

LAMPIRAN 1  
NEW STRAITS TIMES (NEWS/ BUSINESS): MUKA SURAT B5  
TARIKH: 19 JULAI 2018

RM3.4B CONTRIBUTION TO GDP

## Cradle-funded startups help boost economy

**KUALA LUMPUR:** Cradle Fund Sdn Bhd's Cradle Investment Programme (CIP) has contributed RM3.4 billion to Malaysia's gross domestic product (GDP), created 80,600 full-time jobs and attracted RM1.3 billion in private and foreign funds from 2008 to this year.

The figures were provided by Cradle acting group chief executive officer (CEO) Razif Abdul Aziz at Cradle Buzz 2018, here, yesterday.

"These are positive outcomes by any measure, and testimony that the right funding at the right time can result in far greater outcomes than of ordinary public spending."

"Stay tuned for the full report on the study in coming weeks," he added.

HELP University was commissioned to conduct the study that

produced these numbers using data from grant programmes between 2008 and 2016.

The main point of it was to find out what has been Cradle's impact on the ecosystem over the years.

Before the one-day conference got under way yesterday, a moment of silence was observed for Cradle's first chief executive officer Nazrin Hassan, 45, who passed away on the eve of Hari Raya this year.

Razif paid tribute to Nazrin for envisioning the potential in companies like MyTeksi (Grab), iMoney and iPay88, which received grants from Cradle.

Since its establishment, Cradle — incorporated under the Finance Ministry in 2003 — has funded more than 800 tech startups and witnessed this network quickly grow in the region.



Cradle acting group CEO Razif Abdul Aziz (left) and Finance Ministry national strategic unit director Datuk Dr Aminuddin Hassim at the Cradle Buzz 2018 launch yesterday. PIC BY SAIFULLIZAN TAMADI

Cradle's conference cum 15th anniversary brought together 305 investors and startup founders to discuss the direction and development of new compa-

nies, as well as exchange ideas.

It was officiated by Finance Ministry national strategic unit director Datuk Dr Aminuddin Hassim. **Bernama**

**LAMPIRAN 2**  
**UTUSAN MALAYSIA (UTUSAN BIZ): MUKA SURAT 13**  
**TARIKH: 19 JULAI 2018**

## Program Cradle sumbang RM3.4 bilion kepada KDNK

**KUALA LUMPUR 18 Julai** – Program Pelaburan Dana Cradle telah menyumbang RM3.4 bilion kepada Keluaran Dalam Negara Kasar (KDNK), mencipta 80,600 pekerjaan sepenuh masa dan berjaya menarik RM1.3 bilion pelaburan swasta dan asing sejak ia diperkenalkan pada tahun 2008, kata penyelia dana teknologi, Cradle Fund Sdn. Bhd. (Cradle).

Pemangku Ketua Pegawai Eksekutif (CEO) Cradle, Razif Abdul Aziz berkata, sejak penubuhannya Cradle telah membayai lebih daripada 800 pemula niaga berasaskan teknologi dan telah membangunkan jaringan pemula niaga rantau ini sehingga berkembang dengan ketara.

"Hari ini kita boleh lihat bagaimana pemula niaga ini berkembang menjadi lebih baik, lebih bermaklumat dan mempunyai jaringan yang luas.

"Tetapi cabaran yang bakal mereka hadapi akan menjadi lebih besar kerana dunia hari ini semuanya berdasarkan teknologi digital," kata Razif dalam ucapannya pada seminar Cradle Buzz 2018 dan sambutan ulang tahun Cradle ke-15, di sini hari ini.



Hari ini kita boleh lihat bagaimana pemula niaga ini berkembang menjadi lebih baik, lebih bermaklumat dan mempunyai jaringan yang luas."

**RAZIF ABDUL AZIZ**

Pemangku Ketua Pegawai Eksekutif (CEO) Cradle



umumkan tidak lama lagi.

Persidangan satu hari Cradle Buzz 2018 itu telah dirasmikan oleh Pengarah Unit Strategik Keberangsaaan Kementerian Kewangan Malaysia, Datuk Dr. Aminudin Hassim.

Ia menyaksikan penyertaan 305 pelabur dan usahawan syarikat pemula niaga yang membincangkan pelbagai topik berkaitan dengan idea, hala tuju dan kedudukan syarikat-syarikat baharu. – BERNAMA

Razif berkata, Cradle di bawah 15 tahun pimpinan bekas CEO, Al-lahyarham Nazrin Hassan telah membayai dana awal pemula niaga yang kini telahpun menyaksikan kejayaan seperti syarikat MyTeksi (Grab), iMoney dan iPay88.

Katanya, Cradle dengan kerjasama Help Universiti telah menjalankan kajian impak Program Pelaburan Dana Cradle bagi tempoh 2008-2016 dan laporan penuh mengenainya akan di-

**LAMPIRAN 3**  
**UTUSAN MALAYSIA (RENCANA): MUKA SURAT 6**  
**TARIKH: 19 JULAI 2018**

## Sumbangan dan semangat Mazlan



**MAISARAH  
SHEIKH RAHIM**

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**T**ANGGAL 10 Oktober 2007, Malaysia mencipta sejarah melalui penghantaran Angkasawan pertama negara, Datuk Dr. Sheikh Muszaphar Shukor Sheikh Mustapha ke Stesen Angkasa Antarabangsa (ISS). Ia menjadi petanda satu lagi pencapaian di peringkat dunia yang mampu diraih oleh rakyat negara ini. Kejayaan yang pada mulanya dianggap mustahil itu telah dirangka kerajaan menerusi program Angkasawan Negara pada 2003 yang diumumkan Perdana Menteri ketika itu, Tun Dr. Mahathir Mohamad.

Sudah pasti peristiwa bersejarah berkenaan paling diingati seluruh rakyat negara ini. Namun, di sebalik kejayaan tersebut, pastinya tidak ramai mengetahui siapakah tokoh penting yang mengilhamkan program bersejarah itu.

Prof Emeritus Datuk Dr. Mazlan Othman ialah antara individu utama terlibat dalam rangka projek misi angkasawan negara itu agar nama Malaysia mampu berdiri seberis dengan negara luar yang berjaya dalam bidang angkasa lepas. Ia adalah langkah besar negara dan merupakan program pembangunan bidang sains dan teknologi saintifik dalam membina imej negara di mata antarabangsa.

Beliau yang sebelum itu berkhidmat sebagai Pengarah di Pejabat Hal Ehwal Angkasa Lepas Pertubuhan Bangsa-Bangsa Bersatu (PBB) di Vienna, Austria kembali ke negara ini atas permintaan Dr.

Mahathir dan berkhidmat sebagai Ketua Pengarah Bahagian Sains Angkasa (Baksa) Malaysia yang antara lain bertanggungjawab terhadap penubuhan Agensi Angkasa Lepas Malaysia.

Dr. Mazlan, anak jati Negeri Sembilan ialah satu-satunya wanita yang terlibat dalam bidang astronomi dan profesional astrofizik di negara ini. Dilahirkan pada 11 Disember 1951, kepintaran sains mula terserlah sejak melanjutkan pelajaran di Kolej Tunku Kurshiah, Seremban, Negeri Sembilan ketika berumur 12 tahun.

Beliau yang merupakan anak kesembilan daripada 13 adik-beradik kemudiannya melanjutkan pelajaran dalam bidang sains ke Universiti Otago, New Zealand di bawah biasiswa Colombo Plan. Lebih membanggakan, beliau mengukir nama sebagai wanita pertama dari seluruh dunia yang memperoleh Ijazah Doktor Falsafah (PhD) dalam bidang Astrofizik dari universiti berkenaan pada 1981.

Keberadaan Dr. Mazlan di luar negara satu-satunya wanita yang menuntut bidang dalam itu dalam kalangan lelaki sudah pasti dianggap akan wujud satu kekangan besar. Namun, perkara itu langsung tidak menjadi satu cabaran bagi beliau kerana beliau akan berkawan dengan sesiapa sahaja tidak mengira bangsa atau jantina selagi mereka itu ada

kepakaran tertentu.

Lagipun, menurut penerima Anugerah Blue Planet dari Rusia itu, tradisi pembelajaran di New Zealand tidak mempunyai hierarki. Hubungan pelajar dan profesor amat rapat. Mereka di sana tidak membezakan warna kulit, bangsa atau jantina.

"Ibu bapa saya juga tidak pernah gementar untuk melepaskan saya belajar di sana, malah ayah amat menggalakkan saya belajar sehingga peringkat PhD. Tetapi sudah tentu ibu sedikit risau tentang mentaliti orang akan berpendapat sebagai perempuan, tiada suami nanti akan jadikan isteri jika belajar terlalu tinggi," katanya yang menghabiskan masa selama sembilan tahun di negara itu.

Menurut ibu kepada dua orang anak ini, beliau turut mengambil pendekatan menggalakkan anak-anaknya pula melanjutkan pelajaran ke luar negara. Anaknya yang pertama mendapat tempias kepakarannya dalam bidang aerokangsa.

Sejak kecil lagi, beliau yang menjadikan Albert Einstein sebagai sumber inspirasi bertekad untuk memberikan sumbangan kepada negara. Ini kerana katanya, beliau yang pernah tersenarai dalam 50 wanita paling berinspirasi dunia pada 2011 itu, negara masih kekurangan saintis yang mampu membangunkan Malaysia dalam bidang itu. Beliau akui membuat keputusan tepat untuk memilih ilmu sains sebagai jalan yang mahu diceburinya walaupun pada awal tidak meminati dan sama sekali tidak menyelal dan pandang ke belakang.

Menyebut soal diskriminasi gender, Pengarah Akademi Sains Negara itu berkata, rakyat negara ini amat bertuah kerana perkara itu tidak berlaku. Pada masa sama, beliau menyokong peruntukan kuota 30 peratus wanita se-

bagi pembuat dasar supaya tidak ada kelompongan antara lelaki dan wanita. Bagaimanapun, beliau gembira ketika ini sudah ramai wanita ke hadapan, dilantik sebagai ketua setiausaha di peringkat kementerian selain ramai tokoh korporat wanita.

Walaupun telah lama mewujud di negara luar, bekas Ketua Pengarah Agensi Angkasa Negara (Angkasa) itu merasakan setiap daripada rakyat negara ini yang mempunyai kepakaran tertentu perlu memberikan sumbangan semula kepada negara.

"Memang betul kita boleh menyumbang di mana-mana sahaja kita berada di dunia ini, itu tidak boleh dinafikan. Tetapi kalau kita fikirkan impaknya kepada negara sendiri, ia jauh lebih besar. Kalau dibandingkan negara luar seperti Amerika Syarikat (AS), mereka sudah kaya dengan para inteleknya. Bandingkan dengan Malaysia, kita masih kekurangan para intelek dalam semua bidang. Bayangkan kalau kita boleh berikan sesuatu dalam bidang itu," jelas pakar astrofizik ini.

Dr. Mazlan yang tercalon sebagai penerima Anugerah Tokoh Sri Kandi 2018 anjuran Gabungan Pelajar Melayu Semenanjung (GPMS) itu turut berpendapat, sebagai seorang pelajar Melayu, beliau tidak pernah lupa kemelayuannya dan seorang rakyat Malaysia.

"Di mana sahaja saya berada, saya akan ingat bahawa saya adalah orang Malaysia. Walaupun saya suka berada di negara luar dari segi persekitarannya, namun saya berfikir saya perlu balik dan menyumbang kepada masyarakat," katanya yang turut melaikkan harapan agar GPMS terus berperanan sebagai tonggak pendidikan negara dan memastikan bahawa anak-anak yang kita didik menjadi orang yang berguna dan pemimpin untuk masa depan.



**MAZLAN  
OTMAN**

**LAMPIRAN 4**  
**BERITA HARIAN (ISU): MUKA SURAT 16**  
**TARIKH: 19 JULAI 2018**

# 21 aplikasi jahat curi data telefon bimbit

② Semak alamat URL diterima sebelum ambil tindakan melayari

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CyberSecurity Malaysia (CSM) mengesahkan 21 aplikasi virus jahat atau *malicious app* dalam tempoh tiga tahun sejak 2016, yang berisiko menjaskan keselamatan khususnya membabitkan data pengguna telefon bimbit.

Ketua Pegawai Eksekutif CSM, Datuk Dr Amirudin Abdul Wahab, berkata aduan mengenai aplikasi virus jahat itu diterima melalui perkhidmatan Cyber999, dengan enam daripadanya dikesan dalam tempoh antara Januari hingga Jun

tahun ini.

"Virus jahat yang dikesan itu dikenal pasti berkebolehan untuk mendapatkan maklumat pengguna yang kemudian boleh digunakan semula bagi pelbagai tujuan."

#### Guna rangkaian WiFi awam

"Ia (kecurian maklumat pengguna) berlaku apabila orang ramai menggunakan rangkaian WiFi awam, mengklik sesuatu paufan diterima melalui mesej atau menurut arahan untuk memuat turun sesuatu fail atau aplikasi yang diragui," katanya kepada BH.

Beliau berkata demikian mengulas laporan BH berhubung taktik sindiket dikatakan berpangkalan di luar negara, yang diyakini mengaut keuntungan besar melalui aktiviti penipuan kredit menerusi caj dikenakan syarikat telekomunikasi ke atas mangsa.

Sindiket menggunakan pelbagai taktik, paling popular menghantar khidmat pesanan ringkas (SMS) kepada nombor telefon mangsa untuk pelbagai tujuan seperti iklan produk, paket percumian, khidmat perjudian, selain ada menawarkan pinjaman peribadi, termasuk menawarkan hadiah.

Selain SMS, sindiket turut menggunakan kaedah panggilan tidak berjawab atau dikenali "wangiri sebagai umpan dan mangsa akan terjerat apabila menghubungi semula nombor terbabit.

Dr Amirudin berkata untuk mengelak terjebak sebagai mangsa, pengguna boleh menyemak alamat URL diterima melalui SMS sebelum mengambil tindakan setuk melayarnya.

"Untuk pengesahan URL ia hanya boleh dilakukan dengan institusi kewangan rasmi berkenaan atau laman web agensi penguasaan undang-undang.

"URL dipaparkan di laman se-

Info

#### CyberSecurity Malaysia

Pengguna juga boleh menyemak atau menghubungi agensi penguasaan undang-undang atau Cyber999 untuk pengesahan.

sawang yang dilayari melalui telefon mudah alih, mungkin berbeza dari laman sesawang yang dilayari melalui desktop atau komputer anda," katanya.

#### Lapor polis

Dalam pada itu, Dr Amirudin menganjurkan orang ramai supaya melaporkan kepada pihak polis sekiranya menerima mesej (SMS) atau panggilan telefon meragukan bagi membolehkan tindakan selanjutnya diambil.

"Selain polis, laporan boleh dikemukakan kepada penyedia talian telekomunikasi (ISP) dan Cyber999 yang dikendalikan CSM...ia juga memudahkan pengguna melaporkan perkara berkenaan kepada Suruhanjaya Komunikasi dan Multimedia Malaysia (SKMM) untuk tindakan lanjut, selain dimajukan kepada penyedia talian telekomunikasi.

"Langkah terbaik, segera tamatkan apa-apa panggilan mencurigakan dan tidak perlu menjawab apa-apa arahan, selain rujuk atau semak terus kepada institusi atau organisasi yang disebut dalam panggilan atau dalam mesej bagi tujuan pengesahan," katanya.



Langkah terbaik, segera tamatkan apa-apa panggilan mencurigakan dan tidak perlu menjawab apa-apa arahan, selain rujuk atau semak terus kepada institusi atau organisasi yang disebut dalam panggilan atau dalam mesej bagi tujuan pengesahan"

**Amirudin Abdul Wahab,**  
Ketua Pegawai Eksekutif CSM

**LAMPIRAN 5**  
**KOSMO (NEGARA): MUKA SURAT 12**  
**TARIKH: 19 JULAI 2018**

## Perusahaan dobi perlu kelulusan, lesen dari ST

KUALA LUMPUR - Suruhanjaya Tenaga (ST) mengarahkan supaya semua perusahaan dobi di negara ini mendapatkan kelulusan dan lesen yang sah terlebih dahulu untuk menggunakan sistem paip gas berpusat (LPG) untuk beroperasi.

ST dalam satu kenyataan berkata, ia bagi memastikan pemasangan sistem perpaipan gas tersebut selamat untuk digunakan.

"Pada masa ini, kekurangan kesedaran terhadap undang-undang



dan pematuhan piawai keselamatan yang berkaitan menyebabkan berlakunya kes kermalangan yang disebabkan oleh kebocoran gas.

"Kegagalan mendapatkan kelulusan dari ST adalah melanggar Akta Bekalan Gas 1993 dan Peraturan-Peraturan Bekalan Gas 1997," katanya dalam satu kenyataan semalam.

Tambah kenyataan itu lagi, kegagalan mematuhi Subseksyen 11(1) Akta Bekalan Gas 1993 juga boleh menyebabkan pengusaha terbabit dikenakan denda sehingga

RM100,000 atau dipenjarakan sehingga tiga tahun atau kedua-duanya sekali.

"Mana-mana sistem perpaipan atau bahagiannya yang digunakan atau dicadangkan hendak digunakan dalam melakukan kesalahan itu juga boleh dilucutkan hak."

"ST juga memberikan amaran bawahan premis dobi yang menggunakan sistem talian paip gas berpusat juga merupakan kawasan larangan merokok," ujarnya.

Menurut kenyataan itu, ST menggesa orang ramai agar mematuhi amaran tersebut bagi mengelakkan kejadian yang tidak diingini.



PENGUSAHA dobi di negara ini perlu mendapatkan kelulusan ST bagi menggunakan sistem paip berpusat terutamanya LPG untuk beroperasi. – Gambar hiasan

**LAMPIRAN 6**  
**STAR BIZ (NEWS): MUKA SURAT 3**  
**TARIKH: 19 JULAI 2018**

## Tek Seng solar unit ceases production

**PETALING JAYA:** A subsidiary of Tek Seng Holdings Bhd is ceasing production in the third quarter of this year due to increasingly tough conditions in the solar industry.

The group told Bursa Malaysia that its 50.69%-owned subsidiary Sdn Bhd (TSST) had decided to temporarily stop its entire production activities.

TSST is principally involved in the manufacturing and sales of photovoltaic products.

The group said the continuing tense competition in the solar industry, coupled with the eroded prices of solar cells due to excess inventory in the supply chain, had resulted in a challenging operating environment for the company.

In addition to this, it said the company's export sales had been significantly impacted due to safeguard tariffs imposed by the US and India on the importation of solar cells and modules from Malaysia.

"The board is of the view that the prospects of TSST will continue to be very challenging and this situation is not expected to improve in the near future.

"In this respect, the board has decided to

The board is of the view that the prospects of TSST will continue to be very challenging and this situation is not expected to improve in the near future.

Tek Seng Holdings Bhd

temporarily stop its production to minimise losses," it said.

The move will also see 118 production workers made redundant.

The group said the ceasing of production by TSST would have an impact on its performance for the financial year ending Dec 31, 2018 as a result of the one-off redundancy cost and impairment loss on assets to be incurred.

"At this juncture, TSST is unable to ascertain the extent of the cessation costs. As such, TSST will make the corresponding announcement to Bursa Securities in due course," it said.

It was reported that Malaysia's solar industry will be hit by another blow after India became the second country to impose safeguard duties on solar panel imports after the United States.

Already faced with a 30% tariff imposed by the US, solar panel exporters from Malaysia are now facing a 25% import duty on shipments to India.

India's Directorate General of Trade Remedies announced on Tuesday that it had recommended the imposition of a 25% safeguard duty on solar cell imports from Malaysia as well as China for a one-year period, as the imports had threatened to cause serious injury to the domestic producers of the equipment.

Malaysia is the second-largest supplier of solar modules and cells to India after China, while Taiwan is the third-largest exporter of the technology.

**LAMPIRAN 7**  
**THE STAR (NATION): MUKA SURAT 14**  
**TARIKH: 19 JULAI 2018**



The way forward: Tio speaking at the SOBA Lab 2018 with (from left) moderator Branding Association of Malaysia president Datuk Eric Chong, Khairan and Chung looking on.

## 'Embrace technology to grow your wealth'

It's the 'Engine of Change' and the quick path to riches

By DAVID TAN and N. TRISHA  
newsdesk@thestar.com.my

**GEORGE TOWN:** Embrace technology and not run away from it, as it can cut down the time you need to grow your wealth, says PKT Logistica Group Sdn Bhd chief executive officer Datuk Michael Tio.

He said it used to take 60 years to become a billionaire.

"This was during my father's time. Now you can achieve this kind of wealth in six years if you are bold enough to embrace technology," he said.

He was speaking at the Star Business Award 2018 (SOBA) Lab at the MISOGO Co-Workspace at Prangin Mall.

Tio was one of the three panellists for the topic "Technology - The Engine of Change".

The other two were Digi Enterprise product marketing head Khairan Nasir and RHB Group Transaction Banking head Chung Chee Kai.

According to Tio, SMEs could use Facebook to better manage their workers and reduce turnover rates.

"In 2008, my IT manager had wanted to ban Facebook usage in the company, as the staff were spending time playing games and downloading movies.

"I told him to hold on as I needed time to find out more about Facebook. I created an account in 2009 and added my workers as friends.

"When I found out that I can get feedback from them instantaneously, I told the IT manager that he can't ban Facebook as it links me directly with the employees.

"I even increased the broadband capacity in the company and even installed a wi-fi station at the wash-

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rooms, so that I can always be in contact with my employees.

"This was a reverse psychology strategy to prevent the employees from misusing the Internet," he said.

He said after PKT allowed Facebook to be used, the company was able to retain its workers more effectively.

"The turnover rate was reduced to only 2% per annum," he said.

Meanwhile, Khairan said many of the SMEs in the country were aware of the need to transform.

"They, however, don't know where to begin. This is why the adoption of technology is not happening as fast as we would like to see."

"The Internet penetration in the country currently is between 60% and 70%," Khairan said.

On going cashless, Chung said the country had the necessary IT and broadband infrastructure for going cashless.

"Some 50% of the SMEs in the country have already gone cashless.

"Cheques are expensive and not cost-efficient to business. E payments are cheaper," Chung added.

Meanwhile, Penang Golf Club sales & marketing executive Mandy Yang

said she learnt the importance of employing appropriate strategies to run a company.

"I am beginning to see the operations of a company from a different perspective and will be applying what I have learnt from the talks," she said.

Wilchard Isah, a training provider, said he wished the session was longer so he could learn more.

"A longer session would give us the time to talk to the speakers and mingle around with the other participants," Bah said.

The other speakers at the event were Credit Guarantee Corp Malaysia Bhd SME advisory & marketing vice-president Jenny Hoh, Malaysia External Trade Development Corporation (Matrade) northern region director Sharifah Nazreen Farhana Syed Marzuki, Erican Education Group founder & managing director Datuk Eric Chong, Lexis Hotels & Resorts president Mandy Chew, and Kalyx Consultants Sdn Bhd managing director Shurlyn Lim.

SOBA 2018 is organised by The Star with Digi, PKT Logistica Group Sdn Bhd and RHB Bank Berhad as main sponsors, Credit Guarantee Corporation as co-sponsor, Matrade as official trade promotion partner and New World Petaling Jaya Hotel as official venue.

It is endorsed by the Ministry of International Trade and Industry, supported by Bursa Malaysia and audited by BDO with 988, SuriaFM and dimsum as official media partners.

For more information on SOBA 2018, call The Star Events Business Unit at 03-7967 1388 ext 1432 (Jasmine)/1857 (Per Wem) or visit [www.soba.com.my](http://www.soba.com.my)

**LAMPIRAN 8**  
**UTUSAN MALAYSIA (LUAR NEGARA): MUKA SURAT 12**  
**TARIKH: 19 JULAI 2018**

Kejayaan pertama di dunia, mampu selamatkan banyak nyawa

## Saintis cipta ujian darah melanoma

■ KAMPALA 18 JULAI

**S**AINTIS Australia berjaya mencipta ujian darah bagi mengeksan melanoma pada peringkat awal, dengan menyifatkan kelayaan itu sebagai yang pertama di dunia dan mampu menyelamatkan banyak nyawa.

Saintis dari Universiti Edith Cowan berkata, ujian baharu itu dapat membantu doktor mengesan penyakit kulit yang boleh membawa maut tersebut sebelum ia merebak melalui tubuh manusia.

"Pesakit yang dikesan mengalami melanoma pada peringkat awal mempunyai jangka hayat selama lima tahun antara 90 hingga 90 peratus," kata ketua penyelidik kajian itu, Pauline Zaenker dalam satu kenyataan.

Zaenker menjelaskan, kadar peluang hidup pesakit akan jatuh kurang daripada 50 peratus jika kanser itu merebak ke dalam badan manusia.

"Ini membuatkan ujian darah itu amat menarik sebagai alat pemeriksaan yang berpotensi kerana ia boleh mengesan melanoma pada peringkat awal ketika ia masih boleh dirawat," katanya.

Kajian itu yang diterbitkan dalam jurnal *Oncotarget*, hari ini termasuk ujian melibatkan 105 orang pesakit dengan melanoma dan 104 individu sihat.

Menurut saintis, prosedur itu mengesan melanoma peringkat awal dalam 79 peratus kes.

Melanoma ketika ini dikesan menggunakan imbasan visual oleh doktor dengan mengambil sampel

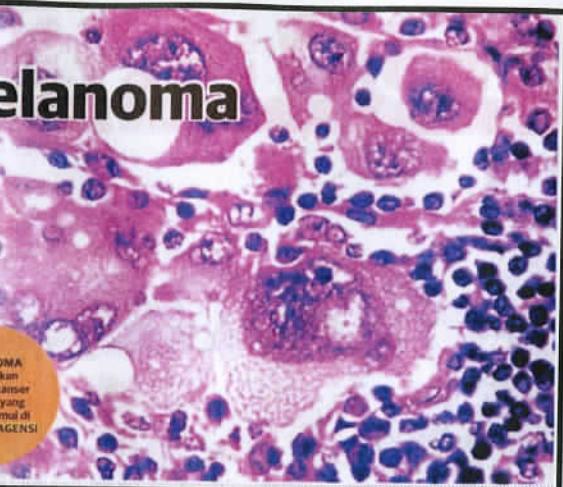
daripada bahagian badan disyaki dan melakukan ujian biopsi.

Zaenker berkata, proses baharu itu melibatkan mengenal pasti antibodi ditulisikan tubuh pesakit sebagai tinjauan kepada kanser tersebut.

"Kami memerlukan sebanyak 1,627 jenis antibodi bagi mengenal pasti kombinasi 10 antibodi yang paling menunjukkan kehadiran melanoma pada pesakit yang disahkan berbanding seseorang yang sihat," katanya.

Sementara itu, saintis terbaik akan menjalankan satu lagi percubaan klinikal yang berlangsung selama tiga tahun untuk mengesahkan penemuan mengesakan dan berharap dapat mengadakan ujian yang dapat digunakan oleh klinik selepas ini. - AFP

MELANOMA merupakan penyakit kanser keempat yang kerap ditemui di Australia. - AGensi



LAMPIRAN 9  
NEW STRAITS TIMES (WORLD): MUKA SURAT 26  
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## Aussie scientists develop 'world first' melanoma blood test

**SYDNEY:** Australian researchers said yesterday they have developed a blood test for melanoma in its early stages, calling it a "world first" breakthrough that could save many lives.

The scientists from Edith Cowan University said the new test could help doctors detect the skin cancer before it spreads through a person's body.

"Patients who have their melanoma detected in its early stage have a five-year survival rate between 90 and 99 per cent," lead researcher Pauline Zaenker said.

She added that survival rates fell to less than 50 per cent if the cancer spread in the body.

"This is what makes this blood test so exciting as a potential screening tool because it can pick up melanoma in its very early stages when it is still treatable," Zaenker said.

The research, published in the journal *Oncotarget* yesterday, included a trial involving 105 patients with melanoma and 104 healthy people.

The procedure detected early stage melanoma in 79 per cent of cases, the scientists said.

Melanoma is currently detected using a visual scan by a doctor, with areas of concern cut out surgically and biopsied.

"We examined 1,627 different types of antibodies to identify a combination of 10 antibodies that best indicated the presence of melanoma in confirmed patients relative to healthy volunteers," she added.

Cancer Council Australia chief executive Sanchia Aranda said the test would be important for high-risk groups, who have to undergo regular inspections of their spots and moles that can be difficult and time-consuming.

She cautioned that the test did not pick up other types of less deadly, but more common, skin cancers such as squamous cell and basal cell carcinoma.

The scientists will conduct another clinical trial lasting three years to validate the findings, and hope to have a test that clinics can use after that. **AFP**

## In China, yellow delivery robots may change future of logistics

BEIJING: Along a quiet residential street on the outer edges of Beijing, a yellow and black cube about the size of a small washing machine trundles leisurely to its destination.

This "little yellow horse" is an autonomous delivery robot, ferrying daily essentials like drinks, fruit and snacks from the local store to the residents of the "Kafka" compound in the Chinese capital.

Equipped with a GPS system, cameras and radar, the robots are seen by their creators as the future of logistics in China, where they say one billion packages will eventually be delivered every day.

Travelling at a less than overwhelming 3km per hour – a slow human walk – the robot has room for improvement, said one customer as she removed a packet of nuts from its bowels.

"The weak point is that it cannot deliver directly to the door like a human," said the customer, who does not live on the ground floor.

"But it's still quite practical. The robot delivers relatively quickly."

The robot takes advantage of Chinese consumers' love of cashless payments and smartphone shopping.

China is the world's biggest online shopping market with more than half of its population making at least one smartphone purchase per



**Small but strong:** A Suning worker loading a delivery robot with groceries outside a Suning supermarket in Beijing. — AFP

month, according to professional services firm PricewaterhouseCoopers. This compares to 14% in the rest of the world.

Whether buying electronics or toilet paper, avocados or clothes, Chinese are used to simply tapping a button on their smartphone and getting a home delivery – some-

times several per day.

To get a delivery via the "little yellow horse", the customer selects the desired products, taps in the address and pays via their phone.

The supermarket staff place the items in the robot, which then busies off.

Liu Zhiyong, founder and chief

executive officer of Zhen Robotics, which manufactures the robot, sees a bright future for his yellow creation.

"At the moment, there are 100 million packages delivered every day in China. It will be one billion in the future," Liu said.

"There won't be enough humans to make the deliveries. We need more robots to fill this gap in manpower and reduce costs."

These costs are especially high in the last kilometre of a delivery, where precision is key and a customised service is required to get the product to the front door.

At the moment, the yellow robots in the Kafka compound have little to trouble them, moving along a wide pavement with no obstacles – and no cars.

Weighing 30kg and with a theoretical top speed of 12km per hour on their six wheels, the robots have four cameras constantly scanning the world around them and a laser tele-detection system allowing them to avoid obstacles.

Liu's firm has already signed up Suning, a large electronics firm that also runs a network of small supermarkets.

But not everyone is convinced that the robots are a long-term logistics solution.

Shao Zhonglin, former deputy

secretary-general of the China Express Association, noted that they were useful "over a short range".

"It's not certain, however, that they can be a broad solution for the final kilometre of delivery because the client still has to come down to get his package."

"Plus the costs remain quite high in terms of buying and maintaining the robots, operating costs, etc," added Shao.

But Zhen Robotics is convinced that the costs will come down over time.

Liu also said the robot will soon be equipped with the necessary technology to operate a lift, meaning it will no longer be confined to ground-floor deliveries.

In the meantime, deliveries in China are increasingly being made by autonomous means.

In recent months, several firms have received the green light to operate drones, either to deliver directly to the customer or to ferry goods between hubs.

And Liu has a warning for anyone trying to vandalise or steal the yellow robot.

"With GPS, we are constantly tracking them, cameras are filming and it can sound an alarm," he said.

"Anyway, what would a thief do with it? It's not exactly resellable."

— AFP