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please contact:

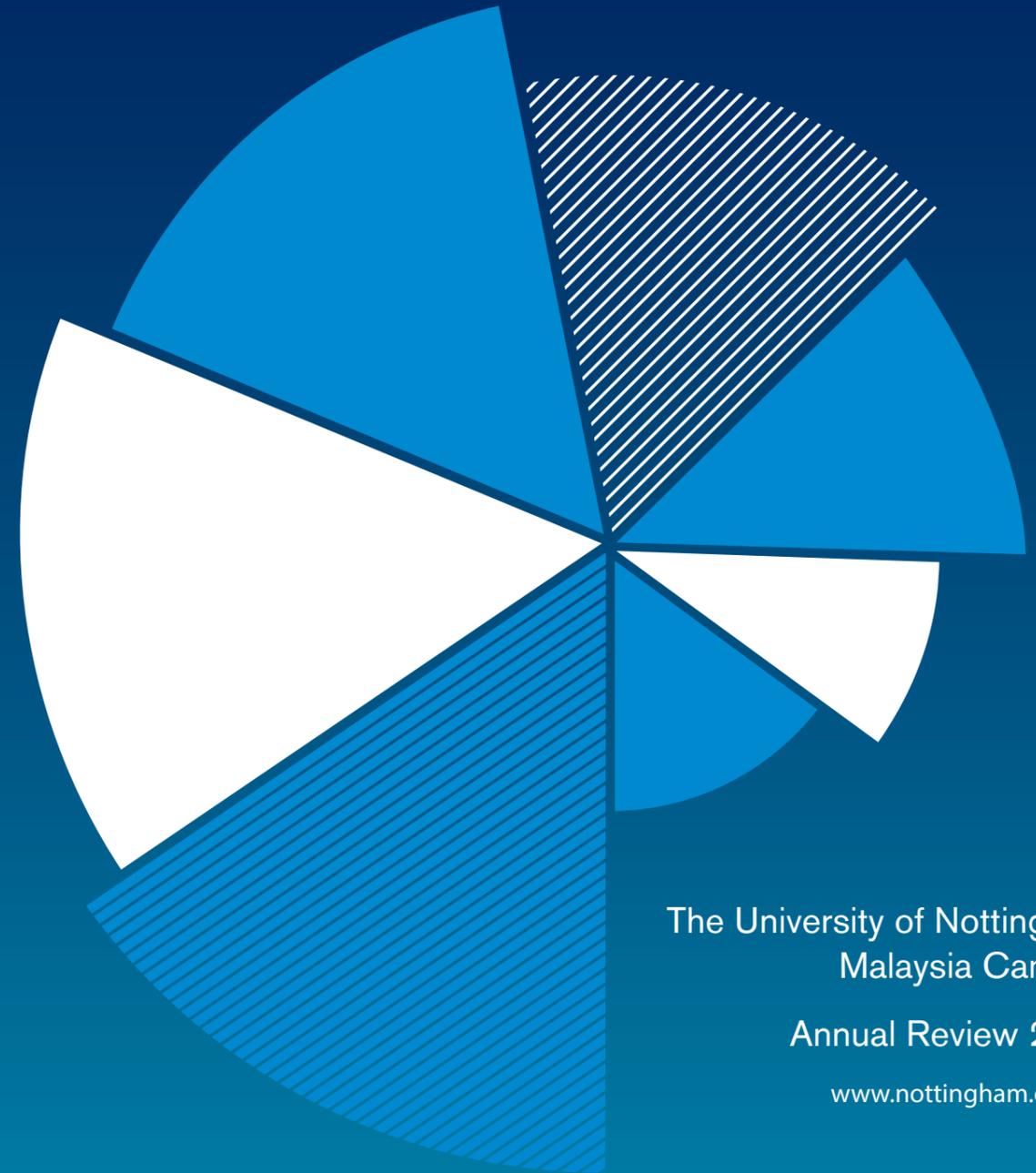
The University of Nottingham Malaysia Campus

Jalan Broga
43500 Semenyih
Selangor Darul Ehsan
Malaysia
t: +60 (0)3 8924 8000
f: +60 (0)3 8924 8001



The University of
Nottingham

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The University of Nottingham
Malaysia Campus

Annual Review 2016

www.nottingham.edu.my

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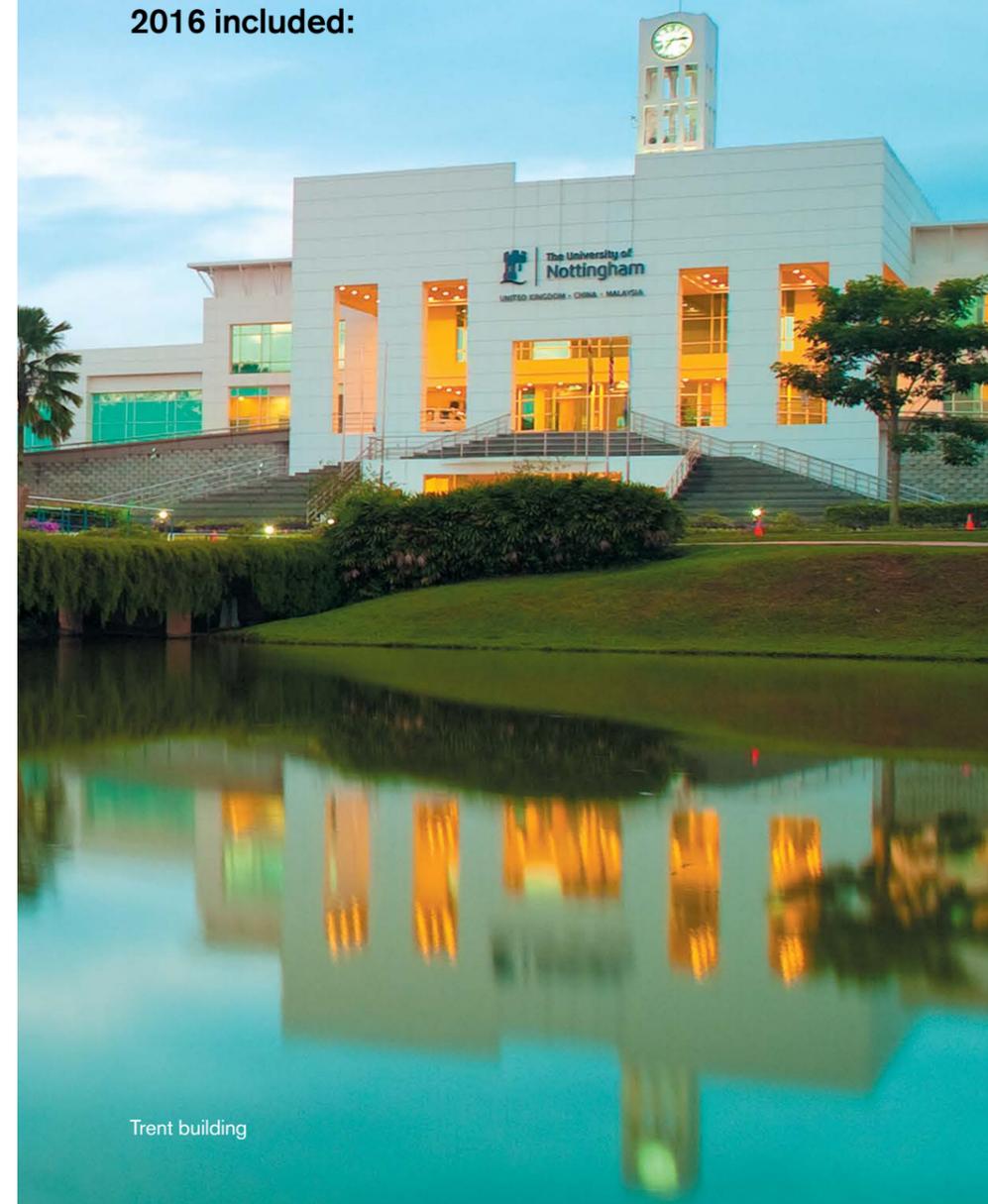
Introduction

This annual review provides an opportunity to record and celebrate the achievements at UNMC during 2016. During the course of the year, guided by the academic and professional service communities, UNMC continues to progress in line with the longer-term vision as outlined in our Strategic Roadmap (2013-2020). The main objectives and activities throughout 2016 included:

- Providing public access to our campus and appropriate use of our facilities by the public, schools and charitable/voluntary groups
- Sharing and exchange knowledge and skills with local communities
- Contributing to key civic agendas especially in terms of social cohesion, neighbourhood management, business and the economy, sport and culture, early
- Being 'good neighbours' in Semenyih by fostering positive relationships with individuals and community groups in the immediate locality of the University-business
- Promoting and supporting education in any form possible

Of course, we also aim to be research intensive and provide an environment in which to conduct excellent teaching and learning. These should all enhance the student experience and add value to the time that our students are with us, as well as when they have graduated.

This review will provide an overview of activity in relation to key functional academic areas of the University. The main focus will be on collective and institutional outcomes but the review also provides an opportunity to celebrate the achievements of key individuals across the institution.



Trent building

Provost Welcome



Graham Kendall
Provost/CEO



UNMC became the first private higher education institution in Asia offering the multi-organisational Global Business Services (GBS)

In September 2000, The University of Nottingham Malaysia Campus (UNMC) welcomed its first students to our campus in the heart of Kuala Lumpur. We were the first British university to establish a campus in Malaysia. In 2005, with close to 1,000 students, the University relocated to its current, purpose-built campus in Semenyih. As we enter our 17th year, we now have about 4,700 students and close to 700 staff. UNMC is proud to now be an established, integral part of the private higher education sector in Malaysia.

We were sad to see Professor Christine Ennew OBE leave the University after 30 years service. As well as being instrumental in establishing the Malaysia campus, she was also Provost/CEO for her last four years. In recognition for her contribution to international higher education, she was awarded an OBE, in the Queen's Birthday Honours list. We offer her our deepest congratulations for this well deserved recognition.

I was delighted to be able to become the Provost/CEO of UNMC. It is a great honour, but also comes with great responsibility, not least of all building on the foundations of those that have preceded me. Along with my appointment as Provost/CEO, there have been other senior management changes and we have an excellent team leading the University.

2016 will be remembered in many ways. You will read about many of them in this report, but I pick out a few highlights here.

We were delighted to have YAM Tuanku Zara Salim, Raja Permaisuri of Perak, a Nottingham alumna, open our new teaching centre, which has been named in her honour.

In November, UNMC entered into an agreement to support the transformation of the Bangladesh Higher Education College Sector. The agreement was signed between the National University, the Bangladesh Directorate of Secondary and Higher Education Bangladesh, the Bangladesh Open University, the National Academy for Educational Management and UNMC. The project will train policy makers, leaders and managers; master trainers; college principals, future leaders, and college teachers. The overall aim of the project is to strengthen college leadership and management, and teaching quality in a sustainable manner.

We are delighted to be one of the key partners in this project. Not only due to its importance to Bangladesh and the World Bank but it also demonstrates our outreach in Asia and how the campus has developed in recent years that enables us to rise to such an important challenge.

The Vinod Sekhar Incubation Centre (VSIC) was also launched in November by Professor Sir David Greenaway, Vice-Chancellor of The University of Nottingham. The VSIC is a collaboration between UNMC and the Petra Group. It provides a platform to facilitate research innovations to become viable businesses ventures, which can add to the wealth and job creation of Malaysia. We look forward to see many businesses develop from this centre, which adds to the strong research and knowledge exchange profile that UNMC has. This includes being the only foreign branch campus that that was awarded a 5-star rating in the most recent MyRA (Malaysian Research Assessment).

In August, UNMC held its inaugural international research conference titled Funding Research on a Changing Landscape. This conference was organised in collaboration with the Malaysian Investment Development Authority (MIDA) and highlighted prominent research funding opportunities. It also featured critical topics dedicated to explore new opportunities and support from the various funding bodies. We were delighted to have Professor Emeritus Tan Sri Dr Zakri Abdul Hamid, Science Advisor to the Prime Minister of Malaysia, as our keynote speaker.

UNMC became the first private higher education institution in Asia offering the multi-organisational Global Business Services (GBS). The GBS course was initiated in Universiti Kebangsaan Malaysia, from within a network in which UNMC plays a key role, serving the educational and national economic transformation agenda in developing talent for the GBS industry.

The Deputy Minister of Higher Education Malaysia Datuk Dr Mary Yap launched a new book entitled *Malchin Testament: Malaysian Poems*, which was edited by Professor Malachi Edwin Vethamani from the School of English. This book launch was of particular note as it demonstrates that UNMC has now established itself as a comprehensive university in Malaysia.

Financially, 2016 was another difficult year, with significant political changes giving rise to uncertainty. Challenging national economic performance and the depreciation of the Ringgit also contributed to a pessimistic climate. Student recruitment is challenging and we are looking into ways to make ourselves even more attractive.

Our operating environment continues to be dynamic and unpredictable. Policy decisions can, and, do impact significantly on our activity and we need to work even harder with the relevant stakeholders. We remain an innovative and agile institution with significant strengths. The quality of our students and graduates, the quality of our staff, the excellence of our research and teaching and an outstanding campus environment places us in an excellent position as we enter 2017. We are well regarded in the Malaysian HE sector and, of course, globally the University of Nottingham is one of the top 1% of Universities worldwide.

Although the primary objective of this brochure is to look back at 2016, we look forward to 2017 with optimism and enthusiasm and anticipate even greater achievements both from our staff and our students.

Graham Kendall

The University of Nottingham Malaysia Campus in numbers

Student population by study level as at 31 December 2016

Study Level	Malaysian	International	Total (2016)
Foundation	482	106	588
UG	2620	628	3248
PGT	202	204	406
PGR	228	146	374
Exchange	-	82	82
Total	3532	1166	4698

Student population by origin as at 31 December 2016

Study Level	Malaysian	International	Total (2016)
Faculty of Arts and Social Sciences	1141	544	1685
Faculty of Engineering	1446	371	1817
Faculty of Science	945	251	1196
Total	3532	1166	4698

Staff numbers as of end December 2016

	Engineering	Arts and Social Sciences	Science	Central	Total
Academic	101	100	88	-	289
SSR	17.5	14.5	16.9	-	16.4
Professional and Support Services	50	44	24	256	374
Total	151	144	112	256	663

Global Reach

UNMC continues to be a highly international and diverse community. The campus is currently home to a community of international students from around 85 countries who make up to over 30% of the student body.

Our students learn from a genuinely international academic community. Some 25% of UNMC academic staff are international and represent around 30 countries worldwide. Our students have mobility opportunities to The University of Nottingham campuses in the UK and China and a range of other academic partners in Australia, Canada, Chile, France, Germany, Italy, Mexico, the Netherlands, the UK and USA.

With internationalisation at the heart of the University, UNMC offers unique opportunities for students as the platform for the dissemination and exchange of knowledge and ideas.



A diverse group of students talking near Trent building

Excellence in Education

At the University we have a vibrant and diverse staff community offering us the capability and passion needed to achieve delivery of the Global Strategy 2020, which puts students at the heart of the University.

The Tuanku Zara Teaching Centre is the newest teaching block designed to cater for growing student numbers and to accommodate the changing patterns of teaching and learning. The Teaching Centre has flexible learning spaces and permits technology enabled learning within the campus. It caters for small group teaching and workshops and also social learning spaces, which epitomises modern teaching practices.

Some notable development this year includes The Drama Studio which was created to facilitate teaching and for theatre performances. It has essential features such as an open ceiling with sound-reflective covering, spot lights and a sound mixer. The studio was showcased during the Nottingham Tri Campus Arts Festival which was held at UNMC in June. The festival held theatre performances from Nottingham campuses from Malaysia, UK and China.

Besides this, there is a Workshop & Low Tech Space, which focusses on rediscovering student engagement by replacing projection space with writable walls. The general teaching rooms have wall-to-wall whiteboard spaces and motion sensor lights to support UNMC's commitment to a sustainable environment.

A dedicated learning space "Foundation Learning Support Centre" is purposed built to provide enhanced learning experience to students who are in transition to university life. It is not only a learning space, but is also integrated with social interaction space, that provides a comfortable and inspiring environment for learning, interaction, and personal development.

Recent developments also include expandable room and pop-up computer lab. Versatile technology-enabled space that includes touchscreens, changing charts with laptops, wireless projection, underfloor sockets and configurable furniture.

Nottingham Student Experience Survey
Continued efforts to ensure that the student learning experience at UNMC produced encouraging results were seen in the Nottingham Student Experience Survey.

Nottingham Malaysia continues to perform well: 92% overall satisfaction.

For all level of programmes, 2016 results showed better performance in terms of the propensity of students to recommend UNMC to others with 82.3% willing to recommend compared to global and Malaysian institutions. This is also an improvement from 2015.

For the four core dimensions included in the survey, learning overall, living overall, support overall, and arrival overall, UNMC continued to improve.

Nottingham Advantage Award (NAA)
The NAA continues to gain popularity. The number of students who enrolled into the programme increased, with 888 students who are actively pursuing this Award. The number of modules offered expanded to 26 in 2016.

Nottingham Malaysia continues to perform well:

92%
overall satisfaction.



Universitas 21 Undergraduate Research Conference 2016, Monterrey, Mexico: A Global Perspective on Aging Societies

UNMC continues to engage globally. The annual Universitas 21 Conference is a great opportunity for our students to gain valuable global experience as the conference is well-attended by students from the Universitas 21 network, such as UK, Australia, US, Canada, China, Singapore, Hong Kong, India, The Netherlands, South Korea, South Africa, Ireland, New Zealand, Sweden, and Ireland.

The Lord Dearing Awards for Teaching and Learning for 2016 recipients were Derek Irwin, Head of School for English, who is now with the Ningbo Campus, and Jaya Kumar Karunagharan from Foundation in Science. The Staff Oscars Awards night, managed by the Student Association, gave recognition to staff who have made an exceptional contribution to the academic environment on campus that enhances student life on campus. Winners were selected via online voting of the nominations from the students.



DYM M Raja Permaisuri Perak Tuanku Zara Salim officiated the opening of The Tuanku Zara Teaching Centre at the University on 22 September 2016.

World-changing research and knowledge exchange

Research at The University of Nottingham Malaysia Campus is going from strength to strength. We had a very successful audit of our latest MyRA return (2015), which confirmed our 5 star status.

Figure 1 shows how our publications have continued to increase year-on-year. Figure 2 shows the impact that our research is having by showing the number of times that our research is cited by other scientists. Table 1 shows how UNMC's citations compare with some of the other leading universities in Malaysia.

In order to sustain the growth in research outputs, both quantity and quality, it is important to secure external research funding. The economic climate in 2016 has been challenging and as a result, sources of national funding support have diminished. Our strategy therefore has been to diversify our sources of grant funding and we have made a concerted effort to secure grants from international schemes, such as the UK's Newton Fund and the RCUK Global Challenges Research Fund. We have had considerable success with these schemes recently and our international awards this year include substantial funding from both the MRC-ASM Newton scheme and the Wellcome Trust Collaborative Awards scheme. The awards were both for breast cancer research, in collaboration with prestigious partners such as University of Cambridge, University of Malaya, Cancer Research Malaysia, and National University Singapore. These two awards alone represent around RM6m in funding (total value), and, together with a number of smaller international awards, our new awards from international sources this year is at least half that of our national awards. We have also had recent success in securing significant funding from industry and other

non-governmental sources, including approximately RM2m from Yayasan Sime Darby for our elephant conservation work.

Knowledge Exchange and Business Engagement remains an important feature of our research strategy. Research, in collaboration with industrial partners, enables companies to leverage on their R&D investment in order to develop their business, expand their product range, eliminate inefficient practices and increase profitability. MyResearch Sdn Bhd, a MIDA (Malaysia Investment Development Authority) R&D status company enables companies to invest in research in a tax efficient way and MyResearch is our primary vehicle for engaging with the business community. This year has seen considerable success in securing contracts in collaboration with industry, exceeding RM3m in total value.

Our expanding business engagement portfolio has this year included the development of a new incubation centre, together with our joint venture partner, Petra Group. The Vinod Sekhar Incubation Centre was launched at a ceremony officiated by the Vice-Chancellor Professor Sir David Greenaway and Petra Group chairman and CEO Datuk Vinod Sekhar. The centre will house a number of startup and spin-out companies, including those formed by our staff, students and alumni. It will be supported by a programme of training and business engagement events with our networks of investors and business collaborators. The incubation centre also houses a new Technology Demonstrator, showcasing UNMC researchers' technology innovations.

This year has also seen a number of changes in leadership in research and knowledge exchange. In August 2016, Professor Claire

O'Malley succeeded Professor Graham Kendall as Vice-Provost (Research & Knowledge Exchange), when he took on the role of Provost & CEO of The University of Nottingham Malaysia Campus. Professor Denny Ng was appointed to the role of Head of Business Engagement & Innovation Services, succeeding Dr Angelina Yee, who returned to her role in NUBS.



Our expanding business engagement portfolio has this year included the development of a new incubation centre, together with our joint venture partner, Petra Group.

Figure 1: Record of UNMC publications as recorded by Scopus. The data was extracted on 15 Mar 2017. The 2016 value will increase over time.

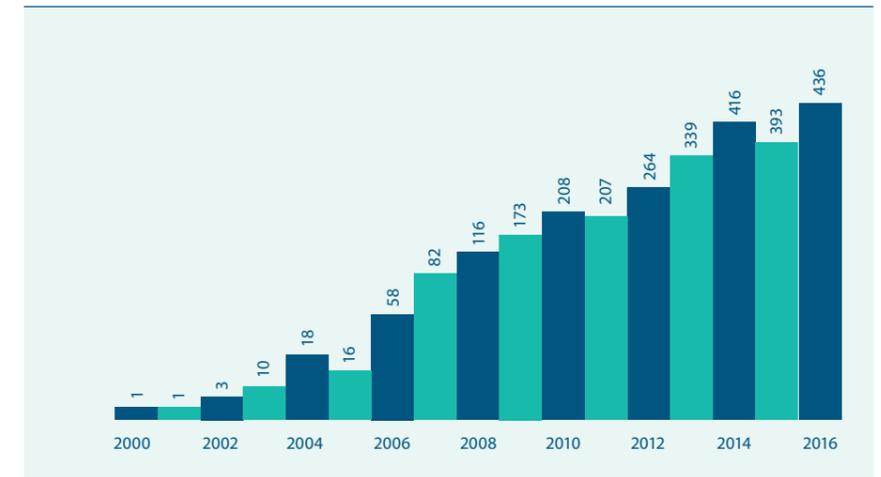
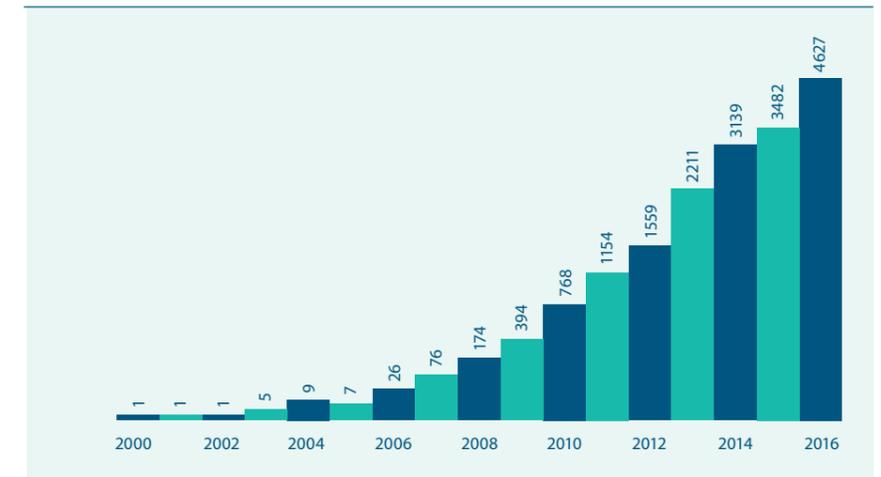


Figure 2: The impact of The University of Nottingham Malaysia Campus' research is evident from the citations that our publications are receiving (data retrieved on 15 Mar 2017). The citations in the figure are extracted from Scopus.



	Overall	2010	2011	2012	2013	2014	2015	2016
RU1	2.8	5.1	3.9	3.7	3.2	2.2	1.7	0.3
RU2	3.6	7.3	5.9	5.2	3.7	2.6	1.5	0.4
RU3	4.2	8.6	6.6	5.3	4.3	2.7	1.5	0.4
RU4	2.7	5.1	4.8	4.6	3.6	2.2	1.4	0.4
RU5	4.9	8	8.3	6.9	6	4.8	2.8	0.8
UNMC	4.5	8.3	8.8	8.5	5.2	3.7	2	0.6

Table 1: This table shows the average number of citations per publication for Malaysia's Research Universities (RU) and UNMC, for the past five years. The data was extracted from Scopus' Scival on 15 Mar 2017. It demonstrates that UNMC's research is competitive, and statistically more frequently cited, as compared to other Malaysian Research Universities.

Community engagement and campus life

Universities have a broad range of social responsibilities that go beyond their immediate responsibilities in relation to teaching, learning and research. At UNMC, we educate our students about getting involved in their community locally, nationally and globally. We empower them to explore pertinent social, cultural and environmental issues as they learn about themselves in the process.



An annual student led event, Nottingham Charity Run

Every year, our staff, and particularly our students, give back through various events championing causes near and dear to them. Notable examples in 2016 includes:

Nottingham Charity Cup 2016 (NCC 2016)

Organised by UNMC Sponsorship Students Club, NCC 2016 is an inter-university football tournament in its 2nd year with the objective of contributing to society while promoting sports, specifically football. There were 400 players and supporters involved in the event. RM3,000 was raised to be donated to Pertubuhan Anak Yatim dan Kebajikan Darul 'Izzah, Bandar Baru Bangi.

Braille Dinner Date

Organised by ACE Society, the event raised awareness about the visually impaired community and how to use and read braille. They raised RM695.40 which was donated to Malaysian Foundation for the Blind (MFB).

SWAG 3.0

SWAG is a showcase of UNMC students' talent in dance. This is the third year that SWAG has been successfully organised by Dance Club. It is not just a showcase of dance talents but also to raise funds towards helping the local community. The Dance Club successfully raised RM2,500 which was donated to Lotus Charity Care Centre, Semenyih.

E-Bazaar

To raise funds for Enactus' social projects through providing a 'night bazaar' experience to our staff and students, especially for our international community on campus. Funds are raised from the collection of rental from the vendors of the night bazaar.

MAPCU Organ Donation Drive

This was a year-long organ awareness and pledge campaign organised by IMU with the Ministry of Health in collaboration with other MAPCU members including UNMC. The SA office worked with two societies ie Rotaract Club and PharmNotts to run this campaign on campus through promotional booths. There were 45 pledges from UNMC.

Blood donation drive

Besides the primary objective of blood donation from students and staff, the event was also to educate the UNMC community on the importance and benefits of donating blood. 206 donors participated in the drive this year.

Nottingham Charity Run

Into its 8th year, NCR 2016 was again successfully organised by ACE Society. 2016 also saw an increase in the number of participants which also helped in reaching RM40,000 mark collection towards charity. NCR continues to be a platform to encourage the staff and student community to be involved in volunteerism and in itself enhancing the name of UNMC in CSR.

RED Project in support of Light for the World Refugee School

To reduce education disparity, more specifically in English and Math, through classroom learning. Plan and execute activities that may improve the appearance of the home while providing support to senior citizens.

Visit to Kechara Soup Kitchen

Working with the experienced staff of Kechara Soup Kitchen, student volunteers helped in the preparation of food and drinks, and also the distribution to the homeless and urban poor

in KL city. This was a good hands-on experience for the student volunteers as they learned from Kechara staff / volunteers and also understood a little more on the plights and struggles of the homeless and urban poor.

Walk-out on Domestic Violence (WODV)

WODV is Feminist Society's first large scale event since being established in 2015. WODV's objectives are to raise awareness and educate students on domestic violence, to encourage discourse as an indirect effect of breaking the cycle violence in the home in the future. WODV successfully achieved their objectives while raising funds for WAO through their first ever WODV walkathon.

A total of RM2,000 was raised for Women's Aid Organisation (WAO).

SUKIPT

- Mixed doubles - Bronze medal (Table Tennis)

2016 Nottingham Charity Cup

- Champion (9-a-side Football)

UTP Rugby Super 10's Tournament 2016

- Bowl category - Champion (Rugby)

UM Intervarsity Floorball Open

- Mens 4th placing (Floorball)

Ultimate Frisbee Open

- Top 5 (Frisbee)

MASISWA Selangor Zone

- 2 gold 2 silver (Swimming)

MASISWA Selangor Zone

- Top 3 (Futsal)

MASISWA Selangor Zone

- Top 3 (Badminton)

Sustaining Excellence

The Careers Advisory Service (CAS) believes that the continuous efforts of supporting students to understand their career interests, assess career opportunities and effectively implement their career decisions lead to graduates who will make a change in the world. CAS is also proactive in helping students and graduates to prepare themselves with employability skills to excel in the working world.

CAS was awarded second place by Universum for the Best Employability Rating Award 2016 in Malaysia, based on students' evaluation of how they have been equipped with employability skills. This recognition from Universum, which is well-known as the global leader in employer branding and talent research for over 25 years with a presence in 60 countries, shows that CAS continues to soar with new initiatives and constant developments.

In striving for continuous progression, CAS implemented new key initiatives, such as the Hi-Tea event, which offers great opportunities for students to network exclusively and gain first-hand information from reputable employers such as Dell, P&G, BDO and Unilever. Besides that, CAS continues to expand the Sector-Focused Careers Day in order to diversify the outreach to Nottingham students by collaborating with schools in the Faculty of Arts and Social Sciences, such as School of Politics, History and International Relations (PHIR).

CAS has completed refurbishment of its premises early this year and now has a modern and welcoming environment to increase our awareness and visibility on campus. It provides additional state-of-the-art careers resources and materials to our students for their career planning.

In addition, there were a number of graduates who have successfully secured jobs at Crystal Group, a leading international garment manufacturer headquartered in Hong Kong, which ranked 17th on the 2016 Fortune Magazine "Change the World" list. The strategic partnership between CAS and Crystal Group opens more global opportunities for students to work abroad.

Further testament of the effectiveness of CAS can be seen in the employment of our graduates by established industry leaders such as Accenture, PwC, Shell, Maybank, ExxonMobil, HSBC Bank, IBM, Intel, KPMG, Nestle, PETRONAS, RHB Bank, Unilever, Deloitte, British American Tobacco, CIMB Group, Ernst & Young, Gamuda Bhd, GlaxoSmithKline, Intel, Leo Burnett, Maxis, Microsoft, OCBC Bank, Procter & Gamble, Philips Morris International, Sapura Kencana, Sime Darby, Intel, Linde, Motorola, and Dyson.

UNMC's active alumni network stays connected through visits to the Malaysia and China campuses, while sharing their experience with current students. The annual Alumni Laureate Award 2016 was presented at the Alumni Dinner with the Alumnus of the Year Award conferred to Shahan Amaratunga from Sri Lanka for his outstanding contribution to the environmental sustainability of the textile industry in his country.

Alumni often return to campus to speak to students about their studies and career development. The Alumni E-Mentoring scheme was established for students to be mentored by alumni in their chosen field of expertise. The Developing Skills in Public Relations Module for the Nottingham Advantage Award also encourages student engagement with the alumni. Alumni engagement is further sustained via activities such as Masterclasses, reunions, networking sessions, alumni sharing sessions and Life Cycle Malaysia.

In collaboration with the Government of Malaysia (through MyAlumni Cluster), UNMC has set up My Alumni Council in Vietnam, Cambodia, Indonesia, Myanmar, China and Thailand to engage with the Malaysian alumni in the respective countries.



At UNMC, we believe that the continued capability to invest and make the most of our people, programmes and infrastructure will be the basis of our future success.

Our environment

Campus Facilities

UNMC recently upgraded its Student Network Services with a 700Mbps Dedicated Internet Access gateway, which supports the latest 802.11ac WiFi standards. New IT infrastructure projects should further equip UNMC with best in class facilities for learning and web connectivity. Learning spaces and facilities were completed through eleven projects worth about RM2 million under the Space Management Committee Budget 2016, besides the RM2.2 million spent in refurbishing campus accommodations with new furniture, added features and a fresh coat of paint.

Environment and Sustainability

220 trees were planted among the aging oil palms as part of a university tree-planting a.k.a. reforestation project in conjunction with the Lions Club International Centennial Legacy project. The flowering creepers at the Balau (a local hardwood) Pergola Amphitheatre are

flourishing while the "24Gardens" beautification project is ongoing. Efforts to rehabilitate the pond area behind the Library has successfully resulted in a conducive shaded area complete with Balau gazebos, a fountain, and a pond with its own thriving ecosystem complete with plant life, ducks, fishes and prawns. Our food waste separation initiative has progressed further with the establishment of a Composting Station, which should produce our first ton of organic fertiliser by April 2017.

Energy savings

Zero and low cost initiatives are producing results and UNMC is on track to reduce over 10% of our electricity consumption in 2017. This 2020 strategic goal is helped by the gradual use of more LED light fittings, de-lamping, monitoring and managing usage, and the installation of solar panels around the campus, and soon, the solar panelled glass roofing over the amphitheatre stage.



Solar power panel on campus

Faculty of Arts and Social Sciences

The Faculty of Arts and Social Sciences (FASS) is part of The University of Nottingham Malaysia Campus (UNMC) that is well recognised and regarded internationally as reflected by the major rankings:

90th in QS World University Rankings by Faculty 2015 - Arts and Humanities

76th in QS World University Rankings by Faculty 2015 - Social Sciences and Management

FASS has 6 schools, 1 department, 1 division and 1 centre. The Division of Organisational and Applied Psychology (DoAP), formerly known as the Department of Applied Psychology, is now a division of Nottingham University Business School (NUBS) Malaysia. The Centre for English Language and Foundation Education (CELFE) was created in 2016 when academic staff of the Foundation in Business and Management in NUBS Malaysia was transferred to the Centre for English Language Education (CELE). The creation of CELFE was to allow a better coordination of teaching resources and sharing of modules for the two foundation programmes: Foundation in Arts and Education and Foundation in Business and Management that are run within the Faculty.

In the Faculty, NUBS Malaysia has its footprint in Malaysia since the establishment of UNMC. It is the largest school within UNMC and FASS. NUBS has secured double international accreditations: AMBA and EQUIS. AMBA reaccreditation for five years was secured in 2015. In 2016, NUBS was awarded a 5-year EQUIS reaccreditation by EFMD, placing the school among a select global group of business schools with the full 5-year EQUIS accreditation. It is also the only UK business school to hold the EQUIS accreditation in three locations. The School of English (SoE) and School of Modern Languages and Cultures (SMLC) led the development of

performing arts at UNMC and successfully hosted the Second Tri Campus Arts Festival in 2016. During the event, the first tri-campus production "One Thousand and One Nights", with the involvement of more than 120 students from three campuses, was produced. Due to the relevance and impact of performing arts in creating the life of students on campus from all faculties, a dedicated space to the performing arts, Drama Studio, was launched within the Tuanku Zara Teaching Centre in 2016.

The Faculty values the experiences of our students. Different initiatives and actions have been taken to create impact on "Excellence in Education and Student Life", one of the core strategies of The University of Nottingham's Global Strategy 2020 (G2020). The initiatives and actions of many of the staff within the Faculty have been recognised by broader student and staff communities, resulting in accumulated accolades from colleagues within the Faculty. The Staff Oscars are presented annually to recognise the contributions of academic and administrative staff in improving the learning experience of our students. The 2016 awards were announced at the UNMC Students' Ball on 3 April 2016. Among the 15 categories, a school, and the members of academic and administrative staff within the Faculty won seven categories of the Staff Oscars: Best Administrative Staff - Ms Nurzatul'iffah; Most High-Tech Lecturer - Dr Tessa Houghton, SMLC; Most Captivating Lecturer - Mr Jean Christophe Graffe, SMLC; Best All-Rounder - Dr Derek Irwin, SoE; Best Personal Tutor - Dr Laura De Pretto, DoAP; Best School 2015-16 - NUBS Malaysia; Lifetime Achievement Award - Professor Christine Ennew, NUBS Malaysia. NUBS Malaysia has won Best School category since 2014.

The Vice-Chancellor's Medal celebrates exceptional achievement by staff or students, recognising any current member of staff or

current student at any of the University's campuses in China, Malaysia or the UK for exceptional achievement in any area or having made a substantial contribution to the University. In 2016, four medals, consisting of two to students and two to staff, were awarded to staff and students of UNMC. Dr Nafis Alam and Dr Pek Chuen Khee from NUBS Malaysia were the recipients of these medals. To acknowledge the outstanding achievements of the University in enhancing the student learning experience, two Lord Dearing Awards were presented to staff of the Malaysia Campus. One of the recipients was Dr Derek Irwin from SoE.

To provide globally excellent and internationally relevant teaching activities in Asia, the Schools in the Faculty are actively developing teaching partnerships and offshore delivery of our programmes. The School of Education (SoED) currently runs its MA Education in Sri Lanka and will offer its MA Special and Inclusive Education in Singapore. NUBS Malaysia runs its MBA in Singapore. The unique feature of our Singapore MBA is that this programme is taught jointly by academic staff from all three campuses. Also, students of the Singapore MBA can join the study tour organised by NUBS Malaysia. In 2016, from 17-22 January 2016, Malaysia and Singapore MBA students visited Taiwan to gain first-hand experience of doing business in Taiwan. During the tour, the group visited Tatung University, the Institute of Physics, Academia Sinica, Eclat Textile Co Ltd, Neo Solar Power Corporation, Phison Electronics Corp, Buffalo Machinery Co Ltd, the Grove and Yuan Ze University. A 2+2 articulation arrangement has also been developed to help build higher education capacity elsewhere. For instance, NUBS Malaysia has established such an arrangement with International University-Vietnam National University-Ho Chi Minh City, Prince of Songkla University, and Beijing Foreign Studies University.

Schools within the Faculty consider ways to offer opportunities in our formal curriculum and the broader university experience that can improve the employability and life-long learning experience of our students. With the introduction of additional accounting related optional modules, NUBS Malaysia has secured the maximum eight Credits for Prior Learning (CPL) towards The Institute of Chartered Accountants in England and Wales (ICAEW) Chartered Accountant Qualification, the ACA, for its BSc/BA (Hons) Finance, Accounting and Management. The BSc/BA (Hons) Finance, Accounting and Management at NUBS Malaysia is also accredited by another three major international accountancy bodies, the Association of Chartered Certified Accountants (ACCA), the Chartered Institute of Management Accountants (CIMA), and CPA Australia. In addition to the ICAEW exemptions, graduates of the BSc/BA (Hons) Finance, Accounting and Management degree also enjoy the maximum exemptions from CIMA (eleven papers and the Operational Case Study Exam), ACCA (nine papers) and CPA Australia (exemption from Foundation examinations in order to directly proceed to Professional Level papers) subject to fulfilment of the relevant requirements for these exemptions.

In addition to the nine ACCA exemptions, NUBS Malaysia now participates in the ACCA Accelerate programme. Under ACCA Accelerate, students of the school's BSc/BA (Hons) Finance, Accounting and Management will be able to register with ACCA during the second or third year of their undergraduate studies, before they complete their degree. NUBS Malaysia also provides an opportunity to its students to study up to four ICAEW Professional Level papers during their summer break. This mechanism allows its students to achieve a total of eight exemptions and to have completed four Professional Level ICAEW papers upon graduation, leaving only three remaining Advanced Level papers to be taken after they graduate while working with one of ICAEW's Authorised Training Employers. This is an additional service NUBS Malaysia provides to enhance the experience and employability of its students.

Many schools also support and encourage students to participate in activities that would enrich their university life and impact the wider community. On 12 November 2016, students and staff from SMLC attended the preview screening of the upcoming Malaysian noir

thriller *Interchange* directed by Dain Said which premiered at Locarno and Toronto Film Festivals and opened the 2016 Singapore International Film Festival on November 23. The SoED secured a grant of RM44,000 to facilitate a three-week teaching and learning school outreach project with disadvantaged schools in northern Sri Lanka. 12 students from the SoED visited three schools and worked with students and staff on initiatives to improve English language competence and project-based learning. Dr Quayle and a group of PHIR students attended a panel entitled "Cultural Diplomacy: Searching for ASEAN Common Values", hosted by the Institute of Diplomacy and Foreign Relations, Kuala Lumpur on April 2016. Professor Parfitt and Dr Joshua Snider have developed arrangements with the International Red Cross, UNICEF, UNHCR, and IFRC whereby these organisations will send speakers to UNMC to address students in PHIR's Human Security module at the MA level. PHIR students have also taken internships with these organisations. PHIR students led by Ms Phoenix Yeo organised a Saturday 'Do Gooding Day' event in November 2016, when some 40 refugee Rohingya children visited the UNMC campus and participated in educational and fun games and shared Malaysian food. Student and staff of SoE participated in the Georgetown Literary Festival 2016. The Festival is an annual international event supported by the Penang state government and hosts a variety of well-known and emerging writers. Our students participated at an event titled 'Readings: UNMC English Students', described on page 20 of the Festival handbook <http://www.georgetownlitfest.com/2015/wp-content/uploads/Festival-Handbook.pdf>.

Understanding the importance of "Partnerships for Growth – Working with Organisations Outside Our University" in G2020, the schools within the Faculty develop strong local and global networks of public, private and voluntary sector organisations to help shape the ways these organisations should operate and to make sure our courses continue to be relevant. In August 2016, SoED ran a week-long programme entitled "The Leadership Practices for High-Performing Schools" for school principals and those identified as part of the school's succession plan with significant responsibility for strategic decision-making. It was attended by 64 International school principals from Sri Lanka, Pakistan, India, Singapore and

Malaysia. In the same month, SoED conducted a week-long summer school for 30 middle managers from Sri Lanka, Pakistan and Kazakhstan. During this summer school, the participants explored practical and theoretical approaches to leadership and management, focusing on issues such as school culture and ethos, team-building, managing change and continuous professional development. SoED also secured Sri Lanka Ministry of Education School Principals Training Programme in 2016. From November to December 2016, the SoED trained 150 school principals from Sri Lanka at UNMC. The programme was very successful and the Ministry is considering to send a further 290 principals for training in 2017. In June 2016, SoED collaborated with the National Association for Gifted Children to host a conference for 200 participants in UNMC. The focus of this conference was to explore education pathways that are inclusive and allow for all students to be successful. The conference delegates included participants and presenters from Malaysia, Singapore, Australia, Indonesia, Thailand, India and Myanmar.

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NUBS has secured double international accreditations: AMBA and EQUIS. EQUIS reaccreditation for five years was secured in 2016.
 ...

The research of the Faculty has gone from strength to strength, and the research landscape is truly rich and diverse. Our geographical positioning in Southeast Asia has encouraged us to capitalise on the rapidly growing region as our laboratory and inspiration. The Faculty is committed to transferring our knowledge and skills to support social, economic and cultural organisations and stakeholders in Southeast Asia and beyond. In 2016, the Faculty had a total of 136 publications in which 102 were journal articles while others were authored books and book chapters, compositions, conference proceedings, confidential reports and internet publications. Compared to 2015, this year saw a rise of approximately 23% in journal publications and 4.5% in total publications. In terms of grants secured, the Faculty captured a total of RM741,577 in 2016. Approximately 47% of these grants were from the Malaysian government while approximately 45% were from national and international private institutions. Compared to 2015, this year saw a significant rise of approximately 138% in total grants secured.

Professor Malachi Edwin Vethamani's *Malchin Testament: Malaysian Poems* was launched by Deputy Minister of Higher Education Datuk Mary Yap, and was attended by UNMC Provost Professor Graham Kendall. The event was covered in *The Star* newspaper: <https://www.pressreader.com/Malchin-Testament> is the first of its kind in the field of Malaysian Literature in English and has already been reviewed positively by various scholars and writers. The book is one of several projects under the School of English's 'Centre for Southeast Asian Writing' (CSAW), which aims to promote research, writing and publishing in the field of Southeast Asian Literature. Among universities in the region, CSAW is unique in promoting the field of Malaysian Literature in English, producing two seminal books in the past two years, of which *Malchin Testament* is one. This ties in very well with the programmes offered at SoE which emphasises Malaysian Literature in English as well as creative writing, a unique combination in the Southeast Asian region. The School of Economics (SoEcon) hosted the 9th GEP Conference in Malaysia on 17-18 February 2016 with the theme of "Asian Economic Integration and Development". The presenters of this conference were from National University of Singapore, Bank Negara Malaysia, The University of Nottingham, Asian

Development Bank, University of Warwick, Singapore Management University, University of Western Australia, South East Asian Central Banks, University of Adelaide, World Bank and INCIF.

Driving our ongoing success in changing the way we work with our students and our colleagues, our students and staff have been recognised for their contributions and achievements. Below is a selected list of these contributions and accomplishments:

- For two years in a row, SoEcon alumni were awarded with the prestigious Chevening Scholarship to pursue postgraduate studies in UK. Jarren Tam Keat Wen was the first to be awarded in 2015, while Rachel Cho Suet Li was awarded the Chevening Scholarship in 2016.
- Dr Ken Kyid Yeoh from NUBS Malaysia successfully secured the Newton Advanced Fellowship, which is jointly funded by The British Academy (UK) and The Academy of Sciences Malaysia. The grant, worth GBP51,000, informs CSR practice in both countries and involves the establishment of inter-university links with De Monfort University in the UK.
- UNMC, represented by the team from NUBS Malaysia, emerged as champion at the 2016 ICAEW Regional Business Case Challenge. The annual competition attracted 30 teams from leading universities in the region, where the participants were given a case study and tasked to resolve a business situation. The panel of judges were industry experts from ICAEW, BDO, PwC and Maybank.
- Dr Nafis Alam, Associate Professor of Finance at NUBS Malaysia, received the Knowledge Exchange and Impact Award: International category at The University of Nottingham's Knowledge Exchange and Impact Awards 2016 held on 5 May 2016 at the East Midlands Conference Centre, Nottingham, UK. Dr Alam received the award for his contributions in raising the profile of UNMC in the field of Islamic Business and Finance.
- Dr Tew Peng Kooi was appointed as Deputy Chairman 1 of Ethnic Relations Course Committee, Institution of Higher Education for the 2016-2018 session.

- On 29 October, Dr Thomas Barker, SMLC, delivered a keynote speech at Brawijaya University (Indonesia) for their ICON LATERALS 2016 conference. Under the conference theme "Imagining Language, Literature and Culture in a Cosmopolitan World", Dr Barker discussed how contemporary Indonesian Islamic-themed films provide a window onto how contemporary Indonesians see and interact with the world and others. The speech entitled "Remapping the World" discusses how the films and their characters tend to find solidarity with other Muslims and begin to interpret the world as a network of Islamic communities and histories.
- Alongside professors from the University of Washington, Utrecht, Melbourne and the National University of Singapore, Dr Thomas Barker, SMLC, was an invited plenary speaker at the University of Indonesia's undergraduate symposium called INUSHARTS. INUSHARTS was held at the University of Indonesia Depok campus from 29-30 August 2016. Dr Barker spoke on the topic of creative industries policy in Malaysia and its relevance to Indonesia.
- Dr Sean Matthews from SMLC is part of a research project making an international comparative study of the practices relating to autonomy and governance in Higher Education, funded by the Sime Darby Corporation and in partnership with the Malaysian think-tank IDEAS (Institute for Democracy and Economic Affairs).
- Dr Khoo Gaik Cheng from SMLC was invited to present a RILCA (Research Institute of Languages and Cultures of Asia) Graduate Seminar on Multiculturalism in Malaysian media and films and screen a film at Mahidol University to MA students (Yasmin Ahmad's *Gubra*).
- Dr Khoo Gaik Cheng, SMLC, was also invited to be the plenary speaker, alongside Prof. A.B. Shamsul, at the first Asian Food and Society International Conference organised at KITA-UKM, whereby she entitled her talk: "Forging a New Malaysia—Together in Vegetarianism?".
- Prof Zaharom Nain, SMLC, is country researcher on the Digital News Report project initiated by the Reuters Institute for the Study of Journalism, University of Oxford. (www.digitalnewsreport.org).

- Prof Zaharom Nain, SMLC, was also invited to speak at the 10th International Malaysian Studies Conference, organised by the Malaysian Social Science Association and Universiti Malaysia Sabah. His paper was entitled "Transforming Malaysian Media – Promise, Performance and Possibilities". He also spoke on the topic "New Channels of Expression and Old Structures of Control: Malaysia's Media in a post-Mahathir Era" at the International Conference Creative Industries in Asia: Innovating Within Constraints, organised by Bangkok University in July 2016; and presented on 'Nationalism can be a force for Evil and, certainly, all things Bad' at the Asia Centre Tribute to Ben Anderson – Debating Imagined Communities in Bangkok, 29-30 January 2016.

- Dr Sumit Mandal spoke on the topic "Tunku Abdul Rahman's cultural passport", public forum, "Tunku Abdul Rahman: Political and intellectual legacies", organised by Star Media Group, Institute for Democracy and Economic Affairs (IDEAS), and Cambridge University, Petaling Jaya, 16 April.

- Dr Linda Quayle continued a "partner class" scheme with Universitas Muhammadiyah Yogyakarta (UMY) and Universitas Islam Indonesia (UII) in Yogyakarta, aimed at facilitating contact between students of Southeast Asian topics in Malaysia and Indonesia. Dr Joshua Snider and Dr Linda Quayle were involved in a benchmarking exercise conducted by the International Relations department at Binus University, Jakarta, Indonesia, July 2016.

- Dr Joshua Snider was invited to Semarang State University in Central Java to deliver a series of seminars on academic writing and publishing in English. This event was sponsored by the Indonesian Ministry of Higher Education, September 2016.

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In addition to the nine ACCA exemptions, NUBS Malaysia now participates in the ACCA Accelerate programme.

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Undergraduate students studying, Learning@The Core Malaysia Campus

Faculty of Engineering

The Faculty of Engineering remains the largest faculty in the campus with more than 1800 students. Hence it is extremely important that we are firmly committed to provide a top-quality learning and research experience and environment to our students. This is the core statement of our faculty vision and mission.

The faculty has continued to blossom in learning and research in the past year. We have made substantial and spectacular strides in our research activities, which contributed significantly to our 5-star Malaysia Research Assessment (MYRA) rating. Our engineering students have continued to be the most-sought-after graduates of the country and thus demonstrated the quality of our education. Our students have continued to win awards in various external competitions and brought us esteem and accolades.

The faculty went through substantial changes in 2016. At the core of it was the major curriculum changes to all our engineering programmes that aims to put the student at the heart of learning experiences. We revamped the learning experiences to become more modern and student-centred with a more project-based approach. All first-year students will have to go through various stages of hands-on workshops, not only to enhance the learning process, but also to train them more thoroughly in real-life problem solving skills and hence prepare them better for real challenges in society. These curriculum changes will be implemented in phases for each discipline and already our new students are showing appreciation of the changes with a much-improved teaching evaluation score.

One very important addition to our curriculum that we have initiated this year is the student continuous professional development (sCPD) course. sCPD is a continuous professional development course that we organised for the students to enhance their exposure to the

industry. This involves professional seminars, field visits, company engagements and this is designed to close the gap between the academia and the industry. Students completing the course are recommended for the Nottingham Advantage Award (NAA) and the participation and response to the course has been genuinely overwhelming.

Our strong links with the industry have also seen us develop a number of important innovative developments. One development of note is the UNMC-Dyson Talent scheme, with which we will develop a bespoke study-through-train with Dyson. Students who enrol in this scheme will conduct their final year and design project together with Dyson, which will be real industrial projects from the company. Moreover these students will be conducting their industrial training in Dyson and the same cohort of students will then be offered employment upon graduation. We are looking at the first batch of students in September 2017.

2016 also saw the faculty as a major operator of exchange workshops for many international universities. The faculty has attracted a lot of attention this year due to our world-class reputation and many universities have requested us to organise various workshops so that they can learn from us. Amongst the more important ones are the Engineering Education Leadership Training for Institute of Technology University of Morutawa from Sri Lanka and the Workshop on Telecommunication Engineering for Future University, Sudan. Another workshop was organised through our Cascade Grant in which we organised a Notts-Maker 3D printing workshop for school children, in order to expose them to the wonders of additive manufacturing. All these workshops were labelled as extremely successful and these universities have already requested the faculty to continue with the collaboration and organise more international workshops.

2016 witnessed another strong year of research from the faculty, both collectively and individually. The faculty has continued to be very productive on the research front. A record number of 22 PhD students graduated in 2016. Altogether we have more than RM12 million worth of research projects running, and throughout the year, we published more than 250 international level refereed and cited publications.

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Our two major research centres have continued to make waves on the research side. Our Asia Aerospace City Research and Technology Centre (AACRTC) has just completed a major design project for Rolls-Royce. It also signed a contract with MARA-Aerotech for a scholarship deal of RM3 million for aerospace research. The anaerobic biogas pilot plant from the Centre of Sustainable Palm Oil Research (CESPOR) is in its final stage of completion and is expected to be in full use come summer. The faculty is also consolidating all its research areas into four main clusters: Apart from AACRTC and CESPOR, we also have the Centre of excellence of Green Technologies (CEGT), which houses the most prominent researchers in the faculty and the Centre of Nanotechnology and Advanced Materials (CENTAM), which is one of the largest recipients of research grants.

Individually, Professor Dominic Foo received one of the top academic accolades in Malaysia by being the recipient of Top Research Scientists Malaysia Award in 2016. Dr Show Pau Loke has followed our senior's footsteps by winning the Young Chemical Engineer

Award by the Institute of Chemical Engineers. Dr Ho Weang Kee has won not one but two multi-million research grants from the Wellcome Trust and Newton grants from the United Kingdom on cancer research. UNMC is also honoured to organise the NASA-7SEAS International Workshop on Transboundary Haze. This is a multinational consortium sponsored by NASA targeted to study haze in Southeast Asia. These are all objective testaments that the research quality of the faculty is absolutely top notch and ranks at the highest international levels.

Our students have continued our proud tradition of winning various national and international student competitions in 2016. Our teams from mechanical engineering won the 1st IEM-METD Student Design Award organised by the Institute of Engineers Malaysia. A team from chemical engineering won the 4th IEM Chemical Engineering Design Competition. Our PhD student Ms Lillian Olule won the Highly Commended Award in the Universitas 21 3-minute Thesis Competition. Another team from mechanical engineering won the 3D Printing Hackathon Competition organised by Materialise. All

these accolades are not only reflective of the high quality of our students and education, but it also highlights the core of our education mantra: to produce a world-class, independent, problem-solving versatile engineer.

A matter of charitable note is that the faculty had organised a very special social responsibility programme in the form of the Blue Sky Team. The Blue Sky Team, initiated by our students and academic staff, was awarded through a CASCADE fund to undertake a project to provide free tuition to refugee children in Malaysia. The mobile tutor group works with the United Nations High Commission for Refugees and Tzu-chi Education Centre to provide a tutoring programme based around the Klang Valley. To date, almost 30 volunteers have contributed their effort and time at these centres every Saturday.

All in all, the faculty has undergone a very busy but fruitful year. With the new landscape and strategies, the faculty is confident that we shall continue to strive for excellence and reach higher heights in the coming year.



Undergraduate students working in the mixing laboratory, Malaysia Campus

Faculty of Science

October 2016 saw a celebratory dinner at the Kuala Lumpur Grand Millennium Hotel to celebrate the 10th Anniversary of the establishment of the School of Biosciences at the Malaysia Campus. The dinner was attended by the current and past Heads of School at UNMC (Professor Festo Massawe and Dr Peter Alderson) and a number of visitors from the UK campus including previous Head of School, Professor Jerry Roberts. The Biosciences 10th Anniversary was also marked throughout the year by a highly successful public seminar series organised by alumni, staff and friends of the School of Biosciences. Topics in the series included "Rationalising Ganoderma Disease of Oil Palms and Climate Change" by Dr Russell Paterson (Ganoderma Disease expert from the University of Minho, Braga, Portugal) and "Improving soil and crop productivity using organic and inorganic amendments" by Associate Professor Dr Ahmed Osumanu Haruna of Universiti Putra Malaysia. Alongside this seminar series the School of Biosciences also ran a special anniversary edition of the Global Food Security Summer School. This event attracted students from the Nottingham UK and Malaysia campuses as well as students from the University of Sydney in Australia.

2016 was also notable because it saw the establishment of a new School in the Faculty of Science. The School of Environmental and Geographical Sciences was established in September and is headed by Professor Chris Gibbins who joined UNMC from the University of Aberdeen. The staff of this new School encompasses all who were previously based in the School of Geography and they are joined by colleagues from Biosciences involved in the delivery of the BSc (Hons) Environmental Sciences degree. There were also a number of other notable changes to the Management Group of the Faculty of Science. Professor Andrew Morris became Dean of Faculty

following Professor Claire O'Malley's move to the Vice-Provost (Research & Knowledge Exchange) position. Dr Sharmini Balashanker took over as Head of School (UNMC), Pharmacy from Professor Morris, whilst Dr Tomas Maul became Head of School (UNMC), Computer Science.

Promotions; Honorary appointments

Four academic staff were promoted to either Associate Professor or Senior University Teacher Fellow in 2016 and there was also a promotion to chair for Professor Kang Nee Ting, the Head of the Department of Biomedical Sciences. Furthermore, a number of new honorary appointments were made and these include Dr Dave Kendall (Biomedical Sciences); Dato' Dr Ng Seik Weng (Pharmacy); Dr Harikrishna Kulaveerasingam (Biosciences); Professor Peter Leggat (Geography).

Media / publicity

A paper entitled "Sexual history and present attractiveness: People want a mate with a bit of a past - but not too much" by Dr Steve Stewart-Williams (Psychology) and co-authors CA Butler and A Thomas was picked up by a variety of news providers including The Daily Mail, The Express, The Sun, Cosmopolitan and Vanity Fair.

Dr Stephanie Evers (Biosciences) was interviewed by Al Jazeera for an article on haze pollution and peat degradation. The full article can be read here: <http://www.aljazeera.com/indepth/features/2016/01/malaysia-burning-swamps-choking-haze-160110130005928.html>.

Professor Graham Kendall (Computer Sciences) has had a number of articles published in The Conversation, some of which have been picked up by the print media including this UK Daily Mail story on gaming: <http://www.dailymail.co.uk/sciencetech/>

[article-3755027/How-Isaac-Newton-help-win-roulette-Laws-physics-help-predict-spin-wheel.html](http://www.nst.com.my/news/2017/03/188408/global-recognition-malaysian-universities-research)

The use of Malaysian fruit in the prevention of atherosclerosis – research conducted by Dr Teng-Jin Khoo and his former PhD student Dr Suraya A. Sani – was highlighted in the New Straits Times and other science publications: <http://www.nst.com.my/news/2017/03/188408/global-recognition-malaysian-universities-research>

The valuable conservation research of Dr Ahimsa Campos-Arceiz and Dr Ee Phin Wong was also featured in the New Straits Times: <http://www.nst.com.my/news/2016/10/179115/environmentalist-leads-msias-asian-elephants-towards-brighter-future>

Professor Andrew Morris was interviewed by the New Straits Times on the problems that new psychoactive substances or "legal highs" are causing in Malaysia. Report available here: <http://www.nst.com.my/news/2016/09/170840/drugs-vague-legal-status-can-lead-rapid-spread>

Facilities and equipment within the Faculty were significantly enhanced during 2016 through major refurbishments of the Biotechnology Research Centre, the 60-person capacity Pharmacy Teaching Laboratory and the Cell Culture Suite. Molecular and biotechnology research was also further enhanced by purchases of a new gel imaging system, an HPLC with PDA and FLD detectors and auto sampler, ultracentrifuge equipment and an FTIR. All of these developments will enhance the Faculty's ability to conduct high-impact research. Research output and esteem indicators were once again notable from the Faculty; some of the research highlights are listed below:

Research highlights (staff):

Dr Christophe Wiart established the Asian Society of Pharmacognosy and he is currently Editor in Chief for The Asian Journal of Pharmacognosy. The Board of Directors includes members from 12 countries across Australasia and the Middle East.

Hafiz Mahfooz UI Haque, Dr Abdur Rakib, and Ijaz Uddin won the best paper award at the 5th EAI International Conference on Context-Aware Systems and Applications 2016 in Vietnam, for the paper entitled "Modelling and Reasoning about Context-Aware Agents over Heterogeneous Knowledge Sources".

Professor Sandy Loh was invited as Chief Guest to inaugurate the International Conference on Frontiers in Life Science (ICFLS-'16') held in Trichy, India. She also presented an inaugural lecture entitled: "Molecular Pharming: Plant-Based Production of Recombinant Biopharmaceutical Proteins". Dr Christina Vimala Supramaniam was invited to contribute to the Malaysian-Indian Biotechnology discussions at the same conference.

Professor Sandy Loh visited Fraunhofer USA - Centre for Molecular Biotechnology (FhCMB), Delaware and presented a paper at the New Technologies, New Vaccine (NTNV) conference. Professor Loh also visited FhCMB's pilot manufacturing facility, Nanofabrication and Advanced Materials Characterisation Lab facilities at the University of Delaware (UD), USA.

Dr Chin Chiew Foan was invited to be one of the judges for The International Invention, Innovation & Technology Exhibition (ITEX) in Kuala Lumpur, Malaysia.

Professor Asgar Ali participated as a member of International Scientific Committee at the IV International Symposium on Guava and other Myrtaceae, Cairn Convention Centre, Australia, organised by ISHS.

Professor Andrew Morris was the opening speaker at the IWPD Conference in Penang, Malaysia on "The Role of Practising Pharmacists in Malaysian Pharmacy Undergraduate Education".

Research income (and output)

The publication output of the Faculty of Science for 2016 in Thomson Reuters listed journals was approximately 1.8 articles per academic; this is a slight improvement on the figures from the previous year. Grant capture has been significant in number and quantum within the Faculty and a total research income of RM3.7 million was registered in 2016. There has also been a slight increase in the number of submissions to National and International grant-awarding bodies compared to previous years. Notably, over RM1 million in research income was obtained from industrial collaborations in 2016. Highlights of some of the more significant grant capture are as follows:

Yayasan Sime Darby has extended its support for research on the Management and Ecology of Malaysian Elephants (MEME) headed by Dr Ahimsa Campos-Arceiz from the School of Environmental and Geographical Sciences for another three years, from Jan 2017 until Dec 2019. Amount awarded was RM1.9 million. Funder: Yayasan Sime Darby.

Dr Tuong Thuy Vu of the School of Environmental and Geographical Sciences and Dr Suzanne McGowan of the School of Geography have been awarded a Newton RCUK-DIPI-TRF-NAFOSTED Research Partnerships grant to assess human impacts on the Red River system in Vietnam. The total amount was approximately RM300K. Funder: Newton Fund RCUK-DIPI-TRF-NAFOSTED.

Dr Christina Vimala Supramaniam was awarded RM580,120 to investigate the efficacy of Living Organic Fertiliser (LOF) and Fortified Living Organic Fertiliser (FLOF) amended with mix cultures of Trichoderma spp. to control basal stem rot diseases in oil palm.

Funder: Green Plant Organic Fertiliser Sdn Bhd (Through CESPOR framework).

Dr Lim Kuan Hon & Dr Suresh Kumar Mohankumar were awarded RM504,140 to investigate the identification of mangiferin and genkwanin 5-O-β-primeveroside in gaharu plant parts and finished products.

Funder: Gaharu Technologies Sdn. Bhd.

Student highlights:

Some of our finest Faculty achievements were once again the result of the tremendous effort that our student body, both undergraduate and postgraduate, had put in during the course of the year. A total of 22 postgraduate students successfully graduated from the Faculty in 2016, which was, again, an increase on the previous year. A total of 23 Faculty research seminars were also delivered throughout 2016 by postgraduate research students. Some of the student highlights include:

Lo Wei Hong, Lew Ying Hui, Darrell Uding Senelus, Leong Shicheah joined a 3D printing theme hackathon, which was organised by Materialise Malaysia Sdn Bhd. These individuals won the Most Impactful Award with the prize of a 3D printed trophy and an Apollo 3D printer sponsored by Designex3D. Their team was named as BrailleHub, based on their project which was a knowledge base website for educators of the visually impaired.

Chee Jen Yang, a PhD student under Dr Chin Chiew Foan (Biosciences), won first prize in the Biotechnology category at the International Conference for Molecular Biology and Biotechnology, Kuala Lumpur.

Wong Xin Yi (BSc Biotechnology student) won the Best Oral Presentation Award at the Intervarsity Biochemistry Seminar (IBS); an annual event organised by the Malaysian Society of Biochemistry and Molecular Biology (MSBMB).

Jasmin Irisha Jim Ilham and Dulanga Witharanage (Biosciences) joined the Malaysian Youth Delegation 2016 (MYD 2016) at the 22nd Conference of the Parties (COP22), United Nations Framework Convention on Climate Change (UNFCCC) in Marrakech, Morocco.

Sonia Wong How Ming (PhD student) and Kong Wei Yang (BSc Biotechnology graduate) under Dr Eunice Ngai's (Biosciences) supervision won prizes at the Monash Science Symposium 2016. Sonia won the 1st place prize "Research in a Flash" category for her presentation "Is it the TRAIL to breast cancer cure?" while Wei Yang won the best oral presentation in "Cell Biology and Biochemistry" category for his presentation "The effects of epigenetic drugs Zebularine and Scriptaid on breast cancer cells".

Tham Shiau Ying, PhD student with Professor Sandy Loh, secured a TORAY grant amounting RM20,000 for a project entitled: "Combinatorial Application of Tocotrienols and Conventional Chemotherapeutic Drugs as a Chemosensitization Strategy in Colorectal Cancer".



Undergraduate students working in a Microbiology laboratory, Malaysia campus

...
Outreach and charitable initiatives remain a key tenet of the Faculty's activity. Of particular note was a RM46,500 international grant obtained by Dr Suresh K. Mohankumar (Biomedical Sciences) from Tanita Healthy Weight Community Trust (Japan)
 ...

Teaching & Learning

In the area of teaching and learning, Jaya Kumar Karunagharan (Foundation Studies) was a winner of a Dearing Award in 2016 for his exceptional contribution to the learning experience of students at the University. Faculty of Science academics were also successful in the Student Oscars led by the Student Association. In 2016, Dr Jessica Price (Psychology), Professor Stephen Doughty (Pharmacy) and Dr Suzanne McGowan (Geography) all left the Oscars ceremony with awards. Two members of the Faculty's academic staff were also awarded their PhDs in the past year; these were Dr Geetha Baskaran and Dr Bavani Ramayah (both Foundation Studies). Course offerings from the Faculty were also enhanced by the successful IQA self-accreditation of the MSc Psychology.

Outreach

Outreach and charitable initiatives remain a key tenet of the Faculty's activity. Of particular note was a RM46,500 international grant obtained by Dr Suresh K. Mohankumar (Biomedical Sciences) from Tanita Healthy Weight Community Trust (Japan). This award enabled the delivery of an obesity awareness project which included visits to local secondary schools. Administrative staff in the Faculty of Science also led two other charitable initiatives: staff and students were able to donate through the purchase of plants which were ultimately grouped together to form a large Christmas tree in front of the Trent Building. This event, supported by a separate Christmas market organised by the Faculty, raised over RM10,000 to support Yayasan

UNMC and Rumah Kasih. The Faculty also continued its involvement with a number of local primary and secondary schools. Students and teachers from Garden International School, IGB International School and Alice Smith School visited the Schools of Pharmacy and Biosciences for chemistry- and biology-themed experiential learning events. There was also a new outreach activity where around 30 primary school students from St Paul's Institution in Seremban engaged in laboratory work delivered by Pharmacy academics and students. The School of Biosciences also organised "Green Week 2016", which included tree planting and gardening to promote awareness about the benefits of a green landscape and biodiversity conservation.

The Faculty again welcomed a large group – 42 students in all – as part of the Kazakhstan gifted student programme aimed at 14-16 year olds. Over 30 academic staff were involved in the delivery of this highly-successful 3-week programme during which the visiting students were exposed to a variety of science activities covering the full spectrum of subjects delivered in the Faculty.

Appendix 1: Student and staff data

Exhibit 1: Student population over time (Dec census date)

Study level	2012	2013	2014	2015	2016
Foundation	927	1079	1077	608	588
UG	2740	2972	3195	3413	3248
PGT	495	433	404	352	406
PGR	263	285	325	379	374
exchange					82
Total	4425	4769	5001	4752	4698

Exhibit 2: Student numbers on foundation programmes (May census date)

Study level	2012	2013	2014	2015	2016
Engineering	439	443	423	387	329
Malaysian	362	357	362	340	290
International	77	86	61	47	39
Science	193	288	327	314	269
Malaysian	162	259	316	289	233
International	31	29	11	25	36
Arts & Social Sciences	295	348	327	355	351
Malaysian	188	245	255	296	308
International	107	103	72	59	43
Total	927	1079	1077	1056	949
Malaysian	712	861	933	925	831
International	215	218	144	131	118

Exhibit 3: Student numbers on undergraduate programmes (May census date)

Study level	2012	2013	2014	2015	2016
Engineering	1453	1534	1547	1465	1146
Malaysian	1051	1129	1176	1168	1179
International	402	405	371	297	267
Science	483	628	748	837	888
Malaysian	375	501	591	686	751
International	108	127	157	151	137
Arts & Social Sciences	804	810	900	942	989
Malaysian	397	420	536	606	699
International	407	390	364	336	290
Total	2740	2972	3195	3244	3323
Malaysian	1823	2050	2303	2460	2629
International	917	922	892	784	694

Study level	2012	2013	2014	2015	2016
Exhibit 4: Student numbers on masters programmes (May census date)					
Engineering	52	44	35	25	32
Malaysian	14	13	10	6	14
International	38	31	25	19	18
Science	29	30	41	46	38
Malaysian	5	7	17	19	10
International	24	23	24	27	28
Arts & Social Sciences	414	359	347	309	418
Malaysian	255	220	206	193	209
International	159	139	141	116	209
Total	495	433	423	380	488
Malaysian	274	240	233	218	233
International	221	193	190	162	255

Study level	2012	2013	2014	2015	2016
Exhibit 5: Student numbers on PhD programmes (May census date)					
Engineering	124	137	141	162	145
Malaysian	90	95	89	99	88
International	34	42	52	63	57
Science	82	92	109	127	128
Malaysian	67	70	74	80	80
International	15	22	35	47	48
Arts & Social Sciences	57	56	56	61	64
Malaysian	33	33	32	42	40
International	24	23	24	19	24
Total	263	285	306	350	337
Malaysian	190	198	195	221	208
International	73	87	111	129	129

Ethnicity	2012	2013	2014	2015	2016
Exhibit 6: Malaysian student population by ethnicity (May census date)					
Bumiputra	14	24	43	50	51
Chinese	2065	2314	2587	2664	2741
Indian	260	261	254	277	310
Malay	617	701	728	787	744
Others	43	49	52	46	55
Total	2999	3349	3664	3824	3901

Subject area	2012	2013	2014	2015	2016
Exhibit 7: Student numbers full-time vs part-time (May census date)					
Engineering	2068	2158	2146	2039	1952
Full-time	2039	2133	2124	2016	1936
Part-time	29	25	22	23	16
Science	787	1038	1225	1324	1323
Full-time	779	1016	1211	1310	1312
Part-time	8	22	14	14	11
Arts & Social Sciences	1570	1573	1630	1667	1822
Full-time	1265	1305	1386	1442	1500
Part-time	305	268	244	225	322
Total	4425	4769	5001	5030	5097

	2012	2013	2014	2015	2016
Exhibit 8: Academic Staff numbers as of end of May					
Engineering	84	101	103	92	103
Science	54	61	74	84	81
Arts & Social Sciences	73	85	89	96	97
Total Academic	211	247	266	272	281
Total	487	579	605	662	675

	2012	2013	2014	2015	2016
Exhibit 9: Non academic Staff numbers as of end of May					
Engineering	43	52	55	50	54
Science	28	31	33	28	28
Arts & Social Sciences	21	25	26	44	26
Central	184	224	225	268	286
Total	276	332	339	390	394

	2012	2013	2014	2015	2016
Exhibit 10: SSRs over time					
Engineering	24.7	20	19.1	19.5	17.5
Science	18.5	19.6	15	16.9	16.9
Arts & Social Sciences	20.8	16.9	16.9	16.9	14.5
Total	21.8	18.8	17.1	17.6	16.4

Nationality	2012	2013	2014	2015	2016
Afghan	0	0	0	0	1
Algerian	2	2	2	1	0
Argentinean	0	0	0	0	1
Azerbaijani	0	0	0	0	1
American	16	16	7	8	8
Australian	3	3	4	4	4
Austrian	1	1	0	0	0
Bahraini	6	8	14	12	7
Bangladeshi	50	54	49	44	41
Belarusian	0	0	1	1	0
Belgian	0	1	1	1	0
Botswana	1	0	0	1	0
Brazilian	1	0	0	1	0
British	36	41	35	32	69
Bruneian	2	4	2	4	8
Burmese	0	0	0	0	9
Cambodian	1	0	0	0	0
Canadian	4	3	4	4	1
Chadian	1	2	2	2	1
Chinese	73	66	78	62	74
Colombian	0	0	0	2	1
Croatian	0	0	1	1	1
Danish	0	0	1	4	13
Djiboutian	1	0	0	0	0
Dutch	1	1	0	0	2
Egyptian	18	36	52	73	81
Ethiopian	0	1	1	0	0
Emirian	0	0	1	1	0
Eritrean	0	0	1	1	1
Fijian	1	0	2	1	0
Filipino	7	7	5	3	7
French	3	3	5	3	4
Gambian	0	1	0	0	0
German	4	2	3	3	4
Ghanaian	2	4	5	4	3
Icelander	0	1	1	1	0
Indian	93	107	101	97	116
Indonesian	40	51	48	46	55
Iranian	52	39	34	34	18
Iraqi	17	12	10	5	6

Nationality	2012	2013	2014	2015	2016
Irish	1	2	1	1	1
italian	0	0	1	1	2
Jamaican	0	0	0	0	1
Japanese	4	8	7	6	6
Jordanian	6	4	5	3	6
Kazakhstani	51	72	62	48	13
Kenyan	28	26	23	24	22
Korean	60	52	46	42	1
Kuwaiti	0	0	2	2	1
Kyrgyz	0	0	0	0	1
Kyrgyzstani	2	1	1	2	2
Lebanese	1	0	1	3	4
Libyan	1	0	2	3	3
Malagasy	1	2	2	2	0
Malawian	2	2	1	1	1
Maldivian	33	27	29	44	44
Mauritian	58	73	64	46	33
Mexican	0	0	2	1	0
Moroccan	1	0	0	0	0
Motswana	0	0	0	0	1
Mozambican	0	0	0	0	1
Myanmar	12	11	10	6	0
Namibian	0	0	1	1	0
Nepalese	2	3	3	3	1
Netherlander	0	1	0	1	0
New Zealander	2	2	2	1	1
Nicaraguan	0	0	0	1	1
Nigerian	57	54	42	37	26
Norwegian	0	0	0	1	1
Omani	3	3	18	15	3
Pakistani	241	216	196	151	94
Palestinian	2	4	4	3	1
Polish	1	1	1	0	0
Russian	5	3	2	3	3
Rwandese	1	0	0	0	0
Saudi	0	0	0	0	1
Seychellois	0	2	8	10	23
Singaporean	21	24	30	27	78
Somali	9	7	2	1	0
South African	1	1	2	2	1
South Korean	0	0	0	0	35

