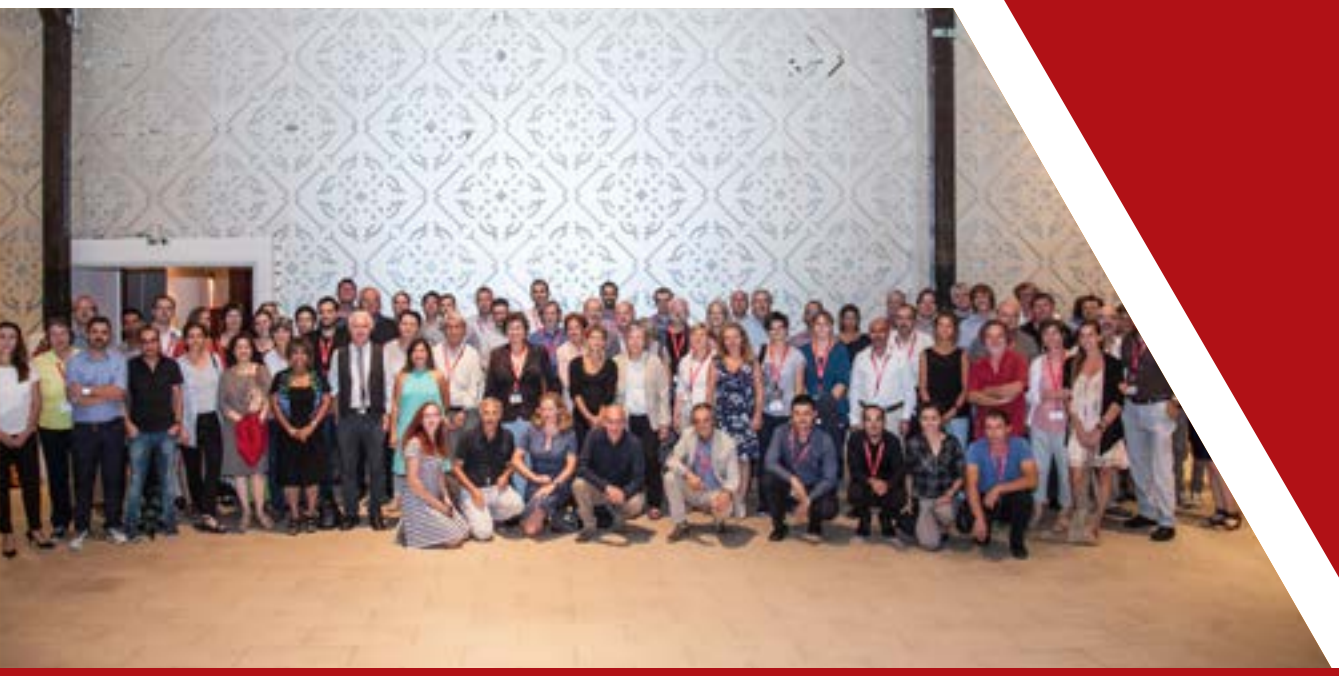
PULSUS
WWW.PULSUS.COM



International Conference on

HEART CONGRESS, VASCULAR BIOLOGY AND SURGEON'S MEETING

December 04-05, 2017 Dallas, USA

Keynote Forum

Day 1

Gerald M Lemole

Temple University, USA

The role of lymphatics on vascular health

The lymphatic system plays an essential role in vascular homeostasis. Well-known is its essential place in balancing fluids and electrolytes, clearing large molecules and toxins from the interstitial space and involvement in immune system functions. However, emerging evidence is mounting regarding the lymphatic role in reverse cholesterol transport. Since first proposed 35 years ago, there has been increased scientific interest and documentation of the importance of lymphatic clearance in preventing arteriosclerosis. Lymphatic stasis plays a significant role in the formation of atheroma and increases the inflammatory process by preventing rapid removal of toxins and metabolic debris from the intima. The entire process is discussed, from the vulnerability of the endothelium, monocyte diapedesis, macrophage conversion to foam cell and HDL passage through the internal elastic membrane to the perivascular and intravascular lymphatics. Most importantly the beneficial effects that diet, exercise, stress modification and some herbs and lymphogogic supplements have on the clearance of oxidized cholesterol away from the intima, positively affecting vascular health.

Biography

Gerald M Lemole was formerly Chief of Cardiac Surgery at Temple University School of Medicine (1969-1979), Deborah Heart and Lung Center (1972-1984) and Christiana Care Health System of Delaware (1986-2006). He has trained with Drs. Cooley and De Bakey in Houston and was on the team that performed the first successful cardiac transplant in America in 1968. He is presently a Professor of Surgery at Temple University and Thomas Jefferson Medical College. He is also Board-Certified in Integrative Medicine, he was appointed as the Medical Director of Christiana Care Health System's Preventive Medicine and Rehabilitation Institute and Center for Integrative Health from 2007 to 2010. He has written over 150 scientific articles, book chapters and editorials for professional publication. He has been a Visiting Professor at many universities and cities including Dublin, London, Ankara, Beijing, Shanghai, Tokyo and other cities around the world. He has written several books on Integrative Medicine, including most recently *After Cancer Care*, published by Rodale press, *Facing Facial Pain* for the Trigeminal Neuralgia Association, *The Healing Diet* published by William Morrow and *An Integrative Approach to Cardiac Care* for Medtronic and a second edition for St. Jude Medical.

lemole@lemole.com

Notes:

Gavin W Britz

Houston Methodist, USA

The importance of the microcirculation following subarachnoid hemorrhage

Subarachnoid hemorrhage is a common form of stroke that often involves delayed and sustained ischemia, which is a major cause of death and neurological disability in patients surviving cerebral aneurysm rupture. Neurological deficits commonly include memory changes and impairments in executive function, associated with hippocampal volume loss. Common causes include vasoconstriction at a large cerebral vessel level, hydrocephalus, infections, and treatment related strokes. In many cases, despite none of these being present, patients still have disability. Little is known about lesser known causes of morbidity including the small parenchymal arterioles and the regulation of CSF flow. We will discuss alternative lesser known causes of poor outcome following an SAH.

Biography

Gavin W. Britz MD, MPH, MBA is Professor of Neurological Surgery, Weill Cornell Medical College Chair, Department of Neurosurgery, Director, Houston Methodist Neurological Institute, Houston Methodist, Houston Texas. He leads an acclaimed team of neurosurgeons and affiliated professionals and is recognized as one of the nation's foremost cerebrovascular, skull base and brain tumor surgeons. He is on the advisory boards of the Joe Niekro Foundation and The Brain Aneurysm Foundation and serves on the editorial board for multiple journals.

gbritz@houstonmethodist.org

Notes:

International Conference on

HEART CONGRESS, VASCULAR BIOLOGY AND SURGEON'S MEETING

December 04-05, 2017 Dallas, USA

Li Zhang

The University of Texas at Dallas, USA

Heme and vascular disrupting agent in non-small cell lung cancer

Lung cancer is the leading cause of cancer-related death in the US and the world, and non-small cell lung cancer represents 85% of lung cancer cases. There are many challenges associated with studying and treating lung cancer, and there is a diverse set of metabolic factors influencing the tumorigenesis and metastasis of lung cancer. Recent studies have shown that lung cancer cells rely heavily on mitochondrial respiration and that inhibiting mitochondrial function may be an effective method to combat lung cancer. Further, more research has noted increased levels of heme flux and function as critical to intensified oxygen consumption and accompanying amplified pathogenesis and progression of lung cancer. The upregulation of mitochondrial DNA and biogenesis genes are also correlated with lung cancer. Interestingly, we found that the vascular disrupting agent combretastatin A-4 phosphate (CA4P) substantially enhanced the levels of enzymes involved in heme biosynthesis, uptake and degradation, and oxygen-utilizing hemoproteins. Furthermore, detection of markers of mitochondrial function suggests that CA4P did not diminish mitochondrial function in viable tumor cells. These results suggest that elevated levels of heme flux and function contribute to tumor regrowth and treatment resistance post-VDA administration. Novel strategies to inhibit vasculature functions and suppress lung tumors will be discussed.

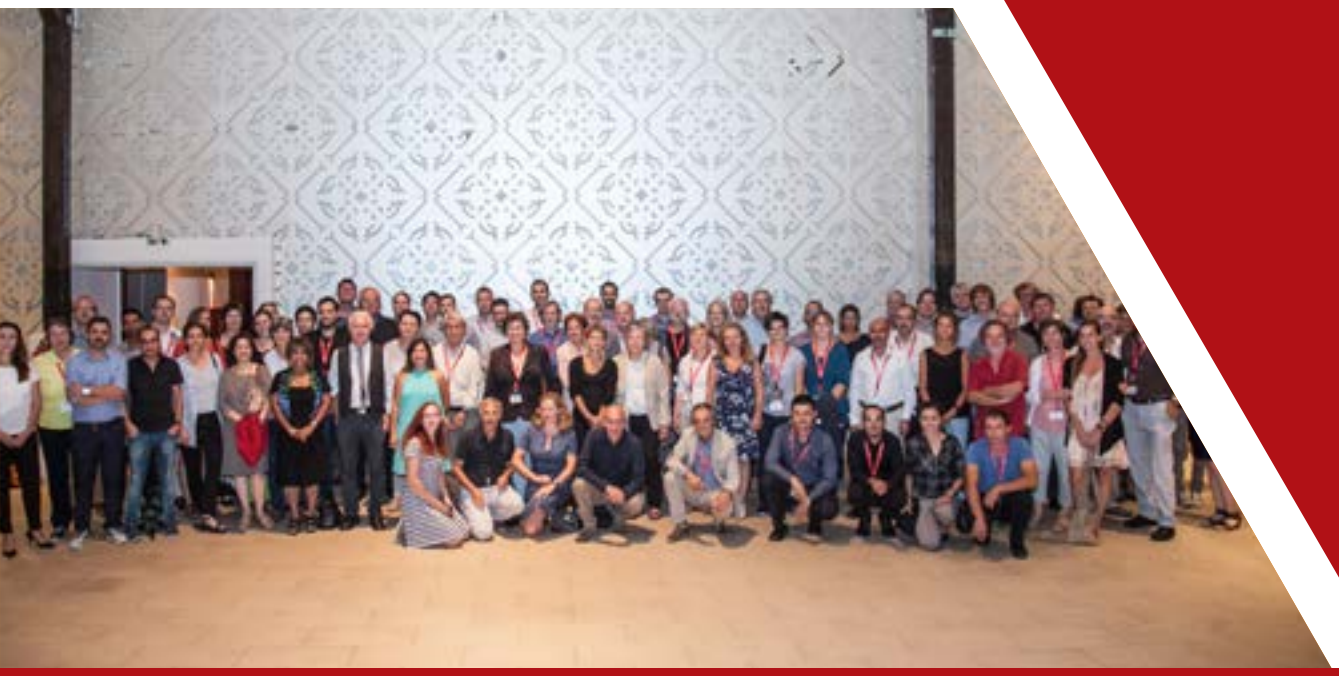
Biography

Li Zhang has completed her PhD from UCLA and Postdoctoral studies from MIT department of Biology. She is the Cecil H. and Ida Green Distinguished Chair in Systems Biology Science at the University of Texas at Dallas. Her laboratory has worked on studying heme signaling and function for more than 20 years. She has published many original research articles and a book entitled *Heme Biology: The Secret Life of Heme in Regulating Diverse Biological Processes* on this subject. Her laboratory has also made important contributions in understanding the roles of molecular chaperones in cellular signaling, molecular mechanisms of oxygen signaling, and the actions of neurotoxicants. Recently, her lab focuses on investigating heme function in lung cancer. She and her colleagues have provided a unifying view of cancer bioenergetics in a review article entitled a holistic view of cancer bioenergetics: mitochondrial function and respiration play fundamental roles in the development and progression of diverse tumors, published in the journal *Clinical and Translational Medicine*.

li.zhang@utdallas.edu

Notes:

PULSUS
WWW.PULSUS.COM



International Conference on

HEART CONGRESS, VASCULAR BIOLOGY AND SURGEON'S MEETING

December 04-05, 2017 Dallas, USA

Keynote Forum

Day 2

Alfred Sparman

Sparman Clinic, USA

The epidemiological shift and current economic environment warrant new approaches to the treatment of risk factors for cardiovascular disease

In the last decade we have seen a significant epidemiological shift which has led to an increase in the incidence of noncommunicable chronic diseases. Statistics indicate that cardiovascular disease, once believed to be a disease of affluent countries, is the leading cause of death worldwide affecting both developing and developed countries. Apart from the change in the epidemiological environment, changes in the economic environment have also led to additional challenges. For some patients, especially those living in countries with limited resources; the picture is an overwhelming one, as this translates into limited access to adequate healthcare services, standard treatments and therapies. Not exempt from the negative effects of cardiovascular disease, those living in poorer countries may find it difficult to access standard therapies, such as statin therapy, and so these patients frequently do not meet their treatment goals, which results in poor treatment outcomes and an undesirable quality of life. Faced with the dilemma of whether to treat their disease or feed their families, many patients turn to biologically based therapies as an alternative. The use of complementary and alternative medicine has also increased among patients living in developed countries. Biologically based therapies specifically, have become a popular choice as adjunct to conventional medicine, with 38% of American adults reportedly using complementary and alternative medicine. The National Health Interview Surveys indicate that of the 38% using complementary and alternative medicine in 2007, 36% were affected by cardiovascular disease. The survey also indicated that the majority of these patients do not inform their doctors of their choice to use these treatments, and so places their health at risk. The treatment of cardiovascular disease with complementary and alternative medicine has and continues to be a controversial issue. However, the increased accessibility to information by way of the internet has created a culture of self-referral with patients becoming increasingly open to the use of biologically based therapies. As such, it may be time for medical and healthcare professionals to increase their knowledge of these therapies, their viability, current research and the need for increased, clinically sound research in these areas as healthcare systems, and patients alike, face escalating financial challenges.

Biography

Dr. Alfred Sparman, an interventional cardiologist and pioneer of angioplasty in Barbados, is the CEO of one of the premier healthcare facilities in the Caribbean. With years of experience in the field of cardiology and a successful practice at The Sparman Clinic and 4H Hospital, Dr. Sparman continues to build on his knowledge of chemistry and research. In addition to his clinical practice, Dr. Sparman enjoys hosting a weekend radio program "Living with the Doc", a medical and social awareness program which focuses on health, treatments, patient experiences and disease management..

nutrition@thesparmanclinic.com

Notes: