

2011 PSTA WINNER CITATIONS

PRESIDENT'S TECHNOLOGY AWARDS 2011



Professor Lim Chwee Teck

**Department of Bioengineering and Department of Mechanical Engineering
National University of Singapore**

“For the development and use of novel micro biochips in the detection and diagnosis of human diseases”

Professor Lim Chwee Teck's pioneering research in the multidisciplinary area of human disease mechanics and mechanobiology has been hailed as highly original and creative. He is a leading researcher valued for his contributions in cell and molecular biomechanics which allow a better understanding of human diseases such as cancer and malaria. To this extent, his research was cited by the MIT Technology Review magazine as one of the top ten emerging technologies in 2006 that will "have a significant impact on business, medicine or culture". Professor Lim was elected as Council Member of the World Council of Biomechanics in 2010. With only 40 such members worldwide, an elected membership by his peers is clear recognition of his status as a world expert in his area of research.

As a much sought-after speaker globally, Professor Lim has delivered more than 175 invited lectures around the world. He has also authored more than 400 technical publications with more than 180 of them being peer-reviewed journal papers, including 30 invited review articles. Professor Lim has also won numerous awards such as the Institute of Engineers Singapore (IES) Prestigious Engineering Achievement Award in 2010, the National Research Foundation (NRF) Technology Incubation Scheme Award in 2009.

Having co-founded three companies to commercialise the technologies developed in his lab, Professor Lim has an entrepreneurial streak. His latest invention of a micro biochip that uses cell mechanics principles to detect and retrieve rare cancer cells from blood has received much international attention. Utilising human disease mechanics to develop a technology for translation into clinical application is commendable. This biochip has since been commercialised and is being

clinically tested at top cancer centres both locally and overseas. For this invention, his team has won the Tan Kah Kee Young Inventors' Award in 2009.

Professor Lim currently holds the position of Professor at the Department of Bioengineering and Department of Mechanical Engineering and is also a Principal Investigator at the Mechanobiology Institute at the National University of Singapore.

For his outstanding contributions in developing novel micro biochips in the detection and diagnosis of human diseases, Professor Lim Chwee Teck from the National University of Singapore, is awarded the 2011 President's Technology Award.