Foreword

New approaches to an old problem

This issue of the *Annals of Cardiothoracic Surgery* is devoted to **Thoracoabdominal Aortic Aneurysm Repair**. This has been a formidable challenge facing all cardiothoracic surgeons. Various surgical techniques have been used and scrutinized, but perioperative complications remain substantial. Recently, catheter-based interventions, such as endoluminal aortic repair, represent a remarkable paradigm shift in treatment alternatives for vascular disorders. The skill set required for performance of such interventions has not been a significant component of cardiothoracic education. Indeed, such skills have traditionally been the core competencies for other specialties, namely interventional radiology, cardiology and more recently vascular surgery. Is it realistic to expect cardiothoracic trainees to attain such catheter-based skills? Additional dedicated training that would extend the residency period would be required. Lengthening the training time to accommodate such training would likely accelerate the current reduction in applicants already seen for cardiothoracic positions. Should cardiothoracic surgeons be trained to perform only open vascular procedures? With introduction of new interventional procedures, such as transcatheter aortic valve implantation, mitral valve clip implantation and hybrid aortic repairs, this notion has been challenged and one may argue that modern cardiothoracic programs should incorporate endovascular training to equip our next-generation cardiothoracic surgeons with this necessary skill set for the future (even the present). Patients in need of cardiovascular care are best served by a practitioner who can offer the full range of diagnostic and therapeutic alternatives and tailor the treatment to the patient specifics. Fellowship trained cardiothoracic or cardiovacular surgeons are the only group who can provide such care.

Our special guest editors are Professor Joseph Coselli and Professor Scott LeMaire. Professor Coselli holds the Cullen Foundation Endowed Chair and is Professor and Chief of the Division of Cardiothoracic Surgery at Baylor College of Medicine (BCM). He serves as Chief of Adult Cardiac Surgery at Texas Heart Institute (THI) at St. Luke's Episcopal Hospital and Associate Chief of Cardiovascular Surgery at St. Luke's Episcopal Hospital, located in the Texas Medical Center in Houston, Texas. He is also Associate Director of the Thoracic Surgery Residency Program at THI/BCM and directs the Aortic Fellowship Program. Professor Coselli specializes in the evaluation and surgical treatment of diseases of the aorta, and was mentored by the pioneering aortic surgeon, E. Stanley Crawford. A Houston native, he received an introduction to cardiothoracic surgery from Denton Cooley, and as a surgical resident, was instructed by Michael DeBakey; years later, Professor Coselli among others, helped to facilitate a reconciliation between these pioneering giants of their field. He has performed more than 7,000 repairs of the aorta and more than 2,900 repairs of thoracoabdominal aortic aneurysms, for which he is world-renowned. He has published more than 360 medical manuscripts and delivered nearly 500 presentations in 27 countries. We are certain you will learn a lot from his video article under the **Masters of Cardiothoracic Surgery** section.

Scott LeMaire is a Professor of Surgery and of Molecular Physiology and Biophysics, the Director of Research in the Division of Cardiothoracic Surgery, Michael E. DeBakey Department of Surgery at BCM, and an attending cardiovascular surgeon at THI. His primary clinical interest focuses on the management of patients with thoracic aortic disease, with a particular emphasis on treatment of aortic dissection and thoracoabdominal aortic aneurysms. His corresponding research program focuses on organ protection during aortic surgery, genetic aspects of thoracic aortic disease, and molecular mechanisms of aortic degeneration. He has received funding from the National Institutes of Health and the Thoracic Surgery Foundation for Research and Education for his research studying the pathobiology of thoracic aortic aneurysms and aortic dissection. We would like to express our special gratitude towards Professor LeMaire for his tremendous input into every single page of this issue.

It is our hope that you will explore the favored surgical techniques presented by the experts in this field - be it open repair, total endoluminal approach or hybrid technique - in this issue. We are deeply honored to have the opportunity to collaborate with all of our contributors to generate this outstanding issue, most notably, Drs. Charles Acher, Richard Cambria, Roberto Chiesa, Gabriele Di Luozzo, John Fehrenbacher, Marcelo Ferreira, Richard Gibbs, Randall Griepp, Chad Hughes, Michael Jenkins, Nicholas Kouchoukos, Germano Melissano, Konstantinos Moulakakis, Yutaka Okita, Virendra Patel, Amit Pawale, Marc Schepens and Joeseph Woo. Thank you.

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