

RESONANCE

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UKM at 141

QS WORLD
UNIVERSITY
RANKINGS

2020





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Photographer
Centre for Corporate Communications
Photo Unit

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Articles are welcomed and can be sent to:
pkk@ukm.edu.my

RESONANCE

Editorial Team

Universiti Kebangsaan Malaysia is one of Malaysia's premier research universities. Its' astounding and renowned presence in the academia is reflected through the various contributions it has made to the society, remarkable research that its researchers take part in and the many cooperation it made with the industry. Flip through Resonance's pages to read about UKM's prestigious achievements in research, publications, students and staff related activities. Happy reading.

A portrait of Prof. Dato' Ir. Dr. Mohd Hamdi Abd Shukor, Vice-Chancellor of Universiti Kebangsaan Malaysia. He is a middle-aged man with short, graying hair, smiling at the camera. He is wearing a dark navy blue suit jacket over a white shirt and a bright red tie. A small gold pin is visible on his left lapel. The background is a blurred indoor setting with large windows showing greenery outside.

Message from the Vice-Chancellor

PROF. DATO' IR. DR. MOHD HAMDI ABD SHUKOR

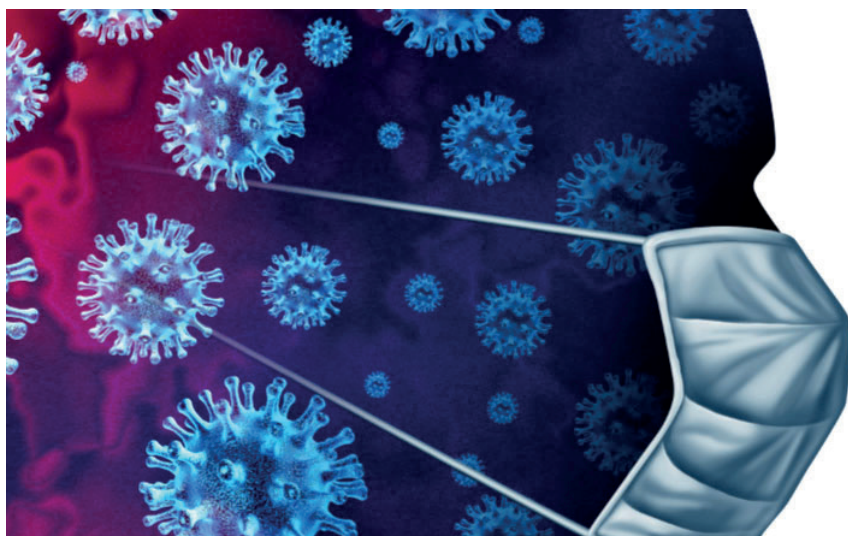
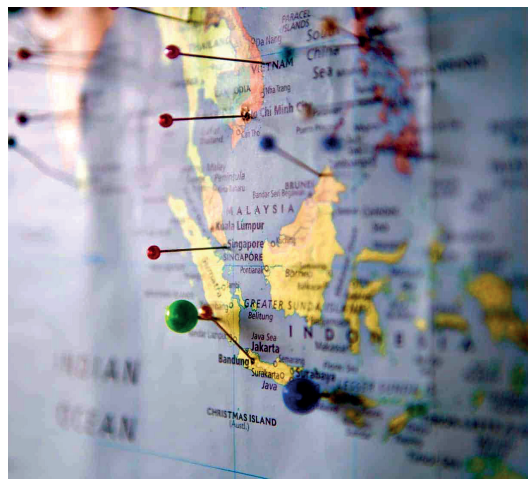
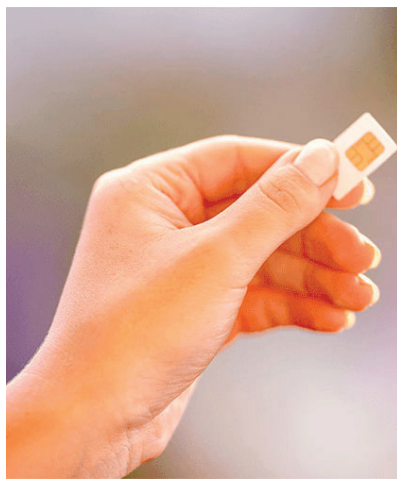
The 18th of May 2020 is truly historical for all of us Warga UKM and Malaysia as a whole. On this day 50 years ago, Universiti Kebangsaan Malaysia, a university inspired by the people and the pride of the nation was established.

The Golden Jubilee Celebration of UKM this year was held during a very challenging period when Malaysia and the entire world is facing the COVID-19 pandemic. In today's context, the research clusters on Heritage and Society, Advance Health and Medical, Sustainable Resources, Environment and Smart Livelihood, Economic and Social Transformation, and Advanced Digital Technology are relevant to drive translational research and innovation in addressing the needs of the society and the nation in line with the motto of UKM's Golden Jubilee "Inspiring Futures".

COVID-19 and the Movement Control Order (MCO) has pushed UKM towards innovation in withstanding the global pandemic by moving forward calmly and maturely. Despite challenges that we face, UKM continues to operate as a Research University in the new normal environment. UKM has been involved directly and indirectly in helping the country to curb the spread of COVID-19 among others by providing labs for COVID-19 diagnostic testing, sharing of knowledge, expertise and new formulation as well as being one of the hospitals to treat COVID-19. The global pandemic has really defined us on the question of our relevance, our ability to adapt, our capability to think pragmatically and at the same time to be creative with new and sophisticated ideas.

I am also pleased that UKM have done well in the recently announced QS World University Ranking 2021 and THE Asia University Ranking 2020. UKM is ranked 141 in QS World University Ranking 2021 compared to 160th place last year; while in THE Asia University Ranking 2020 we have improved to 160th position from 170th last year. My appreciation goes to our professors, lecturers, management, staff and students for their tireless effort and contributions towards the excellence of UKM. Congratulations!

UKM has stayed strong in these 50 years due to the struggle, sacrifice and contribution by many. We should look back to the trust and mandate given to us. We have to be a dynamic higher learning institution, backed by the society to shape the intellect, culture and civilization for the well-being of our nation and the world. With that in mind, we will then look forward, form strategies and calculate the risk towards excellence.



CONTENT

UKM EXCELLENCE

- 06 QS World University Rankings:
UKM at 141 World Ranking
- 08 UKM Ranked 160 in the 2020 THE
Asia University Rankings
- 10 COVID-19 Pandemic is a Reminder
to UKM to Stay Relevant
- The Chancellor

UKM ALUMNI

- 12 Datuk Dr. Noor Hisham Abdullah
was appointed as *Alumni Tersohor*
2019
- 14 UKM Alumni Appointed as
Associate Professor of
Cardiovascular Medicine at Oxford
University

UKM EXPERT

- 16 HCTM is the First in Southeast Asia
to Use UCPFlex Technology
- 17 Malaysians Knowledge, Attitudes
and Practices towards COVID-19
- 18 Female Leaders in Corporate
Sectors are Still Underrepresented

STRATEGIC PARTNERSHIP

- 20 UKM and MARii Working Together
to Spur the Next Generation
Vehicles
- 22 Free SIM Cards and Lessons from
YTL Foundation's Collaboration
with UKM



QS World University Rankings: UKM at 141 World Ranking

Universiti Kebangsaan Malaysia (UKM) continues to chart its way by securing a better ranking position in the Quacquarelli Symonds (QS) World University Rankings 2020/2021 (QS WUR) to be in the top 200 university in the world. UKM secures its placement at 141, moving up 19 places from last year in 160.

“Looking at the data, UKM is progressing very well in improving its indicators value. The overall performance has improved in which academic reputation scores 53.8 percent (%), compared to 50.9% last year, the employer reputation scores 55.7% compared to 44.7% in 2019, meanwhile the international faculty scores 31.2%, an increment from 24% last year and international students’ scores 40.8% in this year’s ranking”, said the Vice-Chancellor, Prof. Dato’ Ir. Dr. Mohd Hamdi Abd. Shukor.

According to him, 65,673 citations were recorded in 2018, and in 2019 the number of citations showed a drastic increase to 95,000. However, the citation scores fall off to 11.9% in 2020. Although

the number of citation has increased, the value when put together in the ranking system it is normalized with the highest value resulting to the fall of the score.

Prof. Dato’ Dr. Mohd Hamdi said UKM would elevate their efforts and quality as outlined in the UKM strategic plan, which layout the three out of five key principles of the House of Quality (HoQ), namely research, academic and international.

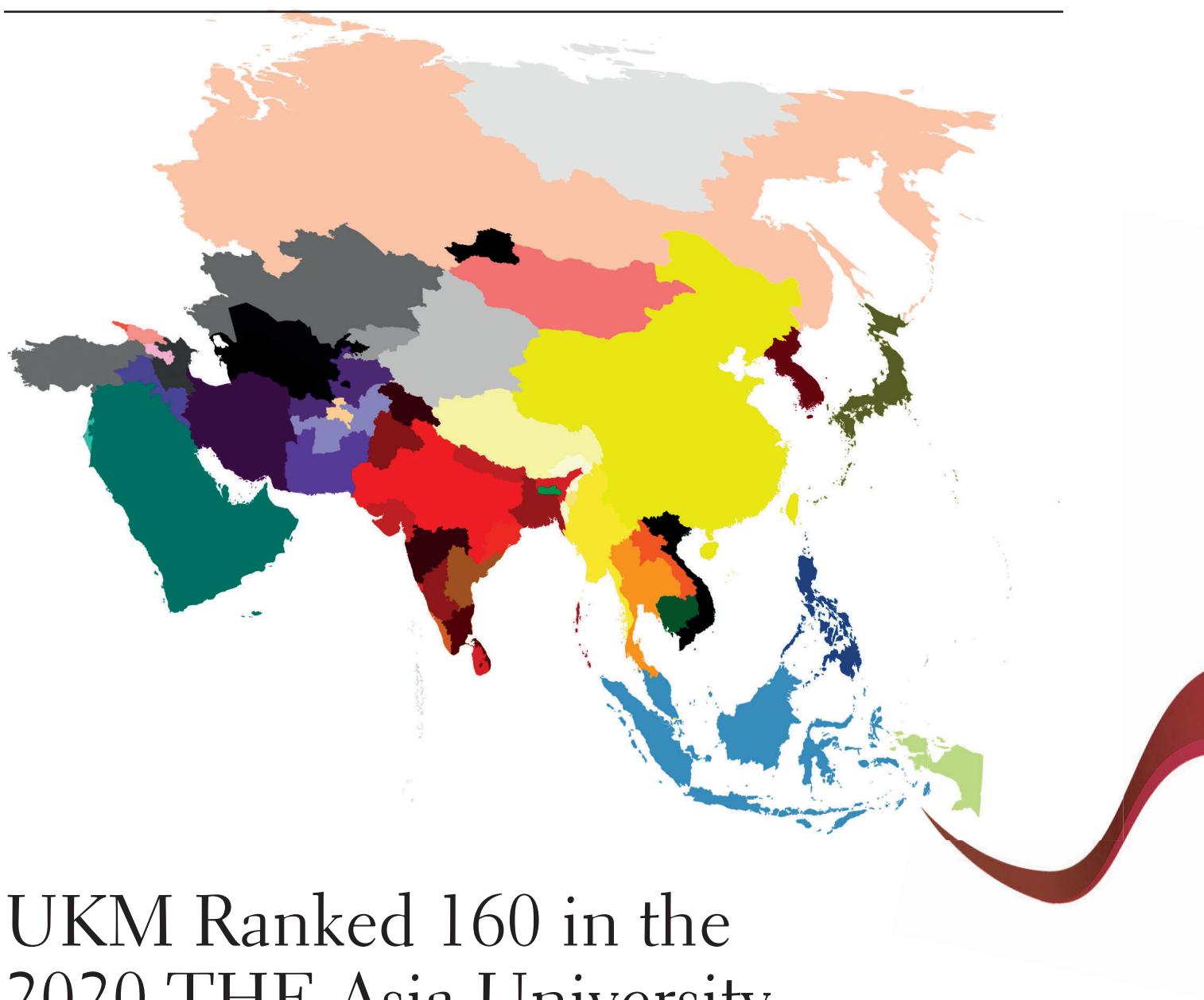
“These three (HoQs) will be refined and supported by the two other elements, namely talent and finance,” he said.

The Vice-Chancellor considers the success of UKM as a present for the university which had just celebrated its 50th anniversary.

Among the leading universities in the world, UKM which just celebrated its 50th anniversary on May 18, 2020 will continue to deliver high quality education and further strengthen UKM’s role in leading the country’s higher education.

UKM AT
141

QS WORLD UNIVERSITY RANKING
2020/2021



UKM Ranked 160 in the 2020 THE Asia University Rankings

UKM is ranked 160th in the rating of 2020 Times Higher Education (THE) Asia University Rankings announced on June 3rd, 2020.

UKM has improved its ranking position to 160th this year from 170th in 2019, moving up 10 places.

This evaluation includes five indicators namely Research, Citation, Teaching, Industrial Income and International outlook. Among these five indicators measured by THE, UKM scores highest in international outlook with score 52.9.



UKM AT 160

THE WORLD
UNIVERSITY
RANKINGS

Vice-Chancellor, Prof. Ir. Dato' Dr. Mohd Hamdi Abd Shukor said our (UKM) improved position to 160th place in the THE Asia University Rankings 2020 from 170th last year is definitely a very good news to UKM.

"I see this as our birthday present to UKM as we celebrate our 50th Anniversary this year. My appreciation goes to our professors, lecturers, management, staff and students for their tireless effort and contributions towards the excellence of UKM. Congratulations to all Warga UKM," he said.

He said that UKM is one of the two universities in Malaysia that has made a significant improvement in the THE Asia University Rankings this year.

"The rise in the rank indicates that UKM is on the right track with regards to our direction in quality improvement and implementation of our strategic plan.

"University rankings is one of many instruments to benchmark ourselves with other institutions. I believe that if we continuously strengthen our fundamentals in research, education and service, good ranking shall follow as the result," he said.

The THE 2020 ranking includes just under 500 universities from 30 territories.

A total of eight Malaysian universities were ranked in the eighth edition of this prestigious rankings.

Covid-19 Pandemic is a Reminder to UKM to Stay Relevant – The Chancellor



The Covid-19 pandemic that hits the world this year had changed the way the university operates. It requires UKM to stay relevant and ready to meet the challenges, in line with its function as a national university, according to the Chancellor, Duli Yang Maha Mulia Yang di-Pertuan Besar Negeri Sembilan Darul Khusus, Tuanku Muhriz Ibni Almarhum Tuanku Munawir.

He said UKM had set a moral compass and intellectual discourse, with a strong commitment to excel that could drive the university to face any circumstance, either in a calm or turbulent crisis.

“In facing the pandemic crisis Covid-19, I am proud of the Director of General Health at the Ministry of Health and the Special Advisor to the Prime Minister on Public Health as they are both the alumnus UKM. These two and many other distinguished alumni in the public and private sectors are testament to UKM’s success stories in serving the nation,” he said.

He delivered the speech in conjunction of UKM 50th Anniversary of “Universiti Kebangsaan Malaysia: Creating the Future”, which was celebrated through the social media platform.

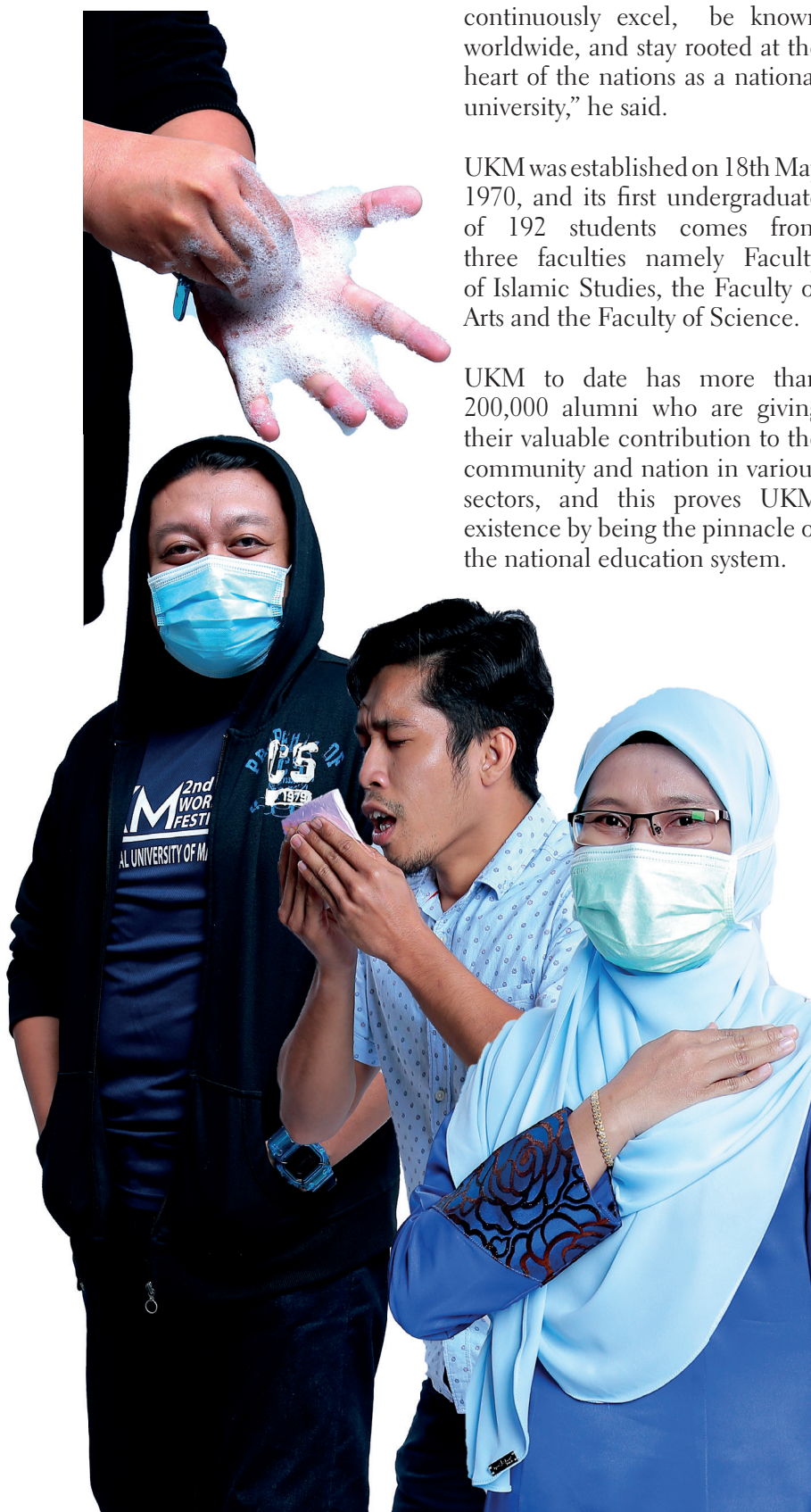
According to him, the achievements of UKM as the leading research university in Malaysia and being recognized as one of the top 200 universities in the world, did not come easily. “I believe it is the result of the efforts, commitments and hardships given by all of the university’s members – academicians, officers, staff and students, that provides the continuity and success of the university,” he said.

According to him, it is important for UKM to determine its navigation for the next 50 years to give more essence to the hope, ambitions and aspiration of its establishment.

“For UKM to create the future, it requires each of its members’ to develop a strong spirit, commitment, knowledge, skills and ability to handle challenges. We have no other choice, but for UKM to continuously excel, be known worldwide, and stay rooted at the heart of the nations as a national university,” he said.

UKM was established on 18th May 1970, and its first undergraduate of 192 students comes from three faculties namely Faculty of Islamic Studies, the Faculty of Arts and the Faculty of Science.

UKM to date has more than 200,000 alumni who are giving their valuable contribution to the community and nation in various sectors, and this proves UKM existence by being the pinnacle of the national education system.





Datuk Dr. Noor Hisham Abdullah was appointed as *Alumni Tersohor* 2019

In the past few months during the peak of the pandemic of COVID-19 in Malaysia, the nation has seen the calm face of Datuk Dr. Noor Hisham Abdullah, the Director General of Health on the national television every day for him to detail out the latest developments of the COVID-19. He who is a good communicator in Malay and English has become the country's public face in this fight with a reassuring voice in the midst of Malaysian collective panic. Besides the daily report of COVID-19, he ensures that the Malaysian are informed and educated on how to flatten the COVID-19 curve.

Datuk Dr. Noor Hisham had obtained a medical doctorate degree in 1988 and a Master in Surgery in 1994, both from UKM. He went on to specialise in endocrine surgery and did his training in various universities in Adelaide and Sydney, Australia.

Due to his great contribution to the nation in the fight against COVID-19, UKM has awarded the *Alumni Tersohor* 2019 to the Director-General of Health, Datuk Dr. Noor Hisham Abdullah in conjunction with the 2020 Medical Faculty Appreciation Award Ceremony.

The award was given for his great contribution in the field of medicine.

With the acceptance of the award, Datuk Dr. Noor Hisham has expressed his thanks to the UKM, especially the Faculty of Medicine who chose him as a *Alumni Tersohor* 2019.

"This award is a recognition of the commitment and dedication of all educators in the Faculty of Medicine UKM and a manifestation of the excellence of health front liners wherever they are. They are special people who are committed, productive, innovative, and always strive to provide the best services to the people beyond expectations," he said.

Datuk Dr. Noor Hisham said the excellence of national health services is the result of the teamwork of each individual, where every contribution, no matter how small, is a string towards high impact health results, reasonable costs, and satisfactory customer satisfaction.



“Thank you to all the health service staff who are still serving, as well as those who have retired. They always perform their duties and improve the quality of conveyance of health services with full dedication and integrity,” he added.

Datuk Dr. Noor Hisham has also been named one of the world’s best doctors by China Global TV Network (CGTN), based on his credibility in dealing with the COVID-19 crisis, along with two other figures, Dr. Anthony Fauci of the United States and New Zealand Director-General of Health Ashley Bloomfield.

Recently, he was awarded The BrandLaureate Most Outstanding Brand Leadership Award by The World Brands Foundation for his exceptional leadership and role in administrating the Covid-19 pandemic in Malaysia. Meanwhile, the Health Ministry was presented with the BrandLaureate Awards’ Certificate of Recognition and Appreciation for its success in flattening the Covid-19 curve.

UKM Alumni Appointed as Associate Professor of Cardiovascular Medicine at Oxford University

*“Currently I am trying to get
doctors and scientists from
UKM or any institutions in
Malaysia to work with me.”*





The success of alumni in all fields plays an important role in raising the name of a university, what more when the success is sketched on the global stage. Apart from helping to improve the university rankings, the success story can also be an inspiration for the university graduates to pursue their interest and become successful people. Amongst the success stories of UKM alumnus, the most recent one has been carved by Associate Professor Dr. Masliza Mahmud who is an Alumni of the Faculty of Medicine UKM 2005 when appointed as an Associate Professor of Cardiovascular Medicine at Oxford University, United Kingdom (UK), recently. She is not only making UKM, but also Malaysia proud of her achievement.

Dr. Masliza, was born in Batu Pahat, Johor and obtained her Bachelor of Medicine from the University of Otago, New Zealand, followed by a Master of Medicine from UKM. She continued her doctorate studies at Oxford University and finally served as an academician at the institution.

At Oxford University, she conducts various medical projects and research that not only beneficial to patients in the UK, but the results later can be used by the international community, including Malaysia.

She hopes researchers and doctors from Malaysia will work with her to build and strengthen cardiovascular field in particularly to improve the field of this research in Malaysia.

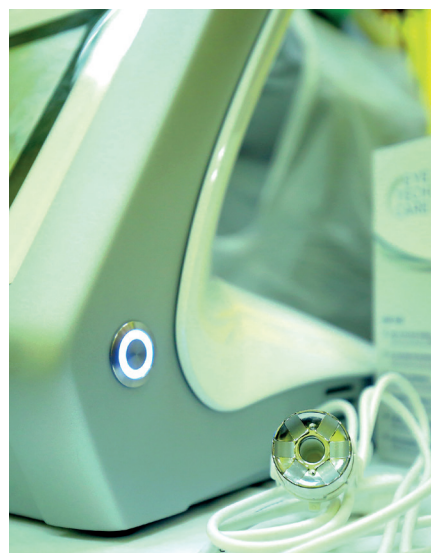
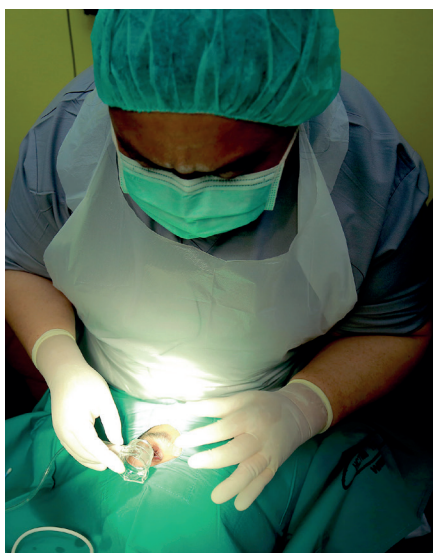
“Currently I am trying to get doctors and scientists from UKM or any institutions in Malaysia to work with me. I am very pleased that very recently one of UKM lecturers has secured a place to undergo a PhD (Doctor of Philosophy) at Oxford under my supervision. I hope other doctors will be more inspired to follow his foot-steps,” she said.

She also wants Oxford University and UKM to collaborate wherever possible in various specialities not necessarily in cardiology. This can provide opportunities for other non-cardiology doctors or scientist to undergo training or PhD at Oxford.

Other than being appointed as Associate Professor, Dr. Masliza currently leads the Clinical Research Group as a Cardiologist Imaging Consultant at the Oxford Centre for Clinical Magnetic Resonance Research (OCMR), Division of Cardiovascular Medicine, Oxford University, United Kingdom.

The success and achievement of Dr. Masliza will certainly be an inspiration to students and junior academics to pursue in academic research until it receives an international recognition.

HCTM is the First in Southeast Asia to Use UCPFlex Technology



Hospital Canselor Tuanku Mukhriz (HCTM), UKM is the first hospital (public and private hospital) in Southeast Asia to use the Ultrasound Cycloplasty (UCPFlex) technology in treating patients with glaucoma.

UCPFlex is a technology that uses focused ultrasound with high intensity to control and destroy the body ciliary in the eye using external approach.

According to HCTM Ophthalmology Expert, Assoc. Prof. Dr. Jemaima Che Hamzah, the technology gives less side effects than other cyclodestructive procedure that is used before such as transscleral diode laser cyclophotocoagulation and endolaser cyclophotocoagulation treatment.

“UCPFlex also has a faster healing rate as compared to other treatments. This technology gives alternatives for the patients to choose their preferable way of treatment.

“In just two weeks, until March 2020, we have tried this treatment to a number of eight patients from HCTM, and all have shown good results,” said Assoc. Prof. Dr. Jemaima.

This technology is brought to Southeast Asia by a supplier of eye treatment technology, Excimed Sdn. Bhd. through the strategic collaboration between HCTM and Excimed.

“We chose HCTM for many reason, among other is that UKM supports research and the use of new technologies.

“Besides, Dr. Jemaima is also a specialist in the glaucoma treatment and highly respected by other doctors,” said the Director of Excimed, Gideon Lim.

He added, this technology will be introduced to other hospitals after successful treatments in HCTM.

Malaysians Knowledge, Attitudes and Practices towards COVID-19



The COVID-19 pandemic has affected everyone's life in which the daily activities are changed to adapt to the new norm. Initially when COVID-19 hits every corner of the world, most countries took a drastic action to curb the spread of the virus. Among the steps taken were the closing of country borders, the public are confined to their home and Movement Control Order (MCO) being enforced. These create anxiety, worry, and panic among the public.

To deepen the understanding of Malaysians regarding the knowledge, attitudes and practices towards COVID-19, a group of researchers from UKM which was led by Assoc. Prof. Dr. Emma Mirza Wati Mohamad and Dr. Arina Anis Azlan from the Faculty of Social Sciences and Humanities with researchers from Universiti Malaysia Perlis, Universiti Putra Malaysia and Sunway University had conducted a study involving 4,850 respondents and this study was published in PLoS One, a high impact journal (Q2).

The study sought to measure the level of knowledge, attitudes and practices among Malaysian society. More specifically, the objectives were to measure knowledge scores among the different layers of society, gauge positive and negative attitudes and observe the disease prevention behaviour of Malaysians in the pandemic.

The research article was published on May 21st 2020, and the content of the article was extended to the World Health Organization (WHO) as part of the journal's initiative to facilitate the process of sharing information about this outbreak. The findings of the study have contributed to global monitoring efforts of COVID-19.

The results showed that 80.5 percent of Malaysians had sufficient knowledge of the COVID-19 virus, despite some misunderstandings about the virus, which was said could spread through the air.

Malaysians' attitudes towards COVID-19 are optimistic. Malaysians are confident that the virus can be overcome and that the government is doing a good job at handling it.

Through the study, Dr. Arina Anis explained that Malaysians had begun to avoid crowded areas, practicing good hand hygiene and using hand sanitizer a week before the MCO was implemented.

"However, only a small number of people used face masks because it is not part of a culture they are used to," she said.

The researchers are hopeful that as the pandemic continues, people will learn to adapt to new norms.

Female Leaders in Corporate Sectors are Still Underrepresented

The number of female leaders in corporate sectors remain underrepresented in comparison with the government sector, said the former Vice-Chancellor of UKM, Prof. Emerita Tan Sri Dr. Sharifah Hapsah Syed Hasan Shahabudin.

She emphasized the number is comparatively small in the government sector.

“There are more women who hold a post in the government sector like Ketua Setiausaha (KSU) which has improved. We have achieved the 30% target in the government sector but neither in private sectors nor the political environment.”





She said during *Forum Webinar Bicara Jubli Emas UKM Siri 3: SriKandi UKM Memacu Kecemerlangan*.

Sharifah Hapsah, who is also the President of National Council of Women's Organisation Malaysia (NCWO) said that Malaysia did not demonstrate any improvement on those issues according to the report on gender from World Economic Forum (WEF) 2020.

"In terms of economic participation and opportunity political representation or empowerment, our ranking (Malaysia) is 103 out of 153 countries."

"We used to be in the high ranking position but not anymore. We are now in the second lowest position just after Myanmar. It's hard to imagine when Cambodia and Vietnam have surpassed us. This is not good," she said.

Even though Malaysia has enormous female students at universities but that does not guarantee an employment, she said.

"We must look into the gender quality issue and admit there is potential inequality when they enter the job market."

"Speaking from education perspective, we must prepare women in order for them not to left behind especially in the STEM sector such as robotic, artificial intelligent and data analytic."

UKM and MARii Working Together to Spur the Next Generation Vehicles



The automotive industry plays a significant role in transforming Malaysia into an industrialised nation, which translates into high-value economic activities, hence improving the standards of living as well as creating higher-paying jobs. In materialising this for the better of the nation, effort has been taken to establish The National Automotive Policy 2020 (NAP 2020). The policy was launched on February 2020 and it aims to propel the country to become a regional leader in automotive manufacturing. The NAP 2020 promotes participation of local companies in the domestic and global supply chain, encourage R&D and engineering activities, build capabilities and capacity of local workforce, support national car projects as well as enhancing exports, investments and local production volume.

In driving the development of National Automotive Policy 2020 (NAP2020), UKM and the Malaysia Automotive, Robotics and IoT Institute (MARii) established cooperation in developing the areas of Next-Generation Vehicles (NxGVs), Remanufacturing, Recycling, and Smart Manufacturing Technologies through various research and development (R&D) projects and commercialisations efforts.

One of the projects includes the development and commercialization of electric vehicle (EV) batteries, supported by various R&D collaborations by both parties, focusing on battery performance, battery replication and the development of a lithium-ion (Li-ion) battery production line.



UKM Vice-Chancellor, Prof. Dato' Ir. Dr. Mohd Hamdi Abd Shukor said the Memorandum of Understanding (MoU) that was signed commits both parties to work together more closely towards the common goal to enhance technology capabilities. "I hope the emergence of the digital economy in the Industry 4.0 landscape will spur more sustainable innovation, in the various domain applications for the benefit of the government, organisations, and citizens.

"These innovations can be harnessed further to change the way we live and work, in creating an inclusive digital society with common goals, that will not only create wealth for better well-being for all but also bring peace and prosperity to the world," he said.

Meanwhile, Chief Executive Officer of MARii, Dato' Madani Sahari said the collaboration complete the strategic network of expertise required to implement projects related to the R&D of basic materials for Li-on battery manufacturing, cybersecurity, and digitalisation in the mobility sector.

"The R&D projects will add value to the development of NxGVs, Mobility-as-a-Service (MaaS) and IR 4.0, in line with NAP2020," he said.

The collaboration will also develop a network catered for Reverse Logistic, which involves the process of collecting, recycling, and dismantling of End of Life Vehicles.

Free SIM Cards and Lessons from YTL Foundation's Collaboration with UKM



UKM is the latest tertiary education institution to join YTL Foundation's Learn from Home Initiative. In this case, not only will UKM students and faculty get free Yes 4G SIM cards with 40GB of data, the university's Faculty of Social Sciences and Humanities is working with YTL Foundation and FrogAsia to develop lessons in Bahasa Melayu and English for students in Standard 1 to Form 5. These lessons will be added to English, Mathematics and Science lessons which are available to parents and students under the initiative.

Thirty undergraduate and postgraduate students from the English Language Studies Programme, Linguistics Programme and Malay Language Studies Programme will join the fellows and alumni from Teach for Malaysia in developing engaging online lessons that students can access to continue learning from home whilst schools are still closed.



At the final semester of their undergraduate studies, these students are required to undergo an eight-week industrial placement. The collaboration between UKM, FrogAsia and YTL Foundation will allow these students to complete their course at a time when many industries have withdrawn their offer of placements due to the pandemic.

Tan Sri (Dr.) Francis Yeoh Sock Ping, Chairman of YTL Foundation said, “we are delighted that YTL Foundation is once again working with UKM on a programme that will benefit the students in the country. We recently collaborated with the university’s Faculty of Social Sciences and Humanities to research the effectiveness of re-designed, technology enabled classrooms on teacher pedagogy and student learning behaviour which subsequently formed the basis of several published academic papers. The use of technology in education is something that UKM understands well and we could not have a better partner to develop online Bahasa Melayu and English lessons.”

As a result of the Movement Control Order (MCO), UKM’s teaching and learning process has now shifted from in person lectures and face to face discussions to 100% online classes and lectures. The university uses its proprietary learning management system, UKMFolio™ as its official asynchronous learning platform for continuous teaching and learning and for online examinations.

Prof. Dato’ Ir. Dr. Mohd. Hamdi Abd Shukor, Vice-Chancellor of UKM added, “On behalf of UKM, I welcome the opportunity for our students to contribute to the Learn from Home Initiative and also thank YTL Foundation for offering free Yes 4G SIM cards with 40GB mobile data to 28,000 UKM’s student. For this semester, we have already started the online teaching and learning since 27 April 2020. I am very much aware and understand

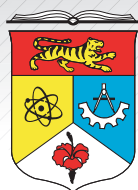
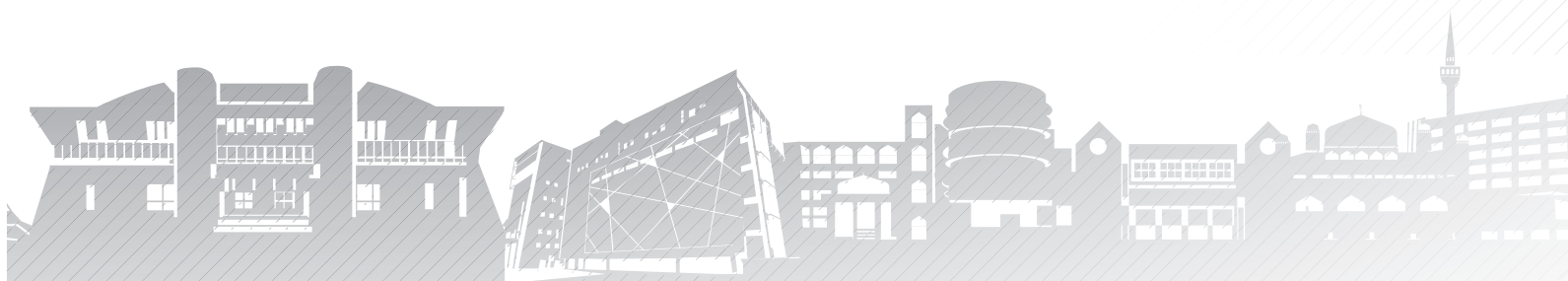
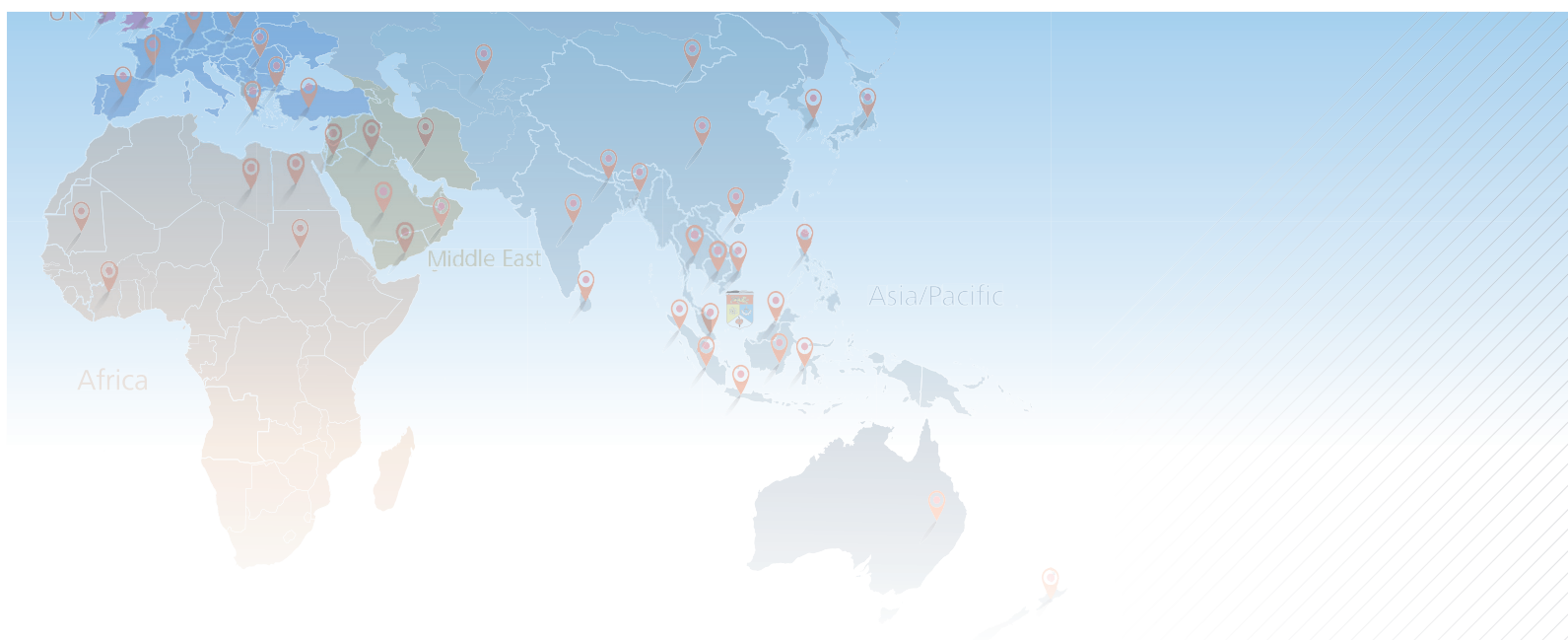
that not every student is equipped with Wi-Fi or good Internet connection at home. Therefore, this initiative will be able to reduce the burden of the students especially for those who depend on mobile data to go through the online learning process and also to stay connected with their lecturers.”

The collaboration with YTL Foundation is a double celebration for UKM as the University is celebrating its 50th anniversary on 18 May 2020. Strategic partnerships with the private sector such as this will be important for the development of the university into a world class institution as UKM looks ahead to the future.

The applications for the free Yes 4G prepaid SIM cards is open for UKM students and faculty until 9 June 2020. YTL Foundation also announced that the closing date for applications for the free Yes 4G prepaid SIM cards as well as nominations for the free mobile phone with 120 GB of data for 12 months for students in B40 households is extended to 9 June 2020 in line with the extension of the Conditional MCO.

Other universities who have joined the initiative include Universiti Sains Malaysia (USM), Universiti Tunku Abdul Rahman (UTAR), Universiti Pahang Malaysia (UMP), New Era University College (NEUC) and Malaysian Institute of Art (MIA).

Please visit www.ytlfoundation.org/learn to apply and to register for the FrogPlay Mobile revision quiz app and lessons in English, Mathematics and Science from Standard 1 to Form 5. For regular updates on the initiative, follow us on <https://www.facebook.com/ytlfoundation> or @ytlfoundation on Instagram and Twitter.



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43600 UKM Bangi, Selangor Darul Ehsan, Malaysia

☎+603 8921 5540/3370/4142 📠+603 8921 4097

✉ pkk@ukm.edu.my

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