

TCF2010 – Biomedical Sciences Track (Day 2, 6th March)

Event: Technology Commercialisation Forum (5-6 March)

Venue: PanPacific Hotel, Level 2

Date: 6th March, Sat

Time: 9am – 12:45 pm

***Please refer to <http://www.tcf.sg/program2010.html> for full Day 2 program

Track 3 - Biomedical Sciences Program

9am - 9:45am: **Panel Discussion**

Topic: Bringing Early Stage Technology to Market

Panel members:

1. Dr. Lim Jui, Executive Director, MERCI (Medical Engineering Research and Commercialization Initiative), National University of Singapore (**Moderator**)
2. Mr Arundeeep S. Pradhan, Director, Office of Technology & Research Collaborations, Oregon Health & Science University (OHSU), USA
3. Dr Andrew Serafini, Partner, Fenwick & West LLP
4. Dr Paul MacAry, Assistant Professor, Department of Microbiology, NUS

9:45 am – 10 am: **Tea Break**

10am - 12pm: **Technology Pitching** (10 presentations)

Title	Inventor/Speaker	Summary
Novel strategies for treatment of influenza, cancer, and inherited diseases: about RNA trans-splicing, RNAi, and antiviral drugs that do not trigger resistance	Dr. Volker Patzel, Microbiology, NUS	Pending
Artificial Vision For The Blind	Dr. Yehuda Yarmut, Deputy Director, Yissum Tech Transfer, Hebrew University of Jerusalem	System involving a tiny video camera and a set of earphones worn by a blind person to capture the surrounding visual field and convert it into sounds using a set of novel algorithms.
Fluorescent Tagged Antimalarials As Commercial Molecular Probes To Diagnose Drug Resistance And To Study Diseases	Drs. Kevin Tan, Microbiology/Martin Lear, Chemistry, NUS	Chloroquine is an antimalarial drug used to treat cancers, autoimmune diseases, viral (HIV, SARS, flu) and bacterial infections. We have synthesized a fluorescent-labelled chloroquine molecule that uniquely and rapidly differentiates drug-sensitive from drug-resistant malaria strains. It is also a fluorescent molecular probe that can be broadly applied to the study of many diseases.
Clip-on Intravenous (IV) Drip Rate Counter	Mr. Johnny Chee, Biomedical Engineering Centre, Ngee Ann Polytechnic	Outside of intensive care, intravenous infusion of fluid into a patient is usually performed by nurses who have to calculate and manually adjust the drip-rate. A clip-on drip-rate counter is an efficient device to help nurses save time, accurately set the drip rate and thereby minimising human errors.

High Performance Bead Protein Microarrays : Bringing Biomolecular Diagnostics into the Digital Age	Dr. Dieter Trau, Bioengineering, NUS	Convenient, low-cost, rapid, parallel analysis of biomolecules such as proteins, DNA, metabolites, etc. is highly desirable in personal health care, diagnostics, bio-threat monitoring and biomedical research. However, this is currently not possible. LHT has developed a disruptive technology, called 'In-situ encoded bead-microarrays' (IEBA). IEBA is a platform technology that enables ultralow cost fabrication of protein microarrays which are very easy and cheap to use.
Digital Holographic Microscopy with Physical Phase Compensation	Ms. Chee Oi Choo, Engineering, Ngee Ann Polytechnic	A novel single-cube-beamsplitter digital holography configuration is developed, enabling physical compensation for external vibrations and <i>phase</i> curvature introduced by the microscope objective and sample tilt.
A Human Monoclonal Biotherapeutic to Target the Dengue NS3 Protein	Prof Subhash Vasudevan, Duke-NUS GMS	This research is to find a novel therapeutic for treatment of dengue fever. A panel of human monoclonal antibodies against NS3 protein has been generated that can bind and potentially inactivate the critical enzyme activities carried out by NS3 such that both the polyprotein processing and virus multiplication is blocked.
Nano-needle Delivery System	Dr. Giorgia Pastorin, Pharmacy, NUS	A Non-invasive penetration method that avoids pain sensation during drug or vaccine delivery that will engender greater patient compliance.
ProTherapeutics Pte Ltd engineering orally active novel therapeutic peptides	Mr. Howard Califano, CEO, ProTherapeutics Pte Ltd (NUS Startup / licensee)	ProTherapeutics is Singapore's first biotech company to develop new drugs from proteins. It specializes in developing drugs based on animal toxins and other naturally occurring proteins. The company aims to engineer small stable peptide therapeutics, through identifying functional sites in proteins.
Life Sciences Technology (title pending)	Dr. Ashley J. Stevens, Special Assistant to the Vice President for Research Technology Development and Senior Research Associate, ITEC, School of Management, Boston University	Pending

12-12:45 pm: **Company Presentations**

Transforming pharmaceutical drug discovery: The Phenotypic Drug Discovery (PD ²) Initiative	Dr. Robert Morris Campbell, Director, Oncology, Lilly Singapore Centre for Drug Discovery	PD2 drug discovery platform.
From Bench to Market : Building a Sustainable Company	Mr. Johnson Chen, Managing Partner, Clearbridge Accelerator	Wanting to see your inventions being adopted in the market place? Need help, mentoring and financing? Want to find out more about commercialisation? This is a brief overview of what investors tend to look for, the challenges and the various business paths and sources of finance.