Duke-NUS Graduate Medical School Singapore Phase II Agreement Signing Ceremony

30 November 2010

Duke-NUS partnership goes from strength to strength
Inaugural NIHA Forum brings together prominent healthcare leaders and experts to discuss critical health issues in Asia

SOME 85 high-level healthcare policymakers, academics and practitioners from around the world gathered to discuss critical health issues in Asia at the first NUS Initiative to Improve Health in Asia (NIHA) Forum, held from 29 to 30 November 2010.

Hosted by the NUS Global Asia Institute, the Forum featured well-known healthcare experts which included Dr Margaret Hamburg, Commissioner, Food and Drug Administration, United States; Prof David Heymann, Chairman, Health Protection Agency, United Kingdom; Dr Jacques Jeugmans, Practice Leader (Health), Asian Development Bank, Philippines; Prof Yeoh Eng Kiong, Professor of Public Health and Director of the Centre for Systems for Health at the Chinese University of Hong Kong; and Prof Paul Zimmet, Director Emeritus and Director of International Research, Baker IDI Heart and Diabetes Institute, Australia.

Recognising the diversity of Asian contexts and the very broad scope of health, the NIHA Forum aimed to identify and address the most pressing and important health issues, which would help in shaping the Initiative’s research agenda, said NUS President Prof Tan Chorh Chuan.

He was speaking to the media after a closed-door dialogue session with Singapore Health Minister Khaw Boon Wan, involving invited guests only, which kicked off the Forum. Highlighting some key issues discussed during the dialogue session, Prof Tan cited the design of health financing systems, the role and impact of human behaviour in driving diseases and healthcare delivery, and challenges such as ageing populations, the severity of chronic diseases and the persistent threat of infectious diseases.

In view of the many complicated and interacting health issues, Prof Tan said: “One of the things we hope that NIHA would be able to do is to gain a more holistic understanding of these complex issues and develop research that offers practical learning points as well as solutions for Asia. With the very rapid development of health systems within Asia, there is a unique opportunity to leapfrog, that is, innovate or adopt new practices that would deliver care better and more effectively at a lower cost.”

Unveiled in July 2010, NIHA is an integrative initiative set up to improve public health and healthcare delivery in Asia. It was made possible with a funding of S$17 million over 10 years from the GlaxoSmithKline-Singapore Economic Development Board Trust Fund.

NIHA is coordinated by the NUS-GAI, in collaboration with NUS’ Lee Kuan Yew School of Public Policy, Yong Loo Lin School of Medicine and Business School. It has three focus areas – multidisciplinary research, high-level policy forums and leadership programmes. In conjunction with the NIHA Forum, NUS-GAI also hosted a dinner at Grand Hyatt Singapore on 29 November 2010 to celebrate the Institute’s first anniversary.
Duke-NUS partnership goes from strength to strength

NUS and Duke University have extended their strategic collaboration in medical education and research, in view of strong progress in the first phase of their partnership, which began in April 2005 with the establishment of the Duke-NUS Graduate Medical School Singapore (Duke-NUS).

The Duke-NUS Phase II Agreement was signed on 30 November 2010, witnessed by Singapore Health Minister Khaw Boon Wan and Education Minister Dr Ng Eng Hen.

NUS President Prof Tan Chorh Chuan said: “In this short space of time, Duke-NUS has established a strong reputation, attracting a great mix of bright students and distinguished faculty from around the world. The Duke-NUS educational model is very distinctive, and the School has also contributed strongly to Singapore’s Biomedical Sciences (BMS) Initiative through its cutting-edge research. I would say that this partnership has greatly exceeded our already high initial expectations.”

In Phase II, Duke-NUS will leverage on the excellent infrastructure that has been put in place during Phase I to further expand and integrate education, research and clinical care. The School will continue to train doctors, future clinician-scientists and researchers, while building on and spurring foundational, translational and patient-oriented research to benefit patients in Singapore and the region.

Over the next five years, Duke-NUS will also be working closely with SingHealth, the largest healthcare group in Singapore, to further develop and strengthen healthcare delivery, education and research for both partners. Duke-NUS’ close proximity to SingHealth’s national specialty centres and the Singapore General Hospital encourages close collaboration between researchers at the School and SingHealth’s clinicians and clinician-scientists, who form the core of the School’s clinical faculty.

Dean of Duke-NUS Prof Ranga Krishnan said: “In the next phase of growth, Duke-NUS and its partner, SingHealth, will create a new model of Academic Medicine, founded on our combined strengths in clinical medicine, basic science, translational research and education, anchored by a strong collaborative spirit … Together, we hope to form an integrated working relationship or enterprise that guides and promotes the future of medicine, not just in Singapore but also as a model for other countries.”
Top cancer experts share cutting-edge advances in cancer treatment and drug development

THE 2010 Frontiers in Cancer Science conference, held from 8 to 10 November, brought together 30 top cancer experts from five countries who shared the latest breakthroughs in cancer science, stem cell research and anti-cancer drug discoveries.

This second annual conference was co-organised by the Cancer Science Institute of Singapore (CSI), NUS; Duke-NUS Graduate Medical School Singapore; Genome Institute of Singapore and Institute of Molecular and Cell Biology, A*STAR. It was the first time the four institutes came together to plan a conference of this nature.

“This illustrates a strong commitment of Singapore cancer researchers to work together to understand the causes of cancer, and to develop new therapies for a disease which is of increasing importance to Asia,” said CSI Director Prof Daniel Tenen.

Believing that in time, growth in the pharmaceutical industry would lead to better cures and lower healthcare cost, he said to the audience: “What you do here in cancer research and what you do with the research output will make it happen – faster or slower. You can make a big difference to the patients waiting eagerly to be helped if you are successful, not just in pushing the frontiers in science to achieve breakthroughs but pushing these breakthroughs to the patients.”

First Singapore Conference on Statistical Science

THE NUS Department of Statistics and Applied Probability (DSAP) organised the First Singapore Conference on Statistical Science from 18 to 19 November 2010 with the aim of fostering greater communication between statisticians working on statistical methodologies and on various fields of applications.

The two-day event attracted 91 local and foreign participants and 19 speakers presenting their research findings. The keynote lecture was delivered by Prof Howell Tong, Saw Swee Hock Professor of Statistics in DSAP and Emeritus Professor in the London School of Economics (LSE).

Delivering the opening address, Guest-of-Honour NUS President Prof Tan Chorh Chuan commended DSAP for its success in bringing together “experts from a spectrum of disciplines and backgrounds around an imaginative scientific programme which I am sure will stimulate many new ideas for new research directions in Statistical Science. It will also add to the growing network of collaborating scholars which serves as a fertile basis for future research partnerships.”

He also noted: “This conference is the brainchild of Prof Saw Swee Hock, who also made it a reality through his generous support and sponsorship.” An Honorary Fellow of LSE and Honorary Professor in the University of Hong Kong and Xiamen University, Prof Saw is currently NUS President’s Honorary Professor of Statistics in DSAP and a member of the NUS Board of Trustees.
Centre for BioImaging Sciences officially opens

The NUS Centre for BioImaging Sciences (CBIS) was officially opened on 6 December 2010 by Guest-of-Honour Mr Lim Chuan Poh, Chairman of Singapore’s Agency for Science, Technology and Research. The S$24 million centre will pioneer leading-edge development and application of novel imaging techniques and computational methods to solve key problems in life sciences, medicine, environment and energy.

Its state-of-the-art research facilities include the FEI Titan Krios cryo transmission electron microscope that has unique capabilities required for life science research. The high-powered microscope is the first to be installed in Singapore and the third in Asia.

In his speech at the CBIS launch, Mr Lim said: “Bioimaging has the potential to play a pivotal role in translational research, especially when used to visualise molecular interactions, cancer function, metabolism and genetic expression in tissues as well as animal models of disease.” He added that the establishment of CBIS was a timely move by NUS to help Singapore grow in its bioimaging capability and to attract some of the best talents in this research area to Singapore.

Said NUS President Prof Tan Chorh Chuan: “Over the past decade, NUS has developed a range of world-class imaging resources to facilitate cutting-edge research at the Yong Loo Lin School of Medicine, Faculty of Engineering and the Mechanobiology Institute. The Centre for BioImaging Sciences will complement this effort by bringing unique top-of-the-line technologies, in particular, cryoelectron microscopy, to catalyse research breakthroughs in life sciences and other disciplines. The expertise of the Centre will be a valuable resource not only for NUS, but also for the Singapore research community.”

Led by Prof Paul Matsudaira, Head of the NUS Department of Biological Sciences and Co-Director of the Mechanobiology Institute (MBI), Singapore, CBIS brings together an interdisciplinary group of biologists, chemists, computer scientists, physicians and engineers from the NUS Faculties of Science and Engineering, Duke-NUS Graduate Medical School and the Mechanobiology Institute, Singapore.

CBIS researchers will embark on interdisciplinary research in critical areas of investigation such as infectious diseases, rice plant biology, neurodegenerative diseases and energy.

In addition to research, the Centre will develop a new biological imaging programme with the NUS Graduate School for Integrative Sciences and Engineering and Biophysical Sciences Programme in the Department of Biological Sciences.

Launch of Musim Mas Professorship in Sustainability

An endowed Musim Mas Professorship in Sustainability was launched on 15 November 2010 through a generous gift of S$2.27 million to NUS Business School from the Musim Mas Group, a fully integrated palm oil corporation.

“We are pleased to establish the Musim Mas Professorship in Sustainability at the NUS Business School. This is our small gesture of thanking all our stakeholders and we expect this Professorship to contribute positively towards research and education on sustainability,” said the Group’s Executive Chairman Mr Bachtiar Karim.

Expressing the University’s appreciation for the support, NUS President Prof Tan Chorh Chuan added: “The gift will strengthen our continued efforts at finding innovative solutions that would have a positive impact on the environment.”
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Foreign Policy magazine names Prof Kishore Mahbubani as one of the Top 100 Global Thinkers

PROF Kishore Mahbubani, Dean of the NUS Lee Kuan Yew School of Public Policy (LKY School), was named among the Top 100 Global Thinkers of 2010 in the December 2010 special issue of Foreign Policy.

The premier magazine on global politics, economics and ideas lauded Prof Mahbubani for being “the voice of a new Asian century”. It stated that few were more ardent evangelists for Asia’s growing role on the world stage than Kishore Mahbubani.

He was selected alongside other illustrious and highly influential thinkers who had shaped the world in 2010, including Warren Buffet, Bill Gates and US President Barack Obama. This is the second annual list of Top 100 Global Thinkers.

“He richly deserves this prestigious recognition and we are particularly proud that he is not only the Dean of our LKY School but also a distinguished alumnus of our university,” said NUS President Prof Tan Chorh Chuan.

Prof Mahbubani said: “It’s a great honour to be included in the Foreign Policy list a second time but I honestly am not sure that I deserve this honour. Nonetheless I hope that this will help to draw attention to the good work that the LKY School and NUS are doing in research on global challenges”.

Creative collection by Design Incubation Centre wins President’s Design Award 2010

THE Objects Around the Tablescape collection from d.lab, a commercial entity and trademark created by the Design Incubation Centre of NUS School of Design and Environment, was among the eleven winners of the President’s Design Award 2010.

Presented by Singapore President His Excellency S R Nathan on 19 November 2010, the Award was the highest accolade conferred on an individual or organisation in the field of design in Singapore. It was jointly administered by the DesignSingapore Council of the Ministry of Information, Communications and the Arts, and Singapore’s Urban Redevelopment Authority.

In the jury citation, the creative team behind Objects Around the Tablescape was commended for having “examined the visceral and emotive qualities of materials such as translucency, texture, weight and ‘feel’ as well as appearance to produce a series of domestic products with almost supernatural qualities.” The Collection was first developed through a material exploration workshop under the design direction of Mr Patrick Chia, Director of the Design Incubation Centre.

ONLY SINGAPOREAN TO RECEIVE THIS HONOUR IN 2010: Prof Kishore Mahbubani, Dean of the NUS Lee Kuan Yew School of Public Policy, was named as one of the Top 100 Global Thinkers of 2010 by Foreign Policy magazine

Prof Chowdari honoured as Business Event Ambassador

NUS physics professor B V R Chowdari was honoured as Business Event Ambassador at the prestigious Singapore Experience Awards 2010, organised by the Singapore Tourism Board. He was recognised for his successful promotion of Singapore as a choice business events destination, having organised many international conferences in his capacity as Head of both the Materials Research Society of Singapore (MRS-S) and the Asian Society for Solid State Ionics.

Most notably, Prof Chowdari has been the organiser of the biennial International Conference on Materials for Advanced Technologies (ICMAT) since 2001. In the last 10 years, ICMAT has attracted some 10,000 delegates which included 16 Nobel Laureates. ICMAT 2009 was also named “Association Conference of the Year” at the Singapore Experience Awards 2010.

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Understanding the biology of decision making under risk

EVER wondered why some individuals are risk-takers while others are not? A study by NUS researchers on the factors influencing people’s attitudes towards risk will shed light on this question.

For their research on the “Biology of Decision Making Under Risk”, Prof Richard P Ebstein of the Department of Psychology and Prof Chew Soo Hong of the Department of Economics were awarded a generous grant of €517,000 (about S$880,000) over three years by the AXA Research Fund. This is the first grant offered by the Fund in Asia.

“We believe that human decision making in a risky environment has its roots in the early evolution of life itself. The specific aim of our project is to identify and unravel the basic biological mechanism underpinning decision making under risk,” said Principal Investigator Prof Ebstein, an expert on human behaviour genetics. He is also Sylvia Scheinfield Professor of Human Genetics at the Hebrew University.

The two NUS researchers will identify the genes and environmental influences that can be linked to an individual’s propensity to take risks by applying methodologies from behavioural and experimental economics, psychology and the biological sciences. A large and culturally diverse sample of 2,400 Chinese in Singapore and China and European Jews in Israel, aged between their late teens to early 20s, will be drawn.

The AXA Research Fund, a major and innovative initiative of scientific philanthropy by the worldwide insurance group AXA, has supported 192 research projects implemented in 17 countries by researchers of 39 nationalities.

Research breakthrough in understanding tonic inhibition

A milestone study by a team of researchers from the Duke-NUS Graduate Medical School Singapore (Duke-NUS), the Korea Institute of Science & Technology (KIST) and Duke University was published in the prestigious journal Science on 5 November 2010.

The paper, “Channel-Mediated Tonic GABA Release from Glia”, described a very significant breakthrough in understanding tonic inhibition, one of the main “brake” mechanisms in the brain. It demonstrated that an inhibitory neurotransmitter signal known as GABA is secreted via ion channels rather than through a conventional neurotransmitter secretion mechanism. This was a big surprise to the field and demonstrated a new function for ion channels.

The work also showed that GABA comes not from nerve cells but from glial cells, an abundant type of brain cells whose functions are poorly understood. This finding was as astonishing: glia cells were not known previously to be involved in tonic inhibition and neurons were thought to be solely responsible for GABA secretion.

Said Principal Investigator from Duke-NUS Prof George Augustine, who led this study that was partially funded by Singapore’s National Research Foundation: “This research is an important demonstration of the potential of the new neuroscience partnership between Duke-NUS and KIST. I have great hope that the collaboration between these two institutions will lead to great strides in our understanding of brain function and disorders.”

Besides George Augustine and Soojung Lee from Duke-NUS, other authors of the paper include Bo-Eun Yoon, Soo-Jin Oh, Hyungju Park, Hee-Sup Shin and Justin Lee from KIST and Ken Berglund from the Duke University Medical Centre.
Transformative boost to paediatric care, education and research at NUHS and NUS

THE Estate of Tan Sri Khoo Teck Puat made a $50 million gift to the National University Health System (NUHS) and NUS. The gift, announced by Singapore’s Minister Mentor Lee Kuan Yew at the opening of the Khoo Teck Puat Hospital on 15 November 2010, will substantially advance paediatric education, research and patient care in Singapore. It will enable the University Children’s Medical Institute (UCMI) of NUHS to bring its programmes in these areas to new heights of excellence.

Explaining the objective of the gift, the trustee of the Estate Ms Mavis Khoo said: “My late father believed passionately in medical research, education and healthcare, and how it makes a real difference to the lives of people. With this gift, we are hopeful of the meaningful benefits it will bring to children in Singapore and around the world.”

In honour of the late Tan Sri Khoo Teck Puat, the UCMC will be renamed the Khoo Teck Puat-National University Children’s Medical Institute.

Conveying his thanks on behalf of the UCMC and the NUHS, Chief Executive Assoc Prof Ben Ong said that “this very meaningful gift to the University Children’s Medical Institute will allow us to make an even more substantial difference in the lives of our young patients.”

Said NUS President Prof Tan Chorh Chuan: “Paediatric medicine, research and education continue to be a true peak of excellence in NUHS and NUS … (This gift) will not only transform the lives of sick children and their families, but contribute to the shaping of paediatric medicine for the future.”

Lee Foundation gift sows seeds of hope in Asia’s rice fields

IN Asia, rice is synonymous with life. The continent produces 90 percent of the world’s rice, is its biggest consumer, and its production employs more people than any other industry in the region. But this rice bowl is under threat from global warming and climate change. Rice productivity has slowed significantly, growing by under 1 percent per year globally, which is lower than the population growth. Production, in fact, needs to increase by 1.5 percent every year to keep up with demand. Against this backdrop, there is an urgent need for increased research on adapting rice to climate change.

The Department of Biological Sciences at NUS has thrown its weight behind this endeavour with the Rice Research and Development Project, which has received its first gift from the Lee Foundation. Said Prof Prakash Kumar of the Department of Biological Sciences: “It is of strategic importance for Singapore to contribute to the long-term stability of rice production in the region as Singapore is completely dependent on imported rice.”

The research will be undertaken in partnership with the Philippines-based International Rice Research Institute, a leader in this field, and Temasek Life Sciences Laboratory, with studies on developing drought-tolerant, disease-resistant and C4 rice (an energy-efficient variety) among other initiatives.

“A serious shortage of rice (with an attendant price hike) can have serious socio-economic and political repercussions,” said Prof Kumar, who pointed out that 700 million of the world’s poor live in rice growing parts of Asia and spend 30 to 40 percent of their income on rice.

To find out more about the project, or to make a gift, please contact Andy Loo at andy.loo@nus.edu.sg or 6516 5761.