



# **HEART HEROES: ADVANCEMENTS IN CARDIOVASCULAR RESEARCH**

**Wednesday, February 8, 2017**

**UCLA Center for Health Sciences (CHS)  
South Tower, 2nd Floor**

# PROGRAM

## COCKTAIL RECEPTION

### WELCOME

#### **STEPHEN T. SMALE, Ph.D.**

Vice Dean for Research  
David Geffen School of Medicine at UCLA

#### **RAVI DAVE, M.D.**

Chapter President  
American Heart Association  
Director, UCLA Santa Monica Cardiology and Imaging

#### **ROSE MARIE ROBERTSON, M.D., F.A.H.A., F.A.C.C.**

Chief Science and Medical Officer  
American Heart Association

### PRESENTATIONS

#### **JILL HISEY, Patient**

*My Cardiac Story*

#### **KALYANAM SHIVKUMAR, M.D., Ph.D.**

Director, UCLA Cardiac Arrhythmia Center  
David Geffen School of Medicine at UCLA

*Heart Rhythm Problems:  
The Research Challenge for the 21<sup>st</sup> Century*

#### **YIBIN WANG, Ph.D.**

Co-Director, UCLA Cardiovascular Theme  
David Geffen School of Medicine at UCLA  
*Vision for Cardiovascular Research at UCLA*

### Q&A / THANK YOU

### OPTIONAL LAB TOURS



## **STEPHEN T. SMALE, Ph.D.**

*Vice Dean for Research*

*David Geffen School of Medicine at UCLA*

*Distinguished Professor, Microbiology, Immunology and  
Molecular Genetics*

*Sherie L. and Donald G. Morrison Chair, Molecular Immunology*

Dr. Stephen Smale serves as Vice Dean for Research in the David Geffen School of Medicine at UCLA. A molecular immunologist and biochemist, he arrived at UCLA in 1990 as an Assistant Professor in the Department of Microbiology and Immunology within the then UCLA School of Medicine. In 1999, he was promoted to Professor and in 2014, to Distinguished Professor in the Department of Microbiology, Immunology, and Molecular Genetics, which spans the UCLA College of Letters and Science and the David Geffen School of Medicine at UCLA. From 1990 to 2007, he was also a Howard Hughes Medical Institute Investigator. Dr. Smale graduated *magna cum laude* from Cornell University, with Honors and Distinction in Chemistry. He received his Ph.D. degree in Biochemistry from the University of California, Berkeley, under the mentorship of Dr. Robert Tjian. He was a Helen Hay Whitney Foundation postdoctoral fellow with Nobelist Dr. David Baltimore at the Whitehead Institute at Massachusetts Institute of Technology. At UCLA, Dr. Smale previously served as Vice Chair of the Department of Microbiology, Immunology, and Molecular Genetics, Director of Basic and Translational Research for the UCLA Jonsson Comprehensive Cancer Center, Director of the Howard Hughes Medical Institute Science Education Program, Co-Director of the UCLA-Caltech Medical Scientist Training Program, and founding Chair of the School of Medicine's Research Initiative in Immunity, Inflammation, infection, and Transplantation (I3T). The research in Dr. Smale's laboratory focuses on gene regulation during inflammatory and innate immune responses and during lymphocyte development and leukemogenesis.



## **RAVI DAVE, M.D.**

*Chapter President*

*American Heart Association*

*Director, UCLA Santa Monica Cardiology and Imaging*

Dr. Ravi Dave, Associate Clinical Professor of Medicine at the David Geffen School of Medicine at UCLA and Medical Director of the Cardiac Rehabilitation Program, received his medical degree from Saurashtra University and completed his internship and residency in Internal Medicine at the University of Illinois at Chicago. He completed his fellowship training in Interventional Cardiology at Los Angeles County USC Medical Center. Dr. Dave is Board certified in Internal Medicine, Cardiovascular Diseases, and Interventional Cardiology. He serves as the Director of the UCLA Santa Monica Cardiology and Imaging Practice and Assistant Director of the Cardiac Catheterization Laboratory at UCLA Medical Center, Santa Monica. In 2010, Dr. Dave was named a Los Angeles "Super Doctor."



**ROSE MARIE ROBERTSON, M.D., F.A.H.A., F.A.C.C.**

*Chief Science and Medical Officer and Past President  
American Heart Association*

Rose Marie Robertson, M.D., is Chief Science and Medical Officer of the American Heart Association (AHA). She received her B.A. degree from Manhattanville College in 1966 and M.D. degree from Harvard Medical School in 1970. She trained in Internal Medicine at the Massachusetts General Hospital and in Cardiology at the Johns Hopkins Hospital. She joined the faculty of the Vanderbilt University Medical Center, Nashville, Tennessee, in 1975 and was Professor of Medicine and Investigator in the Vanderbilt Center for Space Physiology and Medicine. Her research focused on autonomic cardiovascular control and she directed the Vanderbilt Women's Heart Institute. She is the author of numerous original articles in the peer-reviewed literature and multiple book chapters in the area of cardiovascular disease and therapy.

Dr. Robertson began to volunteer for the AHA in the 1970s and served as President of the national organization in 2000-2001. During her tenure, the Association signed a historic and ongoing Memorandum of Understanding, committing to common goals in the reduction of heart disease and stroke with the Office of the Surgeon General; the Office of Disease Prevention and Health Promotion; the Centers for Disease Control and Prevention (CDC); the National Heart, Lung, and Blood Institute; the National Institute of Neurologic Diseases and Stroke; and the Centers for Medicare and Medicaid Services, later joined by the Indian Health Services. She became Chief Science Officer of the AHA in January 2003.

Dr. Robertson was an AHA Established Investigator from 1983 to 1985. In 1993, she received the Gold Heart Award of the AHA Tennessee Affiliate, and in June 1999 the Association's national Award of Meritorious Achievement for "rendering an important service to the American Heart Association in the development of its national programs." She is a member of the American Society for Clinical Investigation, a founding member of the American Autonomic Society, a founding member and Past President of the Association for Patient-Oriented Research. She also has served on numerous review and advisory committees for the National Institutes of Health (NIH), the AHA, the American College of Cardiology, and the European Society of Cardiology. She currently chairs the Robert Wood Johnson Foundation's National Advisory Committee for the Harold Amos Medical Faculty Development Award. She was honored by the CDC in 2001 with its Partner in Public Health Award. She is Co-Principal Investigator of the AHA's Tobacco Center of Regulatory Science, a P50 award from the NIH/FDA to address basic, clinical, and communications research on current and novel tobacco products.



## **JILL HISEY**

*A Patient's Story*

On April 24, 2010, Jill Hisey, then a 44-year-old mother of three in Arcadia, CA, collapsed from sudden cardiac arrest at her son's baseball game. An acquaintance and two strangers performed CPR for 4½ minutes until paramedics arrived. Jill was taken to a local hospital and given therapeutic hypothermia, a therapy in which the body is cooled to protect the brain and improve survival. A day later, doctors warmed Jill's body back to normal temperature and she began to respond. Once she was alert, doctors ordered an angiogram to look for clues about why Jill, who had never had any risk factors for heart disease, had a sudden cardiac arrest. With no plaque or blockages found, they determined it was an electrical issue (arrhythmia) and implanted a device that acts as a pacemaker and implantable cardioverter defibrillator. Initiating CPR immediately is crucial when someone suffers a cardiac arrest. Jill and her family became passionate advocates of CPR training, organizing classes for Little League and Girl Scout coaches in their area as well as hundreds of teens in their community. Jill served on her local hospital's cardiac board, speaks at fundraising events, and appears in a thank-you video for the American Heart Association. She wants people to know that anyone can have a heart problem and CPR can save lives.

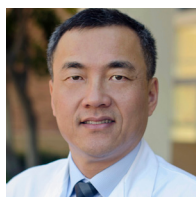


## **KALYANAM SHIVKUMAR, M.D., Ph.D., F.A.C.C., F.R.C.P. (HON)**

*Professor of Medicine, Radiology, and Bioengineering  
Chief, Interventional Cardiovascular Programs  
David Geffen School of Medicine at UCLA  
Director, UCLA Cardiac Arrhythmia Center*

Dr. Kalyanam Shivkumar specializes in interventional cardiac electrophysiology, leading a team of 15 faculty members, 12 trainees, and 60 staff and allied health professionals involved in clinical care, teaching, research, and biomedical innovation. The team provides state-of-the-art clinical care; has developed several innovative techniques (e.g., epicardial mapping) for the non-pharmacological management of cardiac arrhythmias and other cardiac interventions; and has a major focus on mechanistic research. Dr. Shivkumar's research investigates mechanisms of cardiac arrhythmias in humans, especially the role of the autonomic nervous system and neurovisceral sciences in general. Together with his colleagues, he is actively involved in human mechanistic studies and the development of new intellectual property and medical technology for cardiovascular therapeutics. He serves as a section editor of the society journal *Heart Rhythm*, associate editor of *Trends in Cardiovascular Medicine*, and is on the editorial board of the *Journal of the American College of Cardiology (JACC)*, *Pacing and Clinical Electrophysiology* journal, and *JACC: Clinical Electrophysiology*. He is a peer reviewer for several basic science and clinical journals as well as for the National Institutes of Health (NIH), evaluating cardiac arrhythmia and neuroscience research.

Dr. Shivkumar's research has been made possible by grants from the American Heart Association, the Doris Duke Foundation, private donors, and the NIH (continuously since 2006). Dr. Shivkumar has received several teaching awards and has been nominated to serve on the board of examiners for Clinical Cardiac Electrophysiology Section of the American Board of Internal Medicine. He has been elected to the membership of the American Society of Clinical Investigation (ASCI) and serves as the UCLA institutional representative for the ASCI. He was elected as an honorary Fellow of the Royal College of Physicians (London) in 2016.



**YIBIN WANG, Ph.D.**

*Professor of Molecular Medicine*

*Chair of Cardiovascular Theme*

*Vice Chair for Research*

*Director, Division of Molecular Medicine, Department of Anesthesiology and Perioperative Medicine*

*David Geffen School of Medicine at UCLA*

Dr. Yibin Wang received his Ph.D. degree in Molecular Genetics and Cell Biology from Baylor College of Medicine and his post-doctoral training in Neurobiology and Molecular Cardiology at The Scripps Research Institute and the University of California, San Diego. His research focuses on genetic and molecular mechanisms of heart failure and metabolic disorders. Dr. Wang's lab has made major advances in uncovering stress-signaling mechanisms in the pathogenesis of heart failure and revealed the 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 has published more than 175 peer-reviewed manuscripts in leading scientific journals, including *Cell*, *Nature Medicine*, *Cell Metabolism*, *Cell Systems*, *Cell Stem Cell*, *Journal of Clinical Investigation*, *Circulation*, *Circulation Research*, and *Proceedings of the National Academy of Sciences*. He received an Established Investigator Award from the American Heart Association (AHA) in 2005. He also was awarded the title of Chang-Jiang Scholar by the Minister of Education of China in 2009 and of Chinese National Expert for "Thousand Talent Plan" in 2011. Dr. Wang received the Thomas Smith Memorial Lecture award at the 2016 AHA Scientific Session. He serves on the editorial board of *Journal of Biological Chemistry*, *Circulation Research*, and *Journal of Molecular and Cellular Cardiology*, and is the Principal Investigator on several National Institutes of Health grants. He is a member of the leadership committees for the AHA and International Society for Heart Research North American Section, and has served on more than 30 Ph.D. thesis committees. Currently, Dr. Wang is the course master and Vice Chair of the Graduate Program in Molecular, Cellular, and Integrated Physiology at UCLA.



