

## Impact-oriented, Translational Research Serving Prevention and Monitoring of Cardiovascular Disease: From Euphemisms to Action

### GUEST SPEAKER

**A/Prof. Theodoros Kofidis**  
Consultant Cardiothoracic Surgeon  
Dept of CTVS, NUHS / Dept of Surgery, NUS

When: **22<sup>nd</sup> July 2009, 3.00 p.m. to 4.00 p.m.**  
Where: **Institute of Microelectronics, Singapore (Level 2, Auditorium)**  
11 Science Park Road Singapore Science Park II Singapore 117685

### **Abstract**

Translational research is currently being used euphemistically to describe many types of research activities. Truly translational research, however, should obey specific rules and aim at impact, rather than impact factor. The facets of impact-oriented and applied research in the field of cardiovascular disease will be discussed, and imminent needs will be presented, based on facts and statistics. Cardiovascular disease is on the march worldwide. Access to optimised prevention measures, guided therapy, and disease monitoring only occurs in a minority of the affected population. Technology has not yet evolved to generate acute and chronic monitoring mechanisms of cardiovascular disease without the need of the patient to travel, or subject himself to invasive procedures. Separate wearable ECG and blood pressure modules do not reflect heart function, the state of disease and the do not reveal its acuity.

In a joint, large-scale but need-specific project, we intend to produce a new multi-modal system for on-line, off-site, disease prevention, monitoring and fast-response therapy. The target population is vast, and includes all out- and inpatients who suffer from diabetes-related cardiovascular problems, pts with hypertension, ischemic heart disease, heart failure, infarction, arrhythmias, congenital disease, pts after operations as well as all patients around the world living remotely, and pts in need for physical support (elderly and disabled). The novelty of our system lies in the concurrent capture of all the above modalities (as opposed to existing systems which address ECG and separately, blood pressure, only), and the long-term and remote-controlled monitoring of cardiovascular disease, the wireless fast-response therapy execution, and the potential to be integrated in global transmission vehicles to embrace a total population/network of over 2 billion humans. By serving improved and fast-track diagnosis, prevention and therapy, our approach to merge technology and medicine/surgery is deservedly translational, and aims at immediate implementation and global distribution.

### **Speaker Biography**



A/Prof. Theodoros Kofidis is reputed to be a worldwide known Cardiothoracic Surgeon, both for his clinical as well as research achievements. He is trained in some of the world's leading institutions (Stanford-USA, Hannover-Germany) and specialises in all cardiac surgery, such as bypass surgery, heart valve surgery, aortic surgery, heart failure surgery, arrhythmia surgery and more.

A/Prof. Kofidis carries out surgeries in off-Pump technique, without necessitating the heart lung machine or stopping the heart. Furthermore, minimally invasive procedures and valve repair procedures are his preferred approach, to minimise trauma and stress to the patient. He is the first to have implanted and helped children survive and recover from an artificial heart device in Singapore and the region (bridge – to- recovery).

A/Prof. Kofidis is a richly decorated pioneer in heart-related research. His innovations, discoveries and his patents in Heart Surgery, published in more than 100 articles in international journals, have earned him prestigious international awards, and the honor of invited lecturer at Bill Gates Research Centre, the American Medical Association, and the FDA in the USA. He is a Consultant Cardiothoracic Surgeon and envisions promoting advanced, less traumatic surgery in Singapore in the years to come.

### Registration

Pre-registration required. Please send the following details through email to:  
Ms. Daphne Khong E-mail: [khongkw@scei.a-star.edu.sg](mailto:khongkw@scei.a-star.edu.sg)

Closing Date: Tuesday, 21<sup>st</sup> July 2009

Name			
Designation			
Company Name			
Address			
Tel		Fax	
Email			

### Location Map

