



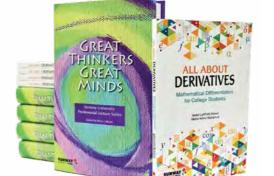
Vice-Chancellor's PREFACE

The Year in REVIEW Highlights of 2018 Achievements

elcome to this review of Sunway University's activities and achievements during 2018. Even though we are still a relatively young university, there have been many developments and indicators that we are becoming mature and sophisticated, and also achieving levels of excellence equivalent to that of institutions far older.

We launched our first massive open online courses (MOOCs), inaugurated our University Press, moved further up the QS Asia league table into the top 2%, and had two staff recognised as being amongst the most highly cited researchers in the world in their fields. We also extended our links to leading international universities to include the University of California, Berkeley, and won several national awards for our educational excellence.

We also became the first non-government linked private university in the country to achieve an international 5-star rating from QS. All of this demonstrates the excellence and drive of our staff, the commitment of our students and stakeholders and the rapid progress that we are making on many fronts. I trust that you will find this report both enlightening and inspiring.



students and an income level of RM 150 million.

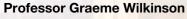


he year 2018 saw Sunway University reach new heights and take new initiatives which demonstrate and

underpin an institution of increasing national, regional and even global significance. The University continued

its growth in terms of student numbers and revenue, passing the level of 7400 total enrolled on-campus

In January we launched our very own publishing house, Sunway University Press, which aims to become a credible international publisher in both print and electronic domains to promote the best academic and non-fiction writing for both specialist and broader audiences. At the official launch event in January, two books were launched, one of which is a collection of articles based on our Professorial Lecture Series: the other a mathematics text book.



Vice-Chancellor





Early in the year we ran a one-day Strategy Workshop which comprised the Senior Management of the University, the Sunway Education Group and the Board of Directors of the University, in order to set the scene for the next phase of the University's development. The purpose of the event was to discuss overall targets for strategic objectives such as size and ranking over the period to 2025 as well as to identify key initiatives that would help make the targets achievable. This established the background for more detailed strategic planning activities to take place in 2019.



In August the University became the host for the Harvard Project for Asian and International Relations (HPAIR) Conference. With approximately 600 attendees, this five-day leading conference brought together students and thought leaders from over 60 countries to discuss themes such as energy and environmental sustainability, governance and geopolitics, social policy and justice, and technology and innovation.



service.



In 2018, the School of Science and Technology saw its inaugural cohort of graduates from the BSc (Hons) Information Systems (Business Analytics). Eleven graduates received their awards with five receiving first class honours



In 2018, an agreement was signed between the Jeffrey Cheah Foundation, the University of Oxford and Brasenose College Oxford, for the establishment of an Oxford-Jeffrey Cheah Graduate Scholarship.

The scholarship, which is in perpetuity, provides full support for one scholar every four years to enable them to undertake research for the DPhil degree. The University of Oxford and Brasenose College provide 60% of the funds, and the Jeffrey Cheah Foundation provides the remainder. Candidates for the Scholarship must be ordinarily resident in an ASEAN country, and preference is given to Malaysian residents.

In August 2018, the Scholarship was launched by HE Vicki Treadell CVO, the then British High Commissioner to Malaysia at a lunch attended by Tan Sri Dr Jeffrey Cheah AO and the first Scholar, Ms Vivien Ho Wei Wen.

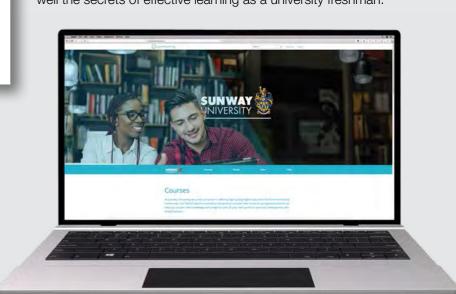
Vivien, aged 20, was born in Ipoh, and received her early education at SJKC Ave Maria primary and secondary schools in Ipoh before being selected to attend PERMATApintar National Gifted Centre. She was then admitted to the University of California at Los Angeles (UCLA), where she graduated summa cum laude with a CGPA of 3.921 and Dean's Honors list.

Vivien took up residence in Brasenose College in October 2018 and as part of the DPhil degree programme, is undertaking first year rotations in the MRC Weatherall Institute of Molecular Medicine.





During the year, we took our very first steps as an institution into global online learning by launching our very first massive open online courses (MOOCs). Four courses were launched which between them brought in over 2000 learners during the year from as far away as Canada and the USA. The MOOCs included topics on augmented and virtual reality; genes and healthcare; beginners guide to coffee; as well the secrets of effective learning as a university freshman.



QS Asia ranking

One of the most significant achievements of the year was climbing in the QS Asia ranking to position 232, up from 261-270 in the previous year. The announcement for the QS Asia 2019 ranking came in October placing the University in the top 2% in Asia.



In September, the University signed a partnership agreement with the Sutardja Center for Entrepreneurship and Technology at the University of California, Berkeley. The partnership will support the University's efforts in entrepreneurship training and education giving access to experts at Berkeley and opportunities for staff and student exchanges. This partnership is a welcome new addition to the increasing links being made with globally leading universities.



The rise was mainly due to improvements in employer reputation, research papers produced per faculty member, international staff, and inbound/outbound exchange students. The improvement demonstrates the concerted advances made in research; recruitment of the best staff globally, and forging new relationships with overseas universities to enable student exchanges to take place



Also in September, an agreement was signed between the Jeffrey Cheah Foundation and the Master and Fellows of Gonville and Caius College, University of Cambridge. The agreement, which is in perpetuity, allows two members of the academic staff of the Sunway Education Group every year to reside in Gonville and Caius for a period of four weeks to undertake research and scholarly study.

Gonville and Caius, founded in 1348, is one of the most distinguished of Cambridge's Colleges. Members of the College have won 14 Nobel Prizes, including Francis Crick, who, with James Watson, discovered the structure of DNA, James Chadwick, discoverer of the neutron and Howard Florey, co-discoverer of penicillin.





Our ISO9001 quality recognition was renewed in October and extended in scope to include our research provision for the first time. Our ISO9001 certification thus came to include all processes related to our core activity involving higher education (i.e. teaching and research-related activities).



In 2018 Sir Leszek Borysiewicz FRS, Chairman of Cancer Research UK (CRUK) and Emeritus Vice-Chancellor of the University of Cambridge, was appointed as Honorary Jeffrey Cheah Distinguished Professor.

Professor Borysiewicz served as Vice-Chancellor of the University of Cambridge from 2010 until 2017, and oversaw the development of the Cambridge-Sunway Collaboration, which culminated in the signing of a Collaboration Agreement in October 2017.

Sir Leszek's many distinguished appointments Include Chief Executive of the UK Medical Research Council, Deputy Rector of Imperial College, London, and Professor of Medicine, University of Wales College of Medicine. He has also served as Governor of the Wellcome Trust, and Trustee of the Nuffield Trust.

Sir Leszek has visited Sunway on two occasions. First in April 2017, when he was Vice-Chancellor of the University of Cambridge where he delivered a Jeffrey Cheah Distinguished Speakers Series Lecture on "Universities and their role in an era of global challenges", and once again in October 2018, this time as Jeffrey Cheah Distinguished Professor and Chairman of CRUK. His Jeffrey Cheah Distinguished Speakers Series lecture this time was on "Cancer and the Life Sciences: The Next Frontiers".

In Sunway, Sir Leszek's role is to assist the institution in building collaborative links between the UK and Malaysia in biomedical sciences, and to advise senior biomedical researchers in Sunway University and the Jeffrey Cheah School of Medicine and Health Sciences on strategy and direction.



Also in October, the Sunway iLabs Makerspace was launched by YBhg Datin Paduka Ir Dr Siti Hamisah Binti Tapsir, the Director General of Higher Education, Ministry of Education, in the presence of the Chancellor, Tan Sri Dato' Seri Dr Jeffrey Cheah Ao. Equipped with 3D printers, laser cutters and other tools to build virtual reality (VR), augmented reality (AR), artificial intelligence (AI) and robotic applications, the iLabs Makerspace provides a facility for students and budding entrepreneurs to experiment with the fabrication of devices that have commercial potential with a particular emphasis on the Internet of Things (IOT).

Sunway University Annual Review 2018

In October the University also held a major event to celebrate the anniversary of the founding of the United Nations' Sustainable Development Goals (SDGs). A total of 8165 individuals came together on campus and around Sunway City to join hands and pledge their



commitment to the SDGs. The number 8165 represents the distance from Sunway to the UN Headquarters in New York in nautical miles. Apart from this special celebratory event, the University started several initiatives during the year to make the campus more sustainable such as banning single-use plastic water bottles and plastic drinking straws, working closely with the various retail outlets on campus to achieve this.





During the year, the University underwent a renewed assessment for the QS Stars University ratings. In November we received an overall rating of five-stars together with five-star scores in five categories. This was a significant improvement from the previous assessment in 2015 where we scored a four-star rating overall and five-star scores in three categories. The five-star component scores covered: teaching, employability, facilities, inclusiveness and social responsibility, with the latter two being improved over the previous rating. These scores demonstrate our overall effectiveness as a comprehensive university offering high quality services in the aspects that matter most to students. Sunway University is the first non-government linked private university in Malaysia to achieve an overall five-star rating from QS, confirming our position as a leader in the private higher education sector in the country.

In early December, the University hosted the inaugural ASEAN Emerging Researchers Conference organised in collaboration with Wolfson College (University of Cambridge), the Cambridge University Malaysia Society, and the Young Scientists Network of Malaysia. The event brought together over 300 young emerging researchers from across ASEAN and from many disciplines sharing their ideas and developments through oral presentations, posters, pitching sessions and workshops, with the objective of fostering interdisciplinary collaboration on major research challenges. The opening address was given by Professor Jane Clarke, the President of Wolfson College. The conference included a Cambridge style formal hall gala dinner.







Also in October, the University was fortunate to win the Putra Brand Gold award for the first time, improving over the bronze and silver awards received in 2016 and 2017 respectively. The Putra Brand Awards, based on rigorous consumer brand awareness research, shows the extent to which the University has now become a leading brand name in higher education in Malaysia.



Also in December, the University signed a landmark Memorandum of Understanding with Universiti Putra Malaysia, leading to close collaboration on research and the hosting of joint PhD students. This collaboration with one of Malaysia's leading research universities will help us develop our strong collaboration with the public institutions in order to boost research excellence to the benefit of both the public and private sectors.

University GOVERNANCE

Board of Directors

- Tan Sri Dato' Seri Dr Jeffrey Cheah Fook Ling Ao Chairman
- ► Tan Sri Dato' (Dr) R.V. Navaratnam
- ► Tan Sri Dato' Dr Lin See Yan
- ► Tan Sri Datuk Seri Razman M Hashim
- Professor Tan Sri Dr Ghauth Jasmon
- Dato' Chew Chee Kin
- Dato' Dr Goh Cheng Teik
- Dato' Sri Idris Jala
- Dato' Dr Lee Weng Keng
- Dr Elizabeth Lee

- Professor Graeme Wilkinson
- Professor Jarlath Ronayne
- Professor Dato' Dr Woo Wing Thye
- Ms Sarena Cheah Yean Tih
 Alternate Director to
 Tan Sri Dato' Seri Dr Jeffrey Cheah Fook Ling AO

Academic Senate

- Professor Graeme Wilkinson Chair
- Professor Abhimanyu Veerakumarasivam
- Professor Chaiporn Vithessonthi
- Professor Datin Dr Chia Yook Chin
- Professor Dato' Dr Woo Wing Thye
- Professor David Bradley
- Professor Donald Bowyer
- Professor Edward Teikink
- Professor Hew Gill
- Professor Ho Chee Kit
- Professor Hwang Ha Jin
- Professor Jarlath Ronayne
- Professor Jeff Tan Kuan Onn
- Professor Lee Chien Sing
- Professor Leong Choon Heng
- Professor Marcus Stephenson
- Professor Mathew Sansom
- Professor Mayeen Uddin Khandaker
- Professor Michael Furmston
- Professor Mohamed Ariff Syed Mohamed
- Professor Mohammad Khalid
- Professor Mohammed Kheireddine Aroua

- Professor Naveed Ahmed Khan
- Professor Nigel Marsh
- Professor Peh Suat Cheng
- Professor Peter Heard
- Professor Poh Chit Laa
- Professor Pua Eng Chong
- Professor Ruqaiyyah Bano Siddiqui
- Professor Sabine Chaouche
- Professor Saidur Rahman
- Professor Sanjaya Singh Gaur
- Professor Serguei Demidenko
- Professor Shandre Mugan Thangavelu
- Professor Stephen Hall
- Professor Steve Williams
- Professor Susela Devi K.Suppiah
- Professor Wong Koi Nyen
- Professor Yeah Kim Leng
- Professor Yuka Fujimoto
- Professor Zaharin Yusoff

Ex-Officio

- Dr Khatijah Khalid
- Ms Wong Sook Jean

By Invitation

- Dr Elizabeth Lee
- Associate Professor Dr Alvin Ng Lai Oon
- Associate Professor Dr Foo Yin Fah
- Associate Professor Dr Lau Sian Lun
- Mr Augustine Wong Chung Howe
- Dato' Tan Yoke Hwa
- Dr Michael M. Dent
- Dr Sim Tze Ying

- Dr Thomas Thornborrow
- Ms Izah Isa
- Ms Monica Foong Sui Oi
- Mr Paul Linus Andrews
- Ms Siti Fariza Mohd Dahlan
- Mr Stephen Thomas Homer (postgraduate student representative)
- Mr Mohamed Janaanu Hassan Shareef (undergraduate student representative)

University Management Committee

- Professor Graeme Wilkinson (Chair)
- Dr Elizabeth Lee (Alternate Chair)
- Professor Pua Eng Chong
- Professor Peter Heard
- Professor Donald Bowyer
- ► Professor Ho Chee Kit
- Professor Peh Suat Cheng
- Froiessor Ferrouat Orien
- Professor Stephen Hall
- Professor Steve Williams
- Professor Marcus Stephenson
- Professor Serguei Demidenko
- Dr Khatijah Khalid
- Ms Betty Lai
- Ms Jerrine Koay
- Ms Lee Siok Ping
- Ms Lim Shui Chin
- Mr Ng Kok Cheng
- Mr Patrick McVeigh

Ms Siti Fariza Mohd Dahlan

- Ms Preeti Nair
- Mr Tony Lee
- Ms Wong Lei Lei

Vice-Chancellor

Senior Executive Director

Deputy Vice-Chancellor

Provost

Dean - School of Arts

Dean - School of Mathematical Sciences

Dean - School of Healthcare and Medical Sciences

Dean - School of Interdisciplinary Studies

Dean - Sunway University Business School

Dean - School of Hospitality

Dean - School of Science and Technology

Group Registrar

Chief Resources Officer

Director - Public Relations

Director - Student LIFE

Director - International Office and Special Projects

Chief Financial Officer

Director - Branding & Corporate Communications

Director - Strategy and Planning

Director - University Services

Director - Information Technology Services

Director - Marketing

STUDENT COUNCIL

he Sunway University Student Council is the official body that represents the Sunway University student community and governs the Sunway University Student Association. The Vice-Chancellor meets the Student Council thrice annually, where issues relating to student welfare are discussed. Acting as the bridge between students and the University management, we ensure that student voices are heard, and their interests and causes represented. Additionally, we aim to work closer with other student bodies on campus, in order to empower them as well as to foster holistic education while building future leaders.

SUNWAY UNIVERSITY

student council

In 2018, our aim and commitment was to create the best campus experience possible for the student community. Instead of focusing on student events alone, we advocated for better representation of students in management activities and in doing so, opened our doors for better engagement and collaboration with the University management.

Mohamed Janaanu Hassan Shareef

President Student Council 2018/2019



(from left to right): Jaden Lu Jie Er (External Relations Director), Eric Ngu Chee Hong (Student Relations Director), Joel Loh Hwei Yung (Secretary), Choong Xin Yi (Vice President), Joshua Yee (Advisor), Mohamed Janaanu Hassan (President), Tan Wei Sheng (Treasurer), Lee Zhen Hen (Academics Affair Director), Darius Law Hoong Sheng (Extra-Curricular Director), Sam Ken- Ji (Public Relations Director).

Academic DEVELOPMENTS



Academic Standards

he year 2018 has been a significant year for Sunway University in the achievement of a number of strategic milestones. This is also reflected in the University's continuous endeavour to provide quality higher education to its students. This year, Sunway University set out its updated strategic priorities for assurance of academic standards and quality that include: improvement of staff engagement in quality assurance, and enhancement of academic quality assurance processes and procedures. These initiatives are to assure that the standards and quality of the awards and of the educational experience enjoyed by our students are better monitored and improved upon.

The following are some highlights of quality assurance and quality enhancement activities in 2018:

Programme Development and Accreditation

As the University becomes more research focused, 2018 saw an expansion in the University's postgraduate research degrees' portfolio. A total of three postgraduate research degree programmes received accreditation and was approved by Ministry of Higher Education: PhD in Psychology, PhD in Mathematical Sciences and Masters in Actuarial Science.

Sunway University has also begun to offer dual award for its doctoral programme, the first being a dual PhD in Biology with the Institut National Polytechnique de Toulouse (INPT), France. This arrangement provides students with international research experience and the opportunity to develop long-term collaboration.

Academic Developments (continued)

Programme Monitoring and Review

The University constantly reviews all its programme on an annual basis through the Annual Teaching Review (ATR). The ATR report takes into consideration feedback from students and various stakeholders as well as programme performance by analysing the assessment results. Actions for improvement are closely monitored and reviewed for its effectiveness.

In addition to ATR, five programmes underwent the Periodic Quality Review in 2018 which is conducted every three to four years for a programme and looks at not just the quality and relevancy of the curriculum but also the quality of programme governance and management.

In 2018, eight programmes successfully obtained full accreditation status from the Malaysian Qualifications Agency.

Enhancement of Quality Management System (QMS)

In 2017, the University became an ISO 9001:2015 certified organisation which validates that the University's quality management system for higher education provision meets international standards and stands as a testament to our integrity and commitment in delivering quality higher education provision to our students. In 2018, the University extended the scope of provision to include Research Management. The research management processes include management of grant applications and expenditure and monitoring of research projects and research outputs. With this, Sunway University is ISO 9001:2015 certified for Provision of Higher Education and Research Management.





Enhancement of Staff Engagement in Quality Assurance

In 2018, further initiatives were undertaken to increase productivity and efficacy of the academic community in monitoring, maintenance and enhancement of academic quality. One of those initiatives included the appointment of quality assurance personnel at the School level to further assist the departments in maintaining standards and quality of programmes offered. Internal Quality Auditors trainings were conducted for both academic and administrative staff to equip them with the ability to implement the requirements of the ISO 9001:2015 standards and to review the University Quality Management System (QMS) based on those standards and requirements.

Sunway University Curriculum Framework

Sunway University approved a university-wide Curriculum Framework for undergraduate programmes in 2018 with the aim to:

- Enable and ensure the development of holistic and balanced graduates who possess core graduate attributes that reflect the distinctive Sunway University values and ethos.
- Achieve a common sense of purpose and identity amidst the rich diversity of disciplinary and professional areas of expertise.
- Enable and support the development of undergraduate programmes that exhibit evidence-informed and creative approaches to curriculum design and delivery that enthuse, engage and motivate staff and students.

The Curriculum Framework will come into implementation in 2019 for new programmes, and existing programmes will adopt the curriculum framework in phases.

In assuring academic quality, Sunway University takes into account the context of the changing higher education environment and the University's strategic directions. With the University Vision always in sight, the pursuit is for continuous quality improvement in higher education studies and research provision.

Academic Enhancement

n 2018, the Academic Enhancement Division (AED) increased its strength of support for academic development and academic staff professional development, in line with Sunway University's aim to provide an outstanding learning experience. Using data derived from a survey of professional development needs among academic staff, and student feedback on teaching and learning, AED ensured that all initiatives were relevant, practical and applicable. Some existing initiatives were strengthened, and new initiatives were introduced in order to improve the quality of curriculum, teaching, learning and assessment practices.

AED also ensured that all of its continuous development programmes were anchored by pedagogical principles and current research findings on teaching in higher education. The results were that all the programmes received high rating and very positive feedback from participants.

Some of the programmes are as indicated below:

- Twenty-seven professional development programmes were offered, in the form of trainings, workshops and sharing sessions. These programmes focused on four main areas that had been earlier identified by academic staff as areas in which support would help enhance their academic practices.
- Consultation services were offered for all areas of academic development, for departments or individual academic staff undertaking quality review initiatives. Through this new initiative, AED was able to provide support on areas such as blended learning, improvement of curriculum design and assessment design, and assurance of learning. Such support was reviewed positively in relation to departmental efforts to meet accreditation and quality needs, respond to student feedback, or ensure highly engaging learning experience for students.
- Classroom Action Research Team, formed in 2017 with the aim of supporting academic staff in developing their research skills and research on teaching and learning, demonstrated positive outcomes through the publication of several Scopus-indexed papers in 2018. Given the success of this initiative, a new group was formed in 2018 to cater to a growing interest in this area.
- AED continued to co-deliver the Lancaster University's Postgraduate Certificate of Academic Practice (PGCAP International). In August 2018, 18 academic staff enrolled onto the programme, bringing the total number of active academic staff on the programme to 29. To date, 61 have graduated from this programme, which was first offered in 2007.
- The 7th Lancaster University Educational Programme took place from 5th to 9th March 2018 at Lancaster University. In total, 16 academic staff and three staff from the University's central administrative services participated in the programme which focused on assessment and feedback. The focus was in line with institutional efforts to ensure that assessment and feedback strategies were inclusive and effective in supporting students' development and achievement. Participants worked on strategies for good assessment and feedback practices within their own subjects and programmes which included (i) consideration of students' overall learning experience, (ii) prioritising assessment tasks with high learning value, (iii) integrating non-graded, formative assessments as part of the process, and (iv) ensuring timely, concrete and supportive feedback.



Learning Programme (PALP)

he PALP supported students who found first and second year subjects challenging. In 2018, the programme grew in strength and continued to expand the number of peer leaders providing support to students who found the transition to higher education more challenging than others. For example, the number of peer leaders for the Business School increased from 40 to 69 in March, 2018, compared to the same period the previous year, while the number of mentees who benefited from the programme increased from 395 to 630 for the same period. Both peer leaders and mentees reported high levels of satisfaction with the programme.

Peer leader satisfaction survey indicated that peer leaders improved their own knowledge and skills of the subject area they were mentoring on and improved critical employable skills including communication and presentation skills, problem solving, time management and working with different people. Survey of mentees of the programme indicated that mentees found the programme helped them gain better understanding of their subjects, cope with difficulties and provide a platform for sharing concerns. PALP support was extended to the School of Hospitality in August 2018.

Research HIGHLIGHTS

Sunway University continues to grow in its research endeavours, and 2018 witnessed a growth in research output by 55% and citations by 83%. In 2018, there was a significant increase in external funding by 216% in comparison to the previous year. A total amount exceeding RM 2 million of external funding was secured out of which RM876,300 came from the Ministry of Education under the Fundamental Research Grant Scheme (FRGS) awarded to six of our academic staff. Other notable successes for external funding was Professor Sabine Chaouche who managed to secure funding from Sunway Management Sdn Bhd in the amount of RM720,000 for her project "Sunway Trilogy," and also Professor Glenda Crosling who was awarded RM141,854 by British Council for her project "The Shape of Global Higher Education Research Series."



Professor Mohamed Kheireddine Aroua's (middle) "Self-Cleaning Ultrafiltration System Producing Clean Water" project.

There were also outstanding achievements made by our academic staff as a result of their research initiatives. Professor Mohamed Kheireddine Aroua, Head of Research Centre for Carbon Dioxide Capture and Utilisation, won the "Gold Award" for the participation in the International Research Innovation Invention Solution Exposition (IRIISE) with the project "Self-Cleaning Solar Powered Mobile Ultrafiltration System for Clean Water Supply." He then went on to win the "IChemE 2018 Global Award" in the Water Category for the project entitled "Self-Cleaning Ultrafiltration System Producing Clean Water." The project was conducted in collaboration with University of Malaya, and the award recognises the best project or process to demonstrate engineering excellence in water use, clean-up and re-use, with a particular emphasis on reducing environmental impact while preserving commercial viability. Professor Mohamed Kheireddine Aroua also won the Highly Cited Researcher Award in 2018, placing him in the top 1% for citations in his field.

Another notable achievement was made by Associate Professor Dr Gopalasamy Reuben Clement who through his project "Harimau Selamanya in Rimba", in collaboration with Terengganu state government, two United States based organisations, Rainforest Trust and Panthera, successfully protected 10,386 hectares of Terengganu state's land formerly slated for logging, thus preserving Terengganu state's natural heritage by creating two new state parks in the Kenyir and Setiu areas. Research achievements such as these reflect Sunway University's commitment towards achieving the UN Sustainable Development Goals.



Delegates at the Harvard Project for Asian and International Relations (HPAIR) Asia Conference 2018, Sunway University, 16 to 20 August 2018.

There were a series of activities and events that further enhanced Sunway University's research reputation locally and internationally. Amongst those events were the Harvard Project for Asian and International Relations (HPAIR). Sunway University became the official partner university of the HPAIR 2018 which hosts Harvard University's largest annual student conference in the Asia-Pacific region. Delegates from top universities around the world attended the HPAIR to learn from influential researchers speaking about Art, Media, & Culture, Energy & Environmental Sustainability, Governance & Geopolitics, World Markets & Economy, Social Policy & Justice, and Technology & Innovation. In August, the School of Mathematical Sciences, in partnership with Malaysia Institute of Statistics held the 4th International Statistical Conference. The conference provided the platform for researchers, practitioners and students from both public and private sectors to share their knowledge and findings in the field.



Research collaboration is important because it not only accelerates the progress in research through sharing of knowledge, resources and innovation, but it also enhances the quality of research and extends the repertoire of the partners. In 2018, Sunway University collaborated with various institutions and organisations locally and internationally on a number of research projects. An important collaboration with Brigham and Women's Hospital (Harvard Medical School) was established to focus on developing novel cancer therapy targeting drug-resistant cancer cells. Sunway University co-investigators for this project are Professor Jeff Tan Kuan Onn and Distinguished Professor Poh Chit Laa. Other research collaborations with our long standing partner Lancaster University included eight interdisciplinary and cross border projects aimed at securing grants awarded by the UK Global Challenge Research Fund (GCRF). Sunway University is also actively engaging public universities on research collaborations and are working on research projects with UITM, USM. UM and UMP.

In its aim to further propel innovation and commercialisation within the University, Sunway Research and Development Sdn Bhd was established during the year. This wholly-owned entity of the University was set-up to facilitate industry-university collaborations through contract research and consultancy services.

In October, the iLabs Makerspace was launched, bringing together budding entrepreneurs, industry leaders, and investors from Asia and the United States to explore opportunities to catalyse innovation and digital transformation in Malaysia. The Makerspace aims to support and foster Sunway University's entrepreneurial ecosystem through self-initiated and collaborative learning that provides hands-on experiences to develop product prototypes and to test the functionality and effects of their creations on end users.



Director General of Higher Education, YBhg Datin Paduka Ir Dr Siti Hamisah binti Tapsir and Founding Trustee of Jeffrey Cheah Foundation, Tan Sri Dr Jeffrey Cheah AO launched Sunway iLabs Makerspace with Director of Sunway iLabs, Matt van Leeuwen.

External Research Grants awarded

Principal Investigator	Title of Research	Funding Body	Amount (RM)	
Professor Sabine Chaouche	Sunway Trilogy Project	Sunway Management Sdn Bhd	720,000	
Professor Poh Chit Laa	SP40 peptide as an antiviral and its mechanism of action against EV-A71	Ministry of Education - Fundamental Research Grant Scheme	178,000	
Dr Chandrajit Lahiri	Characterization of SicA, an indispensable protein from Multidrug Resistance Salmonella sp. and its Inhibition with a novel class of phenaleno-furanone compounds	Ministry of Education - Fundamental Research Grant Scheme	162,800	
Dr Babu Ramanathan	Evaluation of T-cell responses in dengue- infected Malaysian population	Ministry of Education - Fundamental Research Grant Scheme	146,500	
Naveed Ahmed Khan polluted environments are a potential Fundame		Ministry of Education - Fundamental Research Grant Scheme	143,000	
Professor Glenda Crosling	The Shape of Global Higher Education Research Series	British Council	141,854	
Associate Professor Dr Hwang Jung Shan	A study on the induction of innate immune response by cnidarian alpha-pore forming toxins HALT1 and Stll on immune cell lines and C. elegans	Ministry of Education - Fundamental Research Grant Scheme	138,000	
Professor Ruqaiyyah Siddiqui	Targeted development of anti-Acanthamoebic contact lens disinfectants	Ministry of Education - Fundamental Research Grant Scheme	108,000	
Professor Abhimanyu Veerakumarasivam	DIY Biology: Landscape & Opportunities	Volkswagen Foundation	94,796	
Dr Tan Ai Ling	Study on Business Events Economic Value 2018	Malaysia Convention & Exhibition Bureau (MyCEB)	36,428	
Isabel Yee PinnTsin	Design of a live attenuated vaccine (LAV) for the prevention of severe hand, foot and mouth disease (HFMD) caused by Enterovirus 71 (EV-A71)	nd, foot		
Dr Yow Yoon Yen	Distribution of two highly invasive species of Pomacea in Peninsular Malaysia and potential effects on the species diversity of native gastropods	Wildlife Reserve Singapore	26,195	
Dr Mayco Axel Santaella	Malaysia National Day Production	Sunway Berhad	20,000	



External Research Grants awarded (continued)

Principal Investigator	Title of Research	Funding Body	Amount (RM)
Associate Professor Dr Yap Kian Meng	Development of E-Commerce Website for Signal and Networking and Networking Test Instruments	SoLip System Sdn Bhd	5,507
Associate Professor Dr Yap Kian Meng	Development of Smart Wall Switch application – Phase 1	Deng Kai Sdn Bhd	5,057
Associate Professor Dr Yap Kian Meng	Family Ancestry Management Application	HKCNET Sdn Bhd	3,985

Lancaster University Seed Corn funding

Principal Investigator	Title of Research	Amount (GBP)
Professor Harold Thwaites	Understanding Obesity in our City (Unpacking the complexity of urban obesity in Malaysia)	5,000
Dr Lau Sian Lun	Sian Lun Framework for resilience Assessment and Measurement (FRAME) (Developing a scalable framework for community resilience management in urban areas under nominal & crisis conditions)	
Dr Lin Mei Hua	Quality Education for and on Sustainability (Creating sustainability education to support community and individual actions)	5,000
Professor Mohamed Kheireddine Aroua	Sustainable energy Model for Smart Cities (Understanding the barriers to deployment of and decision making around sustainable energy systems for smart cities)	5,000
Professor Poh Chit Laa	Sustainable Cities without Dengue (Creating more effective mapping, prevention and control strategies for Dengue in urban areas)	5,000
Professor Yeah Kim Leng	3 (DI)s in SEA regions. (Disruptive Digital Drivers for Industrial Innovation & Infrastructure) Economic (firm & region growth), Environmental (circular economy & resource efficient) & Socio Cultural (Meaningful livelihoods, locally 'appropriate' innnovation)	5,000
Dr Yong Min Hooi	ImaginAging (Developing 'Ageing well' policies with direct input from citizens)	5,000

Internal Research Grants awarded

Principal Investigator	Title of Research	School	Amount (RM)
Dr Abdul Khaliq Rasheed	Development of world's first 2D-hybrid nanoparticle-based nanolubricant for marine engine applications	Science and Technology	40,000
Dr Babu Ramanathan	Investigation of cellular immune responses in humans against dengue virus	Science and Technology	48,500
Associate Professor Dr Chan Nee Nee	Investigating intercultural competence and internet memes	Arts	13,876
Dr Chandrajit Lahiri	Exploring the antivirulence potential of shrimp hemolymph against typhoid, dengue and HFM-disease causing pathogens	Science and Technology	47,000
Associate Professor Dr Cheng Boon Liat	Antecedents of loyalty and propensity to switch in the high volume - low value service context	Business	21,136
Dr Cheong Huey Tyng	Natural convection in porous enclosures	Mathematical Sciences	13,672
Dr Chook Jack Bee	Genetic variations of hepatitis B virus associated with viral resurgence in a cohort	Healthcare and Medical Sciences	48,000
Dr Clarissa Lee Ai Ling	Imaginaging: Speculative design as applied research methodology on aging in the city	Interdisciplinary Studies	10,000
Dr Davannendran Chandran	Investigation on the effects of graphene Science and Technology nanoparticle as biodiesel-diesel fuel blend additive for improved combustion efficiency		40,000
Professor David Andrew Bradley	Molecular and cellular responses in tumours and normal cells exposed	Healthcare and Medical Sciences	40,300
Associate Professor Dr George John Hess Jr	Produce and distribute album of original compositions	Arts	12,375
Associate Professor Dr Hwang Jung Shan	Association of Methotrexate Pathway Gene Polymorphisms with Methotrexate Efficacy and Toxicity in Malaysian Patients with Rheumatoid Arthritis	Healthcare and Medical Sciences	50,000
Dr Izian Idris	Cheating retailers: The role of consumer emotions and values	Business	19,022
Dr Jactty Chew	Comparative transcriptional profiling of imipenem-susceptible and resistant chyrseobacterium indologenes	Science and Technology	20,000
Dr Jane Gew Lai Ti	Development of inorganic nanoparticles-loaded antibacterial soft contact lens materials	Science and Technology	45,000



Internal Research Grants awarded (continued)

Principal Investigator	Title of Research	School	Amount (RM)
Dr Jason Lee Kian Tek	Politically connected boards and stock price crash risk: The case of Malaysia	Business	7,046
Professor Jeff Tan Kuan Onn	Characterisation of plant-based bioactives through UV-irradiated keratinocytes	Science and Technology	40,000
Dr Jesbains Kaur Sarjit Singh	Synthesis and characterization of advanced Science and Te nanocomposites phase change materials for PV and PV/T applications		40,000
Jeyanthi Amirthalingam	The Affix system of Lun Dayeh/Lun Bawang, an endangered Borneon Language	Interdisciplinary Studies	25,000
Dr Khor Kuan Siew	Employee perceived corporate citizenship: A scale development study Business		16,205
Dr Kavita Reginald	How e. coli k1 infection affects the immunological and nutritional status of the host	Science and Technology	40,000
Dr Khoo Wooi Chen	Bus travel time modelling with a new mixed autoregressive model	Mathematical Sciences	6,720
Dr Koon Vui Yee	Finalizing and reporting the evidence in newly developed CHR scale		
Dr Lai Kee Huong	A comparative study on the proposal of novel metaheuristic algorithms	Mathematical Sciences	4,200

Internal Research Grants awarded (continued)

Lee Chien Sing design case study; media richness and elaboration theories de(Gamified) Science and Technology 20,000 Dr Lim Wei Ling The effect of metallothionein in rotenone-induced Parkinson's disease: An in vitro study on human dopaminergic SH-SYSY cells Science and Technology 20,000 Masilisa Zainuddin Remaginarium - Sustainable design Arts 2,000 Associate Professor Dr Mayco Santaella Cultural sustainablity and documentation of the Javanese Shadow Puppet (Wayang Kulit Jawa) Heritage in Johor Arts 14,700 Professor Mayeen Uddin Khandaker Production of no carrier added new emerging PET radionuclides for medical applications Business 50,000 Professor Mohamed Ariff Syed Mohamed Money supply nexus to banking liquidity and asset pricining Business 28,181 Dr Mohammad Jasim Uddin Exchange rate instability: new measures to track currency behavior of Malaysia Business 28,181 Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Por Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Business 35,226 Dr Ooi Pei Boon Online safety	Principal Investigator	Title of Research	School	Amount (RM)	
rotenone-induced Parkinson's disease: An in vitro study on human dopaminergic SH-SY6Y cells Maslisa Zainuddin Remaginarium - Sustainable design Arts 2,000 Associate Professor Cultural sustainability and documentation of the Javanese Shadow Puppet (Wayang Kulit Jawa) Heritage in Johor Professor Mayeen Uddin Khandaker Production of no carrier added new emerging Healthcare and Medical 50,000 Mayeen Uddin Khandaker Profussor Money supply nexus to banking liquidity and asset prices: A proposed advanced financial economics model for asset pricing Mohamed Ariff Syed asset prices: A proposed advanced financial economics model for asset pricing Professor Exchange rate instability: new measures to track currency behavior of Malaysia Dr Mohammad Jasim Uddin Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Professor Discovery of novel antibacterial agents Science and Technology 40,000 Professor Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Profession Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online safetro on the Malay community in Malaysia:		design case study: media richness and	Science and Technology	30,000	
Associate Professor Dr Mayco Santaella Cultural sustainability and documentation of the Javanese Shadow Puppet (Wayang Kulit Jawa) Heritage in Johor Professor Professor Money supply nexus to banking liquidity and asset prices: A proposed advanced financial economics model for asset pricing Professor Mohamed Ariff Syed Mohamed Dr Mohammad Jasim Uddin Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Aris Alleycats: A musical documentary Aris 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Dr Lim Wei Ling	rotenone-induced Parkinson's disease: An in vitro study on human dopaminergic	Science and Technology	20,000	
Dr Mayco Santaella the Javanese Shadow Puppet (Wayang Kulit Jawa) Heritage in Johor Professor Mayeen Uddin Khandaker Production of no carrier added new emerging Sciences Healthcare and Medical Sciences 50,000 Professor Mohamed Ariff Syed Mohamed Money supply nexus to banking liquidity and asset prices: A proposed advanced financial economics model for asset pricing Business 21,136 Professor Mohamed Ariff Syed Mohamed Exchange rate instability: new measures to track currency behavior of Malaysia Business 28,181 Dr Mohammad Jasim Uddin Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Business 8,632 Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Nor Hazlin Nor Salam Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Business 35,226 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Science and Technology extract by immune challenge 15,000 Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Arts Padma P	Maslisa Zainuddin	Remaginarium - Sustainable design	Arts	2,000	
Mayeen Uddin Khandaker PET radionuclides for medical applications Sciences Professor Money supply nexus to banking liquidity and asset prices: A proposed advanced financial economics model for asset pricing Business 21,136 Professor Exchange rate instability: new measures to track currency behavior of Malaysia Business 28,181 Mohamed Ariff Syed Mohamed Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Business 8,632 Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Professor Naveed Ahmed Khan Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Business 35,226 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Science and Technology extract by immune challenge 15,000 Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Healthcare and Medical Sciences 26,800 Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Arts 11,850 Dr Pauline Leong Poo		the Javanese Shadow Puppet (Wayang Kulit	Arts	14,700	
Mohamed Ariff Syed Mohamed economics model for asset pricing Professor Exchange rate instability: new measures to track currency behavior of Malaysia Dr Mohammad Jasim Uddin Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Nor Hazlin Nor Salam Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:				50,000	
Mohamed Ariff Syed Mohamed Dr Mohammad Jasim Uddin Corporate social responsibility and labor conditions in global supply chain: an exploratory investigation Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Nor Hazlin Nor Salam Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Mohamed Ariff Syed	asset prices: A proposed advanced financial	Business	21,136	
conditions in global supply chain: an exploratory investigation Professor Naveed Ahmed Khan Discovery of novel antibacterial agents Science and Technology 40,000 Nor Hazlin Nor Salam Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Mohamed Ariff Syed		Business	28,181	
Nor Hazlin Nor Salam Alleycats: A musical documentary Arts 2,500 Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Arts 11,850 Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Dr Mohammad Jasim Uddin	conditions in global supply chain:	Business	8,632	
Dr Nur Ain Shahrier Analysing the impact of different streams of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Awareness, reception and impact of online satire on the Malay community in Malaysia:		Discovery of novel antibacterial agents	Science and Technology	40,000	
of capital inflows and outflows on assets market in ASEAN-4 Dr Ong Seng Kai Induced anti-amoebic effect of cockcroach extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Sciences Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Nor Hazlin Nor Salam	Alleycats: A musical documentary	Arts	2,500	
extract by immune challenge Dr Ooi Pei Boon Online safety and youth exposure to cyberbullying in Malaysia Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Arts 11,850 Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia:	Dr Nur Ain Shahrier	of capital inflows and outflows on assets	Business	35,226	
cyberbullying in Malaysia Sciences Padma Priya Pillai A Study of Students well-being and course experience in Sunway University Avareness, reception and impact of online satire on the Malay community in Malaysia:	Dr Ong Seng Kai		Science and Technology	15,000	
experience in Sunway University Dr Pauline Leong Pooi Yin Awareness, reception and impact of online satire on the Malay community in Malaysia: 15,300	Dr Ooi Pei Boon			26,800	
satire on the Malay community in Malaysia:	Padma Priya Pillai		Arts	11,850	
A case study on BFM Kupas	Dr Pauline Leong Pooi Yin		Arts	15,300	



Internal Research Grants awarded (continued)

Principal Investigator	Title of Research	ch School	
Professor Poh Chit Laa	Identification of microRNA (miRNA) as potential therapeutics for dengue	Science and Technology	40,000
Rachel Thomas Tharmabalan	Lessons from Japan: Promoting underutilised food crops through green tourism	Hospitality	4,000
Dr Ronald Teow Sin Yeang	r Ronald Teow Sin Yeang Investigating autophagy and the related microRNAs (miRNAs) in liver cancers, and their clinical pathological and prognostic values		49,900
Professor Ruqaiyyah Siddiqui	Development of chemotherapeutical Science and Technology treatments against brain-eating amoeba, Naegleria fowleri		35,000
Professor Saidur Rahman	Development of a new correlation for the thermal and rheological properties of nano phase change materials (nanoPCM) for solar collectors	Science and Technology	40,000
Professor Sanjaya Gaur	Emotional brand connection to enhance life satisfaction	Business	21,841
Professor Sanjaya Gaur	Managing the outcomes of adverse life events: An experimental study	Business	20,431
Serena Leow Wai Yee	Use of mobile technologies in higher education: Readiness and perceived impact of lecturers and students at Malaysia and United Kingdom universities	Arts	7,359

Internal Research Grants awarded (continued)

Principal Investigator	Title of Research	School	Amount (RM)
Sia Jye Ying	Linear recurrence properties as a new dimension of astute image encryption	Mathematical Sciences	3,072
Siti Zuraiyni Yassin	Application of multimodal communication theory and the mosaic mapping method in the development of an ePlatform, JITJOT for accelerating the production of a writing piece	Interdisciplinary Studies	50,000
Dr Sivakumari Supramaniam	Consumers' emotions and values in interaction with sales people selling intimate apparels	Business	20,080
Dr Syed Shahabuddin	Synthesis of conducting polymer nanocomposites for dye sensitized solar cells and photocatalytic degradation of pollutants from waste water	Science and Technology	40,000
Dr Tan Ai Ling	An exploratory study on factors influencing MICE travellers revisit intention	Hospitality	11,500
Dr Tan Wai Kiat	Development of regime shift model for Sunway Lagoon	Mathematical Sciences	6,000
Tan Yean Nee	Tiling holey squares with straight k-ominoes	Mathematical Sciences	3,000
Dr Teh Pek Yen	The use of big data in sustainable heritage tourism: Smart applicatins approach	Hospitality	14,500
Associate Professor Dr Yap Kian Meng	Robot learning human movements and actions by 'watching' videos	Science and Technology	40,000
Yasmin Yashodha	Threshold effects of globalisation, economic growth, financial development and institutional quality on energy consumption and renewable energy consumption: international evidence	Business	35,226
Associate Professor Dr Yau Kok Lim	Enhancement of reinforcement learning models and algorithms for traffic signal control: Exploiting the power of artificial intelligence for achieving sustainable cities	Science and Technology 30,	
Dr Yow Yoon Yen	Isolation and characterisation of nerve growth factor-potentiating substances from agarophyte Gracilaria manilaensis	Science and Technology 40,0	
Professor Yuka Fujimoto	Low status workers and life satisfaction: effects of transformational leadership and climate for inclusion	Business	8,455
Professor Yuka Fujimoto	The feeling of enrichment from employees: an experimental study	Business	10,611



Recipients of Jeffrey Cheah Travel Grants for Southeast Asia Studies



Alireza Zarei

Senior Lecturer, Department of Economics and Finance Sunway University Business School, Sunway University

"Malaysian Ringgit Behaviour"



Chow Shenn Kuan

Undergraduate student

Sunway University Business School, Sunway University

"Understanding Student Governing Bodies at Harvard University and Representing Sunway University at the Harvard Project for Asian and International Relations (HPAIR) Conference 2018"



Linda Tan Kim Lian

Head – Facilities and Asset Management

Sunway Education Group

"Sustainable Strategies and Implementation **Processes for a Modern Competitive Green Campus**"



Yap Kian Meng

Associate Professor, Department of Computing and

Information Systems

School of Science and Technology, Sunway University

"Harvard Biorobotics Laboratory, Haptic and Robotic Projects"

Sunway University Annual Review 2018

Sunway University Annual Review 2018

School HIGHLIGHTS

	Employed by Graduation *	Graduates Earning Above RM3000 *	New Students	Total Enrolment	International Students	Total Staff * AC: Academic AD: Administrative INT: International Academic Staff	Internal Grants Received *	External Grants Received *	Graduates (All)	Class I & II(I) (Bachelor's only)	New Programmes Launched
School of Arts	74%	21 %	399 (+25%)	805 (+32%)	16 %	44 AC 13 AD 14 % INT Total = 57	RM 80,000	^{RM} 740,000	134	72 %	MA in Visual Communication and Media Studies • BA (Hons) Music Performance
Business School	78 %	16%	1011	2980 (-2%)	9%	88 AC 21 AD 17 % INT Total = 109	RM 300,000	—	754	44 %	• • • • • • • • • • • • • • • • • • •
School of Healthcare and Medical Sciences	100%	—	66 (+2%)	178 (+14%)	2 %	26 AC 7 AD 9 % INT Total = 33	RM 265,000	RM 138,000	20		o o o o o o o o o o o o o o o o o o o
School of Hospitality	78 %	20 %	357 No Change	849 (+8%)	21%	26 AC 8 AD 9 % INT Total = 34	RM 30,000	RM 36,400	211	38 %	v o o o o o o o o o o o o o o o o o o o
School of Mathematical Sciences	78 %	35 %	187 No Change	545 (-3%)	5 %	14 AC 4 AD Total = 18	RM 36,700	_	127	79 %	MSc in Actuarial Science
School of Science and Technology	82 %	30 %	618 No Change	1596 (+14%)	14%	83 AC 22 AD 24 % INT Total = 105	RM 730,500	^{RM} 1,109,600	243	72 %	PhD (Psychology) BSc (Hons) Biomedicine
School of Interdisciplinary Studies	of students	erican Education 0% transferred to Universities	Centre for American Education 192 (+2%)	Centre for American Education 242	Centre for American Education 13%	60 AC 20 AD Total = 80	RM 85,000	^{RM} 141,900	_	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0

^{*} Based on MOHE Tracer study 2018 (Number of Bachelor's and Diploma graduates who are employed full-time or part-time at time of survey, divided by total respondents excluding those who further studies, undergo skill enhancement and chose not to work)

[★] Based on MOHE Tracer study 2018 (Number of Bachelor's graduates earning RM 3000 and above, divided by Number of Bachelor's and Diploma graduates who are employed and who provided income information)

Based on headcount of full-time staff.

Grant amount rounded up to the nearest RM 100.

Student EXPERIENCE

Scholarly ACTIVITIES

The Student Barometer™

he Student Barometer is a global benchmark for student experience administered by i-graduate, enabling tracking and comparison of student satisfaction levels received and identifying specific areas of key importance.

In 2018, i-graduate evaluated student feedback from 212 institutions across the globe, including 13 Malaysian institutions of higher learning.

Sunway ranked among the leading institutions in Asia and Malaysia in several categories with an overall satisfaction rate of 92.9%.



STUDENT BAROMETER™ PARTNER
THE GLOBAL BENCHMARK
FOR THE STUDENT EXPERIENCE



Physical Library Financial Services



Career Advice
Laboratories
Technology
Sport Facilities
Social Facilities
Safety
Campus Buildings
Eco-Friendly Attitud
Campus Environme



Jeffrey Cheah Distinguished Speaker Series (JCDSS)

19 January

How 'Big Food' Kills Us?



Speaker:

Professor Graham MacGregor
Professor of Cardiovascular Medicine,
Wolfson Institute of Preventive Medicine
Queen Mary University of London

28 March

How Genomics is Changing Medicine



Speaker:

Professor Patrick Maxwell
Regius Professor of Physic, and
Head of the School of Clinical Medicine
University of Cambridge

21 June

MIT: Understanding Human Intelligence to Train People and Machines to Think



Speaker:

Professor Eric Grimson

Chancellor for Academic Advancement
Professor of Computer Science and Engineering
The Bernard M Gordon Professor of
Medical Engineering
Massachusetts Institute of Technology

9 August

Life in the Anthropocene: The Challenges of Managing Environmental Hazards and Risks



eaker:

Professor Sarah Whatmore FBA, FAcSS Professor of Environment and Public Policy Head of Social Sciences Division Fellow of Keble College University of Oxford

17 August

A World of Three Zeros: Zero Poverty, Zero Unemployment and Zero Net Carbon Emissions



Speaker: Professor Muhammad Yunus

Nobel Peace Prize Laureate Chairman, Yunus Centre Founder, Grameen Bank, Bangladesh

3 September

Prospects for Malaysia Baru: Constitutional Change Without Changing the Constitution



Speake

Professor Andrew Harding Professor of Law National University of Singapore

4 October

Cancer: Challenges for The Future of Patient Care



Speaker

Professor Sir Leszek Borysiewicz

FRS FRCP FMedSci Chairman, Cancer Research UK Emeritus Vice-Chancellor, University of Cambridge Honorary Distinguished Professor, Sunway University and the Jeffrey Cheah School of Medicine and Health Sciences

3 December

How Do Proteins Fold and Why is it Crucial to Our Health?



peaker:

Professor Jane Clarke FRS FRSC FMedSci President of Wolfson College and Professor of Molecular Biophysics, Department of Chemistry University of Cambridge

18 December

Inflammatory Diseases: Clinical Outcomes, Genes and Mosquitoes



Speaker:

Professor Ken Smith
FRACP FRCPA FRCP FMedSci
Professor of Medicine
and Head of the Department of Medicine
University of Cambridge

Professorial Lecture Series

18 January

The Creative Process of Music Composition and Performance



Professor Donald Bowyer
Professor of Music
Dean of Arts

29 March

The Business of Theatre in Eighteenth-Century Paris



Professor Sabine Chaouche Professor Department of Performance and Media

3 May

Banks, Firms and Financial Markets: Connecting the Dots...



Professor Chaiporn Vithessonthi Professor Department of Economics and Finance

24 July

In Search of the Imperfect



Professor David Bradley
Research Professor
Head – Centre for Radiation Sciences

27 September

In Search of Function: A Cancer Research Odyssey



Professor Abhimanyu Veerakumarasivam Professor Department of Biological Sciences



Date	Topic	Event Type
29 March	Sustainability Series # 1 Fast Fashion	Talk (In collaboration with Sunway iLabs)
2 May	International Collaboration in Science and Technology for Sustainable Development	Dialogue Session (In collaboration with SYSD, SSIC, SIS, and CAE)
3 May	Sustainability Series # 2 Single-Use Plastic	Talk (In collaboration with Sunway iLabs)
8 June	Sustainability Series #3 Food	Talk (In collaboration with Sunway iLabs)
27 September	Sustainability Series # 4 Single-use Plastic	Talk (In collaboration with Sunway iLabs)
8 October	How to Achieve the Sustainable Development Goals (in conjunction with the Launch of the Master in Sustainable Development Management)	Public Lecture
14 & 28 October 28 October 11 & 25 November	Citizenship and Housing Education for the Sustainable Development Goals	Launch, Workshop and Training Series (In collaboration with MyPJ and Petaling Jaya Parliamentary Office)



12 January	TN50: The Road Ahead	
	TNSO. THE HOAD AIREAU	Public Lecture (In collaboration with Transformasi Nasional 2050)
14 January	Green Finance for Energy Security and Sustainable Development	Workshop (In collaboration with ADBI Institute)
26 January	New Media and Politics in Southeast Asia: Social Media, Citizens and The Digital Revolution	Public Lecture
6 March	World Economic Outlook 2018	Public Lecture
13 March	Is the Higher Education Sector Contributing Towards the Sustainable Competitive Advantage of Malaysia? If Not, Why Not?	Seminar
	Malaysian Universities Transformation for Survival Beyond 2020	Seminar
19 March	The Nuclearization of North Korea: Can One Get Off a Tiger Safely?	Public Lecture
20 March	Economic Performance Anxieties in East Asia	Forum
14 May	Keeping the Promise of Reform	Forum
5 June	Improving Malaysian Higher Education	Forum
3 July	An Institutional Relationship Perspective of Corporations as Responsible Citizens Against Corruption: The Malaysian Experience	Public Lecture
9 July	The Changed Political Landscape and the Aspirations of the Youth	Forum
11 July	Challenges for the Next Phase of Malaysia's Development	Public Lecture
28 August	Is China Heading Towards Crisis?	Forum
29 August	A "New Malaysia": The Way Ahead	Forum
28 September	Experiments in Disruptive Innovation in Malaysian Higher Education	Seminar
7 November	MA63: What do young Sabahans and Sarawakians think?	Webcast
30 November	Social Media in the 'New Malaysia'	Public Lecture
11 December	New Malaysia Rising: The Challenge of Fulfilling the Dream	Forum
12 December	Leadership of Malaysian Public Universities and the Challenges of the Next Few Decades?	Seminar
	Effective Leadership Training of Universities Top Management	Seminar

Working in PARTNERSHIP

Senior APPOINTMENTS

Date signed	University / Organisation / Company	Туре	Scope
21 February	Embry-Riddle Aeronautical University	Collaborative Education Agreement	Collaborating in professional aviation education and training programmes
12 March	British Council Malaysia	Service Agreement	IELTS Services Agreement for British Council IELTS Associate
20 March	Drexel University	Agreement	Materials Transfer Agreement
10 April	University of Essex	Articulation Agreement	Advanced Standing for Department of Psychology
28 May	University of Waikato	Articulation Agreement	Credit transfer for School of Arts
4 June	The University of Hong Kong	Programme Collaboration Agreement	Three weeks programme for HKU's journalism and media studies students to provide students with in-depth understanding and appreciation of the United Nation's 17 Sustainable Development Goals (SDGs)
1 August	Meikai University	Student Exchange Agreement	To support a broader educational experience and promote goodwill and cultural ties for students and faculties
20 August	University of California, Berkeley	Memorandum of Agreement	To strengthen academic collaboration between the two institutions
1 October	National Changhua University of Education	Student Exchange Agreement	To support a broader educational experience and promote goodwill and cultural ties for students and faculties
3 October	York University	Articulation Agreement	Credit Transfer arrangement for American Degree Transfer Programme students
1 November	Hungkuang University	Student exchange Agreement	To support a broader educational experience and promote goodwill and cultural ties for students and faculties
13 December	University of Iowa	Articulation Agreement	Credit Transfer arrangement for American Degree Transfer Programme students

New Senior Hires

▶ Professor Datin Dr Chia Yook Chin

Research Professor Head - Department of Medical Sciences Date of Appointment: 1 June

Associate Professor Hossein Nezakati Alizadeh

Department of Marketing

Date of Appointment: 1 December

Mr Nicholas Lee Boon Kheng

Head - English For Specific Academic Purposes
Date of Appointment: 1 July

Professor Serguei Demidenko

Dean – School of Science and Technology
Date of Appointment: 1 October

▶ Professor Shandre Mugan Thangavelu

Vice President, Jeffrey Cheah Institute on Southeast Asia Senior Fellow, Jeffrey Sachs Center on Sustainable Development Date of Appointment: 1 March

Professor Susela Devi K Suppiah

Department of Accounting
Date of Appointment: 1 July

Dato' Tan Yoke Hwa

Head - Department of Allied Healthcare
Date of Appointment: 1 September

Professorial Appointments

Professor Jeff Tan Kuan Onn

Department of Biological Sciences

Date of Appointment: 1 January

Professor Ruqaiyyah Bano Siddiqui

Department of Biological Sciences
Date of Appointment: 1 January

Professor Yuka Fujimoto

Department of Management

Date of Appointment: 1 January



Adjunct and Visiting PROFESSORS

Investing in THE FUTURE

Vice-Chancellor's Office

Professor Sir Leszek Borysiewicz
 Distinguished Honorary Professor
 1 July 2018 - 30 June 2020

Dr Graeme AthertonAdjunct Professor1 May 2018 - 30 April 2020

Provost's Office

Professor Eui Ho Suh
 Honorary Professor
 July 2018 - 30 June 2020

School of Heathcare and Medical Sciences

Dr Duncan Ronald Forsyth
 Department of Medical Sciences
 Adjunct Professor
 15 January 2018 - 14 January 2020

Dr Lee Fatt Soon
 Department of Nursing
 Adjunct Professor
 1 October 2018 - 30 September 2020

Dr Philip Poi Jun Hua
 Department of Nursing
 Adjunct Professor
 1 October 2018 - 30 September 2020

Professor Sibrandes Poppema
 Department of Medical Sciences
 Distinguished Honorary Professor
 1 August 2018 - 31 December 2018

Professor Tan Maw Pin
 Department of Nursing
 Adjunct Professor
 1 October 2018 - 30 September 2020

School of Science and Technology

 Emeritus Professor Dr Ionel Haiduc Research Centre for Crystalline Materials Adjunct Professor
 July 2018 - 30 June 2019

Professor Jagadese J Vittal
 Research Centre for Crystalline Materials

 Adjunct Professor
 October 2018 - 31 December 2019

Professor Louise Helen Philips
 Department of Psychology
 Adjunct Professor
 July 2018 - 30 June 2020

► Emeritus Professor Dr Ng Soon
Research Centre for Crystalline Materials

*Adjunct Professor**

1 June 2018 - 31 May 2019

Professor Phang Siew Moi
 Adjunct Professor
 July 2018 - 30 June 2021

Dr William Henderson
 Research Centre for Crystalline Materials
 Adjunct Professor
 December 2018 - 31 December 2020

Sunway University Business School

Professor Ramayah Thurasamy
 Department of Management
 Adjunct Professor
 1 May 2018 - 30 April 2019

Sunway Campus Library

n 2018, the Sunway Campus Library continued to actively support teaching, learning and research at Sunway University, with emphasis on developing its electronic resources collection.

As at 31 December 2018, total electronic collection available to users included 56,000 e-journals, 127 e-databases and 211,700 e-books. The Library's physical collection stood at 153,000 items of books, audiovisuals and bound journals.



Total membership from Sunway University comprised 6,488 students, 291 academics and 151 administrative staff as at 31 December 2018. The Library saw high usage, with total entries of more than 1.9 million recorded. A total of 34,779 physical loans were made by Sunway University users. A total of 430,595 e-documents were downloaded from e-journals and e-databases, showing an increase of 8% over 2017.

Sunway Campus Library continued to provide a wide range of library services. Improvements carried out during 2018 included the following:

- ▶ A new entrance was created in the Library in January to allow all three levels to be connected.
- ▶ A new Library Homepage was launched in May.
- ▶ E-Archives was launched for Sunway University in June.
- Project-based information skills to support research-informed teaching was implemented for Sunway University. Learning outcomes were evaluated using online quizzes. A total of 4,405 students were given information skills sessions.
- Library opening hours was extended until 10.00 pm on weekdays throughout the year.
- ▶ In expanding access to electronic resources, four new subscriptions to e-databases were made, namely for ProQuest Biological Science Database, CINAHL Plus with Full Text, Thomson Reuters Eikon with Datastream and ABI/Inform.
- ▶ Upon requests from the Student Council, 84 power points were added, 40 of which were located at the Mezzanine Level, and the balance at the Collaborative Zones.
- ▶ Stocktake exercise was carried out in August to ensure library collection is updated and lost items replaced accordingly.

Sunway Campus Library was successful in upgrading its certification to ISO9001:2015 after a SIRIM Recertification Audit in April 2018.

Facilities

In 2018, the Vice-Chancellor's Office was expanded to create more office space and work stations for university administrative staff. Additionally, as the University continued to expand, renovations and upgrades took place for the following schools – School of Healthcare and Medical Sciences, School of Science and Technology, School of Arts, School of Mathematical Sciences and the Sunway University Business School.

Lab renovations also took place for the following Research Centres – Centre for Virus and Vaccine Research, Research Centre for Carbon Dioxide Capture and Utilisation, Research Centre for Nano-Materials and Energy Technology, and Research Centre for Crystalline Materials.

Campus SUSTAINABILITY

he Smart Sustainable Campus Committee was set-up in early 2018 to consolidate all green activities and initiatives undertaken by the various entities and departments within the Sunway Education Group.

The committee's first initiative was to ensure the campus would be plastic-free by 2020 hence the Last Straw Campaign (#The Last Straw) was initiated. This campaign will see the removal of single-use plastic items such as bottles, straws, utensils and takeaway containers by 2020. The first phase of the campaign was to discontinue the sale of plastic bottled water on campus and eliminate the provision of free plastic straws. The University then provided additional water stations and staff and students were reminded to bring their own mugs and water containers through the "Living Green" poster reminders placed strategically around the campus. Metal straws were made available for sale.



Solar Panels

The solar panels installation was another project that commenced in 2018 to reduce dependence on non-renewable energy source and thus reduce our carbon footprint. Malaysia enjoys an average of 4 to 6 hours of effective sunlight. As such, solar panels will help reduce the maximum demand for power consumption during the day.



Herbs Garden

Other initiatives included setting-up a Herb garden for the consumption of Sunway Le Cordon Bleu, Institute of Culinary Arts as well as the School of Hospitality.



Alternative Water Pipes

The University also installed alternative pipes that are connected to Sun-Water from the South Quay Lake Water Plant. This state-of-the-art water treatment facility has a targeted potable water capacity of 10 million litres per day (MLD).



Centralised Chemical Waste Centre

A centralised collection centre for chemical waste was created to efficiently manage chemical waste.



Sustainable Consumption

Hand dryers were installed in all washrooms to reduce the usage of paper towels. Energy saving LED lights were also installed in appropriate locations to reduce electricity consumption.



Waste Separation

Some of the on-going activities include educating the University community on waste separation by placing posters next to the recycling bins including e-waste disposal.



Prizes, Awards and ACHIEVEMENTS



Ng Wing Keh, student of BSc (Hons) Digital Film Production, won Best Documentary at Flicks Fiesta Festival 2018, Penang for the short documentary 'Hidden Gem (2018)'.



Teh Xue Jun and Joey Ooi Bee Law, students of BSc (Hons) Digital Film Production, won the Special Jury Award (Best Female Filmmaker) at the Independent Talents International Film Festival 2018, Bloomington, for their short documentary With Love, Joey. (2018)'.

Dr Ronald Teow Sin Yeang from the Department of Medical Sciences, received the 2018 Award for Achievement in Early Career Research from the University.



School of Hospitality, flanked by team members,



Lecturer, Dr Shehnaz **Tehseen** won the Best Paper at International Conference on **Business Sustainability** & Innovation (ICBSI) 2018.



Diploma in Graphic and

Multimedia Design student,

Anis Anati Binti Mohd Faizal,

won 1st place for academic group

at the ACA World Championship

Design Competition by ADOBE,

and will represent Malaysia at the

World Championship in Orlando,

BSc (Hons) International Hospitality Management students, (L-R) Tan Xiao Han, Thi Yein Soe and Nicole Cara How Jin Mae together with Isabell Voo Yee Sah (BSc (Hons) Convention and Events Management student) won the Business & Major Events Challenge 2018 organised by the Malaysia Convention & Exhibition Bureau.

CAE lecturers, (L-R) Sunita Gnanamalar Arthur Selvaraj,





Dr Daniel Chong Ka Leong, Senior Lecturer and Programme Leader for the BSc (Hons) International Hospitality Management from the School of Hospitality, received the Award for Excellence in Teaching 2018 from the University.



HINTERNATIONAL RESEARCH **CONFERENCE 2018**



Professor Saidur Rahman and Professor Mohamed Kheireddine Aroua received the coveted recognition as Highly Cited Researchers for 2018 in the field of Engineering. The Clarivate Analytics list of Highly Cited Researchers recognizes researchers with exceptional performance demonstrated by production of multiple highly cited papers that rank in the top 1% by citations for field and year in Web of Science.



In March 2018, Dr Mayeen Uddin Khandaker, was named as one of the most valued reviewer for Elsevier journal in Year 2017

Professor Ruqaiyyah Bano Siddiqui from the Department of Biological Sciences received the Award for Achievement in Research 2018 from the University.



Professor Mohamed Kheireddine Aroua was recipient of the Institution of Chemical Engineers (IChemE) Global Award 2018 in the Water category for his work in the development of an automated self-cleaning mobile ultrafiltration system that can be powered by solar energy. This project also received the Gold Award for International Research Innovation Invention Solution Exposition (IRIISE) at the University Research Invention, Creation and Innovation (EUREKA) 2018 EXPO held at Universiti Malaya, Malaysia.





BSc (Hons) Financial Analysis students, Tang Ming Keat, Wee Wei Yee and Law Zhun Khing (back row, first, second and third from left) together with BSc (Hons) Financial Economics students, Khiew Yong Xuan (back row, third from right) and Yim Pei Wen (front), formed the winning team to emerge as Champions at the 4th MFPC National Financial Planning Tournament, beating 19 other teams from Malaysian private and public universities.



postgraduate students led by Associate Professor Dr Yap Kian Meng (back row, fourth from left), won the Gold and Silver medals at the National Robotics Competition in the Universities category. (L-R back): BSc (Hons) in Computer Science students, Leong Jia Lin, Lim Zhi Wei, Goh Jun Huang, Foo Ky-Li, and BSc (Hons) Information Technology student, **Teoh Tien Wern**. (L-R front): Teow Meng Khai [BSc (Hons) in Computer Science student], Samuel John Omamalin [MSc in Computer Science (by Research) student].

Teams comprising undergraduate and



American Degree Transfer Programme students Sin Li Jane and Natasha binti Mohamed Roslan won the silver medal in the Team of 6 Women category, at the 2018 Asian Games competition. held in Indonesia.

Sunway University Annual Review 2018







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Owned and governed by the Jeffrey Cheah Foundation (800946-7)

No. 5, Jalan Universiti, Sunway City, 47500 Selangor Darul Ehsan, Malaysia

() +6 (03) 7491 8622

info@sunway.edu.my

ttps://university.sunway.edu.my/

