Honouring eight outstanding achievers

“Winged” car soars in world’s race

Sweet news for Ramadan fasting
Honouring eight outstanding achievers

<table>
<thead>
<tr>
<th>NUS University Award 2015 Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outstanding Service Award</strong></td>
</tr>
<tr>
<td>Honours individuals who have distinguished themselves by their sustained contributions in serving the University and society</td>
</tr>
<tr>
<td>Ambassador Gopinath Pillai</td>
</tr>
<tr>
<td>Chairman, Institute of South Asian Studies at NUS and Ambassador-at-Large and Special Envoy to Andhra Pradesh, Ministry of Foreign Affairs, Singapore</td>
</tr>
<tr>
<td>Dr. Seek Ngee Huat</td>
</tr>
<tr>
<td>Chairman, Institute of Real Estate Studies at NUS, and Chairman, Global Logistic Properties</td>
</tr>
<tr>
<td><strong>Outstanding Educator Award</strong></td>
</tr>
<tr>
<td>Acknowledges faculty members who have excelled in engaging and inspiring students in their quest for knowledge</td>
</tr>
<tr>
<td>Prof. Brian P. Farrell</td>
</tr>
<tr>
<td>Department of History, Faculty of Arts and Social Sciences</td>
</tr>
<tr>
<td>Assoc Prof Ben Leong Wing Lup</td>
</tr>
<tr>
<td>Department of Computer Science, School of Computing</td>
</tr>
<tr>
<td><strong>Outstanding Researcher Award</strong></td>
</tr>
<tr>
<td>Recognizes researchers whose works have impacted and advanced the frontiers of knowledge, and positioned NUS at the forefront of their areas of expertise</td>
</tr>
<tr>
<td>Prof. Neal Chung Tai-Shung</td>
</tr>
<tr>
<td>Department of Chemical and Biomolecular Engineering, Faculty of Engineering</td>
</tr>
<tr>
<td>Prof. Gan Wei Teck</td>
</tr>
<tr>
<td>Department of Mathematics, Faculty of Science</td>
</tr>
<tr>
<td><strong>Young Researcher Award</strong></td>
</tr>
<tr>
<td>Commends researchers whose works show promise in extending the frontiers of knowledge in their respective fields</td>
</tr>
<tr>
<td>Dr. Goki Eda</td>
</tr>
<tr>
<td>Departments of Chemistry and Physics, Faculty of Science</td>
</tr>
<tr>
<td>Dr. Zhang Rui</td>
</tr>
<tr>
<td>Department of Electrical and Computer Engineering, Faculty of Engineering</td>
</tr>
</tbody>
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NUS lauded eight exceptional educators, researchers and professionals at the University Awards 2015 on 24 April. The special event celebrated their achievements in education and research, as well as notable services to Singapore and the global community.

Receiving the Outstanding Service Award for their contributions to the University and the society at large were Ambassador Gopinath Pillai, Ambassador-at-Large and Special Envoy to Andhra Pradesh, Singapore Ministry of Foreign Affairs, and Chairman, Institute of South Asian Studies (ISAS) at NUS, and Dr. Seek Ngee Huat, Chairman, Institute of Real Estate Studies at NUS, and Global Logistic Properties.

Ambassador Pillai has distinguished himself as a Singapore diplomat for more than 25 years. His key positions in a number of organisations, including NTUC FairPrice Co-operative Limited, Ang Mo Kio-Thye Hua Kwan Hospital and Hindu Advisory Board, have considerably impacted the country.

The founding Chairman of ISAS is instrumental in forging ties between Singapore and India, generating in-depth knowledge on India that benefits the business community, academia, government agencies and society. He also chairs two public listed companies in India – Gateway Distriparks Limited and Snowman Logistics Limited.

Dr. Seek, an authority in real estate investment, helmed the Government of Singapore Investment Corporation (GIC) Real Estate Private Limited for 15 years. During his tenure as GIC’s President, he transformed the organisation into one of the world’s leading sovereign wealth funds and institutional investors in real estate with assets around the globe.

The Adjunct Professor of Real Estate at the NUS School of Design and Environment is a thought leader in real estate, playing an active role in various international platforms and forums. He initiated and built up real estate research as an integral service provided by leading consulting firms in Asia Pacific.

Both NUS alumni have previously been accorded the Distinguished Alumni Service Award by the University.

The accomplishments of six other outstanding educators and researchers from the Faculty of Arts and Social Sciences, School of Computing, Faculty of Engineering and Faculty of Science were also acknowledged at the awards ceremony.

The Outstanding Educator Award was bestowed on Associate Professor Ben Leong Wing Lup and Professor Brian P. Farrell from the Department of Computer Science and Department of History, respectively.

Dr. Goki Eda from the Departments of Chemistry and Physics, and Dr. Zhang Rui from the Department of Electrical and Computer Engineering were presented with the Young Researcher Award for their significant research with promising potential.

One could say that the instincts of achieving at a very high international level, and of excelling despite the odds, run very deeply in our institutional DNA.

— Prof. Tan Chorh Chuan, NUS President
Most prestigious university in Asia

NUS has been named the best university in Asia, again.

The Quacquarelli Symonds (QS) University Rankings: Asia 2015 placed the University in pole position, for the second consecutive time.

NUS performed strongly across most indicators, retaining its top spot in Asia for employer reputation and second for academic reputation. It scored full marks in academic reputation based on 42,561 responses from academics in the region and the rest of the world.

The University was third in the number of citations per paper, an affirmation of its significant research.

As one of Asia’s top two universities across all disciplines measured, NUS was number one in Social Sciences and Management, as well as Life Sciences and Medicine. It came in second in Arts and Humanities, Engineering and Technology, and Natural Sciences.

The University was ranked second based on the same performance indicators and methodology as the established THE World University Rankings. A total of 13 performance indicators were used to assess each university’s strengths in teaching, research, knowledge transfer and international outlook.

NUS has maintained its position as the region’s top university at a time when Asian countries are investing heavily in education and research.

Former Chief Justice of Singapore Mr. Chan Sek Keong and prominent business leader Mr. Stephen Lee Cheong Yen were appointed NUS Pro-Chancellors effective 29 April. The appointments were made by Singapore President and NUS Chancellor Dr. Tony Tan Keng Yam.

Pro-Chancellors act on behalf of the Chancellor during the latter’s absence from the University, and preside at the annual commencement ceremonies.

Mr. Chan was a member of the inaugural cohort of students admitted to the Faculty of Law of the then University of Malaya in Singapore, now NUS, in 1957. He was appointed the first Judicial Commissioner of Singapore in 1986, and went on to become a Judge of the Supreme Court of Singapore in 1988. In 1992, he was appointed the Attorney-General of Singapore. He was sworn in as the third Chief Justice of Singapore in 2006.

NUS conferred an Honorary Doctor of Laws on Mr. Chan in 2010. He is currently a Distinguished Fellow at NUS Law.

Mr. Chan was also appointed a Senior Judge of the Supreme Court in January 2015 for a period of three years, with eligibility to be a Judge of the Singapore International Commercial Court.

Mr. Lee is a prominent business leader who has made distinguished contributions to both the public and private sectors. He is the Chairman of Singapore Airlines, SIA Engineering and NTUC Income Insurance. He is also Senior International Advisor of the Temasek Advisory Panel and Member of the National Wages Council, and serves as an Alternate Member of the Council of Presidential Advisers.

Mr. Lee, who was a Nominated Member of Parliament from 1994 to 1997, received the Singapore Public Service Star in 1996, the Singapore Distinguished Service Order in 2006, and Boeing’s friendship Award to Foreign Experts in 2007.

Two new Pro-Chancellors on board

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The Tahir Foundation Building, which officially opened on 27 April, is a 17-storey research and medical education space located at NUS.

It was named in recognition of a $30 million gift to the University by prominent Indonesian business leader and philanthropist Dato’ Sri Dr Tahir.

A total of 13 performance indicators were used to assess each university’s strengths in teaching, research, knowledge transfer and international outlook.

The Tahir Foundation Building features new facilities such as research laboratories, teaching and learning spaces, as well as medical student activity areas.

It also houses SSSMHP and NUS School of Public Health (SSSMHP) Dean Professor Chia Kee Seng, as well as other senior administrators from NUS and the National University Health System.

The Tahir Foundation Building officially opens

NUS and UM strengthen old ties

NUS welcomed University of Malaya (UM) Chancellor His Royal Highness Sultan Nazrin Muizzuddin Shah and a delegation from the Malaysian University on 29 April. This represented the first visit to NUS by the Sultan of the state of Perlak.

In Singapore for the UM-NUS Inter-University Turku Chancellor Golf Tournament, which was held over two days, the UM delegation included Vice-Chancellor Professor Dato’ Dr Mohd Kamil Jalaludin.

The Malaysian visitors toured University Town and the Lee Kong Chian Natural History Museum at NUS on 29 April. They later attended an official dinner at The Istana, hosted by NUS Chancellor and Singapore President Dr. Tony Tan Keng Yam. NUS Pro-Chancellor Mr. Madat Matiar, NUS Chairman Mr. Ngiam Tong Dow and NUS President Professor Tan Chorh Chuan were among the guests at the dinner.

In his welcome address, Prof Tan underscored three highlights of this particular tournament — it commemorated both universities’ 110th anniversary; Singapore’s 50th year of independence this year; and His Royal Highness gracing the tournament as the new Sultan of Perlak and UM Chancellor.

Tahir Foundation Building officially opens

From left: Assoc. Prof Yeoh, Dr Tahir, Mr Heng and Prof Tan untangling the building’s commemorative ribbon.

About 140 golfers from NUS and UM teed off at Sentosa Golf Club for the 48th edition of the tournament. The final round of games took place at the Orchard Country Club on 30 April, with the NUS team winning the tournament.

The Tahir Foundation Building officially opens

From left: Mr. Wong, Dr Tony Tan Keng Yam, Prof Tan, Mr Madat, Mr. Heng and NUS Golf Captain Mr. Lim Kin Choo and Sultan Nazrin Muizzuddin Shah at the official dinner held at The Istana.

Mr. Heng and Mr. Madat won the tournament.
Former Vice-Chancellor receives May Day Award

Professor Lim Pin, former NUS Vice-Chancellor, was honoured with the Distinguished Service Award by the National Trades Union Congress on 29 April.

The Award recognises Prof Lim for his significant contributions to tripartite discussions on wage reform and for spurring the country’s economic growth during his term as the Chairman of the National Wages Council from 2001 to 2014. He had been instrumental in improving wage outcomes for Singaporeans while keeping businesses competitive.

One key initiative instituted during Prof Lim’s leadership was the enactment of a minimum built-in wage increase for low-wage workers to better reward their efforts, resulting in higher income for these employees in recent years.

Under Prof Lim’s watch, a flexible salary structure linked to performance and productivity was implemented. He also advocated wage restraint in times of economic slowdown, skills upgrading and a more progressive wage model.

NUS President Professor Tan Chorh Chuan, who was presented with a plaque from Ms Fu, said: “We are happy to be identified as one of the 50 sites in Singapore which hold a special place in the hearts of Singaporeans. Over the years, we have not just provided a conducive environment where students can excel academically and grow, but also to develop lifelong friendships and special memories.”

The SG Heart Map is one of the signature programmes marking Singapore’s 50th birthday. Since the launch of the project on 14 November 2014, Singaporeans from all walks of life have willingly shared their personal stories, reflecting diverse choice locations and experiences. From these contributions, 50 frequently mentioned spots representing the “most endearing and cherished” places were mapped out.

One of the contributors, Hui Xue, said of NUS: “It was where I studied and had the most fulfilling three years of my life. It made me who I am today.”

Winner of the 2014 Singapore Design Award, Wenshu has spent months interacting with patients and medical staff at the National University Hospital (NUH) as a result of helping his father who suffers from chronic kidney failure. He then understood better the fears and frustrations of dialysis patients and came up with the idea for his award-winning device. “Design is not about me. It is about the user, the context and the environment,” he said.

Accolades acknowledge design talents

Recent NUS Industrial Design graduates Kiekw Wenshu and Eason Chow have been recognised at two international competitions, taking home the iF Student Design Award and Stanford Longevity Technology Prize respectively for their creative, yet practical, designs.

Wenshu’s design, Safe.Lync, is a peritoneal dialysis connection system intended to enhance the safety, interaction and experience of dialysis for paediatric kidney patients. The non-mechanical system prevents the accidental touch contamination of connector openings which could lead to fatal infections. It was one of 100 winning designs selected by the iF International Forum Design in Germany from almost 12,000 submissions.

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Eason’s Flipod helps relieve pressure points in immobile patients

Eason partnered the Department of Physiotherapy at the National University Hospital and tested the product on users from the Muscular Dystrophy Association of Singapore. It is currently undergoing a patent application.

He will present his invention at the World Economic Forum’s Annual Meeting of the New Champions in China in September 2015.

HR team recognised for global excellence

The NUS Office of Human Resources (OHR) Shared Services has been named one of the top 40 international teams to quality for the International Team Excellence Award (ITEA) in 2014.

The team has successfully implemented a transformation project that entailed a comprehensive reengineering of core human resources processes in NUS by analysing people, process, policy and technology levers across the institution.

Organised by the American Society for Quality, the World Conference on Quality and Improvement (WCQI) held from 4 to 6 May at Nashville, US shared the latest knowledge and best practices in quality and continuous improvement by experts and practitioners.

In 2013, the University, represented by NUS Libraries, made history as the first higher educational institute in Singapore to qualify as one of the 52 finalists. This year, OHR Shared Services was selected out of the 500 international teams that submitted their applications. NUS remains the first and only local university that is consistently invited to this prestigious event.

The remarkable achievements of both teams resulted from the rigorous and progressive track known as Team Acceleration Roadmap.

Under the framework conceptualised by the Organisational Excellence Office, top teams that emerged from the annual learning Institutions Quality Conference will be propelled into international arenas such as the International Convention for Quality Control Credence and WCQI.
"Winged" car soars in world’s race

The NUS-R15 raced its way to seventh place at the prestigious Formula SAE (FSAE) competition, held from 13 to 16 May in Brooklyn, Michigan in the US.

The NUS students’ "winged" car stood out from 120 teams, advancing 18 spots from last year to achieve their finest performance since taking part in the competition in 2004. Their best placing prior to this was 19th position in 2009 and 2012.

The high-tech car boasted a new wireless telemetry system, providing real-time monitoring of the driver and car’s performance including important parameters such as oil and water temperatures — through a smartphone application. The innovative system, developed by final-year student Shua Junjie, won the team the World Champion title for the FSAE Cummins Inc. Applied Technology Award.

The NUS team also took home several other accolades at the competition:

- 1st in the world for Business presentation event
- 2nd for Acceleration drag race
- 3rd for the FEV Powertrain Development Award, which recognises team for overall performance for acceleration, fuel economy, cost and the 22km endurance race
- 4th in the world for the Bosch Engineering Design Drawing Award

The team bagged several accolades during the competition:

- Year 4 Mechanical Engineering student Pakata Goh Liang Hu, who led the NUS FSAE 2015 team, said: "The journey, from the time we started to design the car to the end of the competition, has been challenging and insightful. A race car like this embodies many engineering principles that can be applied to any engineering project, and our team is grateful to have an opportunity to design, build, and race our own car."

A group of law students emerged victorious after battling it out at international moot competitions recently.

Year 3 students Huang Peide and Lee J. En, and Year 4 student Zulfahri Zulkiflee took home the top prize at the 27th annual Jean-Pictet Competition, the most prestigious international humanitarian law moot court competition, in Charlottesville, US.

Named after the former Vice President of the International Committee of the Red Cross, the Jean-Pictet Competition uses simulations and role play within fictitious but realistic warfare scenarios in a bid to take "law out of the books" and teach students to look at situations from multiple perspectives.

However, unlike other moot competitions, students are given little room for preparation as they receive the challenge topics more hours, sometimes minutes, before the finals where they are judged by a panel of leading practitioners and scholars.

"The competition focuses a lot on collaboration. At any point of time it’s usually a very supportive environment," said Zulfahri, whose childhood dream was to be a criminal lawyer. Highlighting a close friendship formed with the African team, he added: “They were really excited when we won, even more excited than we were!" In another accomplishment, Year 3 student Kelvin Chong bagged the Martin Domke Award for Best Oralist at the 22nd Willem C. Vis International Commercial Arbitration Moot held in Vienna, Austria.

The Martin Domke Award, named after a well-known scholar of international arbitration, aims to encourage the study of international commercial law and arbitration for resolution of international business disputes.

Teams were tasked to write and file a memorandum from both the claimant and respondent, in response to a case study dispute requiring arbitration, before moving on to the oral rounds. Kelvin achieved the greatest overall ranking across four preliminary rounds, making him the first Singaporean and member of an Asian team to win the Award.

Real estate students retain Case Competition title

NUS students once again topped the University of Southern California (USC) Marshall International Real Estate Case Competition organised by the USC Marshall Business School.

Crowned the top team last year, NUS remains one of the strongest contenders at the annual competition which is open to colleges and universities worldwide with undergraduate business real estate programmes. It has secured five championship titles since the inaugural round in 2004, the most number of wins by any single university.

In the run-up to the 2015 event, the NUS Department of Real Estate held its own real estate case competition last September. Each team was given four days to analyse a real estate development case prepared by Harvard Business School, conduct research, prepare proposals and present recommendations to the judging panel comprising industry experts.

Year 4 real estate students Colleen Yip, Muhammad Noor Danial, Jocelyn Ng, Wang Miinyang and Kevin Yap, as well as Year 3 student Mark Louis Yong eventually made the cut.

Upon arrival in California, competing teams received a real-world real estate problem posed by leading practitioners. They were required to address the problem by presenting their recommendations in both written and oral formats before a panel of judges drawn from the industry.

Law undergrads ace moot competitions

The NUS team defended their title against a slew of prominent universities, including USC, New York University and Ohio State University, in an intense competition which saw more and better-prepared schools taking part this year.

The experience provided a unique learning opportunity for the students. “We competed with some of the very top universities in the US and learnt a great deal about the US real estate industry from the other teams,” said Colleen.
A centre dedicated to social intervention research, the first such facility in Singapore, was launched at the NUS Faculty of Arts and Social Sciences on 24 April. The Social Service Research Centre (SSR) seeks to consolidate resources and ideas to test social innovations and develop the next stage of Singapore’s social service infrastructure.

“I can see an avalanche of social issues coming... The social challenges of Singaporeans in the next 50 years will be drastically different from those in the last 50. We need to think ahead of the curve, and evolve a new social service infrastructure,” said Guest-of-Honour Emeritus Senior Minister (ESM) Goh Chok Tong at the launch. ESM Goh is an advisor to SSR.

With support from its partners such as the Ministry of Social and Family Development, Community Chest and investment management firm Quahstedt, the establishment of SSR is timely to ensure the effectiveness of social services for the needy.

The Centre will implement rigorous evaluation methods for innovative social programmes, as well as facilitate research between government agencies, sector organisations, professionals and academia, said SSR Director Associate Professor Irene Ng from the NUS Department of Social Work. She will helm the Centre with Professor Paul Cheung, Chairman of the SSR Steering Committee.

To address the country’s next phase of social development, SSR will examine complex issues such as demographic shift and growing income inequality in Singapore. The main research areas include low-wage workers and their families; children and youth from disadvantageous backgrounds; and the elderly and their service needs.

“Moving forward, Singapore must decide what the size, shape and colour of its family will look like.”

Minister from the Prime Minister’s Office Ms Grace Fu, Guest-of-Honour at the conference, highlighted factors that could help raise the low fertility rates, including reducing Singaporeans’ long work hours; providing more affordable high-quality childcare; flexible working arrangement; and involving men more in housework and child-rearing. She also pointed out that Singapore will take a shorter time than most developed countries — only 18 years — to turn from an ageing to an aged society.

On 24 April, the Faculty of Arts and Social Sciences launched the Centre for Family and Population Research (CFPR), which aims to bring together new public policies to strengthen family units in Singapore. Ms Grace Fu, Minister in the Prime Minister’s Office, Second Minister for the Environment and Water Resources, and Second Minister for Foreign Affairs, graced the occasion as Guest-of-Honour.

Centre Director Professor Jean Yeung from the NUS Department of Sociology and Asia Research Institute said CFPR is dedicated to fostering an interdisciplinary understanding of trends, determinants, and consequences of family and population changes, particularly in Asia.

“We adopt a life course and international comparative approach in achieving our goals through research, training and mentoring. We now house 27 researchers from different disciplines,” she elaborated.

Ms Fu underscored the Centre’s critical role as a hub for knowledge exchange between researchers across Asia by sharing the demographic shifts in Singapore.

Besides conducting research, CFPR will offer training programmes on social research, as well as mentorship opportunities for affiliates including junior faculty members and graduate students.

Population dynamics treads a fine line

Like many Asian countries such as Japan, South Korea and Taiwan, Singapore has been facing a drop in total fertility rate (TFR). In 2013, the rate was 1.2, way below the replacement rate of 2.1. Professor Jean Yeung, Director of the NUS Centre for Family and Population Research (CFPR), showed the historical trend of a rapid decline in TFR and population ageing since the 1990s for all ethnic groups at the inaugural Conference on Singapore Families and Population Dynamics on 28 April. The event, organised by CFPR, was held in conjunction with the launch of the Centre to commemorate NUS’ 110th anniversary as well as Singapore’s 50th year of independence.

Ms Fu noted that, without any immigration, Singapore’s population will start to shrink around 2025, and the support ratio will be around 1.5 working age citizens to each senior citizen on 24 April. She stressed the need for Singapore to remain open to migration at a calibrated rate and continue to retain a strong cultural heritage and Singapore identity.

Despite the comprehensive measures and policies to encourage more children, the city state has not succeeded in raising the fertility rate, highlighted Professor of Social issues and Former Director of the J’Y Pillay Comparative Asia Research Centre at NUS.

InnovFest unleashes boundless innovations

More than 2,800 global entrepreneurs, investors, researchers and corporate leaders from around the world descended on Singapore in late April for Innovfest unbound.

The largest such tech gathering in the country in recent years, the two-day innovation conference was hosted by NUS Enterprise and AcWhite, a UK-based leading digital event creator. The event attracted participating companies spanning diverse industries with its theme of “Where Asian Innovation Meets the World”, which positioned Singapore as the hub for emerging technologies and startup opportunities.

Guest-of-Honour Dr Vivian Balakrishnan, Minister for the Environment and Water Resources and the Minister-in-charge of the Smart Nation Initiative, noted that Singapore was “part of the Digital Silk Road” and a perfect place for the prototyping and test-bidding of new products and services.

To address the country’s next phase of social development, SSR will examine complex issues such as demographic shift and growing income inequality in Singapore. The main research areas include low-wage workers and their families; children and youth from disadvantageous backgrounds; and the elderly and their service needs.

One major project which started in May is a longitudinal study of 1,500 low-income debt-laden families, in collaboration with Methodist Welfare Services, Care Corner Singapore and Thye Hua Kwan Moral Charities.

InnovFest’s networking event

Panel discussions, keynote speeches, satellite workshops, forums and pitching sessions covered a range of issues relevant to aspiring and practising entrepreneurs. They focused on assisting digital companies within Asia scale up and become successful in global markets. More than 250 start-ups and 120 speakers from organisations such as Johnson & Johnson, Thermo Fisher, Google and Twitter took part in the activities.

Two new NUS initiatives supporting start-ups were launched at the event. One is the four-month Modern Ageing programme offered by NUS Enterprise and non-profit think tank Access Health International to help entrepreneurs develop and validate business ideas addressing needs of the elderly. The other, NUS IP, will enable start-ups firms to easily access and adopt university technologies for commercialisation.

NUS showcased its expertise at the exhibition through technology-specific pavilions organised around the clusters of Modern Ageing, Sprotomics, Medical Devices, Energy and Environment.

The current Associate of the Australiasian Demographic and Social Research Institute at the Australian National University and the Asia Research Centre, Murdoch University, said studies by the Institute of Policy Studies at NUS found that reasons for the low TFR include the growing number of single women, a dual-income model as well as non-flexible hours in workplaces that do not cater for child-rearing needs.

Immigration contributes to population increase but requires a fine balancing act of ensuring that the non-citizen population does not increase beyond the limits of public tolerance, and having a workforce that achieves economic targets, Prof Jones noted.

Prof Yeung also presented figures of Singapore’s increasingly high inter-ethnic marriages, about a fifth of all marriages in 2013. In recent years, about 40 per cent of marriages involve a foreign partner, and 30 per cent of newborn children have a foreign parent. Such cross-cultural marriages present both opportunities and challenges for Singapore, she said.

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New Centre for family and population issues

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Microbes clean up urban waterways

A seven-year study has unveiled nature’s secret helpers for mopping up pollutants in raw water — tiny microbes.

Scientists from the NUS Environmental Research Institute (NERI) and the Singapore Centre for Environmental Life Sciences Engineering (SCELSE) — a joint Research Centre of Excellence between NUS and Nanyang Technological University — observed that raw water pollutants in drains and waterways are being neutralised by communities of microorganisms.

The finding shows the potential of employing such microbes in cleaning up Singapore’s water network as well as acting as raw water quality indicators. Furthermore, this pollutant-removal ability could be tapped for treating raw water before it is processed as well as for employing such microbes in cleaning up urban waterways.

The research framework created in this study could be easily adopted by other cities. The International World Harbour Project, a network of researchers and managers that aims to bring the best practices in understanding and managing ecological pressures in harbours worldwide, is currently implementing the framework.

The scientists also confirmed that aluminium, copper and potassium contributed to the microbes’ ‘cleaning’ properties. When microbial communities in residential and industrial watershed systems were compared, the two communities demonstrated different functions. This implies that various land use could influence the types of microorganisms present and their capabilities.

First author Dr Gourvendu Saxena, Research Fellow at NERI and SCELSE, highlighted that these marker-based microbial functions provide higher resolving power than existing chemical markers.

Project Leader Associate Professor Sarkey Swarnaj, Deputy Director of NERI and Research Director at SCELSE, said: “With the support of government administrators, environmental sustainability could be achieved naturally through science.”

NUS researchers published an inaugural study demonstrating that Muslim diabetics, whose medication was adjusted during Ramadan, benefitted from improved sugar levels. This significant finding spells good news for Muslim diabetics keen to fast during Ramadan.

Principal Investigator Associate Professor Joyce Lee and graduate student Melanie Saw from the Department of Pharmacy observed 153 Muslim patients with type 2 diabetes before, during and after Ramadan. They noted marked improvements in the glucose levels of patients who made adjustments to their medications, helped by their healthcare providers, during the fasting month.

With these encouraging results, Assoc Prof Lee suggested that patients should talk to their pharmacist or doctor about tweaking the dosage of antidiabetic medicines before fasting during Ramadan, so as to practice safe fasting. She added that diabetes, which sees abnormal peaks in glucose levels, can bring about glucose toxicity that can hurt vital organs such as heart and kidneys.

Published in the international Journal of Endocrinology, this study was undertaken following an earlier analysis by Assoc Prof Lee and Melanie on 5,172 Malay patients with type 2 diabetes. The previous study examined the patients’ blood glucose levels, among other markers, and dosage of antidiabetic medication. The investigators found that changes in blood glucose during Ramadan appeared to be related to patients’ glycaemic control prior to Ramadan.

The team plans to develop a standardised dose adjustment guide for healthcare providers.
Tee off to Make A Difference

Natural History Museum builds on pioneers’ work

The Curator of UM’s Muzium Zoologi was happily surprised by the old collection’s core-minded indians. He believes the dinosaur fossils will attract school groups from the region, and proposed making a museum visit part of school outings.

Another pioneer who enjoyed a strong affinity with the old Raffles Museum is internationally acclaimed ornithologist Dr David Wells. The regular scientific user of the Zoological Reference Collection during his three-decade academic career with UM was quickly mobilised when the museum’s fate became uncertain in the early 1970s. With Mrs Yang Choo Man — the then custodian of the collections — he worked dauntlessly to save and safeguard the valuable materials.

Dr Wells was gratified to see the “unbelievable outcome” for the collection. He noted that addition to key donors, many Singaporeans and supporters also pledged their support through a small-donation scheme, making LKCNHM an unprecedented case compared to other museums which are largely backed by the state or major donors.

The three Museum stalwarts unanimously regarded education as the direction to go for LKCNHM.

The newly opened natural history museum in Singapore has much of its collection, which stretches back to the 19th century, linked to three dedicated naturalists.

Dr Lim Boo Liat, Ds Sasekumar and Dr David Wells contributed to and protected the precious Zoological Reference Collection which formed the core of the Lee Kong Chian Natural History Museum (LKCNHM) at NUS.

Furthermore, he observed that even with considerable finances like those provided in developed countries, such a museum could not possibly be completed “within the tight timeframe”.

Dr Lim believes the success stems from the commitment and leadership of the people involved. “They are all gung ho and pushed it out…without any additional incentives.” Staff expertise, and the extra time and sweat put in were other wiring factors, he added.

The Museum is a reflection of human history.

— Dr Lim Boo Liat, a stalwart of the Museum

Dr Lim, a winner of the Malaysian Merdeka Prize for his decades of contribution to biodiversity research in Malaysia, has been working with the Museum staff since the early 1980s. He marvelled at the tremendous dedication and efforts that went into setting up LKCNHM. The first such venture in Singapore proved that, given adequate funds and proper management, “you can build up a museum which costs three times the amount you are given”, he said.

Malaysia’s top mangrove biologist Dr Sasekumar, a Research Fellow at the University of Malaya (UM) in Kuala Lumpur, has been a close collaborator of the former NUS Department of Zoology and the Museum since 1967. He provided significant collections and materials, as well as advice in identifying mangrove animal species, to help build up the old Raffles Museum, and later, the Zoological Reference Collection. All these endeavours paved the way for the Museum to transform into a hub for biodiversity research in Southeast Asia.

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The Lee Kong Chian Natural History Museum (LKCNHM) at NUS, ensconced in a vegetation-covered “boulder”, houses a treasure trove of Southeast Asian natural heritage.

The seven-storey Museum holds more than 560,000 catalogued lots and over a million specimens from the region. Some 2,000 items on display include those from the world-renowned Zoological Reference Collection — originally the Raffles Collection — which goes back to 1849. Flora from the NUS Herbarium founded in 1955, which documents more than 33,000 plant specimens, is also on show.

The main gallery, comprising 15 zones, traces the history of life on earth, among them green plants, fungi, molluscs, arthropods, birds and mammals. Other sections demonstrate the evolution of terrestrial vertebrates from “fish” and why birds are surviving “dinosaurs”.

Besides the three sauropod dinosaurs dominating the central atrium, other interesting exhibits vie for attention:

- A long 2.7m tusk of a narwhal, often called the unicorn of the sea, which was owned by businessman “Whampoa” Hoo Ah Kay in the 1800s. The pioneer received the rare 200-year-old tusk from the Russian government when he was consul to Russia.
- A meteorite rock, estimated to have fallen to Earth 4,500 years ago. Visitors can feel the texture of this 4,500-million-year-old alien rock from outer space and imagine it travelling through the Solar System.
- Another touchable exhibit, a fossilised dinosaur femur dating back about 67 million years ago to the late Cretaceous period.
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The heritage zone on the mezzanine floor relates the history of the Raffles Museum and LKCNHM.

Taking the spotlight on a wall is a Leatherback Sea Turtle, the largest living turtle species in the world. The 1.73m specimen, caught in 1883, represents the only record of the reptile in Singapore.

The “Cabinets of Curiosities” narrate Singapore’s history of biodiversity exploration, the people who helped build this, and the biological treasures garnered over 137 years. A cabinet stores an Asian Brown Flycatcher bird from the collection of Alfred Russel Wallace, the co-discoverer of the theory of evolution.

To make the Museum experience more educational, the gallery is complemented by a web-based app that allows visitors to find out more about the exhibits.