UN Sec-Gen Ban Ki-moon: Honorary Graduate

NUS Chairman to step down

Biochip analyses single cancer cell

Among world's top 25
Mr Ban Ki-moon, the eighth Secretary-General of the United Nations (UN), was conferred the Honorary Doctor of Letters by NUS Chancellor and Singapore President Dr Tony Tan Keng Yam on 30 August at the Istana. The honorary degree recognises Mr Ban’s humanitarian accomplishments and dedication to UN and the world.

NUS President Professor Tan Chorh Chuan remarked that the NUS community can draw inspiration from Mr Ban who “has embodied the highest ideals of the UN, as a global leader who has done so much to help improve and secure the well-being of people throughout the world”. Following the environmental advocate’s ideals on climate change, Prof Tan shared that NUS is also doing its part in embracing sustainability and nurturing green leaders for the future.

“On behalf of thousands of other dedicated women and men who work around the world to ease suffering and build a better world, I thank you for this recognition of our global work for peace, development and human rights,” said Mr Ban in his acceptance speech and called for greater mutual accountability, compassion and solidarity.

“Global solidarity saved my life and my country,” he said, referring to the aid rendered by global humanitarian organisations during the Korean War. Earlier that day, Mr Ban had shared his views on becoming global citizens with students and faculty during a dialogue session at NUS (Page 10). He exhorted young Singaporeans to widen their horizon and lead with greater compassion for the marginalised.

“Mr Ban Ki-moon, the eighth Secretary-General of the United Nations (UN), was conferred the Honorary Doctor of Letters by NUS Chancellor and Singapore President Dr Tony Tan Keng Yam on 30 August at the Istana. The honorary degree recognises Mr Ban’s humanitarian accomplishments and dedication to UN and the world.

Dignitaries who attended the event included Emeritus Senior Minister Goh Chok Tong, Speaker of Parliament Dr Halimah Yacob, Minister for Foreign Affairs Dr Vivian Balakrishnan, Minister of State for Education and Communications Dr Janil Puthucheary, as well as Ambassador of the Republic of Korea Mr Lee Sang-deok.

Public Dror Professor Kishore Mahbubani, Dean of the Lee Kuan Yew School of Public Policy at NUS, hailed Mr Ban as a world leader and a personal friend, saying, “Mr Ban’s humanitarian accomplishments and stewarding commitment to the citizens of the world in the pursuit of sustainable development, human rights, global peace and security have made a significant impact worldwide, and are widely admired.”

In his citation on Mr Ban, Prof Mahbubani highlighted the honorary graduate’s key accomplishments such as driving the success of the 2015 UN Climate Change Conference in Paris in the concerted fight against global warming; launching the Sustainable Development Goals in 2015 to achieve universal peace and prosperity by 2030; and advocating women’s rights and gender equality that saw the establishment of a new Special Representative on Sexual Violence in Conflict.

NUS Board of Trustees Chairman Mr Wong Ngit Liong will be stepping down on 31 December 2016, after more than 12 years of distinguished leadership. Mr Wong will be succeeded by Mr Hsieh Fu Hua on 1 January 2017.

Mr Wong was first appointed on 1 August 2008 as Chairman of the then NUS Council. He was subsequently reappointed on 28 March 2016 as Chairman of the NUS Board of Trustees following the corporatisation of the University.

During his 12 years at NUS, Mr Wong played an instrumental role in steering NUS through the corporatisation of the University. He appointed several new board members to establish a new culture of collaborative work between the management and Board. In addition, Mr Wong successfully oversaw the implementation of major changes to the University’s corporate governance, and the setting up of new and enhanced administrative systems and capabilities. He also managed the transition between university presidents.

Mr Wong’s passion, commitment and remarkable leadership have been instrumental in transforming NUS into a leading global research-intensive university, widely respected for pioneering innovations in education. He has also credited with putting in place a robust leadership development and succession planning framework at the University.

During his tenure as Chairman, Mr Wong led the University through a physical transformation of the NUS Kent Ridge Campus, which included the development of University Town and Singapore’s first residential colleges; strengthened the University’s balance sheet and financials; deepened engagement with the wider Singaporean community; and oversaw a rapid rise in NUS reputation around the world.

“It has been a greatly rewarding experience to work with the Board of Trustees, management, faculty, students, staff, benefactors and alumni of NUS,” said Mr Wong. “I am grateful to the University community, and the many friends of NUS, who have worked incredibly hard and personally touched the lives of many in our NUS community. We thank him for his visionary leadership and selfless dedication in service of NUS and Singapore.

“We look forward very much to working with Mr Hsieh Fu Hua as he takes on the role of NUS Board of Trustees Chairman. My colleagues and I are thrilled to welcome him back to the University community, and will look to his strategic leadership and wise counsel as NUS strives to strengthen its position as a leading global university centred in Asia.”

Said Acting Minister for Education (Higher Education and Skills) Mr Ong Ye Kung, “Mr Wong’s leadership and selfless dedication to the growth and development of the Singapore economy and society.”

Mr Hsieh also strengthened the nexus between NUS, the industry, and the professional community, with many distinguished private sector leaders taking up his call to contribute to the University’s development in diverse ways.

“While we will miss the strong guiding presence of Mr Wong, we will welcome to its helm another senior corporate and community leader in Mr Hsieh Fu Hua. I am confident that Mr Hsieh will build on the good work of Mr Wong to lead NUS in its next chapter, in contributing to the growth and development of the Singapore economy and society.”

Mr Hsieh right: engaging Mr Chua Kim Loong, Dean of Saw Swee Hock School of Public Health at the University with vision and wisdom, and played a key role in the formulation of NUS’ goals and strategies in education, research and entrepreneurship. He has worked incredibly hard and personally touched the lives of many in our NUS community. We thank him for his visionary leadership and selfless dedication in service of NUS and Singapore.

Mr Wong right: chatting with NUS students during the 2016 Commencement Dinner.

“As a former student of NUS, Mr Wong understands the importance of the University’s development in diverse ways. He added, “Mr Wong also strengthened the leadership and wise counsel as NUS strives to strengthen its position as a leading global university centred in Asia.”

Said Acting Minister for Education (Higher Education and Skills) Mr Ong Ye Kung, “Mr Wong has played an instrumental role in leading NUS through the University’s development in diverse ways. He added, “Mr Wong also strengthened the nexus between NUS, the industry, and the professional community, with many distinguished private sector leaders taking up his call to contribute to the University’s development in diverse ways.

“While we will miss the strong guiding presence of Mr Wong, we will welcome to its helm another senior corporate and community leader in Mr Hsieh Fu Hua. I am confident that Mr Hsieh will build on the good work of Mr Wong to lead NUS in its next chapter, in contributing to the growth and development of the Singapore economy and society.”
Virtual role-play prepares future pharmacists

The online game allows students to be virtual pharmacists.

Instead of just conducting the usual experiments in the laboratory, aspiring pharmacists can now get their hands dirty by “gaming” in cyberspace.

Some 200 Year 2 NUS Pharmacy undergraduates are currently engaging “gaming” in cyberspace. Pharmacy students with a “course” aims to equip them with the skills and confidence needed towards patient interactions. Led by Dr Kevin Yap from the department, the team conceptualised and developed an innovative multiplayer role-playing game. This exciting “course” aims to equip Pharmacy students with real skills for professional practice in a community or retail pharmacy.

In the game based on a futuristic post-apocalyptic setting, students take on the role of pharmacist avatars and interact with patients while embarking on a mission, such as saving the world from a plague that transforms humans into zombies. By asking appropriate questions, the students will gain a better understanding of their virtual patients’ medical conditions. They then undertake numerous tasks that are applicable in real-life pharmacist practice, including processing prescriptions, prescribing over-the-counter treatments, developing a pharmaceutical care plan for the patient, as well as counselling patients.

“Virtual environments provide an engaging and safe environment for students to experiment and learn from their mistakes,” says Dr Yap. “They also allow students to put themselves in the shoes of a healthcare professional to develop the skills and confidence needed towards patient interactions.”

Dr Yap and colleagues — Dr Yap Kai Zhen from NUS Pharmacy, Mr John Yap from the NUS Computer Centre and Mr Udai Satyamohan Athreya from the NUS Centre for Instructional Technology — noted the digital savviness of current “Generation C” youths. As such, they adopted a blended technology-infused learning approach to sustain the students’ interest and encourage peer learning while improving their hands-on skills.

Cybersecurity and synthetic biology consortia launched

Two new consortia hosted at NUS have been launched to promote research, commercialisation and training in cybersecurity and synthetic biology to boost Singapore’s push in these fields.

Supported by the National Research Foundation (NRF) Singapore, the Singapore Cybersecurity Consortium (SGCSC) and the Singapore Consortium for Synthetic Biology (SINERGY) will work with industry, government agencies and researchers to drive use-inspired research, technology translation, manpower training, and technology awareness in cybersecurity and synthetic biology.

The strategic set-up aims to strengthen Singapore’s economy and society from knowledge created by the $42 million investment in NRF’s National Cybersecurity R&D Programme, together with the $34 million fund in synthetic biology R&D under the Biological Design Tools and Applications grant call and NRF’s Competitive Research Programme. Being highly dependent on software and information technology infrastructure, Singapore faces cybersecurity challenges and threats.

Professor Abhik Roychoudhury from NUS Computing will lead SGCSC to raise greater awareness, understanding and translation of cybersecurity technologies.

Synthetic biology, an emerging research domain, incorporates the design and construction of novel artificial biological pathways, organisms or devices, or the redesign of existing natural biological systems. SINERGY will be helmed by Associate Professor Matthew Chang, Director of the Synthetic Biology for Clinical and Technological Innovation programme at NUS.

With unpredictable events and security threats rising globally, it is essential to understand and take measures against such risks.

To address this critical need, the Lloyd’s Register Foundation Institute for the Public Understanding of Risk — Asia’s first international academic and public outreach institution — was launched on 3 October by Minister for National Development and Second Minister for Finance Lawrence Wong.

Jointly set up by the University and the Lloyd’s Register Foundation, a UK charity that works to enhance the safety of life and property and advance public education, the Institute was funded by a $17.6 million (£10 million) donation from the Lloyd’s Register Foundation, together with $19.4 million from NUS.

This gift represents the Foundation’s largest yet outside the UK, and also the most generous research support NUS has received from a foreign foundation.

Research and education on the scientific understanding of risk and its practical application will be the focus of the Institute. By marrying disciplines such as science, engineering, social sciences and humanities, it seeks to promote public dialogue on risk issues pertinent to Asia and the world. Risk communication tools and methodologies developed will facilitate better informed decision-making by policymakers, business leaders, scientists and people across Asia for a safer society.

During the launch, NUS President Professor Tan Chorh Chuan and Managing Director of Lloyd’s Register Foundation Professor Richard Clegg inked an agreement to formalise the Institute’s establishment.

Prof Tan thanked the Foundation for its generosity and collaboration in an increasingly important area. The new Institute will help to bridge this gap in Asia and lead high-quality research in the underserved area, he noted.

The Foundation is delighted to partner NUS in the initiative, said Prof Clegg, “The public understanding of risk is one of the four strategic themes of the Lloyd’s Register Foundation and working in true partnership with NUS is going to make real impacts in this field for the ultimate benefit of society,” he stressed.

Lloyd’s Foundation institute focuses on risk

NUS Medicine, SIT partner in allied health

Starting October, students at Singapore Institute of Technology (SIT) can attend courses at NUS in a joint delivery of curriculum for the Institute’s Allied Health degree programmes. These Bachelor of Science degree courses are in Physiotherapy, Occupational Therapy, Diagnostic Radiography and Radiation Therapy.

An agreement formalised on 1 September 2016 between NUS and SIT paves the way for the co-development and co-teaching of curricula, pedagogical research and access to NUS laboratory facilities for SIT students.

It was witnessed by Dr Jael Puthucheary, Minister of State, Ministry of Communications and Information, and Ministry of Education.

During the five-year collaboration, classes are held at SIT’s Jurong campus in Dover, while laboratory sessions are conducted at NUS. Professors from NUS Yong Loo Lin School of Medicine and SIT will co-teach Anatomy and Physiology modules.

SIT President Professor Tan Thiam Soon said, "This collaboration will ensure that the Anatomy and Physiology components in these Allied Health degree programmes are not only relevant, rigorous and future-ready, but are also well-integrated with the respective Allied Health curricula."

NUS President Professor Tan Chorh Chuan commended that the cooperation will mean more qualified professionals for the national healthcare system.
Clean sweep at Asia Moot Court

Kiu Yan Yu, Dana Chang, sweeping the top awards Moot Court competition by — Western classical music, between the two countries. The Asia Cup Moot, a moot court competition hosted by Japan’s Ministry of Foreign Affairs, attracts teams from law schools across Asia. The 2016 edition featured a total of 43 law schools, with 13 representing their countries in the oral rounds held in Tokyo. This year’s most problem focused on the law of the sea, examining a State’s claim of historic fishing rights in another’s territorial sea and its Exclusive Economic Zone. The students had to present on issues such as historic fishing rights in United Nations Convention on the Law of the Sea, principles of good faith in international law, and the powers of the International Court of Justice to order specific remedies. Year 2 Chee Yeow said, “Despite having entered the competition at a fairly late juncture, we still managed to pull through due to the hard work put in by everyone on the team.” Faculty and alumni who are law practitioners also helped mentor the participants on their journey to achieving the remarkable feat. An Orientation Review Committee (ORC) set up by the Office of the Provost has begun the process of rethinking freshman orientation at NUS. “Orientation is intended to welcome and introduce freshmen to the university community,” said Professor Tan Eng Chye, NUS Deputy President (Academic Affairs) and Provost. “As part of the review, we’ve asked the Committee to consider new approaches to freshman orientation as well as positive current practices that should be extended and preserved.” The Review Committee was established in late August following reports of inappropriate and unauthorised student-organised activities during the university orientation period. The 14-member ORC comprises a diverse mix of representatives from the student body, faculty, as well as alumni. The Committee is chaired by Professor Tan Tai Yong, Executive Vice President (Academic Affairs) of Yale-NUS College. The modified curriculum introduces two new mandatory core modules — Writing Academically: Arts and Social Sciences, and Public Writing and Communication — to improve students’ skills in writing, expression and communication. The restructuring will extend flexibility for a broad-based education that explores other interests, including double majors and overseas programmes.

He said that there has been overwhelming agreement so far that orientation programmes should make freshmen feel welcomed as valued new members of the university community. It was vital, he said, that all student leaders and student organisers be made aware of and embrace the objectives of orientation, and that they are trained and equipped to conduct orientation activities in meaningful ways that align with the spirit of orientation. “At all times, freshmen should feel welcomed and assured and supported,” said Prof Tan. The Committee has engaged more students and faculty; their recommendations in the final report will be shared with the NUS community.

Bonding with music in Myanmar

Music builds bridges, regardless of culture, language or politics. This was evident when students from Yong Siew Toh Conservatory of Music (YSTCM) at NUS played seamlessly with a Myanmar orchestra and a traditional Myanmar ensemble, despite cultural differences.

In two concerts held in August at Nay Pyi Taw and Yangon in Myanmar, the events organised by the Singapore Embassy in Yangon commemorated the 50th anniversary of diplomatic relations between the two countries. The concert repertoire consisted of several genres — Western classical music, traditional Myanmar songs, as well as pieces specially composed by Assistant Professor Chen Zhangyi from YSTCM and Burmese cellist Mr Saw James Hsar Doe Soe. “The project was such a great experience because I not only took on the role of a musician, but also became an ambassador of the music between our two countries,” said Mr Saw, a co-conductor and the Conservatory’s first Burmese alumnus. Burmese dignitaries including Ms Aung San Suu Kyi, Myanmar’s State Counsellor and Foreign Minister, as well as Singapore’s Ambassador to Myanmar Mr Robert Chuah attended the concert in Nay Pyi Taw.

For Ms Aung San Suu Kyi in Nay Pyi Taw. At the end of the concert, she even came up to the stage to speak to the musicians. We also really enjoyed the response of the audience at Yangon.”

An Orientation Review Committee (ORC) set up by the Office of the Provost has begun the process of rethinking freshman orientation at NUS. “Orientation is intended to welcome and introduce freshmen to the university community,” said Professor Tan Eng Chye, NUS Deputy President (Academic Affairs) and Provost. “As part of the review, we’ve asked the Committee to consider new approaches to freshman orientation as well as positive current practices that should be extended and preserved.” The Review Committee was established in late August following reports of inappropriate and unauthorised student-organised activities during the university orientation period. The 14-member ORC comprises a diverse mix of representatives from the student body, faculty, as well as alumni. The Committee is chaired by Professor Tan Tai Yong, Executive Vice President (Academic Affairs) of Yale-NUS College.

Fresh perspective on freshman orientation

An Orientation Review Committee (ORC) set up by the Office of the Provost has begun the process of rethinking freshman orientation at NUS. “Orientation is intended to welcome and introduce freshmen to the university community,” said Professor Tan Eng Chye, NUS Deputy President (Academic Affairs) and Provost. “As part of the review, we’ve asked the Committee to consider new approaches to freshman orientation as well as positive current practices that should be extended and preserved.” The Review Committee was established in late August following reports of inappropriate and unauthorised student-organised activities during the university orientation period. The 14-member ORC comprises a diverse mix of representatives from the student body, faculty, as well as alumni. The Committee is chaired by Professor Tan Tai Yong, Executive Vice President (Academic Affairs) of Yale-NUS College.

He said that there has been overwhelming agreement so far that orientation programmes should make freshmen feel welcomed as valued new members of the university community.

It was vital, he said, that all student leaders and student organisers be made aware of and embrace the objectives of orientation, and that they are trained and equipped to conduct orientation activities in meaningful ways that align with the spirit of orientation.

“‘At all times, freshmen should feel welcomed and assured and supported,’” said Prof Tan.

Prof Tan Tai Yong, Executive Vice President (Academic Affairs), Yale-NUS College.

The Committee has engaged more students and faculty; their recommendations in the final report will be shared with the NUS community.

To further enrich the undergraduate experience and to better equip students for their career in the social sciences and humanities domain, NUS Arts and Social Sciences has revised its curriculum for first-year students.

From Academic Year 2016/17 onwards, the enhanced curriculum seeks to lay the groundwork for freshmen by providing them the 50th anniversary of diplomatic relations between the two countries.

The modified curriculum introduces two new mandatory core modules — Writing Academically: Arts and Social Sciences, and Public Writing and Communication — to improve students’ skills in writing, expression and communication. The restructuring will extend flexibility for a broad-based education that explores other interests, including double majors and overseas programmes.

Students can opt for two more Unrestricted Electives to pursue non-major or cross-faculty modules. Thecolleges have reduced the number of modules for majors has been reduced to accommodate the new compulsory modules and Unrestricted Electives. Internships will be formalised as part of the course to encourage students to gain work-related experience before graduation.

Arts and Social Sciences curriculum enhanced

To further enrich the undergraduate experience and to better equip students for their career in the social sciences and humanities domain, NUS Arts and Social Sciences has revised its curriculum for first-year students.

From Academic Year 2016/17 onwards, the enhanced curriculum seeks to lay the groundwork for freshmen by providing them the 50th anniversary of diplomatic relations between the two countries.

The modified curriculum introduces two new mandatory core modules — Writing Academically: Arts and Social Sciences, and Public Writing and Communication — to improve students’ skills in writing, expression and communication. The restructuring will extend flexibility for a broad-based education that explores other interests, including double majors and overseas programmes.

Students can opt for two more Unrestricted Electives to pursue non-major or cross-faculty modules. Thecolleges have reduced the number of modules for majors has been reduced to accommodate the new compulsory modules and Unrestricted Electives. Internships will be formalised as part of the course to encourage students to gain work-related experience before graduation.

An Orientation Review Committee (ORC) set up by the Office of the Provost has begun the process of rethinking freshman orientation at NUS. “Orientation is intended to welcome and introduce freshmen to the university community,” said Professor Tan Eng Chye, NUS Deputy President (Academic Affairs) and Provost. “As part of the review, we’ve asked the Committee to consider new approaches to freshman orientation as well as positive current practices that should be extended and preserved.” The Review Committee was established in late August following reports of inappropriate and unauthorised student-organised activities during the university orientation period. The 14-member ORC comprises a diverse mix of representatives from the student body, faculty, as well as alumni. The Committee is chaired by Professor Tan Tai Yong, Executive Vice President (Academic Affairs) of Yale-NUS College.

He said that there has been overwhelming agreement so far that orientation programmes should make freshmen feel welcomed as valued new members of the university community.

It was vital, he said, that all student leaders and student organisers be made aware of and embrace the objectives of orientation, and that they are trained and equipped to conduct orientation activities in meaningful ways that align with the spirit of orientation.

“‘At all times, freshmen should feel welcomed and assured and supported,’” said Prof Tan.

Prof Tan Tai Yong, Executive Vice President (Academic Affairs), Yale-NUS College.

The Committee has engaged more students and faculty; their recommendations in the final report will be shared with the NUS community.

To further enrich the undergraduate experience and to better equip students for their career in the social sciences and humanities domain, NUS Arts and Social Sciences has revised its curriculum for first-year students.

From Academic Year 2016/17 onwards, the enhanced curriculum seeks to lay the groundwork for freshmen by providing them the 50th anniversary of diplomatic relations between the two countries.

The modified curriculum introduces two new mandatory core modules — Writing Academically: Arts and Social Sciences, and Public Writing and Communication — to improve students’ skills in writing, expression and communication. The restructuring will extend flexibility for a broad-based education that explores other interests, including double majors and overseas programmes.

Students can opt for two more Unrestricted Electives to pursue non-major or cross-faculty modules. Thecolleges have reduced the number of modules for majors has been reduced to accommodate the new compulsory modules and Unrestricted Electives. Internships will be formalised as part of the course to encourage students to gain work-related experience before graduation.

Arts and Social Sciences curriculum enhanced

To further enrich the undergraduate experience and to better equip students for their career in the social sciences and humanities domain, NUS Arts and Social Sciences has revised its curriculum for first-year students.

From Academic Year 2016/17 onwards, the enhanced curriculum seeks to lay the groundwork for freshmen by providing them the 50th anniversary of diplomatic relations between the two countries.

The modified curriculum introduces two new mandatory core modules — Writing Academically: Arts and Social Sciences, and Public Writing and Communication — to improve students’ skills in writing, expression and communication. The restructuring will extend flexibility for a broad-based education that explores other interests, including double majors and overseas programmes.

Students can opt for two more Unrestricted Electives to pursue non-major or cross-faculty modules. Thecolleges have reduced the number of modules for majors has been reduced to accommodate the new compulsory modules and Unrestricted Electives. Internships will be formalised as part of the course to encourage students to gain work-related experience before graduation.
NUS has joined the league of the world’s best 25 universities, besides securing the pole position in Asia.

This year, THE expanded its World University Rankings to include 980 universities from 79 countries, representing some five per cent of the world’s higher education institutions. Among them were 289 Asian universities from 24 countries, of which 19 universities made the top 200.

The data clearly demonstrates that National University of Singapore is the number one university in Asia.

— Mr Phil Baty, Editor, THE World University Rankings

The QS rankings show NUS university in the top 25 list. It clinched the 12th spot in the Quacquarelli Symonds (QS) World University Rankings 2016/2017, and best in Asia, for the second consecutive year. NUS also rose two runs to 24th in the latest Times Higher Education (THE) World University Rankings 2016–2017, the second consecutive year.

The QS rankings show NUS doing well in employer and academic reputation, with perfect scores in both metrics. It was named first in Singapore, as well as 9th and 11th globally, respectively.

This edition of the QS World University Rankings, which covered more than 900 universities, sought responses from 74,651 academics and 37,781 employers.

To evaluate a university’s strength in research, teaching, employability and internationalisation, six performance indicators were employed — academic reputation, employer reputation, citations per faculty, faculty student ratio, and proportions of international students and international faculty.

The University has also been placed among the top 20 universities doing research in Computer Science and Business and Economics, respectively; and 18th in Physical Sciences.

Asia’s 11th most innovative university

NUS’ concerted efforts in science and technology have been recognised by the inaugural Reuters Top 75: Asia’s Most Innovative Universities ranking. Making its debut at 11th spot, the University joined the ranks of top schools lauded for advancing science, developing new technologies and powering the global economy.

NUS stands out as the highest placed educational institution in Asia, outside of Northeast Asia, on the list.

The IP & Science division of Thomson Reuters compiled the list based on data from some 150 Asian academic and government agencies which published the most number of scholarly articles from 2009 to 2014. The papers were cross-referenced against the number of patents filed by these organisations.

While pleased with the recognition, Loren maintained that his greater joy comes from raising awareness of inclusive design. “There is still plenty of room for the design community in Singapore to tackle the needs of the disadvantaged,” he said.

Oneware has also previously won the top prize in the 2016 IKEA Singapore Young Designer Award.

Influential business academics under 40

Nine of the 18 most influential professors aged 40 and below in Singapore identified by Singapore Business Review hail from NUS Business School. The list acknowledges young business academics who have shown notable willingness to share their skills, knowledge and expertise in any medium.

These rising stars, both in the classroom and in cutting-edge research, were nominated by their colleagues and various business schools. They include authors of impactful publications and sought-after speakers in different forums.

The youngest, 27-year-old Assistant Professor Sam Yam from the Department of Management and Organisation, also made his mark in this year’s Poets & Quants global list of 40 most outstanding “under 40” business professors across the world.

Young talented professors

• Assoc Prof Fu Qiang (Strategy & Policy)
• Assoc Prof Keung Ching Tung (Accounting)
• Assoc Prof Li Xiuqiang (Marketing)
• Assoc Prof Qian Wenlan (Finance)
• Assoc Prof Kim Hwee Yen (Strategy & Policy)
• Assoc Prof Michael Ke Mai (Management & Organisation)
• Assoc Prof Johan Salimin (Finance)
• Assoc Prof Zhang Yan (Marketing)
• Assoc Prof Sam Yam (Management & Organisation)
Ban Ki-moon: Be a global citizen

During a student trip to the US sponsored by the Red Cross in the 1960s, a young Ban Ki-moon was so inspired by US President John F Kennedy that he vowed to pursue a career in diplomacy. Little did the high school boy from the then war-torn Korean countryside dream that he would not only become a diplomat in South Korea’s Ministry of Foreign Affairs, but also rise to the highest office in the country as leader of this country, you can be a global citizen.

The current UN Secretary-General shared his personal journey with NUS students and faculty at “Thought Leaders Roundtable discussion titled “The Challenge of Establishing World Class Universities” during his speech, Prof Tan said, “Category fundamentals to go beyond these, to think about how you can further differentiate yourself as a university.”

Most universities seek to achieve this by accruing significant numbers of talented faculty, staff and students who originate transformative ideas, influence the direction of a particular field, create important new products and services, and ultimately create high impact.

Beyond this, however, there could be additional value for the respective partners, faculty and students, Singapore and the wider regional and global community.

The two-day event was attended by Prof Tan speaking on the challenges of a world class university

He added that NUS’ position as a preferred partner was based on a strong and successful track record of creating distinctive value with partner universities such as Duke University and Yale University. NUS partnered Duke in 2005 to establish Duke NUS Medical School, and collaborated with Yale University to set up Yale-NUS College, Singapore’s first liberal arts and science school, in 2011. Both schools have clearly differentiated missions of NUS in recognition of the value for the respective partners, faculty and students, Singapore and the wider regional and global community.
Biochip takes on cancer, cell by cell

A microfluidic chip designed by engineers from NUS and start-up Clearbridge mFluidics promises to make personalised cancer treatment a distinct reality.

A world’s first in using microfluidic flow to isolate selected tumour cells for single cell analysis, the invention allows accurate assessment of the cancer type so as to enable targeted management.

The device created by Professor Lim Chwee Teck from NUS Engineering and his former PhD student Dr Tan Swee Jin, now Technical Director of Clearbridge mFluidics, can seek out any cancer cell of choice obtained from liquid biopsy to perform single cell analysis. Liquid biopsy is less invasive, less painful and can be done more frequently compared to tumour biopsy that involves surgery.

The innovative system gives highly sensitive readings, identifying low-frequency occurring mutations for better cancer diagnosis. The equipment detects the presence of specific activating but treatable mutations to help doctors decide on the best drugs, as well as track changes or treatment progress during anticancer therapy.

Some cancer cells can be more malignant and invasive, limiting the effectiveness of treatment. This leads to patients with the same cancer showing different treatment outcomes. The researchers thus focus on locating the critical ones such as cancer stem cells or cancer cells with druggable mutation, for the right remedy.

The engineering feat uses microfluidic dynamics to move cells and passively hold a cell in each controlled chamber alongside the main channel. The selected cells are then ejected from the chambers for downstream assessment. The biochip takes about two to three hours to process a blood sample of about 101,000 cells with little losses. Conventional methods such as microplate aspiration is very labour-intensive and error-prone, while dielectrophoresis is expensive and complicated.

The team has proven that the microfluidic device is able to perform high-throughput, selective picking and isolation of single circulating tumour cells (CTCs) to 100 per cent purity from a larger population of other cells. The biochip takes less than an hour to pick selected cells from a sample of over 35,000 with little losses.

The breakthrough work published in Scientific Reports could pave the way to customised medicine. Dr Tan revealed that a prototype of the biochip will be out year end, with an improved version in 2017.

Discovery detects early gastric cancer

Gastric cancer is the third leading cause of cancer deaths globally. Most patients are only diagnosed at late stage, contributing to the poor five-year survival rate of less than 5 per cent.

A recent discovery by the Cancer Science Institute of Singapore at NUS may bring hope to such patients by catching the disease at its initial stages.

The scientists, headed by Assistant Professor Polly Chen and Professor Patrick Tan, found that RNA sequencing is closely related to the development of gastric cancer. Further investigation into this association may potentially help in the early detection and better treatment of the deadly disease.

RNA is an intermediary product between deoxyribonucleic acid (DNA) and the protein coded by DNA. Acting as a messenger, RNA undergoes a series of changes known as RNA editing during message transmission. This process may encounter uncontrolled or disorder transfer of DNA information, resulting in a modified gene product with cancer-causing qualities.

The research team observed that RNA editing, more prevalent at the initial phase of gastric cancer, can be spotted in recurrent and premalignant tissue samples. This suggests that RNA editing levels, obtainable through a biochip, could contribute to identifying individuals at risk from the cancer during the disease’s early stages.

The discovery has potential to translate into molecular therapy, said Prof Tan, who is also with the Duke-NUS Medical School. The team will further examine the key RNA editing events driving gastric cancer development and explore safe and efficient methods to correct this process.

Of the 19 butterfly species that visit both forests and urban parks, five expanded their diet in the parks housing more non-native plants. This implies that non-native flowering plants may benefit some butterflies by providing extra nectar resources.

The scientists proposed that habitat management for flower specialised butterflies would be important to provide their preferred native flower sources in urbanising landscapes.

Solar sonic window blocks noise

Sonic Crystal window is a new invention that allows for natural daylight and ventilation.

Typically used to control sound waves, sonic crystals are regularly spaced tubular structures which form “band gaps” and prevent waves of certain frequencies from travelling through the size of the gaps determines the frequency that is eliminated.

The NUS Mechanical Engineering team led by Professor Lee Heew Pueh is the first to incorporate sonic crystals in windows. The group designed tubes with slits and tested the prototypes at NUS Eusoff Hall. They found that the novel windows cut traffic and construction noise — with frequencies ranging from 700Hz to 1,400Hz — by half.

Adding a jagged edge to individual panes of the hollow tube further lowered the noise by another decibel.

Yellow Vant Lanturn, a flower specialist, feeding on Leesia indica flowers.

A small but conspicuous butterfly could be a “fussy” feeder that only picks specific flowers, found NUS biologists.

Urban development affects butterflies’ diet

A new invention would save viewing through the window. The new invention would save germs in places like hospitals.

The tubes were made of aluminium for easier engineering, but they could be crafted with a transparent material for better viewing through the window.

The researchers are exploring portable versions of their patented invention, such as temporary screens for events, said Prof Lee.
Social work education pioneer turns 90

Even though Mrs Ann Wee has been contributing to society from young, the mother of social work education in Singapore is still actively pursuing her passion at 90.

The NUS Associate Professorial Fellow celebrated her birthday, which was on 27 July, with NUS Social Work staff, students and guests at the NUS Society Kent Ridge Guild House on 19 August.

Mrs Wee joined the Department of Social Studies in 1957 at the University of Malaya, an NUS predecessor institution. She was promoted to the Head of Department 10 years later and stepped down at age 60, the longest-serving head to date.

Special guest Minister for Social and Family Development Tan Chuan-Jin attended the exclusive occasion, together with the NUS Institute of Social Affairs (ISS) Dean Prof Chua Kee Chian, Mr Masagos, NUS President Prof Tan Chorh Chuan and Mrs Wee’s son Mr Ivan Lee.

Mrs Wee (seated) celebrating her birthday with Mr Tan (3rd from left), friends, and guests including (far right) Mrs Lee, Prof Chan and Mrs Marshall.

Mr Masagos, NUS President Prof Tan Chorh Chuan and Mr Lee at the award ceremony.

ISS marks 35th anniversary

A former student of Mrs Wee — an elegant lady putting on a scarf and zooming off in her open-top sports car, “a regular Grace Kelly of her time in Singapore”.

Also relating their experiences with Mrs Wee were retired librarian Mrs Lee Wang Cheng Yeng; Mrs Marshall; and voluntary welfare organisation Promoting Alternatives to Family Violence Executive Director Dr Sudha Nair, Mrs Wee’s student who recently won the Her World’s Woman of the Year award for her social work.

The NUS Institute of Systems Science (ISS-155) celebrated its 35th year of training and developing infocomm technology professionals on 30 September.

The funds raised at the annual event, jointly organised by NUS and the National University of Singapore Social Studies, has been actively engaging the NUS community. He spearheaded the establishment of the Engineering Class of 1976 Bursary Fund, to provide financial aid for engineering undergraduates.

Some 140 NUS alumni and friends participated in the annual golf tournament this year.

Alumni and friends tee off for charity

Some 140 NUS alumni and friends participated in the annual golf tournament this year.

Parents rally behind children’s classmates

A few lives are made easier by not having to worry about taking the MRT before the cut-off timing for free rides to save money. The same few lives will make a bigger impact on other lives when they graduate than I ever could on my own.

Madam Tan, mother of a student from the Class of 2020 at NUS Yong Loo Lin School of Medicine

Madam Tan rallied the parents of the Class of 2020 to set up the Class of 2020 Parents’ Bursary at NUS Medicine, in the hope of changing the lives of some 140 NUS students needing financial help, starting from Academic Year 2018/19. These gifts and contributions, in forming disaster relief organisation Mercy Relief.

Graced by Guest-of-Honour Emeritus Senior Minister Goh Chok Tong, the tournament at the Raffles Country Club attracted about 140 NUS alumni and friends.

NUS Deputy President (Academic Affairs) and Provost Professor Tan Eng Chye thanked the generosity and support of the alumni and friends, saying, “Their contributions provide a strong boost to the University’s ongoing efforts to enable more of our talented students to fulfill their potential and make a lasting impact to the Singapore community.”

A staunch supporter of the Charity Golf, NUS President Mr Eddie Lee recalled having to take out a loan and work part-time for his tuition fees as an NUS Law student. “I want to do what I can to help today’s students, who are facing the same financial challenges, to benefit from a life-changing education just as I did.”

The cheque of $564,500 was presented to Prof Tan at a dinner and prize presentation ceremony after the tournament. Key donors also received commemorative plaques for their contribution.
Service to society

In a strong show of support for NUS’ tradition of giving back to society, some 1,400 staff, students and alumni rolled up their sleeves, literally, to participate in community activities at the inaugural NUS Day of Service.

An initiative of the NUS Alumni Advisory Board, the 21 projects classified under Environment, Food, Health and Knowledge took place locally and abroad on 3 September, targeting about 4,500 beneficiaries.

“NUS traces its roots to a modest medical school founded in 1905 through the strong support of the local community. Because of this, beyond the pursuit of excellence and academic achievement, giving back to the community has been a central and integral part of our education philosophy,” said NUS President Professor Tan Chorh Chuan.

In the early hours of the morning, Prof Tan and 45 people brought together by NUS Tembusu College prepared, cooked and delivered food alongside regular volunteers at the Willing Hearts soup kitchen. The charity caters 5,000 meals daily to underprivileged and marginalised individuals in Singapore.

On the eastern shore of the island, NUS Deputy President (Administration) Mr Don Yeo launched an international coastal clean-up organised by College of Alice & Peter Tan and NUS Human Resources. Some 160 gung-ho volunteers collected and sorted 923kg of trash along the coastline.

Other activities included food distribution by NUS Alumni Relations to 2,000 needy families at Food from the Heart’s Self Collection Centres nationwide; a community awareness programme titled “Bin Right!” by alumni of NUS Master of Science (Environmental Management) and NUS Environmental Studies on using recycling bins; a visit by the NUS Students’ Union to the Action for Singapore Dogs shelter to promote animal welfare; a Mid-Autumn Festival celebration with elderly residents in Chinatown conducted by Eusoff Hall; and free door-to-door basic health screening for tenants of rental flats under NUS Medicine’s Neighbourhood Health Service programme.

Noted Year 2 NUS Social Work student Janice Yeo, “I definitely encourage more people to participate in the next NUS Day of Service. It’s a very meaningful way to spend your Saturday and contribute to a greater cause alongside a group of like-minded individuals.”

Overseas alumni also joined in the Day of Service. The NUS Auckland Overseas Chapter hosted a dinner to raise funds for the Asthma and Respiratory Foundation New Zealand; the NUS Xiamen Overseas Chapter educated primary school students about conservation of traditional villages in Quanzhou, China; while the Lee Kuan Yew School of Public Policy Overseas Alumni Chapters in Bangladesh, India and Japan planted 200 saplings, fed poor children and held a fundraising event, respectively.