SOUA 2016: Empowering the future

NUS NEWS

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During his travels to Ciudad Perdida in Colombia, Professor Tan Chorh Chuan, NUS President, was struck by the once-thriving ancient city, now abandoned after the Spanish conquest in the 16th century. Not even the settlement’s shams, traditional community leaders who divined the future, could have predicted the implications of the European developments for themselves.

“It remains a stark reminder of the dangers of not keeping up. It should cause us to reflect on how vital it is, to stay well abreast of the powerful trends and drivers which are reshaping our world,” reflected Prof Tan during his State of the University Address on 4 November.

“To thrive and to contribute in this age of empowerment, individuals must have the right mindset, one that looks forward with hope and optimism, eager to seize opportunities to make a real difference.”

As individuals and as an institution, we must have the right mindset, one that looks forward with hope and optimism, eager to seize opportunities to make a real difference.

Prof Tan pointed out that NUS’ strong A.G.I.L.E. framework builds upon five areas — Academic; Global and experiential; Industry relevance; Lifelong learning; and Entrepreneurial.

The University’s academic programme has been boosted by the addition of new courses such as Quantitative Reasoning. This will be complemented by a new pillar on General Education which includes a pilot multidisciplinary module on “ Asking Questions” short modules on “ Learning How to Learn” and “ How to Decide”, as well as a possible Computational Thinking module.

For a global and experiential education, students will have greater access to programmes that “will enable them to build fresh skills and networks, and years, applying theoretical knowledge to real-world issues.”

On the critical facet of lifelong learning, Prof Tan shared that NUS is paying attention to cultivating continual learning among students and graduates, as well as the general population. For instance, the School of Continuing and Lifelong Education at NUS offers executive development programmes and part-time degree courses to support the national SkillsFuture drive.

Finally, a wide range of experiential programmes to promote the entrepreneurial spirit more broadly among students.

However, Prof Tan exhorted students to shift away from being preoccupied with grades only.

The new Annex Block at Ridge View Residential College will be completed in 2017.

The University’s implementation of the Roots and Foundational Life Skills programmes in January helps students understand themselves better and develop positive personal qualities (Roots) and effective interpersonal skills (Wings).

Elaborating on the second key direction on enabling faculty, Prof Tan illustrated how NUS has worked to create an emerging state-of-the-art research environment conducive to the breakthrough of transformative ideas.

Initiatives include the Educator Track which supports teaching faculty making an impact; the $10 million Learning Innovation Fund-Technology fund to use technology for improving courses; and the new Institute for the Application of Learning Sciences and Educational Technology to facilitate original evidence-based teaching approaches.

“Among upcoming physical projects for better infrastructure are an upgraded Data Storage Institute building, the national Deepwater Ocean Basin research facility and a new net-zero energy building at NUS. On the third key direction, Prof Tan stressed the need for platforms that allow our faculty experts to work with academic, industry and public sector partners to tackle the most important societal issues.” Three such NUS platforms are the Smart Nation Research Cluster, Health System Innovation Cluster and an ecosystem for the translation and commercialisation of research.

“As all these will help position NUS well to excel, influence and contribute, even as we move into a future which is much more volatile and unpredictable,” he said.

In closing, Prof Tan paid tribute to NUS Board Chairman Mr Wong Ngit Liong, who after 12 years at the helm, will step down at year-end. Mr Wong’s visionary leadership, selfless dedication and hard work have been instrumental in NUS’ rapid rise as a world-class global university, he added.

NUS key directions

• Empower students for the future
• Enable faculty to stand out globally
• Provide new platforms to create high impact

A.G.I.L.E. framework for holistic talent development

Academic

Global and experiential

Industry relevance

Lifelong learning

Entrepreneurial

NUS NEWS
Goh Chok Tong to chair LKY School

Emeritus Senior Minister (ESM) Goh Chok Tong has been appointed as the new Governing Board Chairman of the Lee Kuan Yew School of Public Policy (LKY School) at NUS from 1 April 2017. He will take over the helm from Professor Wang Gungwu, who has led the School’s Governing Board for 12 years.

Mr Goh, an NUS Economics alumnus and Honorary Graduate of the University, will bring on board his rich experience in public policy. He has held various ministerial positions in finance, trade, home, and defence, before becoming the second Senior Minister of Singapore and Coordinating Minister for National Security. He served as Senior Minister of Singapore and Chairman of the Monetary Authority of Singapore (MAS) from 2004 to 2011. He was appointed as ESM, and Senior Adviser to MAS, in 2011.

Mr Goh said, “The LKY School, under the stewardship of Prof Wang Gungwu as the founding chairman, is widely regarded as the leading public policy school in Asia. I look forward to working with the Governing Board, Dean Kishore Mahbubani and his team, to continue the upward trajectory of this distinguished school.”

Singtel cybersecurity lab tackles digital threats

The $4.2 billion NUS-Singtel Cyber Security Lab hosted by NUS Computing is supported by NRF under its Corporate Laboratory@University Scheme. NUS, Singtel and NRF will fund the project equally over five years. In his address, Mr Teo highlighted incidents of cyber attacks in Singapore and around the world. He thus viewed the Lab as dovetailing the nation’s cybersecurity strategy.

Headed by Professor David Rosenberg, Provost’s Chair Professor at NUS Computing, the NUS-Singtel Cyber Security Lab aims to develop new data analytics techniques that enable IT service providers to detect and respond to security in real time. It will also create new approaches to implement IT systems that are “secure by design” to defend against various types of attacks.

The research focuses on four themes: the world’s deep and cloud security; predictive security analytics; Internet-of-Things and industrial control systems; and future-ready cybersecurity systems based on quantum technology. The Lab expects to have more than 100 researchers and more than 120 cybersecurity professionals from undergraduate to postdoctoral level.

National Marine Lab officially opens

Deputy Prime Minister Teo Chee Hean, Coordinating Minister for National Security and Chairman of the National Research Foundation (NRF), officially launched the St John’s Island National Marine Laboratory (SJINML) on 28 November.

The Laboratory, part of the Tropical Marine Science Institute at NUS, was designated a national marine laboratory in early 2016, and now supports marine research for the country.

Mr Teo announced that the marine lab will be accessible to all local researchers and their partners, with upgrading to support emerging research areas. The facility will organise outreach activities to raise public awareness of marine science.
Roots & Wings’ students take flight

More than 5,000 NUS freshmen have gone through Roots & Wings 1.0, a groundbreaking foundational life skills module based on the science of human potential. This is the world’s first such programme offered by a university, designed specifically to help students hone social emotional intelligence to thrive in a global environment of change and uncertainty.

Conceptualised and facilitated by NUS Centre for Future-ready Graduates (CFG), the programme prepares students for an increasingly complex and competitive world. It incorporates the latest psychology, neuroscience and leadership research and experience, from NUS and global thought leaders.

One interesting display was Sim Hao Jie’s Levit8, a portable air purifier for urban apartments. He drew on NASA’s research and rigorous experiments in drafting the airflow schematics. Besides beautifying the living space, the plants in the purifier help remove common volatile organic compounds circulating in the home such as toxins from paint, carpets and adhesives.

Levit8, a unique standing desk crafted by graduate Poh Hui Qing, Year 4 student Letitia Lim and Year 3 student Andhriana Justine, uses a simple twisting origami technique to fold flat when not in use. Able to take loads of more than 10kg, the portable product allows users to effortlessly alternate between sitting and standing at one’s desk, facilitating a healthier work life. The triad’s furniture statement reached its crowdfunding target in less than two days on the Kickstarter platform.

Lee Si Min’s invention Blender enables children to explore mixing colours in a fun way, without the mess. By pouring digitally coloured content from one Blender to another, they can observe or adjust the resulting colour change.

Innovative designs showcased in Dubai

Innovative problem solvers

Undergraduates from the Special Programme in Science at NUS have done the University proud in the international arena recently.

Team KiasU/NUS emerged champion at the International Natural Science Tournament 2016 held from 12 to 16 October in Novosibirsk, Russia.

The tournament required the students to provide innovative solutions to unhooded scientific problems and situations given by Russian manufacturing or technology companies.

Students looking for a more in-depth experience can go for Roots & Wings 2.0, which offers 12 weeks of 90-minute weekly tutorials. The blended learning programme includes e-modules, readings, homework, a capstone project done in groups of four and an individual project. The pilot batch of 100 students found the content relevant and timely and the second run of the programme has been over-subscribed.

CFG Director Ms Crystal Lim-Leahy shared that the Centre is working on incorporating new content on industry awareness, personal branding and storytelling for the next round, taking into consideration participants’ feedback.

Students sharing their personal experiences at the workshop

Year 1 NUS Arts and Social Sciences undergraduate Farhri Agarwal, who attended the closing workshop in November, revealed she has learnt to reflect more on her feelings, thoughts and actions: “I think it will really help me in my day-to-day life and my career,” she said.

Another peer who benefited from the workshop was Tan Men Shu, a Year 3 student from NUS Engineering. He liked the sessions on empathy and mindfulness, saying, “We usually get caught up in life, and mindfulness helps me take a step back.”

Students sharing their personal experiences at the workshop

NUS Special Programme in Science (SPS) marked its 20th anniversary on 28 October by launching a fund for students in the programme.

More than $20,000 has been raised to date for those who need assistance such as participating in local and overseas competitions and attending supplementary programmes. Guest-of-Honour Professor Tan Choh Chuan, NUS President, launched the Special Programme in Science Fund at the event graced by 250 guests and SPS alumni.

In his speech, Prof Tan underscored the achievements of SPS students and prominent alumni. He shared the University’s strategies to keep abreast with change: continuously creating value for students, Singapore and the community; helping students to develop their potential; and remaining committed to the spirit of giving.

An estimated 500 students have completed the programme, with many going on to pursue postgraduate degrees and careers in leading institutions around the world.

Fund for Special Programme in Science

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Head of DDI Associate Professor Christian Gilles Boucharenc said the range of projects presented by the students covered various design fields, ranging from environmental to the humanistic.

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some of their original works

NUS Division of Industrial Design (DID) graduates and students showed off their original works at the prestigious Global Grad Show from 24 to 29 October as part of Dubai Design Week.

The exhibition, displaying innovative creations from the world’s leading design schools, featured 145 projects from 50 universities this year.

NUS President Professor Tan Chorh Chuan (centre in white shirt and black coat) toasting with NUS Science Dean Prof Shen Zouwai on his left and SPS Director Assoc Prof Liu Yih-Cheng on his right. Prof Tan Eng Chye (2nd from right) and other previous Science Deans and SPS Directors were also present.

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Outstanding scientists receive President’s Awards

NUS researchers were presented with the President’s Science and Technology Awards (PSTA) 2016 on 18 October for their exceptional research by Singapore President Dr Tony Tan Keng Yam. The highest scientific accolades in Singapore recognise individuals and teams for their achievements in science and technology which have resulted in significant scientific, technological or economic benefits to the country. The Awards comprise the President’s Science and Technology Medal (PSTM), President’s Science Award (PSA) and President’s Technology Award (PTA).

NUS Chemistry Associate Professor Liu Xiaogang was conferred the PSA for his noteworthy work in developing rare-earth-doped nanocrystals that could be used as luminescent tags for tracking cancer cells and deciphering various biologically relevant processes. These tunable colour-emitting nanoparticles can be applied to biological assays that are more selective, more sensitive and less expensive. Assoc Prof Liu is also a senior scientist at the Institute of Materials Research and Engineering (IMRE), Agency for Science, Technology and Research (A*STAR).

Professor Liu Bin from NUS Chemical and Biomolecular Engineering, who is also a senior scientist at A*STAR, was conferred the PTA for his collaborative efforts in developing and launching Singapore’s first commercial earth observation satellite, TelOS-1. CRISP contributed to the image reception and processing system of the satellite to produce high-quality images.

Brighter and more accurate than commercial quantum dots, the materials are suitable for long-term tracking of biological processes and vascular imaging. These multi-functional probes can be used for image-guided therapy, monitoring of drug delivery and other therapeutic functions.

A team comprising NUS Centre for Remote Imaging, Sensing and Processing (CRISP), ST Electronics (Satellite Systems), DSO National Laboratories and Nanyang Technological University’s Satellite Research Centre also received the PTA for their collaborative efforts in developing and launching Singapore’s first commercial earth observation satellite.

Top 15 for global employability

NUS graduates are the 15th most employable in the world, up two spots from last year, according to the Global University Employability Ranking 2016 published by Times Higher Education (THE). NUS is the third Asian and the only Singapore university on the global top 15 list.

The latest Global University Employability Ranking survey was conducted with 2,500 recruiters from 23 countries, and 1,500 international managers across the globe. The respondents were asked to define the criteria looked for in graduates and identify the universities they believed produced the most employable graduates. Participating companies came from all major business sectors, had more than 5,000 employees each and recruited more than 50 graduates yearly.

The Global University Employability Ranking 2016 was commissioned by French human resource consulting agency Emerging and conducted in April 2016 by European research agency Trendence.

ASEAN Start-up Enabler of the Year

Two young outstanding NUS researchers have been honoured as “Innovators Under 35” by EmTech Asia, in association with MIT Technology Review.

NUS Computer Science’s Assistant Professor Prateek Saxena was recognised for his contribution in cybersecurity. His work on symbolic testing has been used to discover security flaws in Microsoft’s largest web product, while his research on auto-sanitisation of web programs to make them robust against attacks has been adopted in Google Chrome’s web compilation infrastructure.

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Executive MBA moves up ranks

NUS Business School’s Asia-Pacific Executive Master of Business Administration (MBA) programme has climbed up eight runs to the 17th spot in the Financial Times Executive MBA Ranking 2016.

The annual ranking of the world’s top 100 executive MBAs also places the School’s double-degree Executive MBA programme with the University of California, Los Angeles, among the world’s top 15 EMBA programmes at number six.

The rankings are based on surveys of recent alumni and data provided by business schools.

tech review lauds young innovators

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Asst Prof Saxena (left) and Asst Prof Ho
Far-reaching impact of the Cold War

Professor Hopf observed that the people of East Germany, who lived behind the Berlin Wall, had lost their lives in the last century. He highlighted that the Berlin Wall symbolised the huge divide between the East and West. Despite East Germany's construction of the 155km long Berlin Wall, which divided the country, it continued to drift closer to a new Cold War between the US and China, which might not bring the equilibrium people expected.

The second speaker, Dr Michael Witter, German's Ambassador to Singapore, detailed the history of the Wall and post-War II Germany. This was followed by Associate Professor Joey Long from NUS History, who traced the various conflicts throughout the world. What began as internal conflicts escalated in scale across the world with the interventions and backing by rival powers.

Two segments of the Berlin Wall, which polarised Germany for almost 30 years, were unveiled on 18 October at NUS University Town Sculpture Garden. The historical structures were unveiled on 18 October by Guest-of-Honour Dr Visvan Balakrishnan, Singapore Minister for Foreign Affairs (MFA); Professor Tommy Koh, Rector of Tembusu College at NUS; and Dr Michael Witter, Germany's Ambassador to Singapore. Dr Elmar Prost, Managing Director of Lagerhaus KW GmbH gifted the two artifacts of the Cold War to Singapore in 2015 to celebrate 50 years of diplomatic relations between Germany and Singapore. They have been loaned to NUS through MFA.

During the question-and-answer session, issues such as the future of communism were raised. The Tembusu Forum, a flagship event at Tembusu College, aims to raise awareness of and engage undergraduates on issues that encourage the sharing of ideas.

Research integrity in the spotlight

With Singapore now a world-class research hub, the issue of integrity and ethics in research is becoming more critical. To engage the research community on this important matter, a conference entitled “Research integrity — A Singapore Approach” was held on 27 November, co-organised by the Agency for Science, Technology and Research (A*STAR), NUS, Nanyang Technological University (NTU) and Singapore University of Technology and Design (SUTD). It drew more than 300 participants comprising senior leadership of academic organisations and funding bodies, researchers, educators, policy makers, administrators and students.

At the event, the four partners issued a joint statement outlining the research publication principles that their researchers must adhere to: leadership, honesty, reproducibility, proper citation, acknowledgement and reporting. The statement is a natural development from the Singapore Statement on Research Integrity, which aimed to develop unified codes of conduct and policies for better research integrity locally and worldwide.

In his opening address at the conference, Mr Lim Chuan Poh, A*STAR Chairman, highlighted three serious consequences of research misconduct: erosion of trust in research; wasting of public resources; and widespread and lasting negative consequences. To address this, the Singapore Statement on Research Integrity was developed in 2010. Keynote speaker Professor Sir David Lane, A*STAR Chief Scientist, captivated the audience with his lively topic on “Good Science/Bad Science”.

During the panel discussion on preventing misconduct and promoting responsible research, Professor Tan Chor Chuan, NUS President, stressed the importance of building a culture of personal and collective integrity. He believes that establishing such a culture will in the long term make integrity breaches less likely in the research community.

NUS was the first institution in Singapore to introduce a research integrity code in 2006, with policies and code of conduct communicated and shared in a systematic way with colleagues, faculty, researchers and students, said Prof Tan.

Other panellists who gave their insights into research integrity were Dr Raj Thampuran, A*STAR Managing Director; Professor Chong Tow Chong, SUTD Provost; and Professor Lam Khin Yong, NTU Chief of Staff and Vice President (Research).

Professor Barry Halliwell, Senior Advisor to NUS President who moderated the discussion, underscored the importance of filtering out bad science in the biomedical domain, as translation of inaccurate results into clinical care can harm people. He also noted that Singapore is increasingly recognising the need for social sciences and humanities research, and poor-quality work, if implemented into policies, could do enormous damage as well.

Questions from the audience included the interpretation of a Singapore Gold Standard in research integrity, and a system to ensure that every individual involved in research adheres to the integrity code.

Prominent research leader and biomedical scientist Professor Barry Halliwell will help to steer biomedical research efforts in Singapore at the Agency for Science, Technology and Research (A*STAR) from 1 January 2017.

Prof Halliwell, who is Senior Advisor to NUS President, will succeed Professor Sir George Radllass as Chairman of the Biomedical Research Council (BMRC). Prof Halliwell’s appointment at A*STAR will run concurrent to his NUS responsibilities.

BMRC oversees seven research institutes and other research units that support key industry clusters in the biomedical sciences. It works with industry to enhance the capabilities of the public R&D sector, and encourages thematic partnerships that draw on multidisciplinary scientific capabilities to attract private R&D biomedical investments into Singapore.

Respected internationally for his seminal work on the role of free radicals and antioxidants in biological systems, Prof Halliwell is credited for helping to develop NUS into a global research powerhouse during his tenure as Deputy President (Research and Technology) from 2006 to 2015.

Prof Halliwell was awarded the Public Administration Medal (Silver) in 2010 for his contributions to Singapore, as well as the President’s Science and Technology Medal 2013.
**Neem plant arrests prostate cancer**

A bioactive compound derived from the leaves of the neem plant has shown great potential in the prevention and treatment of prostate cancer.

The NUS-led study published in *Antioxidants & Redox Signalling* found the active ingredient nimbolide could suppress cancer cell invasion and migration of prostate cancer cells with little adverse effects. Over 12 weeks, the tumour size was reduced by up to 70 per cent and its metastasis, or spread, by up to 50 per cent.

Associate Professor Gautham Sethi from NUS Pharmacology helmed the research in collaboration with Professor Goh Boon Cher of the Cancer Science Institute of Singapore at NUS, Professor Hui Kam Man of the National Cancer Centre Singapore and Professor Abn Kvang Seok of Kyung Hee University in Korea.

Current treatments are only marginally effective for prostate cancer, one of the most commonly diagnosed cancers in the world.

The researchers determined that nimbolide targets an enzyme maintaining the antioxidant system that regulates the STAT3 gene. Reports show that the activation of STAT3 gene contributes to prostate cancer initiation and progression.

The neem plant, native to the Indian sub-continent, is ubiquitous in Singapore. It has been used in traditional Chinese medicine for centuries and can also be found in soaps, toothpaste, skincare products and dietary supplements.

The humble neem plant has shown great potential in the prevention and treatment of prostate cancer, according to a study published in *Antioxidants and Redox Signalling*. The study found that a compound derived from the neem plant, nimbolide, significantly suppresses cancer cell invasion and migration, reducing tumour size by up to 50% and metastasis by up to 70%.

**Sand defence stronger than steel**

NUS engineers have demonstrated that sand can be used as a cheaper, lighter and more effective alternative to protect critical infrastructure. The team said the research could potentially be used as a new material in building defence systems, which has yet to be fully explored.

Sand was found to have UV-blocking properties that could be used to protect critical infrastructure from impacts. The team concluded that sand could provide protection against impacts at high-speed, similar to the ability of steel to dilate and dissipate the pressure, stopping projectiles into pieces, as the sand grains disintegrate and dissipate the energy exerted against it by the impact of the projectile.

Sand's absorption capacity of 90% for UV was found to be higher than that of steel, which has an absorption capacity of 85%. In contrast, the energy absorption capacity of an equivalent steel plate diminishes dramatically as the velocity of the projectile increases, allowing the projectile to pass through without further resistance. This hydrodynamic effect causes the steel to melt and behave like a fluid.

The energy exerted against it by the impact of a high-speed projectile. Furthermore, the resistance offered by the sand increased with the travelling speed of the projectile.

The impact also resulted in an extreme frictional force that could break the projectile into pieces, as the sand grains disintegrate and dissipate the pressure, stopping projectile penetration of the projectile.

The team suggested that sand, as a principal material in constructing armour systems, could be partially replaced with sand as a cost-effective and lightweight sacrificial layer. However, the team noted that the ability of sand to act as an effective protective layer needs to be fully explored.
Changes in Senior Management

from 1 October 2016. Assoc Prof Lim assists the Provost and Vice Provost (Undergraduate Education) in driving NUS’ educational initiatives, which include developing technology-enhanced education programmes, such as the Learning Innovation Fund – Technology (LiT-T) and Blended Learning modules. He also oversees the development of the Computational Thinking module and assist in the innovation laboratory in the Institute for Application of Learning Sciences and Educational Technology.

Assoc Prof Lim is a Clinician Scholar in the Department of Medicine, with a concurrent appointment as Senior Consultant Neurologist at the National University Hospital. He was Assistant Dean of Education in the NUS Yong Loo Lin School of Medicine in the late 2000s, and Chair of the NUS Teaching Academy from 2010 to 2012.

From 1 January 2017, Associate Professor Peter Pang will be Dean of Students. Heading the Office of Student Affairs, Assoc Prof Pang will work closely with the Provost and Vice Provost (Student Life) in overseeing student life matters.

Aviation courses set for take-off

Both partners will also plan and deliver undergraduate certificate programmes specific to aviation, organises conferences and seminars, as well as conduct research.

Commenting on the tie-up, Prof Tan said, “SCALE is a new strategic thrust of NUS in which we leverage the University’s knowledge and expertise to contribute towards promoting and expanding lifelong learning opportunities for working adults.”

Mr Shum noted, “By bringing together the complementary strengths of CAAS and NUS, we will be able to offer courses that are more relevant to the aviation community, facilitating upskilling while offering professional recognition and academic certification.”

Aviation professionals looking to upgrade themselves are poised for a career take-off with the launch of specialised courses at NUS next year.

Professor Tan Eng Chye, NUS Deputy President (Academic Affairs) and Provost, and Mr Kevin Shum Jin-Chyi, Director-General of the Civil Aviation Authority of Singapore (CAAS), signed a Memorandum of Understanding on 16 November. Under the agreement, the University’s School of Continuing and Lifelong Education (SCALE) will craft programmes that enhance aviation experts’ competence in operational excellence and strategic thinking.

CAAS’ training arm Singapore Aviation Academy and SCALE will jointly design, develop and teach several new courses, including Digital Airport Designs, Technology Innovation for Airports, Aviation Safety & Health Management, and Aviation Social Work & Ethics. To be conducted over a one-week period, each course lasts about 40 hours and is expected to commence in the second half of 2017.

New Dean at Arts and Social Sciences

Professor Robbie Goh has been appointed the new Dean of NUS Arts and Social Sciences (FASS). Prof Goh, currently a Professor in the Department of English Language and Literature, will take over from Professor Brenda Yooh as the Faculty’s 17th Dean effective 1 January 2017.

Prof Yooh, who is Professor (Provost’s Chair) at the Department of Geography, as well as the Research Leader of the Asian Migration Cluster at the Asia Research Institute at NUS, has served as FASS Dean since 2015. During her tenure, the faculty had expanded its range of multidisciplinary education offerings with new programmes in Environmental Studies and Global Studies. She also successfully revised its curriculum to strengthen, broaden and deepen the training of its students.

From 1 January next year, Prof Yooh will assume the new role of Vice Provost (Graduate Education) at NUS, where she will be responsible for matters relating to Masters and PhD programmes including funding, curriculum, strategy and policy.

Professor Tan Chorh Chuan, NUS President, expressed his appreciation to Prof Yooh for “her outstanding leadership of the Faculty of Arts and Social Sciences”. He said, “During her tenure as Dean, the Faculty has nurtured and recruited world-class faculty and attracted some of the brightest minds of Prof Yooh, and steer the Faculty forward to even higher levels of excellence and contribution.”

An NUS alumnus, Prof Robbie Goh has been a faculty member at the University since 1988, starting out as a Senior Tutor with the Department of English Language and Literature. He has served in various administrative roles, including as Vice Dean of FASS from 2010 to 2015, and the Head of English Language and Literature from 2004 to 2010. As Vice Dean, he had played a vital role in deepening the Faculty’s collaboration with New York-based Tisch School of the Arts for its minor in film production.

Prof Goh said, “We have a strong team of colleagues in the Dean’s Office and leading the various departments, and together I am confident we will be able to propel the Faculty ahead while taking on the challenges of a rapidly changing society, workplace and global order.”

Husband’s giving legacy lives on

Before he left, he told me to make plans to help others in need. I felt it was important to honour his husband’s wish of helping others in need. In the early 1980s, Mr Ong moved his family from Indonesia to Singapore where he set up a successful engineering company. Recognising the value of education, he had always advocated giving assistance to those in financial need.

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HUSBAND’S GIVING LEGACY LIVES ON

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Madam Lim Song Kie

Madam Lim Song Kie set up the Ong Sin Seng and Lim Song Kie Bursary to honour her husband’s wish of helping others in need. In the early 1980s, Mr Ong moved his family from Indonesia to Singapore where he set up a successful engineering company. Recognising the value of education, he had always advocated giving assistance to those in financial need.

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NUS NEWS

2014

2015
NUS will see its first net-zero energy building on campus come 2019. Conceptualised by NUS Design and Environment (SDE), NZEB@SDE represents the first purpose-built net-zero energy building commissioned by a Singapore tertiary institution.

At the event, Mr Lee shared Singapore’s commitment to reduce its emissions intensity by 36 per cent below 2005 levels by 2030.

"About a quarter of our emissions and a third of our electricity consumption comes from our buildings," he said. "If we can make our buildings more energy efficient, this would be a needle mover."

A net-zero energy building uses only as much energy as it produces. NZEB@SDE will attain this through green building technologies such as solar photovoltaic panels on its roof to allow the building to generate power from the sun, and an innovative hybrid cooling system to cut down on air conditioning.

The proposed building design promises to offer a biophilic experience for its occupants, allowing them to connect to nature and its processes. It uses the architectural concept of “floating boxes”, with a shallow plan depth and porous layout to allow for cross-ventilation, natural lighting and views of the outdoors.

The building will include communal spaces on different levels, providing places for social interaction as well as to display student work and visiting exhibitions.

NZEB@SDE will function as a living laboratory to promote research collaboration with public agencies and industry partners. It will house teaching, research and test-bedding facilities such as design studios, research laboratories, workshops, a 3D scanning Lab and the NUS-JTC Industrial Innovation Centre.

SDE Dean Professor Lam Khee Poh pointed out that the project will inspire staff and students to explore innovative ideas and push the boundaries of sustainable design to “build a green and resilient urban habitat for all to enjoy.”

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The groundbreaking ceremony on 7 November was officiated by Mr Desmond Lee, Senior Minister of State for Home Affairs and National Development.