

# MSE-Colloquium@NTU

29 September 2014, 4.00pm (refreshments will be served at 3.30pm)  
Lecture Theatre 6, Nanyang Technological University



## The Golden Age of Materials Science Innovation – Some Lessons on Innovation and Start Up Companies

Professor Freddy Boey  
*Provost, NTU*

Turning research into innovation and matching spirit of experimentation with prolific output, Professor Boey will be sharing insights on how to conduct research at an international level.

### About the Speaker

Provost Prof Freddy Boey has a sterling track record of breakthrough commercial applications that have given the “made-in-Singapore” label pride of place on the global stage.

The former Chair of MSE, who is a fellow of Imperial College London, has developed 103 patents and founded several companies. In between, he has supervised a large number of PhD students and mentored post-doctorates. Some of Prof Boey’s students have gone on to set up companies or get involved in his start-up companies.

Prof Boey’s own pioneering research in biomaterials for medical devices – as well as nanomaterials and nanostructures for cell regeneration, sensing and energy storage – have no doubt helped to raise both the school’s and NTU’s profile internationally, besides generating a buzz in international healthcare.

Take the disposable surgical tissue retractor he invented to keep wounds open during surgery. This was licensed to Insigntra Medical Inc, Irvine, California, and sold in the US, Middle East, India, Japan and Europe.

Patents in hand, he has gone on to found companies such as Amaranth Medical Inc, which develops fully-biodegradable coronary stents that release drugs into heart patients. The flagship product of Prof Boey’s most recent company, Peregrine Ophthalmic, is a nano-based drug delivery system to treat glaucoma, which has been successful in human trials.

Several of his biomedical devices have received US FDA (Food and Drug Administration) approval and the CE mark. His invention of a customisable hernia mesh that improves the outcome of hernia operations, through lowering the risk of inflammation and infection, was the first such surgical mesh to be approved for sale by the FDA.