

**LAMPIRAN 1**  
**SINAR HARIAN (ADUAN) : MUKA SURAT 58**  
**TARIKH : 12 JUN 2018 (SELASA)**

HEBAHAN

**Penutupan Planetarium Negara sempena Aidilfitri**

■ Planetarium Negara akan ditutup pada 14 hingga 18 Jun ini bersempena dengan sambutan Hari Raya Aidilfitri. Planetarium Negara akan dibuka seperti biasa pada 19 Jun (Selasa) dari jam 9 pagi hingga 4.30 petang. Untuk maklumat lanjut, boleh hubungi 03-22734303 atau layari laman sesawang [www.planetariumnegara.gov.my](http://www.planetariumnegara.gov.my) atau laman sosial Facebook/Twitter/Instagram: Planetarium Negara.

- **Bahagian Pendidikan Sains Angkasa**

**LAMPIRAN 2**  
**UTUSAN MALAYSIA (RENCANA) : MUKA SURAT 7**  
**TARIKH : 12 JUN 2018 (SELASA)**

## UiTM lahirkan pakar bedah robotik



**ABDUL RAZAK IDRIS**

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**U**NIVERSITI Teknologi Mara (UiTM) bukan sahaja hebat kerana melahirkan hampir 700,000 alumni sejak penubuhannya 62 tahun lalu atas nama Institut Latihan RIDA pada tahun 1956. Kemudian ia dikenali dengan nama Institut Teknologi Mara (ITM) dan menjadi Universiti Teknologi Mara (UiTM) semasa Tun Dr. Mahathir Mohamad menjadi Perdana Menteri iaitu pada 1999.

Sejak bertapaknya UiTM, institut pengajian tinggi untuk bumiputera tersebut terutama orang Melayu, bumiputera Sabah dan Sarawak telah mencipta kejayaan demi kejayaan dalam bidang kejuruteraan, pentadbiran, kewirausahaan dan terbaru bidang perubatan.

Adakah kita sedar bahawa Perdana Menteri dan Timbalan Perdana Menteri kita hari ini adalah seorang doktor. Maka bertepatan juga hebatnya UiTM apabila berjaya mempunyai pakar bedah robotik dalam kalangan orang Melayu dan beragama Islam.

Insan bernama Dr. Ahmad Kusyairi Khalid telah mencipta nama sebagai pakar bedah menggunakan robot bernilai RM14 juta di Pusat Pakar UiTM Campus Sungai Buloh. Lulusan dari Universiti College Cork, Republik Ireland itu bukan sahaja masih muda sebagai pakar tetapi turut mencurah bakti sebagai pensyarah di dalam bidang Telinga, Hi-dung dan Tekak (ENT).

Pembedahan menggunakan robot tersebut telah berlangsung empat kali. Namun pada kali ke empat beliau telah melakukan pembedahan hampir mustahil di-



**DR. AHMAD KUSYAIRI KHALID** perlu diberi pengiktirafan setimpal dengan ketramplian dirinya dalam bidang perubatan dengan semangat Malaysia Boleh gagasan Dr. Mahathir.

lakukan secara normal.

Pembedahan robotik melalui mulut tanpa melibatkan parut luar untuk membuang tisu tonsil pada pangkal lidah bukan sahaja sempurna tanpa parut malahan tempoh pemuliharaan amat singkat. Oleh kerana lengan robot itu kecil dan panjang, di samping kamera yang boleh berputar 360 darjah dengan mudah kerja-kerja pembedahan dilakukan.

Kejayaan tersebut perlu diuar-uarkan kerana di negara ini hanya beliau dan seorang lagi pakar di sebuah pusat perubatan swasta yang mampu melakukan prosedur perubatan tersebut.

Sebelum ini pembedahan memerlukan potongan pada bibir, tulang rahang dan melalui depan lidah sehingga boleh sampai ke kawasan pembedahan di tekak dan ini amat menyeksakan pe-sakit.

Berbicara tentang skil mengendalikan robot Da Vinci yang mengambil sempena nama pelukis tersohor dunia Leonardo Da Vinci ia bukan tugas yang mudah. Ia ibarat melakar potret Monalisa yang penuh artistik, sempurna dan klasik.

Ahmad Kusyairi perlu berguru dalam bidang pembedahan secara robotik tersebut di Korea Selatan dalam tempoh yang panjang hingga mampu melakukan pembedahan dengan kaedah mutakhir tersebut.

Menurut Ahmad Kusyairi yang merupakan alumni Kolej Melayu Kuala Kangsar (MCKK) kejayaan beliau adalah hasil sistem pendidikan negara yang terbaik sejak beliau di bangku sekolah lagi. Jelasnya lagi, kejayaan di dalam melakukan pembedahan serba canggih baru-baru ini di bulan Ramadan amat mencabar sekali. Ini disebabkan pesakit perlu

dirawat dan dipantau rapi sebelum dan sesudah kerja-kerja pembedahan dijalankan.

Pesakit yang mempunyai masalah sakit jantung misalnya, memerlukan prosedur pembedahan berlaku sejak awal sebelum pesakit dibedah dengan hanya menganga sahaja. Bukan semudah ABC untuk meletakkan pesakit di 'tangan' robot yang dikendalikan oleh dirinya. Segala rawatan dari aspek ujian darah, tekanan darah tinggi dan lain-lain dilakukan dengan penuh profesional.

Begitu juga selepas operasi, bagaimana pesakit dipantau dengan rapi. Dibimbangi berlaku kesan sampingan yang boleh memberi kesan kepada kawasan anggota yang dibedah.

Kehebatan anak Melayu inj yang muda belia berusia 34 tahun ini, sewajarnya diberi penghargaan setaraf pakar-pakar perubatan negara mahupun individu yang menaikkan nama Malaysia di mata dunia. Bayangkan beliau perlu membedah menggunakan robot di sudut paling sukar di pangkal lidah yang selama ini dilakukan dengan kaedah membedah rahang atau menebuk leher.

Bukankah kejayaan beliau membedah pesakit kanser tekak tanpa merosakkan pitar suara pesakit wajar dibanggakan kerana ia membuktikan UiTM mampu melahirkan warga yang setaraf tokoh perubatan di dunia.

Pasca Pakatan Harapan sebagai Kerajaan Pusat, orang muda seharusnya diberi pengiktirafan yang gah di semua sektor di negara ini.

Seorang muslim dan anak Melayu dari Terengganu perlu diiktiraf atas pencapaiannya mengharumkan bukan sahaja nama UiTM malah menaikkan nama bumiputera dalam bidang tersebut.

Syabas Dr. Ahmad Kusyairi, syabas UiTM.

### LAMPIRAN 3

## NEW STRAITS TIMES (LETTERS) : MUKA SURAT 20

### TARIKH : 12 JUN 2018 (SELASA)



Nur Adlyka Ainul Annuar is among a group of astronomers who discovered the evidence of black holes. BERNAMA PIC

Dr Hafizah Noor is among a group of scientists who contributed to the study of gravitational wave detectors through her GEO600 experiment. FILE PIC

#### SCIENCES

## MALAYSIA NEEDS A NOBEL PRIZE

POST 14th General Election (GE14), it is an opportune time to revisit the idea of a Nobel Prize for Malaysia.

In 1998, then prime minister Tun Dr Mahathir Mohamad had challenged the scientific community to win the Nobel Prize by 2020. We have the same Dr Mahathir as prime minister today, but are we any nearer to a Nobel award?

We need a paradigm shift. If we can achieve the apex in sports, healthcare, airline and others, why not the sciences in the form of a Nobel laureate to top it all?

We have a bigger chance to reach that goal in the sciences as there are more areas to choose from, and our scientific community is gaining strength in research. We have young scientists coming to the fore with new research areas, such as the discovery of black holes (by Dr Nur Adlyka Ainul Annuar) and detection of gravitational waves (Dr Hafizah Noor).

Winning a Nobel Prize is important for Malaysia because it is an embodiment of a successful strategy in individual fields of new knowledge. It is a testament that we are in the realms of excellence, abreast with the world's best, capable of original research

with useful technologies that stimulate global economies.

We cannot be importing technologies forever. We should attempt to reverse the royalties paid for such by having home-based innovations and exporting them instead. It would also translate that we have the best universities in the world, capable of producing Nobel laureates.

I believe Malaysia has a better chance to be a global contributor in science and technology as the infrastructure is in place with vast options to choose from. However, there are two issues that must be addressed.

First is that our local universities are not among the top in rankings, and second is the neutral attitude on science, causing a fall out in interest in Science, Technology, Engineering and Mathematics (STEM) subjects among students.

In Asia, universities in Japan, South Korea, China and India have reached the top 100 in the world. Each of these countries have Nobel Prize winners among them. Being among the top in ranks can create confidence among other countries in our education system. It is like a magnet that can draw world talents to our shores.

Achieving this would earn us

respect and prestige. We would be counted for preference in academics, research, trade, policy making and more.

How can we improve our rankings?

We should review the philosophy of Research Funding Agencies to fund as many research submissions with the limited budget that Malaysia has, and collaborate more with successful research universities. No university seeking excellence should work alone. The exploration in knowledge and discovery is so immense that knowledge sharing is essential. Hence, cross breeding of research and sharing should be encouraged.

On talents, they should be incubated locally and abroad.

Homegrown talents can reinforce their research in specialty areas, while those abroad can pursue disciplines that are rarely found locally. We have not yet developed our homegrown brands of innovations, technologies and professional training programmes, including clinical specialties. The dictum of "foreign is always best" should no longer hold.

Next, facilities. We need to build more research centres of repute, the likes of Pasteur Institute, Paris, and the Howard

Hughes Medical Institute, the United States. The centres would have to be optimally staffed, and house advanced and modern equipment for their research. Universiti Sains Malaysia's Advanced Medical and Dental Institute and Universiti Kebangsaan Malaysia's Molecular Biology Institute are apt examples.

The need for Malaysian icons to be recognised with prestigious awards in various disciplines is most welcomed by the scientific community. In order to do that, we need to create local awards in more disciplines, in the likes of the National Academy of Science Awards, US (in Biology, Medicine, Engineering and Applied Science, Physical Science, Mathematics, etc.) and Royal Society Awards of the United Kingdom. The prize should be substantial enough to reflect its true value.

Malaysia has yet to have an icon in science whom students can emulate.

We have not created any Watson and Crick (discovery of the DNA helix) or a Louis Pasteur (in microbiology). As schoolchildren, we loved to read biographies of scientists and their discoveries and to identify with one of them. That was how the generation of yester-year was attracted to science.

The youth of today would likely look up to well-endowed icons, such as Datuk Lee Chong Wei (badminton) or Robert Kuok, Malaysia's billionaire. This is because the outlet for science is limited to being a teacher, laboratory scientist or engineers .. with average pay.

Although doctors are remunerated more for the unearthy hours they have to endure, the inability to incorporate all medical graduates as housemen sends negative signals to graduates.

The portrayal of high-end remuneration of corporate or the entertainment world or sports is more appealing. Hence, it would be fashionable to pursue non-science courses.

We have to show that Malaysia has the attributes of a developed nation comparable to the best – with unlimited potential for world-class excellence.

Winning a Nobel Prize for Malaysia would be the most coveted prize, and, it would add value to Malaysia if it aspires to be in the ranks of a developed nation.

#### DR LOKMAN MOHD NOH

Former professor of paediatrics, and consultant paediatrician [clinical immunology] UKM, USM and UPM

**LAMPIRAN 4**  
**KOSMO (DUNIA) : MUKA SURAT 47**  
**TARIKH : 12 JUN 2018 (SELASA)**



AGENSI  
BULAN yang semakin jauh bergerak dari Bumi menyebabkan hari semakin panjang di Bumi.

## Waktu di Bumi semakin panjang berbanding dahulu

WASHINGTON – Pasukan saintis mendakwa hari di muka Bumi semakin panjang selepas mereka mendapati peningkatan enam jam sejak 1.4 bilion tahun lalu susulan daya graviti Bulan yang semakin lemah.

Satu kajian baharu mengenai sejarah Bumi mendapati bahawa kira-kira 1.4 bilion tahun lalu, fenomena Bumi mengalami hari paling panjang iaitu lebih 18 jam.

Fenomena itu berlaku ekoran Bulan bergerak semakin jauh dari Bumi pada kadar 3.82

sentimeter pada setiap tahun dan pasukan saintis turut mendapati hari singkat pula disebabkan Bulan mengelilingi pada jarak dekat dengan Bumi.

Profesor Stephen Meyers daripada Universiti Wisconsin-Madison dan pengarang bersama kajian itu berkata, pihaknya menggunakan sejenis kaedah statistik kompleks yang dikenali sebagai astrokronologi.

"Ia digunakan untuk menghubungkan teori astronomi dengan pemerhatian geologi. Jadi, hasil keputusan menunjukkan apabila Bulan bergerak jauh, putaran Bumi semakin perlahan sekali gus menyebabkan hari semakin panjang," katanya.

– Agensi