第二届浙大二院-UCLA医学院
心血管科学会议

心力衰竭与心脏重构-从创新机制到治疗

2nd SAHZU-UCLA Joint Cardiovascular Science Conference:
Cardiac Remodeling and Heart Failure – From Novel Mechanisms to Therapies

会议指南 | CONFERENCE GUIDE

SPONSOR 主办

海南博鳌创新研究院 | 浙江大学医学院附属第二医院
美国加州大学洛杉矶分校心脏中心

2019.10.09-10
HANGZHOU·CHINA | 中国 · 杭州

OCT. 9TH

WELCOME REMARKS | 8:00-8:10 | Pearl Hall

Jian'an Wang, Reza Ardehali

SESSION 1 | 8:10-12:10 | Pearl Hall

Moderators	Zhao Wang, Jun Jiang	
08:10-08:55	PKGing Away at Heart Failure	David A. Kass
08:55-09:25	HFpEF: Malady, Model, and Mechanisms	Joseph A. Hill
09:25-09:55	Novel Insight into T-Tubule Formation	Ju Chen
09:55-10:15	Coffee Break	

Moderators	Xiyong Yu, Lenan Zhuang	
10:15-11:00	Cardiac Regeneration: Seed Stem Cell, Micro-Environment and Homing	Junbo Ge
11:00-11:30	Common Pathway in Cardiac Remodeling and Maturation	Yibin Wang
11:30-12:00	The Cardiorenal Axis in the Heart	David J. Lefer
12:00-12:10	The Trigger and the Impact of Hypertension-Associated Inflammation	Xiao Shen

SESSION 2 | 13:30-16:00 | Pearl Hall

Moderators	Bin Zhou, Wei Chen	
13:30-14:00	Prevention and Control of Cardiovascular Diseases in China	Dongfeng Gu
14:00-14:30	The Impact of Microvascular Disease in PAD	Joshua A. Beckman
14:30-15:00	The Relationship of Structural and Cellular Heterogeneity of the Aorta to Dissection and Aneurysms	Alan Daugherty
15:00-15:30	Chemokine Imaging in Atherosclerosis	Robert J. Gropler
15:30-15:40	Myeloid-Specific Deletion of IRF5 Attenuates Abdominal Aortic Aneurysm by Regulating PI3Kγ Pathway-Mediated Macrophage Migration	Meixiang Xiang
15:40-16:00	Coffee Break	

EDITOR SESSION | 16:00-17:20 | Pearl Hall

Roundtable Discussion with the Editors

Moderators	Jian'an Wang, Yibin Wang, Thomas M. Vondriska, Ju Chen	
Panelists	Vesna Todorović (*Nature*)	Heather Goodell (*VP Publishing, AHA*)
	Joseph A. Hill (*Circulation*)	Joshua A. Beckman (*Circulation*)
	Tomasz J. Guzik (*Cardiovascular Research*)	Alan Daugherty (*ATVB*)
	Robert J. Gropler (*Circulation: Cardiovascular Imaging*)	

POSTER SESSION | 17:20-18:00 | Bauhinia Hall

OCT. 10TH

SESSION 3 | 8:30-11:25 | Pearl Hall

Moderators	Aijun Sun, Liansheng Wang	
08:30-09:15	Genetic and Metabolic Interactions in Diastolic Dysfunction: A Population-Based Approach in Mice	Aldons J. Lusis
09:15-09:45	Stem Cell Therapy for Heart Failure	Jian'an Wang
09:45-09:55	FMO2 and Cardiac Fibrosis	Xinyang Hu
09:55-10:15	Coffee Break	

Moderators	Zhenwei Pan, Xiaojie Xie	
10:15-10:45	Differential Regulation of Perivascular and Cardiac Fibrosis	Tomasz J. Guzik
10:45-11:15	Mitochondrial Dynamics in the Regulation of Fuel Preference and Energy Efficiency	Orian S. Shirihai
11:15-11:25	Mitochondrial Translation and Cardiac Disease	Jinghai Chen

SESSION 4 | 13:30-16:40 | Pearl Hall

Moderators	Qing Jing, Ping Liang	
13:30-14:00	Cardiac Regeneration for Heart Failure	Reza Ardehali
14:00-14:30	Epigenetic Regulation of Heart Failure Pathogenesis	Saptarsi M. Haldar
14:30-15:00	TGF-Beta Signaling Cascades in Cardiac Remodeling	Nikolaos G. Frangogiannis
15:00-15:10	Pathogenesis and Intervention Strategy Study of Calcified Aortic Valve Disease	Xianbao Liu
15:10-15:30	Coffee Break	

Moderators	Wei Zhu, Peng Shi	
15:30-16:00	New Paradigms for Epigenetic Therapy Targeting Different Forms of Heart Failure	Thomas M. Vondriska
16:00-16:30	Integrating Light-Sheet and Light-Field to Study the Micro-Environment in Zebrafish Model of Myocardial Injury and Repair	Tzung K. Hsiai
16:30-16:40	GHRH Agonist Rejuvenates Heart Function in Old Mice	Hong Yu

CLOSING REMARKS | 16:40-16:50 | Pearl Hall

Jian'an Wang, Reza Ardehali

Round table discussion on how to publish high quality research

Editors:

Joseph Hill, M.D., Ph.D.
Circulation Editor-In-Chief
Tomasz J Guzik M.D., Ph.D. FRCP FACP
Cardiovascular Research Editor-In-Chief
Alan DaughertyPhD, DSc
ATVB Editor-In-Chief
Robert Gropler, M.D.
Circulation: Cardiovascular Imaging Editor-In-Chief
Vesna Todorović, Ph.D.
Nature Senior Editor
Joshua Beckman, M.D.
Circulation Associate Editor
Heather Goodell
Vice President, Scientific publishing, American Heart Association

Moderators:

Yibin Wang, Ph.D.
Thomas Vondriska, Ph.D.
Jian'an Wang, M.D., Ph.D.
Ju Chen, Ph.D.

Oct 9th, 16:00-17:20

0-15 minutes:	Introduction of each editor, 1-2 slide from each editor on the journal history, aims and scope, and journal statistics
15-20 minutes:	Q&A only on this topic
20-30 minutes:	Process of publication: from initial submission to acceptance or rejection
30-35 minutes:	Q&A only on this topic
35-55 minutes:	1. How do you read from the editor's letter if the manuscript is unequivocally rejected or if there is still an open door? 2. Is there internal referral of a manuscript in the AHA journals? How about from AHA journals to other independent journals? 3. Can a manuscript be submitted to several AHA journals at the same time? 4. What is the best approach if authors believe the reason for rejection is partly due to the fact that the reviewers did not understand the paper? 5. Can the chief editor over rule the decision of the reviewers? 6. Does the journal get involved in conflict resolution regarding authors or is the institutions' responsibilities? 7. Can authors use the same 'data set' to publish more than one paper? If so, can similar figures be published more than once?
55-65 minutes:	Q&A only on this topic
65-80 minutes:	Open question from the audience.

GUEST INTRODUCTION 嘉宾介绍

David A. Kass

Abraham and Virginia Weiss Professor, Cardiology
Professor, Medicine, Pharmacology and Molecular Sciences, and Biomedical Engineering
Johns Hopkins University School of Medicine, USA

Dr. Kass is a world leader in the field of myocardial physiology and disease. His work spans from the very basic molecular and cellular research all the way to human studies. He pioneered the clinical development of cardiac resynchronization therapy, later advancing cell and molecular dissection of this treatment to reveal novel heart failure treatments. He discovered nitroxyl, HNO, as an inodilator heart failure therapy, which was developed by Cardioxyl and is currently in advanced trials at BMS. Over the past 15 years, his laboratory has focused on cGMP/protein kinase G signaling, with recent findings leading to new drug treatment for heart failure based on PDE9 inhibition now in clinical trials, and a novel link between PKG and mTOR signaling with applications to cancer immunotherapy. David has over 400 original papers, many book chapters and reviews, garnering >60,000 citations with an H-index of 129.

Joseph A. Hill

Professor, Internal Medicine and Molecular Biology
James T. Willerson, M.D. Distinguished Chair in Cardiovascular Diseases
Frank M. Ryburn, Jr, Chair in Heart Research
Chief, Division of Cardiology
Director, Harry S. Moss Heart Center
University of Texas Southwestern Medical Center, USA

Joseph Hill is a professor of Internal Medicine and Molecular Biology, Chief of Cardiology at UT Southwestern Medical Center, and Director of the Harry S. Moss Heart Center. His research group strives to decipher mechanisms of structural, functional, metabolic, and electrical remodeling in heart disease with an eye toward therapeutic intervention. He has received numerous recognitions and awards, including election to the Association of American Professors; he recently served as President of the Association of University Cardiologists and chair of the Academic Council of the American College of Cardiology. He received the 2018 Research Achievement Award from the International Society for Heart Research. Presently, he serves as Editor-in-Chief of Circulation. Dr. Hill maintains an active clinical practice focusing on general cardiology, heart failure, and hypertension.

嘉宾介绍

Ju Chen

Professor, Medicine
AHA Endowed Chair
Director, Basic Cardiac Research
UCSD School of Medicine, USA

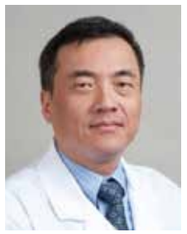
Dr. Chen is interested in understanding the molecular basis of cardiac and skeletal myopathy. His lab is also studying a number of signaling pathways underlying cardiac hypertrophy and heart failure. To achieve these goals, they utilize genetically engineered mouse models and human embryonic stem cells (hESCs), physiological measurements, and a range of molecular and cell biological techniques. He has published over 200 (80 since 2014) peer-reviewed original articles on various topics centered on cardiovascular and skeletal muscle development, structure, function, and disease, with 22,500 citations and the H-index of 79.

Junbo Ge

Academician, Chinese Academy of Sciences
Chief, Department of Cardiology, Zhongshan Hospital
Chief, Shanghai Cardiovascular Clinical Center
Chairman, Shanghai Institute of Cardiovascular Diseases
Head, Institutes of Biomedical Sciences, Institute for Pan vascular Medical Research
Fudan University, China

Dr. Ge dedicates to the optimization and innovation of diagnosis and treatment strategy for coronary artery disease and made extraordinary achievements in intravascular ultrasound (IVUS). His research areas also include the development of novel coronary stents, treatment strategy optimization of complex CAD and stem cell therapy. Dr. Ge has been responsible for over 20 scientific research projects supported by the government, Furthermore, a total of over 300 papers published by Prof. Ge have been included by SCI-E (as the first author or the corresponding author). He was awarded Scholars of the Yangtse River; Elite of science and technology; National Labor Medal; Tan Jiazhen prize in life sciences; the national "Bethune" Medal, etc.

GUEST INTRODUCTION



Yibin Wang

Professor, Molecular Medicine
Chair, Cardiovascular Theme
Vice Chair, Research in the Department of Anesthesiology and Perioperative Medicine
Director, the Division of Molecular Medicine in the Department of Anesthesiology and Perioperative Medicine
UCLA David Geffen School of Medicine, USA

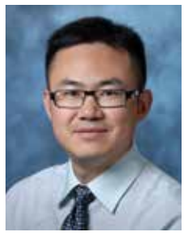
Dr. Wang's research mainly focuses on genetic and molecular mechanisms of heart failure and metabolic disorders. His lab has made major advances in uncovering stress-signaling mechanisms in the pathogenesis of heart failure and revealed functional importance of amino acids catabolism in heart failure and metabolic disorders. In addition, his lab reported novel regulatory mechanisms in cardiac transcriptome reprogramming involving RNA splicing regulation and non-coding RNA mediated epigenetic modulation. Dr. Wang received an Established Investigator Award from American Heart Association in 2005. He was awarded the title of Chang-Jiang Scholar from Minister of Education of China in 2009, and Chinese National Expert for "Thousand Talent Plan".

David J. Lefer

Director, Cardiovascular Center of Excellence
Professor, Pharmacology
Louisiana State University Health New Orleans School of Medicine, USA

Dr. Lefer has been working in the fields of myocardial protection and coronary physiology for over 20 years and has made important contributions to these fields. His lab was among the first to demonstrate the profound loss of endothelial cell derived nitric oxide (NO) from the coronary circulation following coronary artery occlusion and reperfusion. A series of subsequent studies in both small and large animal models clearly demonstrated that oxidative stress occurring within the first few minutes of reperfusion significantly impaired NO generation by coronary endothelial nitric oxide synthase (eNOS). Dr. Lefer's laboratory was the first to report on the potent cardioprotective actions of NO in the setting of acute myocardial infarction and congestive heart failure in both small and large animal models. Dr. Lefer has investigated nitrite-based therapies in a number of models of chronic tissue ischemia and ischemia-reperfusion injury.

嘉宾介绍



Xiao Shen

Professor, Zhejiang University, China

Dr. Xiao Shen graduated as M.D. from Peking Union Medical College in 2003. After that, he studied the roles of angiotensin converting enzyme in the immune system as a postdoctoral fellow in Emory University of United States. In 2008, he became Assistant Professor in Cedars-Sinai Medical Center at Los Angeles. In US, his research was supported by NIH and AHA. In 2016, Dr. Shen joined the faculty of Zhejiang University School of Medicine. His current research focuses on cardiovascular diseases and inflammation. He has published 40 papers including those in the journals Nature Immunology, Science Immunology and Circulation Research.

Dongfeng Gu

Academician, Chinese Academy of Sciences
Professor, Chair of Department of Epidemiology
Deputy Director, National Center for Cardiovascular Diseases, China
Vice President, Fuwai Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, China

Dr. Gu has led large observational and interventional studies in both the genomic fields and epidemiology that have explored the risk factors associated with hypertension, coronary artery disease and what impacted prevention of cardiovascular diseases (CVD) in populations. He is a council member of the International Society of Cardiovascular Epidemiology and Prevention, and the president of Chinese Society of Preventive Cardiology. Dr. Gu is a Deputy Chief Editor for Chronic Diseases and Translational Medicine, and served on the editorial boards of the Journal of Hypertension, the Human Genetics. Publications include over 280 articles in peer-reviewed international medical journals such as New Engl J Med, Lancet, JAMA and Nat Genet.

GUEST INTRODUCTION

Joshua A. Beckman

Director, Vascular Medicine
Professor, Medicine
Vanderbilt University School of Medicine, USA

Dr. Beckman is an associate editor for Circulation and sits on the editorial boards of the journals JACC and Vascular Medicine. His primary research interests include the mechanisms by which diabetes mellitus impairs endothelium-dependent vascular relaxation, and the relationship of chronic inflammation to atherosclerotic disease. He has spent the last 15 years studying the impact of diabetes and its constituents on endothelial function. His role in the proposed research application is coordinate the phenotyping of patients with vascular stiffness and hypertension in response to an anti-inflammatory intervention. This includes the acquisition of experimental measures, data analysis, and participation in preparation of manuscripts. He has personally studied the vascular function and phenotype of hundreds of patients, evaluating resistance arteriolar function, carotid intima-media thickness (CIMT) and conduit artery and vein function in a wide variety of pathophysiological states.

Alan Daugherty

Associate Vice President for Research
Senior Associate Dean for Research
Chair, Physiology
Director, Saha Cardiovascular Research Center
Gill Foundation Chair in Preventive Cardiology
Saha Cardiovascular Research Center, University of Kentucky, USA

The Daugherty Lab is primarily focused on molecular mechanisms of human vascular diseases. Initially, the research was dedicated to modifications of lipoproteins and their roles in influencing the immune responses of atherosclerosis. Since arriving at the University of Kentucky in 1997, the lab has been focused on the role of the renin angiotensin system in atherosclerosis and aortic aneurysms. The group's pioneer observation was that angiotensin II (AngII) infusion markedly promoted atherosclerosis and aortic aneurysms in hypercholesterolemic mice. He has subsequently published a series of articles in which we have routinely demonstrated profound effects and the related mechanisms of the renin angiotensin system on atherosclerosis and aortic aneurysms.

嘉宾介绍

Robert J. Gropler

Professor, Radiology
Division of Nuclear Medicine
Washington University School of Medicine in St. Louis, USA

Dr. Gropler's group has been involved in PET related research of the CV system for >25 yrs at the Mallinckrodt Institute of Radiology (MIR). A major focus of our work that is germane to this application is the development and validation of new quantitative tools to measure myocardial oxygen, glucose and lactate metabolism using PET radiotracers developed at Washington University. These studies are performed in rodents, large animals and humans. More recently our group has collaborated closely with numerous investigators here at MIR to evaluate new PET radiotracers designed to assess myocardial fatty acid metabolism and key cellular processes such as PPARaplha/gamma activation, oxidative stress, and inflammation bringing several of the radiotracers to humans via the eIND mechanism.

Meixiang Xiang

Professor and Chief Physician, Department of Cardiology
Deputy Director, Heart Center
Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Xiang is full of enthusiasm in both clinical and basic cardiac researches. Her clinical specialties include: 1) Individualized treatment for patients with heart failure; 2) Emergency treatment of cardiovascular critical patients; 3) Implantable cardiac devices indications and techniques, e.g. CRTD implantation. Her research interests are mainly focused on: 1) basic and clinical translational research on cardiac remodeling and heart failure; 2) the mechanism of artery injury and aortic aneurysm formation. She received many research grants, including Nationa Science & Technology Pillar Program during the 12th Five-year Plan Period, and National Natural Science Foundation of China as the principal investigator. She was honored as a Distinguished Scholar of Zhejiang University in 2016, and won the first place of Science and Technology Advancement Prize of Zhejiang Province in 2008 and 2013, respectively.

GUEST INTRODUCTION

Vesna Todorovic

Nature Senior Editor

Vesna Todovoric joined Nature in September 2017, after a 3 years tenure as a Senior Editor at Nature Communications. During her academic career, Vesna has worked on a host of subjects. She started her career by studying one of the basic cellular processes – DNA replication, focusing on the characterization of DNA replication origins and their interacting protein complexes in multiple model systems. Her research interest expanded from DNA replication to cell biology and mouse cardiovascular development and disease, as she contributed to the elucidation of TGF-beta biology and the role this cytokine plays in development, homeostasis and disease in many organ systems, with a specific focus on cardiovascular biology. At Nature, Vesna is responsible for content on metabolism and vascular biology research. She is based in the New York office.

Heather Goodell

Vice President, Scientific Publishing for the American Heart Association

Heather Goodell is the Vice President of Scientific Publishing for the American Heart Association. She oversees a program 12 peer-reviewed scientific journals as well as statements and guidelines. She has worked at the AHA for over 13 years, with past careers at Pearson Education and others.

嘉宾介绍

Aldons J. Lusis

Professor, Microbiology, Immunology & Molecular Genetics, Medicine, and Human Genetics
Vice Chair, Human Genetics
UCLA David Geffen School of Medicine, USA

Dr. Lusis uses the combination of genetics, molecular biology, and informatics to investigate pathways underlying common cardiovascular and metabolic disorders. His lab exploits natural genetic variation among inbred strains of mice (and among human populations when possible) to identify novel targets and formulate hypotheses, and performs validation using experimental perturbations in mice. During the past 10 years, they have developed a unique mapping approach in mice that is analogous to genome-wide association studies in humans. It facilitates studies of gene-by-environment interactions, which are very difficult to address in human populations, and it has important advantages for systems-based approaches which require access to relevant tissues.

Jian'an Wang

Professor and Chief Physician, Department of Cardiology
Director, Heart Center
President, Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Wang is full of enthusiasm in medical practice, research and education to promote health management in the population. He advocates evidence-based medicine, and is experienced in interventional cardiology, covering from invasive imaging, coronary catheterization, transcatheter aortic valve replacement (TAVR) and percutaneous mitral valve clip. He is the co-Editor-in-Chief of Internal Medicine as the national textbook for medical students. He is honored as a Distinguished Expert of Zhejiang Province and is rewarded the National Bethune Medal for his contribution to medical service and education. He received many research grants, including the National 973 Project as the principal investigator. He is one of the pioneers in China for cell therapy of cardiovascular diseases and won National Science & Technology Progress Award (second class) for his innovative work in cardiac repair post myocardial infarction.

GUEST INTRODUCTION

Xinyang Hu

Associate Professor and Attending Physician, Department of Cardiology
Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Hu is an attending physician of the second affiliated hospital of Zhejiang university school of medicine and associate professor of Zhejiang University. She focuses on stem cell therapy for heart failure. She did a lot of work about hypoxia-preconditioning of MSCs from basic research to pre-clinical study and clinical study. She has established the non-human primates model for the stem cell pre-clinical study. She carried out the first large study of stem cell therapy for myocardial infarction in non-human primates and provided evidence to mechanistically support the beneficial effects of hypoxia preconditioning stem cells on cardiac remodeling and function. She has authored 15 research papers as first author or corresponding author, such as Circulation Research, Stem Cells, etc. She received AHA Travel Stipend Award in 2014 and Circulation Research Best Manuscript Award in 2016.

Tomasz J. Guzik

Professor, Physiology and Cardiovascular Pathobiology
Institute of Cardiovascular and Medical Sciences, University of Glasgow, UK

Dr. Guzik is currently the Regius Professor of Physiology and Cardiovascular Pathobiology and an Honorary Consultant Physician in Cardiology. He also serves as a Professor of Medicine at Jagiellonin University Collegium Medicum in Krakow, Poland. His notable recognitions include the honorary Bernard and Joan Marshall Prize in Research Excellence from the BSCR and the prestigious Corcoran Award Lecture at the American Heart Association. He is a recipient of European Research Council Grant. His research focusses on vascular biology, hypertension, and clinical immunology. His main focus is on using translational approaches to understand disease pathology.

嘉宾介绍

Orian S. Shirihai

Professor, Medicine (Endocrinology) and Molecular & Medical Pharmacology
Head, Mitochondria Physiology Laboratory
Director, Metabolism Theme
Director, Mitochondria Bioenergetics Core
UCLA David Geffen School of Medicine, USA

Dr. Shirihai is studying organellar biology with a focus on mitochondria, lysosomes and autophagosomes. In the past fifteen years, the lab has focused on the study of mitochondrial quality control mechanisms including fusion, fission and autophagy. Since 2012 his lab has collaborated on a novel approach for delivering cargo into lysosomes through the use of nanoparticles. The lab develops these nanoparticles as a mode of intervention and as a mechanism to introduce probes and caged acids into lysosomes. His lab is known for its development of key imaging approaches to quantify mitochondrial dynamics, motility, mitophagy and turnover.

Jinghai Chen

Professor
Second Affiliated Hospital, Zhejiang University School of Medicine
Institute of Translational Medicine, Zhejiang University, China

Dr. Chen's research is focused on noncoding RNA regulation of cardiac remodeling and regeneration during cardiac development and diseases. Most recently, he identified a microRNA cluster, miR-17-92, is a key regulator of cardiomyocyte proliferation in embryonic, postnatal, and adult heart. He has been further working on the mechanism of individual member of miR-17-92 cluster in cardiac regeneration and applying RNA therapy to cure ischemia heart disease and to prevent heart failure. His interested areas also include long noncoding RNA regulation in cardiac remodeling and regeneration. Dr. Chen is currently an associate editor of BMC cell biology. He reviewed papers from more than 10 scientific journals, including JMCC, Theranostics, Stem Cells International. He has served as an Ad Hoc reviewer for National Natural Science Foundation of China.

GUEST INTRODUCTION

Reza Ardehali

Associate Professor, Cardiology, Molecular, Cellular and Integrative Physiology
UCLA David Geffen School of Medicine, USA

Dr. Reza Ardehali is a clinician-scientist who treats patients with advanced heart disease and studies the molecular processes involved in heart development and disease. His lab is studying the extent of heart muscle cell division during pre-natal and post-natal development; how cardiac progenitor cells residing in the heart respond to injury such as a heart attack; and the mechanisms behind cardiac fibrosis, the process of scar formation in the heart. His lab discovered several cell surface markers that signify a stem cell is able to generate the cells that make up heart muscle and vessels. This discovery marks a significant step forward in the quest to use stem cells to create transplantable cells for heart regeneration. His goal is to use stem cells to create heart cells that can be transplanted into the heart through a minimally invasive procedure, which could regenerate the heart by replacing scar tissue and restoring heart function.

Saptarsi M. Haldar

Vice President, Research Cardiometabolic
Disorders
Amgen, USA

Dr. Haldar joined Amgen from the Gladstone Institute of Cardiovascular Disease and University of California San Francisco, where he was a Professor of Medicine. In that role, he ran a laboratory focused on how cells in the cardiovascular system control gene expression and how these gene control mechanisms go awry during disease. His lab had a major interest in congestive heart failure, a very common and deadly condition that affects a large number of adults. More specifically, he has developed therapeutic approaches that target gene-control mechanisms in the stressed and failing heart, a process that has striking similarities to uncontrolled growth in cancers.

嘉宾介绍

Nikolaos G. Frangogiannis

Professor, Department of Medicine (Cardiology)
Professor, Department of Microbiology & Immunology
Albert Einstein College of Medicine, USA

Dr. Frangogiannis' research explores the mechanisms of cardiac injury, repair and remodeling. His laboratory has identified key molecular signals responsible for orchestrating the healing response in myocardial infarction. One of his research interests is the role of TGF-beta-activated signaling cascades in cardiac repair, remodeling and fibrosis. The goals of the Frangogiannis laboratory are: i) to dissect the cellular mechanisms and molecular signals involved in the pathogenesis of cardiac remodeling, and ii) to identify novel therapeutic targets for patients with heart failure.

Xianbao Liu

Chief Physician and Deputy Director, Department of Cardiology
Second Affiliated Hospital Zhejiang University School of Medicine, China

Dr. Liu is one of the key members of Prof. Jian'an Wang's clinical and translational research team. He helps prof. Wang to organize transcatheter aortic valve replacement (TAVR) program, which is one of the leading TAVR centers in China focusing on new device R&D and technical innovation in bicuspid aortic stenosis. He is interested in the translational research of calcified aortic stenosis and functional improvement of aged stem cell therapy in myocardial infarction. As principal investigator, he has 4 national grants including 1 grant from national 863 program and 3 grants from national natural science foundation of China. Publications include over 40 articles in peer-reviewed international medical journals such as J Heart Lung Transplant., Cell Death Dis. and Int J Cardiol, etc.

GUEST INTRODUCTION

Thomas M. Vondriska

Professor, Anesthesiology, Medicine, Physiology
UCLA David Geffen School of Medicine, USA

Dr. Vondriska's lab investigates epigenomic mechanisms of cardiovascular disease. Their systems biology approach marshals genomic, epigenomic and proteomic discovery tools to examine animal models and human populations. Bioinformatics and network biology play important roles in our investigations of chromatin biology and cardiovascular health. He wants to discover the basic principles of chromatin biology as well as to understand the causes of cardiovascular disease--towards the goal of new therapies and cures.

Tzung K. Hsiai

Professor, Medicine and Bioengineering
Cardiovascular Engineering & Light-Sheet Imaging Laboratory
Maud Cady Guthman Chair in Cardiology
UCLA Samueli School of Engineering, USA

Dr. Hsiai received his undergraduate education from Columbia University and his medical training from the University of Chicago. He completed his internship, residency and NIH-funded cardiovascular fellowship at UCLA School of Engineering and Medicine, where he developed micro-sensors to study mechano-transduction underlying vascular injury and repair. His group's research focuses on flexible sensors to study mechano-signal transduction of cardiovascular diseases. His group has developed the quantitative approach to monitor intravascular shear stress and vascular oxidative stress to assess unstable plaque.

嘉宾介绍

Hong Yu

Professor, Department of Cardiology
Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Yu came back to China from University of Miami in 2011 as a Qiushi Chair Professor in Zhejiang University, Hangzhou, and was selected into the Thousand Telents Plan in Zhejiang Province. He has worked in the field of cardiovascular biology for more than 20 years. He has published more than 80 peer reviewed papers. His research is focused on stem cell therapy for cardiovascular diseases, and the effects of aging on the activity of stem cells and their rejuvenation. He has been working on how to improve the activities of stem cells for better efficacy of cell therapy to cure cardiovascular diseases. His interested areas include promoting angiogenesis using progenitor cells, rejuvenation of aged stem cells and prevention of vascular calcification using an agonist of growth hormone releasing hormone, the roles of GDF11 in cardiac progenitor cells and cardiomyocytes, and effects of exosomes on stem cells and endothelial cells.

Zhao Wang

Assistant Professor
Division of Cardiology,
Department of Internal Medicine,
University of Texas Southwestern Medical Center, USA

Dr. Zhao Wang is the assistant professor in the cardiology division of University of Texas Southwestern Medical Center. He received Ph.D. degree from Dr. Philipp Scherer lab in Albert Einstein College of Medicine, focusing on obesity and diabetes. Dr. Wang did postdoctoral training in Dr. Joseph Hill's lab for cardiac disease at University of Texas Southwestern Medical Center. Dr. Wang's lab now works on the mechanisms of cardiac remodeling under hypertension and myocardial infarction, heart failure, diabetic cardiomyopathy and the metabolic syndrome. Dr. Wang has published more than 60 peer-reviewed papers that are widely cited. Dr. Wang's work is supported by grants from National Institute of Health, American Heart Association, and American Diabetes Association.

GUEST INTRODUCTION

Jun Jiang

Chief Physician and Deputy Director, Department of Cardiology
Second Affiliated Hospital Zhejiang University School of Medicine, China

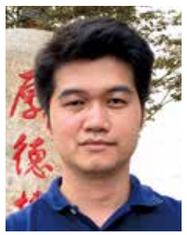
Dr. Jiang is the deputy director of the department of Cardiology, the Second Affiliated Hospital, Zhejiang University School of Medicine Dr. Jiang received his MD. degree at Zhejiang Medical University in China and was trained in clinical cardiology at Sir Run Run Shaw Hospital, interventional cardiology at Second Affiliated Hospital, Zhejiang University School of Medicine, and basic research in Medical University of South Carolina in 2005. He is currently the Young member of the Chinese society of Cardiology. He is full of enthusiasm in medical practice, research and education to promote health management in the population, with special interests in imaging and physiology optimized percutaneous coronary intervention (PCI), complex lesion (CTO and left main) PCI, and solutions for cardiac rupture after acute myocardial infarction.

Xiyong Yu

Dean, Guangzhou Medical University School of Pharmaceutical Sciences, China
President, Guangdong EpiPharm Institutes of Biomedicine
Chairman, Chinese Association of pathophysiology Cardiovascular Committee
Vice President, International Society for Heart Research (ISHR)-Chinese Section
Co-honorary Chairman, ISHR China Committee of Translational Medicine
Chairman, Chinese Pharmacology Society Pharmacoepigenetic Committee

Dr. Yu engages in the research field of molecular cardiology and clinical pharmacology. His main research interests are the epigenetic regulation of stem cells on cardiac remodeling. There were more than 400 papers published in the domestic and abroad (>140 SCI papers) academic journals, 9 books issued, and 11 National (or PCT) invention patents gotten. He has undertaken more than 20 research projects from the National 973 programs, National Natural Science Foundation (NSFC), the Provincial Natural Science Fund and other scientific and technological programs. Professor Yu won 5 Medical and Health Progress Awards, and 3 Science and Technology Awards from Guangdong Provincial Government. He has also been awarded as one of the academic and technology leaders of medical science and education project in Guangdong Province, the Chinese Industry-University-Institute Integration Innovation Award, the Ten Outstanding Young Persons in Guangdong Province Nomination Award, the State Department experts in special government allowances, the Guangdong provincial authorities forefront positions.

嘉宾介绍



Lenan Zhuang

Principal Investigator, Zhejiang University, China

Dr. Zhuang graduated from Shannxi Normal University in 2005. In 2011, he got his Ph.D. degree in Dr. Gang Pei's lab in Shanghai Institute of Biochemistry and Cell Biology (SIBCB), where he studied the interaction of arrestin1 with PPAR and the function of it in the status of obesity and diabetes; Since 2013 he has been to US, worked with Dr. Kai Ge in National Institutes of Health (NIH) as a postdoctoral fellow, where he studied epigenetic regulation on adipogenesis and published several decent papers, including his works deciphering the role of histone H3K36 methylation in adipose tissue development and function in Nature Communications. In 2018, he joint Dr. Eric Olson's lab in University of Texas, Southwestern Medical Center (UTSW), explored the epigenetic regulation in muscle and heart. This year he joint Zhejiang University, started his own lab. Now he is gathering his expertise, advanced materials and technologies, focusing his studies on cardiomyocyte differentiation and heart development, particularly, on the epigenetic regulation of energy metabolism in heart.

Bin Zhou

Professor, Chinese Academy of Sciences, China

Dr. Bin Zhou obtained his Bachelor degree from Zhejiang University School of Medicine in 2002, and received Ph.D. degree from Chinese Academy of Medical Sciences and Peking Union Medical College (PUMC) in 2006. From 2006-2010, Dr. Zhou had postdoctoral training with Dr. William Pu at Boston Children's Hospital and Harvard Medical School. In 2010, Dr. Zhou became a professor and group leader in Chinese Academy of Science. The major goal of his lab is to understand the cellular and molecular mechanisms of cardiovascular development, diseases and regeneration. His lab develops more precise genetic lineage tracing and gene targeting technology to better understand the origin and fate of cardiovascular cells in development, diseases and tissue regeneration.

GUEST INTRODUCTION

Wei Chen

Professor, School Medicine, Zhejiang University, China

Dr. Chen is the awardee of(the) "One-thousand Young Scientists Program", and "the National Science Fund for Excellent Young Scholars", and the group leader of Protein Machinery Program funded by National Basic Research Program of China for Young Scientists. His lab is mainly focused on: (1) developing state-of-art single-molecule biophysical technologies to investigate dynamic function of protein machinery that are essential and critical in many physiological and pathological processes; (2) investigating mechano-chemical coupling of immune receptors in antigen recognition and triggering of immune responses; (3) developing and applying single-cell techniques for investigating systemic immunity in various diseases. In a long run, he aims to integrate single-molecule and single-cell techniques and computational modeling to understand immune systems from the molecular level to systematic level and translate these technologies and basic research to benefit clinical practice. As the first or corresponding authors, he has published on Cell, Mol. Cell., eLife, Immun. Rev., J.Cell Biol., Biophys. J., JBC, JoVE etc. He has also been co-authors on publications of Nat. Immun., Immunity, Annual Rev. Phys. Chem., PNAS, J. Cell Biol. , etc.

Aijun Sun

Professor, Zhongshan Hospital, Fudan University, China
Vice Director, Shanghai Clinical Center for Cardiovascular Diseases
Vice President, Youth Committee of Chinese Society of Cardiology, China

Dr. Sun acquired Doctor Degree in Shanghai Second Medical University in 2002, worked as a visiting scholar in Essen University, Germany in 2003, and University of Texas (Houston), US in 2014. Dr. Aijun Sun has been engaged in exploring the molecular mechanisms and translational study on HF in the past 15 years. She clarified the novel mechanisms by which ALDH2 could slow down HF progression via maintaining the metabolic homeostasis and subsequent enhancement of myocardial protection and improvement of revascularization. She also proposed a novel concept to increase the efficiency of stem cell transplantation by improving its energy metabolic pattern. She is in charge of 12 national research grants and has published 20 articles in famous periodicals including Circulation, Nat Commun in the last 5 years.

嘉宾介绍

Liansheng Wang

Professor, Internal Medicine
Vice director, First Affiliated Hospital of Nanjing Medical University, China

Dr. Wang majors in clinical and basic research of coronary heart disease. He went to the University of Texas Medical Branch (UTMB) as a senior visiting scholar to study cell and molecular biology of cardiovascular diseases from 2004 to 2005. In 2012, he completed DCRI training at Duke University in the United States. He has published more than 40 original papers as the first author or correspondent author, and the cumulative SCI impact factor exceeded 100.

Zhenwei Pan

Professor, Department of Pharmacology, College of Pharmacy, Harbin Medical University, China

Dr. Pan obtained the Doctoral Degree of Pharmacology in 2008 in Harbin Medical University and was promoted to Professor in 2012. He was awarded as Young Yangzi River Scholar of Ministry of Education China in 2015. He studied in Sanwa Chemical Drug Research Center of Japan from 2002.11-2003.12 and worked as a visiting scholar in School of Medicine, Indiana University, USA from 2012.2-2013.5. His research interest is the involvement of noncoding RNAs in cardiac diseases, eg ischemia injury, arrhythmia, heart failure. To date, Dr. Pan has published 58 peer-reviewed papers in journals such as Circulation, JCI, JACC, Heart Rhythm, etc. Dr. Pan holds 18 scientific grants supported by NSFC, MOST, and Ministry of Education of China, etc.

GUEST INTRODUCTION

Xiaojie Xie

Chief Physician, Department of Cardiology
Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Xiaojie Xie is the director of the education department of the Second Affiliated Hospital, Zhejiang University School of Medicine. Dr. Xie received her M.D. & Ph.D. degree at Zhejiang University in China and was trained in cardiovascular research at Kentucky University (United States) in 2006, and stem cell clinical trials in Hospital Universitario Reina Sofia (Spain) in 2011. She devotes herself to American Heart Association training program as an instructor of Basic Life Support, Advanced Cardiovascular Life Support, and Experienced Provider. Dr. Xie is currently the committee member of Chinese Society of Cardiology, as well as the president assistant of Guizhou University. She is full of enthusiasm in medical practice, education and research to promote health care and management in the population. She is honored as an Excellent Teacher of China Resident Standardized Training for her great contributions to medical education. She has been worked in National Natural Science Funds Commission in 2011 and received many research grants as the principal investigator. She is also experienced in clinical trials of cardiovascular disease. Her research focuses on the pathogenesis and molecular targets of abdominal aortic aneurysm and atherosclerosis.

Qing Jing

Professor and Principal Investigator, Lab of RNA and Molecular Medicine
Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China

Dr. Jing focuses on understanding the mechanisms of cardiovascular development, disease and repair. His Group established in vivo and in vitro systems for exploring the cellular and molecular mechanisms of vascular development and screening drugs to produce sufficient functional cardiomyocytes for cardiac regeneration. He is elected as Fellow of American Heart Association since 2012. He has published 48 articles in international SCI journals, including Eur Heart J, Circ Res, J Cell Biol, ATVB and Cell. His articles have been cited more than 4000 times, one (Eur Heart J, 2010) has been cited more than 990 times (Google Scholar).

嘉宾介绍

Ping Liang

Professor, Institute of Translational Medicine, School of Medicine
Zhejiang University, China

Dr. Ping Liang got his MD at China Medical University in 2005 and obtained his Ph.D. at Peking University in 2010. He then did his postdoc with Dr. Joe Wu at Stanford during 2011-2014. He joined Institute of Translational Medicine at Zhejiang University and became a full professor in 2014. Ping's researches are focusing on understanding cellular and molecular mechanisms of channelopathies and cardiomyopathies using iPSCs, and his work has been published on Cell Stem Cell, Circulation, JACC, JCMM, Stem Cell Research & Therapy, JBC and Biophysical Journal.

Wei Zhu

Associated Professor, Department of Cardiology
Second Affiliated Hospital, Zhejiang University School of Medicine, China

Dr. Zhu is presently working in the Key Cardiovascular Research Lab, the Second Affiliated Hospital Zhejiang University School of Medicine, doing basic cardiovascular research. In the past few years, he has investigated the specific microRNA expression profile of mesenchymal stem cells and its reparative roles using a mouse myocardial infarction model. He is also interested in the physio- and pathophysiological roles of mitochondrial dynamics proteins in cardiac remodeling process in heart failure. He as published research works in peer reviewed journals such as Circulation Research and Stem Cells. Recently, he worked with the research team and explored how certain mitochondrial structure protein can modulate ROS generation to regulate molecular signaling, conferring the protection against stress. The research work has elucidated how a moderate ROS generation within the mitochondria exerts biological effects, and helped understand the concept of ROS compartmentation. The research work has been published in PNAS 2017.

GUEST INTRODUCTION

Peng Shi

Principal Investigator, Zhejiang University, China

Dr. Peng Shi obtained her Ph.D from University of Texas Health in San Antonio in 2007, and then received post-doc training in University of Florida 2007-2011. Dr. Shi took an Assistant Professor position in the Department Neurology in Cedars Sinai Medical Center in Los Angeles USA 2011-2016. Since April 2016, Dr. Shi setup her research program in the Institute of Translational Medicine, Zhejiang University as Principal Investigator. Her research is focused on the microglia-mediated neuroinflammation on autonomic regulation in cardiovascular and neurodegenerative diseases.