constructs with anisotropy and vascularization for myocardial regeneration

Haitao Cui[1], Lijie Grace Zhang[1,2,3,4]
[1]Department of Mechanical and Aerospace Engineering, Washington, USA [2]Department of Electrical and Computer Engineering, Washington, USA, [3]Department of Biomedical Engineering, Washington, USA, [4]Department of Medicine, Washington, USA

Thur-126 Abstract ID: 442 Reprogramming of fibroblasts into induced cardiac progenitor cells by CRISPR/Cas9-mediated transcriptional activators

Xueyan Jiang[1], Zhongxiao Lin[1], Xiaoya Zhao[1]
[1]Key Laboratory of Molecular Target and Clinical Pharmacology, School of Pharmaceutical Sciences & the Fifth Affiliated Hospital, Guangzhou Medical University, Guangzhou, China

Thur-127 Abstract ID: 470 Massive parallel single-nucleus transcriptomic analysis of post-infarct adult hearts

Yigiang Zhang[1,2,3], Nuria Gago-Lopez[1,2,3], Ning Li[1,2,3,4], Zhenhe Zhang[1,2,3], Naima Alver[1,2,3], William Robb MacLellan[1,2,3]
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Regenerative Medicine, University of Washington, Seattle, WA, USA, [4]State Key Laboratory for Biology of Plant Diseases and Insect Pests, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing, China

Thur-128 Abstract ID: 529 A novel human-derived tissue-engineered patch for vascular reconstruction

Liping Gao[1], Hong Sun[1]
[1]Xuzhou Medical University, Xuzhou, China

Thur-129 Abstract ID: 593 Transplantation of bio-patches with human pluripotent stem cells-derived cardiovascular progenitor cells (hPSC-CVPCs) promotes infarct healing

Yun Jiang[1], Wei Bi[1], Qiang Wu[1], Jinxi Wang[1], Senle Rao[1], Huangtian Yang[1]
[1]CAS Key Laboratory of Tissue Microenvironment and Tumor, Laboratory of Molecular Cardiology, Shanghai Institute of Nutrition and Health, SIBS, CAS, Shanghai, China

Thur-130 Abstract ID: 606 Logic messenger RNA for functional selection of human embryonic stem cell-derived cardiomyocytes

Edan Elovic[1], Sharon Etzion[2], Smadar Cohen[1,2]
[1]The Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel, [2]Regenrative Medicine and Stem Cell (RMSC) Research Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Thur-131 Abstract ID: 166 MIR148A Family regulates cardiac differentiation of human embryonic stem cells by inhibiting the DLL1-mediated Notch signaling pathway

Xing Fang[1], Shumei Miao[1], You Yu[1], Xinglong Han[1], Hongchun Wu[1], Zhen-Ao Zhao[1], Yongming Wang[2], Wei Lei[1], Shijun Hu[1]
[1]Soochow University, Suzhou, China, [2]Fudan University, Shanghai, China

Thur-132 Abstract ID: 364 Single-cell analysis of non-myocytes during cardiac regeneration

Hong Ma[1], Ziqing Liu[1], Xiangwen Peng[1], Yucheng Yang[1], Josh Welch[2], Li Qian[1], Jiandong Liu[1]
[1]University of North Carolina, Chapel Hill, NC, USA, [2]Univeristy of Michigan, Ann Arbor, MI, USA

Thur-133 Abstract ID: 136 A nanogel coating improves the engraftment and reparative potency of transplanted mesenchymal stem cells in infarcted rat hearts

Xinyang Hu[1, 2], Ling Zhang[1, 2], Guowu Liu[3, 4], Kaiqi Lv[1, 2], Yingchao Wang[1, 2], Jing Zhao[1, 2], Wangxing Hu[1, 2], Jizeng Sun[3], Changchen Xiao[1, 2], Keyang Zhu[1, 2], Lianlian Zhu[1, 2], Jinliang Nan[1, 2], Ye Feng[1, 2], Huaying Zhu[5], Wei Chen[5], Wei Zhu[1, 2], Jianyi Zhang[6], Ben Wang[3, 4], Jian'an Wang[1, 2]
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Theme 7: Cardiac Metabolism

Thur-134 Abstract ID: 428 * Modulating metabolic switch promotes cardiomyocyte proliferation and cardiac regeneration in post-myocardial infarction heart

Luxun Tang[1], Qiao Liao[1], Liangpeng Li[1], Yu Shi[1], Shuang Qu[1], Xuewei Xia[1], Wenbin Fu[1], Wei Eric Wang[1], Chunyu Zeng[1]
[1]Army Medical University, Chongqing, China

Thur-136 Abstract ID: 496 * Fibrinogen is associated with two-year major adverse cardiovascular events following percutaneous coronary intervention in patients with acute coronary syndrome

Lisha Zhang[1], Juan Zhou[1], Yue Wu[1], Zuyi Yuan[1]
[1]Xi'an Jiaotong University, Xi'an, China

Thur-137 Abstract ID: 506 * Preserved cardiac structure by endogenous n-3 PUFAs is associated with profile shifts of lipid mediators in murine ventricular pressure overload

Fenghua Yang[1], Chun Cai[2], Weijiang Tan[1], Xiang Li[1], Shuang Zheng[1,3], Junjie Zhang[2], W. Glen Pyle[4], Peter H Backx[5], Ren Huang[1]
[1]Guangdong Province Key Laboratory of Laboratory Animals, Guangzhou, China, [2]Guangdong Medical University, Zhanjiang, China, [3]Guangdong Pharmaceutical University, Guanghzou, China, [4]Ontario Veterinary College, University of Guelph, Guelph, Canada, [5]York University, Toronto, Canada; University Health Network, Toronto, Canada

Thur-138 Abstract ID: 410 * Increasing fatty acid oxidation prevents high fat diet induced cardiomyopathy through regulating mitophagy activity

Dan Shao[1], Stephen C. Kolwicz Jr[1], Pei Wang[1], Nathan Roe[1], Outi Villet[1], Arianne Caudal[1], Wang Wang[1], Rong Tian[1]

[1]University of Washington, Seattle, WA, USA

Thur-139 Abstract ID: 612 * Mitochondrial protein interactome analysis reveals physical remodeling of OXPHOS machinery and intermediary metabolism network in the failing mouse heart

Arianne Caudal[1, 2, 3], Juan D. Chavez[4], Chi Fung Lee[2, 3], Outi Villet[2, 3], Bo Zhou[2, 3], James E Bruce[4], Rong Tian[1, 2, 3]
[1]Biochemistry, University of Washington, Seattle, WA, USA, [2]Mitochondria and Metabolism Center, University of Washington, Seattle, WA, USA, [3]Anesthesiology and Pain Medicine, University of Washington, Seattle, WA, USA, [4]Genome Sciences, University of Washington, Seattle, WA, USA

Thur-140 Abstract ID: 206 * The ribosomal prolyl hydroxylase Ogfod1 alters the proteomic landscape to protect the heart from injury

Leslie Kennedy[1], Junhui Sun[1], Angel Aponte[2], Audrey Noguchi[3], Danielle Springer[3], Marjan Gucek[2], Matthew Cockman[4], Peter Ratcliffe[4], Elizabeth Murphy[1]
[1]Cardiac Physiology Group, NIH/NHLBI, Maryland, US, [2]Proteomics Core Facility, NIH/NHLBI, Maryland, US, [3]Mouse Phenotyping Core Facility, NIH/NHLBI, Maryland, US, [4]Francis Crick Institute, London, UK

Thur-141 Abstract ID: 511 BET bromodomain inhibition is associated with mitochondrial alterations in the heart

Jérôme Piquereau[1], Angele Boet[2,3,4,5], Christine Péchoux[6], Fabrice Antigny[2,4], Mélanie Lambert[2,4], Mélanie Gressette[1], Benoît Ranchoux[2,4], Natacha Gambaryan[7], Valérie Domergue[8], Sharon Mumby[7], David Montani[2,3,9], Ian M Adcock[7], Marc Humbert[2,3,9], Anne Garnier[1], Catherine Rucker-Martin[2,4,5], Frédéric Perros[2,4]
[1]UMR-S 1180, Inserm, Univ. Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France, [2]INSERM UMR_S 999, Hôpital Marie Lannelongue, Le Plessis Robinson, France, [3]Réanimation des cardiopathies congénitales, Hôpital-Marie-Lannelongue, Univ. Paris-Sud, Le Plessis-Robinson. France, [4]Univ Paris-Sud, Faculté de Médecine, Université Paris-Saclay, Le Kremlin Bicêtre, France, [5]Hôpital Marie Lannelongue, Recherche médicale, Le Plessis Robinson, France, [6]Gabi, Inra, AgroparisTech, Université Paris-Saclay, 78350 Jouy-en-Josas, France, [7]Airway Disease Section, National Heart and Lung Institute, Imperial College London, London, UK, [8]Animal Facility, Institut Paris Saclay d'Innovation Thérapeutique (UMS IPSIT), Université Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France, [9]AP-HP, Service de Pneumologie, Hôpital Bicêtre, Le Kremlin-Bicêtre, France

Thur-142 Abstract ID: 450 Does menopause have an impact on plasma HDL-C levels? A systematic review and meta-analysis

Hongwei Li[1,2], Runlu Sun[1,2], Qian Chen[1,2], Jinlan Bao[1,2], Qi Guo[1,2], Zhijian He[1,2], Weifeng Lu[1,2], Liming Lu[3], Yuling Zhang[1,2]
[1]Cardiovascular Medicine Department, Sun Yat-sen Memorial Hospital, Sun Yat-sen University, Guangzhou, China, [2]Guangdong Province Key Laboratory of Arrhythmia and Electrophysiology, Guangzhou, China, [3]Key Unit of Methodology in Clinical Research, The Second Affiliated Hospital of Guangzhou University of Chinese Medicine, Guangzhou, China

Thur-143 Abstract ID: 505 High fat-carb diet-induced obesity depresses cardiac function and alters serum metabolomics in aged cynomolgus monkeys

Shang Zheng[1,2], Weijiang Tan[2], Baoyong Gong[2], Binglin Li[2], Xiang Li[2], Xiaolin Liu[2], Ting Luo[2], Lijing Wang[1], Feng Hua Yang[2], Ren Huang[1,2]
[1]Guangdong Pharmaceutical University, Instititue of Vascular Biology, Institute of Basic Science, Guanghzhou, China, [2]Guangdong Laboratory Animals Monitoring Institute, Guangdong Province Key Laboratory of Laboratory Animals, Guangzhou, China

Thur-144 Abstract ID: 526 The expression and clinical significance of key enzymes-ATP-citrate lyase related with glucolipid metabolism in Urea transporter B(UT-B) deficient mice

Yanwei Du[1], Shuang Fu[1], Xin Su[1], 1, Lanying Yu[1], 1, Tiantian Liu[1], Yi Li[1], Sheng Liu[1], Jiayan Ren[1], Yan Meng[2], Xuejian Lv[3], Baoxue Yang[2]
[1]Changchun University of Chinese Medicine, Changchun, China, [2]College of Basic Medicine, Jilin University, Changchun, China, [3]The Second Affiliated Hospital of Jilin University, Changchun, China

Thur-145 Abstract ID: 555 Decreased mitochondrial pyruvate carrier expression mediates pathological cardiac hypertrophy

Mariana Fernandez-Caggiano[1], Alisa Kamynina[1], Asvi A. Francois[1], Thomas Eykyn[1], Oleksandra Prysyazhna[1], Thomas Eykyn[1], Susanne Krasemann[2], Maria G. Crespo-Leiro[3], Maria Garcia Vieites[3], Nieves Domenech[3], Philip Eaton[1]
[1]School of Cardiovascular Medicine and Sciences, King's College London. The Rayne Institute, St. Thomas' Hospital, London SE1 7EH, United Kingdom, [2]University Medical Center Hamburg Eppendorf UKE. Institute for Neuropathology Research Campus N27, Hamburg, Germany, [3]Unidad de Cirugia Cardiaca y Trasplante, Servicio de Cardiología, Complejo Hospitalario Universitario de A Coruña (CHUAC), A Coruña, Spain

Thur-146 Abstract ID: 599 Human cytomegalovirus promoting endothelial cell proliferation by targeting regulator of G-protein signaling 5 hypermethylation and downregulation

Xiaoni Zhang[1], Na Tang[1], Dongmei Xi[2], Qian Feng[3], Yongmin Liu[4], Lamei Wang[5], Yan Tang[6], Hua Zhong[7], Fang He[8]
[1]Medical College of Shihezi University, Shihezi, China, [2]The First Affiliated Hospital of Medical College of Shihezi University, Shihezi, China, [3]The First Affiliated Hospital of Medical College of Shihezi University, Shihezi, China;

Thur-147 Abstract ID: 639 Effects of maternal obesity and voluntary exercise during pregnancy on cardiometabolic risk factors in adult offspring

Mukesh Raipuria[1,3], Hasnah Bahari[2], Priscilla Prestes[1], Margaret Morris[4], Fadi Charchar[1]
[1]Federation University Australia, Mt Helen VIC, [2]Universiti Putra Malaysia, Selangor, Malaysia, [3]Children's Cancer Institute Australia, Sydney, NSW, Australia, [4]UNSW Sydney, Sydney, NSW Australia

Thur-148 Abstract ID: 223 Targeting ATGL to rescue BSCL2 lipodystrophy and its associated cardiomyopathy

Hongyi Zhou[1], Xinnuo Lei[1], Yun Yan[1], Todd Lydic[3], Jie Li[2], Neal L Weintraub[2], Huabo Su[2], Weiqin Chen[1]
[1]Department of Physiology, Medical College of Georgia at Augusta University, Augusta, GA, USA [2]Vascular Biology Center, Medical College of Georgia at Augusta University, Augusta, GA, USA, [3]Department of Physiology, Michigan State University, East Lansing, MI, USA

Theme 8: Vascular Dysfunction, Inflammation and Remodeling

Thur-149 Abstract ID: 556 * Up-regulated Piezo1 in VSMCs promotes pathological hemodynamic-induced neointimal hyperplasia

Zhang FeirRan[1], Zhou JiaGuo[1]
[1]Department of Pharmacology, Cardiac and Cerebral Vascular Research Center, Zhongshan School of Medicine, Sun Yat-Sen University, Guangzhou, China

Thur-150 Abstract ID: 561 * Protective function of LXR agonists in established vulnerable plaques: involvement of regulating endoplasmic reticulum-mediated macrophage apoptosis and efferocytosis

Xinyu Che[1], Qin Shao[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Thur-151 Abstract ID: 569 * Reduced intracellular chloride concentration impairs angiogenesis via promoting VEGFR2/PTP1B interaction

Jinyan Shang[1] , Kai Li[1], Xiaofei Lv[1], Sijia Liang[1], Jiaguo Zhou[1]
[1]Sun Yat-Sen University, Guangzhou, China

Thur-152 Abstract ID: 570 * microRNA-29a involvement in phenotypic transformation of venous smooth muscle cells via TET1 in response to mechanical stretch

Qingping Yao[1], Jiting Liu[1], Ze Liu[1], Yingxin Qi[1], Zonglai Jiang[1]
[1]Institute of Mechanobiology & Medical Engineering, Shanghai Jiao Tong University, Shanghai, China

Thur-153 Abstract ID: 576 * The role of E-type prostaglandin receptor EP3 in acute renal injury induced by ischemia-reperfusion

Leng Jing[1], Zhao Wen[1], Liu Bin[1]
[1]Medical College of Shantou University, Shantou, China

Thur-154 Abstract ID: 588 * CircAdamts6 regulates neointimal formation in the rat common carotid artery

Jun Jiang[1,2], Zhihua Rong[1], Tao Li[2], Xiaoling Zhu[1], Yu Cao[1]
[1]Affiliated Hospital of Southwest Medical University, Luzhou, China, [2]Key Laboratory of Medical Electrophysiology, Southwestern Medical University, Luzhou, China

Thur-155 Abstract ID: 600 * MicroRNA-31 attenuated angiotensin II-induced hypertension by regulating regulatory T cells differentiation

Xiangxiao Li[1], Wei Cai[2], Wenda Xi[1], Weihong Sun[3], Weili Shen[1], Tong Wei[1], Xiaohui Chen[1], Libo Sun[2], Hong Zhou[2], Yang Sun[2], Wendong Chen[1], Pingjin Gao[1], Honglin Wang[2], Qun Li[1]
[1]Shanghai Key Laboratory of Hypertension, Ruijin Hospital, Shanghai Institute of Hypertension, Shanghai Jiao Tong University School of Medicine, Shanghai, China, [2]Shanghai Institute of Immunology, Department of Immunology and Microbiology, Shanghai Jiao Tong University School of Medicine, Shanghai, China, [3]Shanghai Institute of Biological Sciences, Chinese Academy of Sciences, Shanghai, China

Thur-156 Abstract ID: 615 * Adiponectin improves vascular endothelial dysfunction through caveolin-1 mediated nuclear translocation and HDAC inhibition

Yunhui Du[1, 4], Xiaoliang Wang[4], Wayne Bond Lau[4], Yongxiang Wei[1], Huirong Liu[2], Jie Du[1], Litian Yin[3], Erhe Gao[5], Walter Koch[5], Yajing Wang[3, 4], Xinliang Ma[1, 4]
[1]The Key Laboratory of Upper Airway Dysfunction-Related Cardiovascular Diseases, Beijing An Zhen Hospital, [2]Metabolic Disorder Related Cardiovascular Diseases, Capital Medical University, China, [3]Department of Physiology, Shanxi Medical University, Taiyuan, China, [4]Department of Emergency Medicine, Thomas Jefferson University, Philadelphia, PA, USA, [5]Center for Translational Medicine, Temple University, Philadelphia, PA, USA

Thur-157 Abstract ID: 619 * Immune response-free monkey autologous iPSCs and their exosomes are more effective than their allogeneic counterparts in promoting angiogenesis and wound healing

Meng Lu[1], Peng Lu[1], Ming Xu[1], Xiaokai Wang[1], Anfeng Cui[1], Yijun Li[1], Meng Xiang[1], Sifeng Chen[1]
[1]Fudan University, Shanghai, China

Thur-158 Abstract ID: 620 * Angiotensin II inhibits apoptosis of mouse aortic smooth muscle cells through regulating the circNRG-1/miR-193b-5p/NRG-1 axis

Yan Sun[1], Suli Zhang[1], Mingming Yue[1], Yang Li[1], Jing Bi[1], Huirong Liu[1]
[1]Capital Medical University, China

Thur-159 Abstract ID: 627 * Bmal1 deletion in myeloid cells attenuates atherosclerotic lesion development and restrains abdominal aortic aneurysm formation in hyperlipidemic mice

Guangrui Yang[1], Lihong Chen[2]
[1]Dalian University of Technology, China, [2]Dalian Medical University, China

Thur-160 Abstract ID: 636 * Chlamydia pneumoniae infection promotes the migration of vascular smooth muscle cell via the CXCR4/TLR2 singling pathway in atherosclerosis

Guolin Miao[1], Beibei Wang[1], Lijun Zhang[1], Jingya Liu[1], Xi Zhao[1], Guangyan Wang[1], Ningbo Zheng[1], Lijun Zhang[1]
[1]Tianjin Medical University, Tianjin, China

Thur-161 Abstract ID: 638 * Autoantibodies against angiotensin II type 1 receptor induced sustained vasoconstriction through inhibition of BK channels in vascular smooth muscle cells

Meili Wang[1], Xiaochen Yin[1], Suli Zhang[1], Huirong Liu[1]
[1]Capital medical university, Beijing, China

Thur-162 Abstract ID: 656 * GDF11 promote the endothelial differentiation and paracrine functions of MSC on Angiogenic Therapy via TGFβ-R/ERK/EIF4E pathway

Chi Zhang[1], Hong Yu[1]
[1]Zhejiang University, and Cardiovascular Key Laboratory of Zhejiang Province, Hangzhou, China

Thur-163 Abstract ID: 541 * Mesenchymal stem cell-derived exosomes inhibits the activation of NLRP3 inflammasome in mice after myocardial infarction by releasing circASXL1

Yanli Wang[1], Yu Zhang[1], Wenping Xie [1], Bing Yan[1], Feng Liu [1], Yuqing Zhang [1], Chaoshan Han[1], Bao Zhu[1], Yangxin Li [1]
[1]First Affiliated Hospital of Soochow University, Suzhou, China

Thur-164 Abstract ID: 628 * Cardiac inflammation and electrocadiographic changes are strongly correlated in a Coxsackievirus B3 induced viral myocarditis mouse model

Linghe Wu[1,2], Linde Woudstra[1,2], Tariq Dam[1,2], Liza Wong[4], A.C. van Rossum[2,4], Hans W.M. Niessen[1,2,3], Paul A.J. Krijnen[1,2]
[1]Department of Pathology, Amsterdam UMC, location VU Medical Center, Amsterdam, The Netherlands, [2]Amsterdam Cardiovascular Sciences, Amsterdam, The Netherlands, [3]Department of Cardiac Surgery, Amsterdam UMC, location VU Medical Center, Amsterdam, The Netherlands, [4]Department of Cardiology, Amsterdam UMC, location VU Medical Center, Amsterdam, The Netherlands

Thur-166 Abstract ID: 566 Silk fibroin and silk sericin composite hydrogel encapsulated exosomes promote wound healing

Chaoshan Han[1], Yu Zhang[1], Yanli Wang[1], Yuqing Zhang[1], Bing Yan[1], Wenping Xie[1], Feng Liu[1], Bao Zhu[1], Chaofan Wu[1], Yao-hua song[1], Yangxin Li[1]
[1]First Affiliated Hospital of Soochow University, Suzhou, China

Thur-167 Abstract ID: 604 Yap-1 participate in polarization of macrophages

Chaojin Lin[1], Songpei Li[1], Sai Deng[1]
[1]Key Laboratory of Molecular Clinical Pharmacology, School of Pharmaceutical Sciences & Fifth Affiliated Hospital, Guangzhou, China

Thur-168 Abstract ID: 517 Effect of PFKFB3 on curcumin inhibiting Ang-II induced proliferation and migration of VSMCs

Dongmei Yang[1], Yumei Cao[2], Yanjie Huo[2], Juan Nie[1], Qinhui Tuo[1]
[1]School of Medical, Hunan University of Chinese Medicine, Changsha, China, [2]School of Pharmacy, Hunan University of Chinese Medicine, Changsha, China

Thur-169 Abstract ID: 520 BRD9 controls oxytocin signal pathway in gastric cancer via CACNA2D4 and CALML6

Yuan Wang[1], Xueyan Jiang[1], Guodong Zheng[1], Chuanshan Xu[1], Lu Liang[1], Zhongxiao Lin[1], Xiyong Yu[1]
[1]Guangzhou Medical University, Guangzhou, China

Thur-170 Abstract ID: 533 Platelet-derived microparticles deliver miR-142-3p and promote endothelial cell proliferation in hypertension

Han Bao[1], Yuanxiu Chen[1], Qingping Yao[1], Yingxin Qi[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Thur-171 Abstract ID: 537 Engineering P-selectin immunoliposomes loaded with neutrophil and mast-cell-derived protease inhibitor for cardioprotection post-ischemia reperfusion injury

Bahman Hooshdaran[1], Mikhail A. Kolpakov[1], Xinji Guo[1], Tao Wang[1], Yuan Tang[2], Mohammad F. Kiani[2], Abdelkarim Sabri[1]
[1]Cardiovascular Research Center and Department of Physiology, Temple University, Philadelphia, United States, [2]Department of Bioengineering, Temple University, Philadelphia, PA, USA

Thur-172 Abstract ID: 539 miR-92a-3p mediates the proangiogenic effect of endothelial exosomes in endothelial cells

Sufang Li[1], Hong Chen[1]
[1]Peking University People's Hospital, Beijing, China

Thur-173 Abstract ID: 557 JAK2 V617F mutation promotes hypoxia-induced pulmonary hypertension in mice

Yusuke Kimishima[1], Tomofumi Misaka[1], Tetsuro Yokokawa[1], Keiji Minakawa[1], Koichi Sugimoto[1], Takafumi Ishida[1], Kazuhiko Ikeda[1], Yasuchika Takeishi[1]
[1]Fukushima Medical University, Fukushima, Japan

Thur-174 Abstract ID: 564 Short term Pm2.5 exposure exacerbated transition from left ventricular failure to right ventricular hypertrophy

Wenhui Yue[1], Tong lei[2], Zhongbing Lu[2], Yawei Xu[1], Yingjie Chen[1]
[1]Tongji University, Shanghai, China, [2]University of Chinese Academy of Sciences, Beijing, China

Thur-175 Abstract ID: 601 Preliminary characterization of phosphodiesterase-9 in rodent and human pulmonary artery

Liting Wang[1], Liang Zhang[1], Kaouter Bouadjel [1], Audrey Varin[1], Frédéric Perros[2], Fabrice Antigny[2], Olaf Mercier[2], Rodolphe Fischmeister[1], Véronique Leblais[1], Boris Manoury[1]
[1]UMR-S 1180, Univ Paris-Sud, Inserm, Université Paris-Saclay - Châtenay-Malabry, France, [2]UMR-S 999, Univ Paris-Sud, Inserm, Université Paris-Saclay - Le Plessis-Robinson , France

Thur-176 Abstract ID: 605 Arterial mechanical stretch blocks venous smooth muscle cell autophagic flux in the grafted vein

Yi Chen[1], Jiting Liu[1], Qingping Yao[1], Yingxin Qi[1]
[1]Shanghai Jiao Tong University, Shanghai, China

Thur-177 Abstract ID: 607 The role of RIP3 and RIP1 on necroptosis under AV-shunt in aorta

Wenpin Cheng[1]
[1]Shin Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan

Thur-178 Abstract ID: 621 Smooth muscle cell TMEM16A upregulation prevents vascular autophagy and remodeling

Xiaofei Lv[1], Sijia Liang[1], Yongyuan Guan[1]
[1]Sun Yat-Sen University, Guangzhou, China

Thur-179 Abstract ID: 631 Role of central nervous system in the progression of preeclampsia

Abdoulaye Issotina Zibrila[1], Zheng Wang[1], Yuyao Sun[1], Gongxiao Zhao[1], Kaiyue Feng[1], Ying Ma[1], Leilei He[1], Yuejin Liang[2], Lynn Soong[2], Jinjun Liu[1]
[1]Xi'an Jiaotong University, Xi'an, China, [2]University of Texas Medical Branch, Galveston, TX, USA

Thur-180 Abstract ID: 647 The mitochondrial Na^+/Ca^{2+} exchanger enables mitochondrial calcium balance in placental vessel from preeclampsia

Xueqin Feng[1], Zhice Xu[1,2], Xiyuan Lu[1]
[1]First Hospital of Soochow University, Suzhou, China, [2]Loma Linda University, Loma Linda, CA, USA

Thur-181 Abstract ID: 666 The protective effect of recombinant cystatin rSjcystatin on myocardial infarction of mice

Yannan Li[1], Siyu Chen[1], Liying Xie[1], Lin Zuo[1]
[1]Shanxi Medical University, Shanxi Taiyuan, China

Thur-182 Abstract ID: 287 Celastrol inhibits proliferation of vascular smooth muscle cells via autophagy in atherosclerosis

Yaning Shi[1,2], Zhe Shi[1,2], Neng Zhu[3], Chanjuan Zhang[1,2], Yuxiang Wang[1,2], Jianye Yan[4], Duanfang Liao[1,2], Li Qin[1,2]
[1]Hunan University of Chinese Medicine, Changsha, China [2]Division of Stem Cell Regulation and Application, [3] The First Hospital of Hunan University of Chinese Medicine, Changsha, China [4]Institute of Innovation and Applied Research in Chinese Medicine, Changsha, China

Thur-183 Abstract ID: 298 SIRT1-QKI-cZFP609 axis in smooth muscle cells impairs arteriogenesis and angiogenesis after ischemia via inhibition of HIF-1α

Yongqing Dou[1], Peng Kong[1], Mei Han[1]
[1]Hebei Medical University, Shijiazhuang, China

Thur-184 Abstract ID: 514 Biochanin A relaxes porcine coronary arteries by blocking L-type calcium channels

Thomas Migkos[1], Jana Pourova[1], Marie Vopršalová[1], Cyril Auger[2], Valerie Schini-Kerth[2], Přemysl Mladěnka[1]
[1]Charles University, Hradec Kralove, Czech Republic, [2]University of Strasbourg, Strasbourg, France

Thur-185 Abstract ID: 232 The neuroregulation of vascular calcification

Rui Yang[1], Hui Li[1], Sheng Jin[1], Yuming Wu[1], Xu Teng[1]
[1]Hebei Medical University, Shijiazhuang, China

AUTHOR INDEX

Prizes & Awards & Speakers

PRIZES & AWARDS

Outstanding Investigator Award
Bin Zhou (Shanghai Institutes for Biological Sciences)

Keith Reimer Distinguished Lecture
Christoph Maack (Univ Hospital of Wȯrzburg)

Research Achievement Award
Issei Komuro (Univ of Tokyo)

Peter Harris Distinguished Scientist Award
Sian Harding (NHLI, Imperial College)

Janice Pfeffer Distinguished Lecture
Lucie Carrier (Univ Med Ctr Hamburg-Eppendorf)

President's Distinguished Lecture
Yoshihiko Saito (Nara Medical Univ)

Distinguished Leader Award
David Eisner (Univ of Manchester)

RJ Bing Young Investigator Award Finalists
Alicia D'Souza (Univ of Manchester)
Atsushi Hoshino (Univ of Pennsylvania)
Gabriele Schiattarella (Univ of Texas Southwestern Medical Center)
Ronald Vagnozzi (Cincinnati Children's Hospital Medical Center)

Outstanding Investigator Award

The purpose of this annual award is to recognize an outstanding scientist who (i) is making major and independent contributions to the advancement of cardiovascular science, and (ii) is leading a growing research program likely to play a major role in the future. The main criteria for selecting awardees are scientific excellence, independence, an potential for future research contributions. While the Peter Harris Award recognizes lifelong accomplishments and the Richard Bing Award recognizes young investigators, the Outstanding Investigator Award (presented annually) is targeted at established investigators who are in the intermediate phase of their academic career.

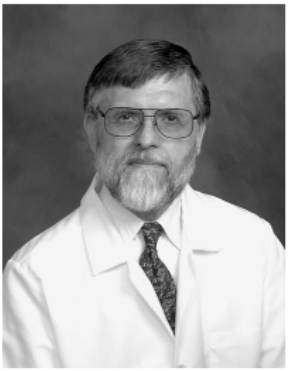
In non-Congress years, the Outstanding Investigator Award is presented at one of the ISHR Section meetings on a rotating basis. The winner presents a major lecture and receives a $1,000 honorarium and a plaque.

An announcement of this Award is published in Heart News and Views, and posted in the ISHR website. The winner receives free registration and reimbursement for travel expenses (up to a maximum or $1500 when the recipient delivers the lecture at his/her local Section meeting, and $3,000 when inter-continental travel is required). Nominations for the Outstanding Investigator Award are sought by the Secretary General from members of the International Council, members of the Editorial Board of the Journal of Molecular and Cellular Cardiology, and the Councils of ISHR Sections. In addition, the Secretary General publishes an open invitation in the ISHR website for members to submit nominations.

"Elucidating the origin of new cardiomyocytes in the adult mammalian heart"

Dr. Bin Zhou
The Outstanding Investigator Award 2019

Keith Reimer Distinguished Lecture



Keith Reimer, M.D. 1946-2002

Keith Arnold Reimer, M.D., Ph.D., Professor of Pathology at Duke University Medical School, internationally recognized cardiovascular scientist, pathologist, and teacher, died on March 15, 2002 of metastatic renal cell carcinoma at the age of 56. Keith began his career in experimental pathology studying ischemic injury of the kidney, however he quickly shifted his focus to myocardial ischemic injury, the field in which he went on to make his major scientific contributions. After completing the MD/PhD program at Northwestern University in Chicago, Keith joined the faculty at Duke University in 1975 as Assistant Professor of Pathology. Early in his career, working in collaboration with Dr. Robert B. Jennings, he published landmark studies describing and characterizing the "wavefront phenomenon" of myocardial ischemic cell death. These studies, published in two papers, have been cited more than 1000 times. During the early 1980s, Keith developed methods to measure baseline predictors of infarct size, such as area at risk and collateral flow, that have become the standard for generating reliable and reproducible data to test cardioprotective interventions. The effort to discover cardioprotective interventions led to one of Keith's most notable achievements – the description of one of the strongest and most reproducible interventions for reducing infarct size: ischemic preconditioning. Numerous investigators and laboratories have worked to better understand this remarkably effective intervention, and the ever-expanding number of studies on ischemic preconditioning, in a wide variety of tissues, have consistently confirmed the original observation that brief periods of ischemia and reperfusion are not detrimental, but are actually markedly protective. The original article describing the phenomenon of ischemic preconditioning, "Preconditioning with ischemia: a delay of lethal cell injury in ischemic myocardium" has been cited more than 3700 times.

Keith was an active member of the ISHR since 1976, and was elected a Councilor of the American Section in 1979, serving until 1985. He was a finalist for the Richard Bing Young Investigator Award of the ISHR in 1980. Keith served as Secretary of the American Section from 1985-1994, and as a member of the Council of the International Society from 1989-1995. In 1997, he became President-Elect of the American Section and was the sitting President of the American Section, as well as a member of the International

ISHR Council, when he died.

Each year, the International Council selects a speaker to deliver the Keith Reimer Distinguished Lecture at the World Congress or at the annual section meeting of one of the six ISHR Sections on a rotating basis. The purpose of this lecture is to honor the memory of Dr. Reimer and to recognize his contributions to cardiovascular research. The topic of the lecture must be in the field of ischemia, coronary hemodynamics, cardiac metabolism, or contractile mechanisms. The speaker receives a plaque and $1,000 honorarium in addition to travel expenses.

"Mitochondrial redox regulation in heart failure"

Dr. Christoph Maack
The Keith Reimer Distinguished Lecture 2019

Research Achievement Award

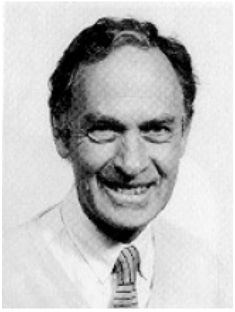
This Award recognizes an internationally prominent scientist with a sustained and distinguished record of major scientific achievements in the field of cardiovascular research. Awardees will have already had, and are expected to continue to have, a major impact on our understanding and/or treatment of cardiovascular disease. While both the Outstanding Investigator Award (OIA) and the Research Achievement Award (RAA) recognize established investigators, the OIA is targeted at more junior individuals (at least Assistant/Associate Professor or the equivalent), while the RAA is targeted at more senior individuals (full Professors or the equivalent).

The Research Achievement Award is presented at the triennial ISHR World Congress or, in non-Congress years, at one of the ISHR Section meetings on a rotating basis. The Award consists of a plaque and a monetary prize of $1,500. An announcement of this Award, along with a photograph and a biosketch, will be published in Heart News and Views, and posted in the ISHR website.

"Precision medicine for heart failure based on molecular mechanisms"

Dr. Issei Komuro
The Research Achievement Award 2019

Peter Harris Distinguished Scientist Award



Peter Harris, M.D., Ph.D.
1923-2002

Peter Harris was an influential international statesman in cardiology. A science scholar at King's College, London, UK, Harris trained in medicine at Kings College Hosp., qualifying in 1946. During house appointments at King's and the Brompton Hosp., he obtained his MD in 1951, winning the university gold medal and a PhD in 1955. He was appointed lecturer, in 1957, and reader in medicine, in 1962, at Birmingham University. In 1966, he was appointed the first Simon Marks' Professor of Cardiology at the Cardiothoracic Institute and Director of the Institute of Cardiology, in the Univ. of London. His career, which was dedicated to exploring the cardiovascular system and the origins of heart disease, can be viewed as three chapters. During the 1950's and early 1960's, he was in the mainstream of research, and used established methods of haemodynamic measurements to explore cardiac output and pulmonary blood flow and the metabolism of the heart muscle. [During]... the second stage of his career ...his research into the heart muscle turned to experiments at the cellular and molecular level. In 1970, Harris organized a meeting of an international study group for research in cardiac metabolism, which resulted in the publication of one of the most influential works on cardiology: Calcium and the Heart. The third element to Harris's career involved his fascination with the evolution of the cardiovascular and related systems. In a series of essays in 1983, he traced the way that the origins of clinical heart failure might lie in ancient reflexes. His study of the right ventricle of the heart and the blood flow to the lungs of yaks showed they had adapted genetically to high altitude by eliminating the vasoconstrictor response due to reduction of oxygen. Away from the laboratory, he was a talented musician and artist, and he showed a leaning toward satirical writing. His wife Francesca survives him. Excerpted from The Lancet 2003: 361: 1231

This Award was created in 1986, this very distinguished Award of international importance is the highlight of each World Congress of the ISHR. It is conferred in recognition of a lifetime of distinguished scientific achievements in the field of cardiovascular research.

"Broken heart syndrome – what doesn't kill you makes you stronger?"

Dr. Sian Harding
Peter Harris Distinguished Scientist Award 2019

Janice Pfeffer Distinguished Lecture

Janice M. Pfeffer, Ph.D.
1943-2001

The Janice M. Pfeffer Lectureship recognizes the scientific contributions of one of the pioneers in the field of cardiac remodeling. Born in Rockford, Illinois on October 31, 1943, Janice Marie Sikorski graduated with honors from Rockford College. There she studied with a lab partner named Marc Pfeffer, who shared her passion for integrative physiology. Janice and Marc became inseparable not only as husband and wife, but also as collaborators in integrative physiology. Janice M. Pfeffer was awarded her Ph.D. in Physiology and Biophysics from the University of Oklahoma, where she studied under Dr. Edward D. Frohlich. Her doctoral thesis, "Longitudinal Changes in Cardiac Function and Geometry During the Development of Left Ventricular Hypertrophy in the Spontaneously Hypertensive Rat," became a classic study on the role of cardiac hypertrophy and left ventricular remodeling. She continued her studies as a post-doctoral fellow in Dr. Eugene Braunwald's laboratory at the Peter Bent Brigham Hospital, Harvard Medical School. There she demonstrated that progressive ventricular enlargement, “ventricular remodeling”, occurs following a myocardial infarction, and that this process continues long after the histologic resolution within the infarct zone. Her landmark study, “Influence of Chronic Captopril Therapy on the Infarcted Left Ventricle of the Rat", definitively demonstrated that ventricular enlargement was attenuated by angiotensin converting enzyme inhibitors, and that favorable alterations in ventricular remodeling in the animal model were associated with improved cardiac performance and prolonged survival. These pioneering animal studies introduced the concept of ventricular remodeling as a potential therapeutic target, and subsequently served as the basis for the landmark clinical trial, Survival and Ventricular Enlargement (SAVE), which showed that long-term treatment with an angiotensin converting enzyme inhibitor (captopril) prevented cardiac remodeling and resulted in improved clinical outcomes in humans. Based upon the results of this seminal translational study, angiotensin converting enzyme inhibitors have become one of the mainstays of therapy for the treatment of myocardial infarction. In addition to being a meticulous and thoughtful scientist, Janice M. Pfeffer was a devoted mother and wife, who serves as a role model for countless women scientists. The intent of the Janice M. Pfeffer Lectureship is to acknowledge not only the latest insights and advances in the field of cardiac remodeling, but also to remember the remarkable personal and professional qualities that were emblematic of Dr. Janice M. Pfeffer.

Each year, the International Council selects a speaker to deliver the Pfeffer Distinguished Lecture at the World Congress or at the annual section meeting of one of the three largest ISHR Sections. The purpose of this lecture is to honor the memory of Dr. Pfeffer and to recognize her contributions to cardiovascular research. The topic of the lecture must be in the field of remodeling, heart failure and/or hypertrophy. The speaker receives a plaque and $1,000. honorarium in addition to travel expenses.

"Sarcomeropathy - from bedside to bench and back "

Dr. Lucie Carrier
Janice Pfeffer Distinguished Lecture 2019

President's Distinguished Lecture

In October 2004, the International Council created a new distinguished lecture, named The President's Lecture, which is a highlight of ISHR World Congresses and Section meetings. The President's Lecture is held at each World Congress of the ISHR and, in nonCongress years, at the annual meeting of one of the ISHR Sections on a rotating basis. This lecture is intended to be a high profile event and is scheduled as a keynote plenary lecture. The International Council selects the speaker. The topic of the lecture is in the field of molecular biology, genetics, genomics or proteomics, but the content should be chosen to be of broad interest to the cardiovascular community. The speaker is reimbursed for travel expenses, and receives a plaque and a $1,000 honorarium. A photograph and biosketch of the speaker is published in Heart News and Views, and is posted in the ISHR website. The President's Lecture enhances the content of the ISHR scientific meetings by providing a high-quality presentation in a topical area that is not covered by other distinguished lecture awards, and reflects the continuing growth of the ISHR as a professional Society. This award is funded by a generous donation from Roberto Bolli, MD, winner of the ISHR 2004 Research Achievement Award, who declined to collect the monetary prize associated with the Award and requested that it be used for this purpose.

"Molecular mechanism for cardio-renal connection"

Dr. Yoshihiro Saito
The President's Distinguished Lecture 2019

Distinguished Leader Award

The ISHR Distinguished Leader Award is an award of high distinction that is conferred annually to an individual who has made sustained outstanding contributions to accomplishing the mission and advancing the objectives of the ISHR. The selection of the recipient is made solely on the basis of a distinguished and consistent track record of major contributions to the Society, such as leadership roles, activities, and initiatives that have benefited and promoted the ISHR by overcoming problems, developing new programs, and expanding the reach and impact of the Society, at the Section and/or the International levels. In non-Congress years, the Distinguished Leader Award is presented at the meeting of the Section to which the recipient belongs. The winner receives a $1,000 honorarium and a plaque. An announcement of this Award is published in Heart News and Views, and posted in the ISHR website. The winner receives free registration and reimbursement for travel expenses (up to a maximum or $1500 when the recipient delivers the lecture at his/her local Section meeting, and $3,000 when inter-continental travel is required). Candidates are nominated by current Section Presidents and the President of the International ISHR. The winner is selected by vote of the ISHR-International Council

Dr. David Eisner
The Distinguished Leader Award 2019

RJ Bing Young Investigator Award

Dr Richard J Bing (1909-2010)

The Richard J. Bing Award for Young Investigators is given at each World Congress of the International Society for Heart Research. The purpose of this Award is to recognize outstanding endeavors by new investigators in research activities, and to encourage continued biomedical research careers broadly related to cardiovascular biology. Candidates must be either graduate students or have received their Ph.D. (or equivalent) less than 8 years prior to the opening day of the Congress. Applications include an original unpublished manuscript in any are of cardiovascular biology, a curriculum vitae and a letter signed by the candidate's immediate supervisor detailing how much of the design and research work was done by the candidate and by co-investigators. Four Finalists are selected from the submitted works by a Committee of the ISHR. At the Congress, each Finalist will verbally present his/her study to the Society and a winner will be chosen by a panel of senior investigators. ISHR covers the registration fee at the World Congress for all Finalists. The winner of the Award will receive a plaque and a cash award of US$1500. The three runner-ups will receive a plaque and a cash award of US$1000. A photograph and biosketch of the winner will be published in Heart News & Views and will be posted in the ISHR website.

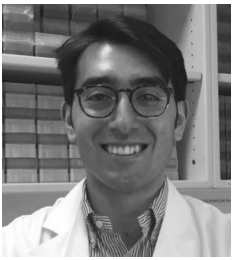
RJ Bing Young Investigator Award Finalists

Alicia D'Souza
Division of Cardiovascular Sciences University of Manchester, UK
Advisor: Dr Mark Boyett

Why do athletes have heart block? A new role for electrical remodeling of the atrioventricular node in equine and murine models of endurance exercise

Atsushi Hoshino
Dept of Cardiovascular Medicine Kyoto Prefectural Universtiy of Medicine
Advisor: Dr Zolt Arany

The mitochondrial adenine nucleotide translocator mediates mitophagy independently of its nucleotide exchange activity



Gabriele Schiattarella
Dept of Internal Medicine—Cardiology Univ of Texas Southwestern Medical Center
Advisor: Dr Joseph Hill

Nitrosative stress-dependent suppression of Xbp1s drives heart failure with preserved ejection fraction

Ronald Vagnozzi
The Heart Institute at Cincinnati Children's Cincinnati Children's Hospital Medical Center, USA
Advisor: Dr Jeffery Molkentin

An acute immune response underlies the benefit of cardiac adult stem cell therapy

SELECTED JUNIOR FACULTY SPEAKERS

Carolina Jaquenod De Giusti, National University of La Plata, Argentina	ECI Symposium 2
Daniel Soetkamp, Cedars-Sinai Heart Institute, USA	ECI Symposium 2
Eva Peters, Amsterdam University Medical Center, The Netherlands	ECI Symposium 2
George Madders, University of Manchester, UK	ECI Symposium 2
Guomin Xie, Capital Medical University, China	ECI Symposium 2
Hui Sun, Central South University, China	ECI Symposium 2
Johannes Janssens, University of Melbourne, Australia	ECI Symposium 1
Kazuko Tajiri, University of Tsukuba, Japan	ECI Symposium 2
Lianbo Shao, Soochow University, China	ECI Symposium 1
Lili Wang, Vanderbilt University Medical Center, USA	ECI Symposium 1
Lorna Daniels, University of Auckland, New Zealand	ECI Symposium 2
Monika Gladka, Hubrecht Institute, The Netherlands	ECI Symposium 1
Natasha Fillmore, National Institutes of Health, USA	ECI Symposium 1
Thomas Agbaedeng, South Australian Health and Medical Research Institute, Australia	ECI Symposium 1

TRAVEL AWARDEES

The International Society for Heart Research congratulates the following Travel Awardees:

Sections: Australasian
Lorna Daniels
Daniel Donner
Kyle Hatton-Jones
Johannes Janssens
Sarbjot Kaur
Parisa Koutsifeli
Kim Mellor
Anand Ramalingam
Celine Santiago
Helena Viola

Sections: Chinese
Cheng Ni
Huaping Li
Wenbin Fu
Suchi Chang
Yi Zhang
Ling Zhao
Rui Zhou
Junxia Zhang
Qingqi Ji
Hui Sun

Sections: European
Azrul Kadir
George Madders
Aurelia Bourcier
Bernadin Ndongson-Dongmo
Deli Zhang
Frederik Flenner
Gaia Calamera
Alacan Guran
Hasan Alveera
Jin Li
Kalman Benke
Maike Schuldt
Maria Arnold
Natalia Mendez-Carmona
Richard Jabour
Rio PutraJuni
Salvatore Antonucci
Qasim Majid
Daniel Benak
Kayleigh Griffiths
Sandy Chu
Michaela Cyprova

Sections: Japanese
Zhongyue Pu
Toshiyuki Ko
Tatsuyuki Sato
Tomoya Nakano

Sections: North American
Darrian N. Bugg
Arianne Caudal
Howard Choi
Zhen Li
Emily Olszewski
Marta Adamiak
Rushita A. Bagchi
Natasha Fillmore
Leslie M. Kennedy
Thomas E. Sharp
Daniel Soetkamp
Soroosh Solhjoo
Marta Szulik
Zhen Wang
Xiaomei Yang
Farid Khalafalla
Zhiqiang Lin
Hong Ma
Mark Ranek
Gaetano Santulli
Dan Shao
Qinchuan Wang

Sections: Latin American
Jaime Riquelme
Natalia Oshiyama
Luis Alberto Gonano
Alejandro Orlowski

INVITED SPEAKERS

Ajay Shah, King's College London, UK	Symposium 32
Alessandra Ghigo, University of Turin, Italy	Symposium 33
Andrew W. Trafford, University of Manchester, UK	Symposium 23
Anna-Maria Gomez, Institut National de la Santı et de la Recherche Mıdicale, France	Symposium 25
Anthony Rosenzweig, Harvard Medical School, USA	Symposium 34
Asa Gustafsson, University of California-San Diego, USA	Symposium 22
Baoliang Song, Wuhan University, China	Symposium 5
Ben He, Shanghai Jiaotong University, China	Symposium 26
Bjorn Knollmann, Vanderbilt University, USA	Symposium 25
Brian O'Rourke, Johns Hopkins University, USA	Symposium 2
Buddhadeb Dawn, University of Nevada, USA	Symposium 16
Burkert Pieske, Charitı-University Medicine Berlin, Germany	Symposium 15
Charles Steenbergen, Johns Hopkins University School of Medicine, USA	Symposium 14
Chunyu Zeng, Third Military Medical University, China	Symposium 12
Dale Abel, University of Iowa, USA	Symposium 4
Daniel Kelly, University of Pennsylvania, USA	Symposium 8
Daowen Wang, Tongji Medical College, China	Symposium 3
David Lefer, Louisiana State University, USA	Symposium 18
Dazhi Wang, Harvard Medical School, USA	Symposium 19
Depei Liu, Peking Union Medical College, China	Symposium 21
Derek Hausenloy, Duke-National University of Singapore Medical School, Singapore	Symposium 18
Diane Fatkin, Victor Chang Cardiac Research Institute, Australia	Symposium 30
Diego De Stefani, University of Padova, Italy	Symposium 2
Ding Ai, Tianjin Medical University, China	Symposium 29
Diogo Mosqueira, University of Nottingham, UK	Symposium 19
Don Bers, University of California-Davis, USA	Symposium 7
Elizabeth Murphy, National Institutes of Health, USA	Symposium 18

Emiliano Medei, Federal University of Rio de Janeiro, Brazil	Symposium 10
Emilio Hirsch, University of Torino, Italy	Symposium 33
Enzo Porrello, Murdoch Children's Research Institute, Australia	Symposium 27
Ernesto A. Aiello, National University of La Plata, Argentina	Symposium 33
Eva van Rooij, University Medical Center Utrecht, The Netherlands	Symposium 35
Fabio Di Lisa, University of Padova, Italy	Symposium 14
Fadi Charchar, Federation University, Australia	Symposium 11
Federica Accornero, Ohio State University, USA	Symposium 28
Federica Del Monte, Medical University of South Carolina, USA	Symposium 22
Frank Lezoualc'h, Institut National de la Santı et de la Recherche Mıdicale, France	Symposium 2
Friederike Cuello, University Medical Center Hamburg-Eppendorf, Germany	Symposium 32
Gary Lopaschuk, University of Alberta, Canada	Symposium 8
Gemma Figtree, University of Sydney, Australia	Symposium 36
Gianluigi Condorelli, Humanitas University, Italy	Symposium 35
Han Xiao, Peking University, China	Symposium 34
Hao Zhang, Key Laboratory of Cardiac Regenerative Medicine, National Health Commission, China	Symposium 19
Hector Valdivia, University of Michigan, USA	Symposium 25
Heng Ma, Fourth Military Medical University, China	Symposium 34
Henk Granzier, University of Arizona, USA	Symposium 15
Heping Cheng, Peking University, China	Symposium 32
Hiroyuki Tsutsui, Kyushu University, Japan	Symposium 2
Hossein Ardehali, Northwestern University, USA	Symposium 6
Huangtian Yang, Chinese Academy of Sciences, China	Symposium 31
Huihua Li, Dalian Medical University, China	Symposium 26
James Bell, University of Melbourne, Australia	Symposium 36
James Hudson, University of Queensland, USA	Symposium 24
James Martin, Baylor College of Medicine, USA	Symposium 14
Jeffery D.Molkentin, Cincinnati Children's Hospital Medical Center, USA	Symposium 9
Jennifer Davis, University of Washington, USA	Symposium 33

Jennifer L. Strande, Medical College of Wisconsin, USA	Symposium 20
Jenny Van Eyk, Cedars Sinai Medical Center, USA	Symposium 30
Jian'an Wang, Zhejiang University, China	Symposium 16
Jianyi Zhang, University of Alabama at Birmingham, USA	Symposium 24
Jie Du, Capital Medical University, China	Symposium 26
Jiliang Zhou, Medical College of Georgia, USA	Symposium 29
Jill Tardiff, University of Arizona, USA	Symposium 30
Jingsong Ou, Sun Yat-sen University, China	Symposium 5
Joan Heller-Brown, University of California-San Diego, USA	Symposium 23
Johannes Backs, University of Heidelberg, Germany	Symposium 28
John Calvert, Emory University, USA	Symposium 4
John Elrod, Temple University, USA	Symposium 6
Jolanda Van der Velden, Amsterdam University Medical Center, The Netherlands	Symposium 15
Jonathan Choi, Chinese University of Hong Kong, China	Symposium 29
Joseph Hill, University of Texas-Southwestern, USA	Symposium 15
Joseph Wu, Stanford University, USA	Symposium 24
Julie McMullen, Baker Heart and Diabetes Institute, Australia	Symposium 14
Julieta Palomeque, National University of La Plata, Argentina	Symposium 25
Jun Bu, Shanghai Jiaotong University, China	Symposium 13
Junbo Ge, Fudan University, China	Symposium 26
Junichi Sadoshima, Rutgers New Jersey Medical School, USA	Symposium 10
Junjie Xiao, Shanghai University, China	Symposium 34
Katharine Dibb, University of Manchester, UK	Symposium 25
Kerry Anne Rye, University of New South Wales, Australia	Symposium 5
Koh Ono, Kyoto University, Japan	Symposium 11
Koichi Kuwahara, Sinshu University, Japan	Symposium 23
Lars Mõgdefessel, Technical University of Munich, Germany	Symposium 5
Lea Delbridge, University of Melbourne, Australia	Symposium 15
Leslie Leinwand, University of Colorado, USA	Symposium 23

Li Wang, Chinese Academy of Medical Sciences, China	Symposium 27
Ling Tao, Fourth Military Medical University, China	Symposium 12
Lisa Heather, University of Oxford, UK	Symposium 8
Livia Hool, University of Western Australia, Australia	Symposium 1
Liwen Liu, Fourth Military Medical University, China	Symposium 12
Longsheng Song, University of Iowa, USA	Symposium 13
Luca Scorrano, University of Padua, Italy	Symposium 22
Manuel Mayr, King's College London, UK	Symposium 28
Manuela Zaccolo, University of Oxford, UK	Symposium 7
Maria Kontaridis, Harvard Medical School, USA	Symposium 36
Mark Anderson, Johns Hopkins University, USA	Symposium 18
Mark Sussman, San Diego State University, USA	Symposium 24
Martin Vila-Petroff, National University of La Plata, Argentina	Symposium 7
Matteo Mangoni, Institut de Genomique Fonctionnelle, France	Symposium 1
Mauro Giacca, King's College London, UK	Symposium 27
Merry Lindsey, University of Nebraska Medical Center, USA	Symposium 9
Michael Davis, Georgia Institute of Technology, USA	Symposium 24
Min Zhang, King's College London, UK	Symposium 34
Ming Lei, University of Oxford, UK	Symposium 17
Ming Zheng, Peking University, China	Symposium 21
Minghui Zou, Georgia State University, USA	Symposium 12
Nathalie Rosenblatt Velin, Lausanne University Hospital, Switzerland	Symposium 31
Nestor Perez, National University of La Plata, Argentina	Symposium 32
Ning Sun, Fudan University, China	Symposium 19
Paolo Bernardi, Padua University, Italy	Symposium 6
Paula da Costa Martin, Maastricht University, The Netherlands	Symposium 28
Peipei Ping, University of California – Los Angeles, USA	Symposium 6
Peter Ferdinandy, Semmelweis University, Hungary	Symposium 4
Phil Eaton, Queen Mary University of London, UK	Symposium 32

Pilar Alcaide, Tufts University, USA	Symposium 35
Ping Liang, Zhejiang University, China	Symposium 17
Priscila Sato, Temple University, USA	Symposium 10
Qing Jing, Chinese Academy of Sciences, China	Symposium 3
R John Solaro, University of Illinois, USA	Symposium 30
R. Mark Payne, Indiana University, USA	Symposium 21
Raj Kishore, Temple University, USA	Symposium 31
Rebecca Ritchie, Baker Heart and Diabetes Institute, Australia	Symposium 4
Rodolphe Fischmeister, Institut National de la Santı et de la Recherche Mıdicale, France	Symposium 7
Rong Tian, University of Washington, USA	Symposium 12
Ronglih Liao, Harvard Medical School, USA	Symposium 27
Ruiping Xiao, Peking University, China	Symposium 4
Sakthivel Sadayappan, University of Cincinnati, USA	Symposium 20
Salvatore Pepe, University of Melbourne, Australia	Symposium 6
Sam El-Osta, Baker Heart and Diabetes Institute, Australia	Symposium 3
Sarah Franklin, University of Utah, USA	Symposium 11
Sean Davidson, University College London, UK	Symposium 31
Sergio Lavandero, University of Chile, Chile	Symposium 10
Shey-Shing Sheu, Thomas Jefferson University, USA	Symposium 13
Shinsuke Yuasa, Keio University School of Medicine, Japan	Symposium 27
Shiqiang Wang, Peking University, China	Symposium 13
Stephan Lehnart, University of Goettingen, Germany	Symposium 1
Steven Houser, Temple University, USA	Symposium 20
Susmita Sahoo, Icahn School of Medicine at Mount Sinai, USA	Symposium 31
Tetsuji Miura, Sapporo Medical University, Japan	Symposium 10
Thomas Eschenhagen, University Medical Center Hamburg - Eppendorf, Germany	Symposium 20
Thomas Krieg, University of Cambridge, UK	Symposium 2
Thomas Thum, Hannover Medical School, Germany	Symposium 11
Thomas Vondriska, University of California-Los Angeles, USA	Symposium 35

Congress Information

HOTELS

1. China National Convention Center Grand Hotel

2. InterContinental Beijing Beichen

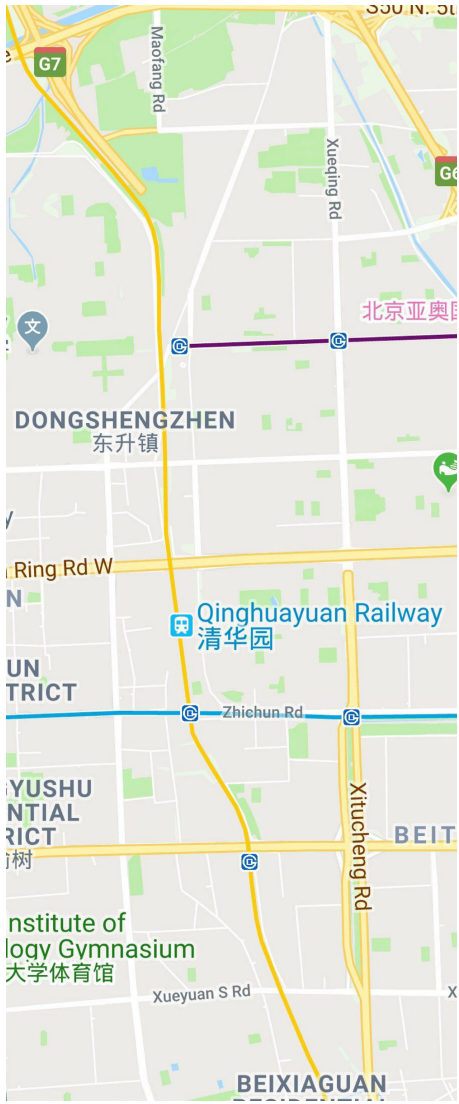
3. North Star Huiyuan Prime Hotel

4. North Star Yayuncun Hotel

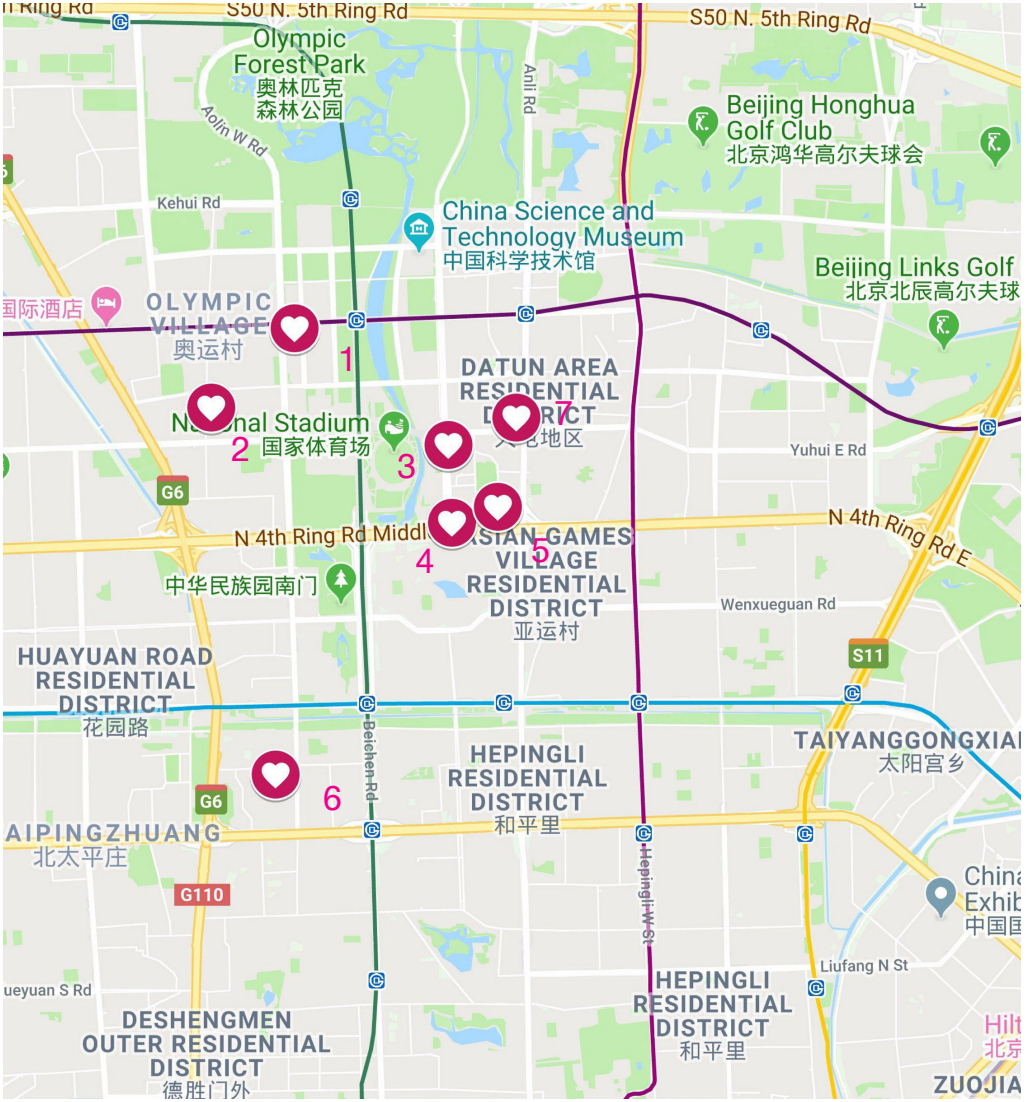
5. Beijing Continental Grand Hotel

6. North Star Yuanchenxin International Hotel

7. Celebrity International Grand Hotel



MAP


S50 N. 5th Ring Rd
Olympic Forest Park
奥林匹克森林公园
Aolin W Rd
Anli Rd
Beijing Honghua Golf Club
北京鸿华高尔夫球会
Kehui Rd
China Science and Technology Museum
中国科学技术馆
Beijing Links Golf
北京北辰高尔夫球
OLYMPIC VILLAGE
奥运村
DATUN AREA RESIDENTIAL DISTRICT
National Stadium
国家体育场
Yuhui E Rd
G6
N 4th Ring Rd
N 4th Ring Rd E
ASIAN GAMES VILLAGE RESIDENTIAL DISTRICT
亚运村
中华民族园南门
Wenxueguan Rd
S11
HUAYUAN ROAD RESIDENTIAL DISTRICT
花园路
Beichen Rd
HEPINGLI RESIDENTIAL DISTRICT
和平里
TAIYANGGONGXIANG
太阳宫乡
AIPINGZHUANG
北太平庄
G110
Hepingli W St
Liufang N St
DESHENGMEN OUTER RESIDENTIAL DISTRICT
德胜门外
ZUOJIA
1
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HOW TO GET TO THE CHINA NATIONAL CONVENTION CENTER (CNCC):

1. From Beijing Capital Airport to CNCC

•Airport Express Light Railway & subway

1). Take the Airport Express at Floor B2 for Terminal 2, or Floor F2 for Terminal 3

2). Get-off at Sanyuanqiao Station and transfer to subway Line 10

3). Get-off at Beitucheng Station and transfer to subway Line 8

4). Get-off at Olympic Green Station through exit E

Fare: CNY 25 for the Airport Express (purchased at the airport) plus CNY 4 for the subway (purchased at the Sanyuanqiao station) (USD 5 total)

•Taxi

You can also take a taxi from the Beijing Capital International Airport to the congress venue. You can show the following address to the taxi driver:

TAXI NOTE
司机师傅您好，请送我去国家会议中心，谢谢！
地址 : 北京市朝阳区奥林匹克公园天辰东路 7 号（近奥林匹克公园地铁站）
Please take me to China National Convention Center, thank you!
Address: No.7 Tianchen East Road, Olympic Green, Chaoyang District.

Fare: About CNY 120 (USD 20 including toll). The cost is subject to change depending on actual traffic conditions. The toll for the expressway (10 Yuan) is not included on the meter and should be paid by the passengers.

2. From Train Stations to CNCC

•Taxi

From Beijing Railway Station: About CNY 80 (USD 13).

From Beijing South Railway Station: About CNY 100 (USD 16).

From Beijing West Railway Station: About CNY 80 (USD 13).

•Subway

From Beijing Railway Station:

1).Take subway Line 2
2).Get-off at Guloudajie Station, and transfer to subway Line 8
3).Get-off at Olympic Green Station through exit E.

From Beijing South Railway Station:

1).Take subway Line 4
2).Get-off at Xizhimen Station and transfer to subway Line 2
3).Get-off at Guloudajie Station and transfer to subway Line 8
4).Get-off at Olympic Green Station through exit E.

From Beijing West Railway Station:

1).Take subway Line 9
2).Get-off at the Military Museum Station and transfer to subway Line 1
3).Get-off at Fuxingmen Station and transfer to subway Line 2
4).Get-off Guloudajie Station and transfer to subway Line 8
5).Get-off at Olympic Green Station through exit E.

Fare: About CNY 7 (USD 1.1) for these routes.

TRANSPORTATION IN BEIJING

The Subway

There are 15 subway lines in Beijing. The fare is about 3-9 Yuan. Trains run from 5:30am to 11:00pm. Tickets can be bought at the ticket office at each station or at the self-service ticket vending machine. Subway stops are announced over the train's speaker system in Chinese and English. Most stations have four entrances in the four directions for each stop. So, you should know beforehand which exit to take when leaving the station. You can find signs inside the station listing the main buildings outside each exit. Passengers can find toilets on the platform level or in the ticket hall of each station.

Airport Express Train

The Airport Express Line of the subway system serves the airport from Terminal 3 to Terminal 2 and then takes passengers first to Sanyuanqiao and then to Dongzhimen. Tickets cost 25 yuan.
*Tickets are issued for one-way use only.
At most stations, passengers can buy a ticket at either the Customer Service Center or self-service ticket vending machines, but some stations are only equipped with ticket vending machines which accept 1 Yuan coins and 5 Yuan and 10 Yuan banknotes.

Taxis

Taxis in Beijing have several colors. All of them have a taximeter inside. You can easily find them in every part of Beijing. All taxis charge 2.3 Yuan per kilometer with a base rate or minimum charge of 13 Yuan.

The price is calculated every 500 meters (547 yards) and every 2.5 minutes.

- The price is then rounded to the whole number of Chinese Yuan. For example, 15.4 Yuan will be rounded down to 15 Yuan, and 15.6 Yuan will be rounded up to 16 Yuan.
- The toll for the expressway (10 Yuan) is extra and should be paid by the passengers.

www.en.bcia.com.cn
www.jp.bcia.com.cn
www.beijingchina.net.cn/transportation/subway.html

REGISTRATION HOURS

World Congress registration, badge, and program pickup is located at Level 1 Main Lobby between C1 and C2 at CNCC during the following days and times, please look for the registration signage:

Date	Jun 3rd (Mon)	Jun 4th (Tue)	Jun 5th (Wed)	Jun 6th (Thu)
Time	08:00-20:00	08:00-18:00	08:00-18:00	08:00-18:00

REGISTRATION FEES

The registration fee includes many benefits: admission to all scientific sessions, preprints and program books, opening reception, morning and afternoon coffee/tea, three lunches (June 4-6).

Registration Type	Before/On Mar 22nd, 2019	After Mar 22nd, 2019
Regular ISHR Member	USD590	USD690
Regular Non-ISHR Member	USD740	USD840
*Trainee ISHR Member	USD490	USD590
*Trainee Non-ISHR Member	USD590	USD690
Student ISHR Member	USD390	USD490
Student Non-ISHR Member	USD490	USD590

*Up to 8 years after final PhD/MD or equivalent qualification

ISHR COUNCIL MEETINGS

International Council Meeting 1, Old and New Councils July 1 st – 5:30 PM
International Council Meeting 2, New Council July 3 rd – 5:00 PM
Please refer to the Daily Schedule for date, time and room assignment.

ECI PRE-CONGRESS EVENT

This year, the Congress will be hosting its first half-day event dedicated entirely to Early Career Investigators. This half-day event is comprised of 2 scientific sessions, with oral presentations from selected Early Career Investigators, followed by an interactive career development workshop with some of the leading researchers in our field.

EXHIBITS

Schedule:

Time	Description	Location
Jun 3rd, 8:00-12:00	Exhibition Set-up	North Foyer at 3F CNCC
Jun 3rd, 8:00-12:00	Exhibiters Registration	North Foyer Exhibiters registration desk at 3F CNCC
Jun 3rd, 12:00-18:30 Jun 4th -6th, 8:00-18:30	Exhibition	North Foyer at 3F CNCC
Jun 6th, 18:30-24:00	Exhibition Removal	North Foyer at 3F CNCC

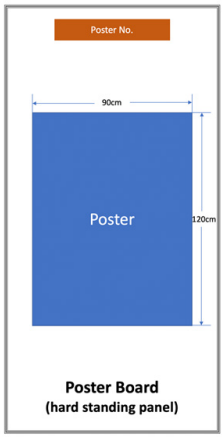
Official Website:
www.cnccchina.com

POSTER SESSIONS

Lunch will be provided for all registered attendees during the Poster Sessions. These lunchtime Poster Sessions will provide a forum for investigators from diverse disciplines to exchange new knowledge, findings, and ideas, and to lay the groundwork for future collaborations.

Poster will be on display at the North Foyer, Convention Level 3 of China National Convention Center. Poster hanging 8:00-9:00AM/ Poster removing 6:00-7:00PM. Authors must report in person with their posters on the assigned date. Each poster area will be clearly identified with the poster number. Authors are responsible for removing posters. All posters must be removed after the poster session. Unclaimed posters will not be stored and will be discarded at the end of the Congress.

Poster Presentation Provisions



Each presenter will have his/her own hard standing panel and a 90 cm (3 ft.) in width and 180 cm (6 ft.) in height area in which the poster information will be affixed. A sign for each panel will be provided by the Congress sponsors and will contain the paper number. It is encouraged that poster information be suitably laminated as one sheet. Posters will be attached to panels. Poster lamination is the responsibility of the authors.

Posters must contain authors' names, title of presentation, an abstract and materials such as graphs, charts, tables and photographs that are necessary to communicate effectively the research findings to the audience. Material on posters should not be copies from pages of the typed manuscript or difficult to read handwritten text. Instead, the poster should contain enlarged text and key figures that are easy to read from a distance.A schematic of the hard-standing panel as well as sample photos are shown below: All submitted abstracts are available on the ISHR website, www.ishrworld.org.

Time Table for Poster Sessions

Date	Time
Jun 4th (Tue)	12:30-14:00
Jun 5th (Wed)	12:30-14:00
Jun 6th (Thu)	13:00-14:30

FOOD AND BEVERAGE SERVICE

ISHR will provide coffee service each morning and afternoon. (9:15-9:45 AM, 16:00-16:30 PM) Lunch will be provided during the poster sessions on June 4th-June 6th.

HOUSING/HOTELS

The official ISHR XXIII World Congress hotel is China National Convention Center Grand Hotel, located in the center of the Beijing Olympic Green. It is adjacent to China National Convention Center.

SPEAKER READY/PRESENTATION UPLOAD ROOM

The Speaker Ready and Presentation Upload Room is available for all speakers to practice and socialize at 306B at 3rd floor of CNCC. It will be open daily as follow:

Date	Time
Jun 3rd (Mon)	07:30-17:30
Jun 4th (Tue)	07:30-17:30
Jun 5th (Wed)	07:30-17:30
Jun 6th (Thu)	07:30-17:30

All technical session and special interest program speakers are required to attend the Speaker Prep at least 12 hours before your designated session or program in the Speakers' Lounge. Please bring your presentation file with USB memory stick to the lounge, including your full name in the file name. Your attendance ensures that all parties are informed and that the technical session/program will run smoothly.

All sessions must start on time and projectors must be utilized. Please make sure that your slides are clear and legible for all audiences.

INTERNET ACCESS

Free Wi-Fi is available for all participants at the conference center.
Wi-Fi Network: BICC-WLAN
No password is required.

Travel

ABOUT BEIJING

Beijing, the capital of People's Republic of China (PRC), the center of politics, culture, transport, tourism and international communication, is a fast-growing, dynamic metropolis that, while courting foreign businesses and visitors, maintains a firm grip on its rich cultural heritage. It is a monolithic showcase that can give a brief view of China to foreign visitors.

Area: 16,800 sq km (6552 sq mi)
Population: 21.7 million
Country: People's Republic of China
People: 95% Han Chinese
Main language: Mandarin (putonghua)
Time zone: GMT/UTC plus 8 hours
Telephone area code: 010

Travel to Beijing, you'd better know something about Beijing history. Here, ancient history and modern culture perfectly combines, attracting visitors from all over the world. Beijing natives receive millions of visitors at home and abroad every year with their everlasting enthusiasm, humor and hospitality.

As an ancient city, its history can be traced back to 3,000 years ago. In the Spring-Autumn and warring Periods (770 BC – 221 BC), Yan Nation established its capital in Beijing, calling it "Ji". In Qin, Han and Three Kingdom Period Beijing area is the center of northern China. Wang Mang established its capital in Beijing in the Yan Nation at the end of the Western Han Dynasty, so Beijing is also called "Yanjing". During the Southern Song Dynasty Liao Nation established the Capital in Beijing, calling it Pei, Jin Dynasty officially established Capital in Beijing. Since then, the Yuan Dynasty, Ming Dynasty and Qing Dynasty all established Capital in Beijing, with a total of 34 emperors reigned in Beijing in China's ancient history.

The long history of Beijing has left a large number of cultural relics and a rich and varied human landscapes, which provides very rich tourism resources for Beijing. The magnificent Great Wall and the Forbidden City

are the world-famous tourist attractions. The beauty of the Summer Palace, Beihai, Xiangshan, the Temple of Heaven and the Royal Garden are all great magnets for visitors.

After the founding of New China, as Beijing is the country's political and cultural center, its social business and urban infrastructure facilities has made great progress, the most noticeable progress was made in the period of more than 20 years after 1978 with the implementation of "reform and opening up", Beijing has developed and changed rapidly since then. Now, it is a modern city with high-rise buildings, shopping malls and vast international hotels connected by an intricate freeway system crisscrossing the city. In the rush hour, traffic jams can match those of any major cities around the world and the ringing of mobile phones is incessant. However, the modern buildings conceal traditional hutongs, parks, numerous architectural treasure and exquisite yellow-tiled temples where prayers flag and wind chimes move in the breeze because of the passing traffic.

June is a good time to visit Beijing. It is filled with bright reds and vivid greens everywhere. Normally, the weather is very warm with the temperature remaining 18-28 Centigrade degree (64-82 Fahrenheit degree). There are usually less windy days and few sandstorms during this month. There might be some drizzle but clear and sunny days are in the majority.

TOURS

We have prepared three tour options as below:

Date	Description	Time	Price/Person
Jun 2nd (Sun)	Half Day Tour: Morning Tiananmen Square and Forbidden City	08:30-13:30	CNY450
Jun 3rd (Mon)	Half Day Tour: Morning Summer Palace	08:30-13:30	CNY400
Jun 5th (Wed)	Half Day Tour: Morning Great Wall at Badaling Section	08:30-13:30	CNY550

Route 1: The Forbidden City

As the seat of Imperial power for 500 years, the Forbidden City (also known as the Palace Museum) is now the largest museum and one of the top tourism attractions in China. The palace has been burnt down, rebuilt, sacked and renovated countless times, so most of the architecture you can see today dates from the 1700's and onwards. Altogether there are 9,999.5 rooms in the Museum, not all of which can be visited. The Forbidden City was listed as a UNESCO World Heritage site in 1987.

Tips: To preserve the World Heritage Site and guarantee a better visiting experience, the Forbidden City is limiting the daily number of visitors to 80,000. If you choose this route, please provide your valid IDs and passport numbers so that we can register and book tickets online in advance. On the day of visit, please bring your valid ID cards or passports in case of random admission checks.

Route 2: The Summer Palace

The Summer Palace is the largest and most well-preserved royal garden in China. The park greatly influences Chinese horticulture and landscape with its famous natural views and cultural interests, which also has long since been recognized as The Museum of Royal Gardens. Construction started in 1750 as a luxurious royal garden for royal families to rest and entertain. It later became the main residence of royal

members towards the end of the Qing Dynasty. It ranked amongst the World Heritage Sites by UNESCO in 1998.

Route 3: The Great Wall at Badaling

The Great Wall at Badaling was built along the ridges of mountains, looking precipitous from the external wall but gently sloped from the internal wall. It is a section of the Great Wall opened earliest to tourists and receives the largest number of tourists. In the six decades since it opened, the Great Wall at Badaling scenic spot, on behalf of the Great Wall of China, was conferred with the World Cultural Heritage license by UNESCO. In 2007, in the appraisal of the world's new seven wonders, Great Wall maintained its top position because of its extensive and profound history and culture, and unprecedented prestige in the world.

ITINERARY

08:30
Pick up for CNCC Gate C1
08:30-13:30
Transfer to the scenic spot and sightseeing
13:30
Return to CNCC Gate C1
For further details, please contact Rui at wangrui@chinastargroup.com.

Local Contacts

Local Contacts

Registration
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Jingrui Zhang (张京瑞), Tel: 1863 978 6217
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Hua Liu (刘 华), Tel: 1370 126 9807

Inquiry
Zhaowen Du (杜照雯), Tel: 1897 675 8691

Cashier
Lei Zhang (张 磊), Tel: 1352 270 3763

Exhibition
Han Zheng (郑 撼), Tel: 1891 130 5234

Poster
Yuqing Zheng (郑玉青), Tel: 1524 259 1371

Hotel/Dining
Lixin Yan (闫立新), Tel: 1390 137 0528
Lili Chen (陈丽丽), Tel: 1355 268 5010

Tour
Ji Wang (王 吉), Tel: 1851 959 0051
Rui Wang (王 蕊), Tel: 1820 129 2054

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