

# PULSE@UM

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UM-GENTING PARTNERSHIP  
TOWARDS DEMENTIA CARE

## RESEARCH SPOTLIGHT

FINDING SOLUTIONS FOR AFFORDABLE  
CANCER TREATMENTS

PROMOTING A SUSTAINABLE  
RESEARCH ENVIRONMENT

BALANCING ETHICS AND GENOME EDITING -  
BERMAN INSTITUTE OF BIOETHICS, JOHNS  
HOPKINS UNIVERSITY

LANCET NEUROLOGY REVIEW - PARKINSON'S  
DISEASE IN THE ASIA PACIFIC REGION

## COMMUNITY PROGRAMMES

50 KELUARGA SIHAT  
RCE WALKING FOOTBALL PROGRAM  
KEEPABLE CANCER COMMUNITY CENTRE



**UNIVERSITY OF MALAYA** | **FACULTY OF MEDICINE**



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# MESSAGE FROM THE DEPUTY DEAN

## PROFESSOR DR NG CHIRK JENN DEPUTY DEAN (RESEARCH)



Warmest greetings to all! Once again, University of Malaya remains the top university in Malaysia, rising to the 70th spot in the QS-World University Rankings for 2020. We must thank our faculty members who weather the storm despite the limited research grant – it's your hard work that has taken us to the top!

It is therefore my pleasure to launch the second issue of PULSE@UM 2019, which features exciting partnerships with other public institutions, industries, communities, as well as international collaborators. In this issue, the cover story highlights the historical moment where the Faculty embarked on a public-private partnership with Genting Berhad to organise the inaugural Eminent Speakers' series on 'Navigating towards Healthy Ageing' and launch the Dementia Care Centre.

This issue also highlights a range of research activities conducted by the FOM research teams, from implementation, dissemination, advocacy to community engagement. This demonstrates how the Faculty has extended its reach and impact on the community where the needs are. In collaboration with the Ministry of Health, and industries, a Cancer Research Forum was held in February, highlighting the important issues pertaining to cancer care including access to affordable cancer treatments in Malaysia. In April, a public conference entitled "Getting the Ethics of Genome Editing Right: Engaging Multiple Perspectives" was held and the Master of Health Research Ethics Programme was launched. This is a testimony of a strong collaboration with our international colleagues in Berman Institute of Bioethics, Johns Hopkins University. The Faculty also sees many exciting community engagement activities such as the 50 Keluarga Sihat Program, the Regional Centre of Expertise (RCE) walking football programme, and the KeepAble Cancer Community Centre. On top of these, it is also worthy to feature the FOM Parkinson's research group, whose work has been recently published in *Lancet Neurology*.

Another important research agenda of FOM is to continuously support researchers in honing their research skills. Together with YSN-ASM, a workshop on 'Responsible Conduct of Research (RCR)' was held to inculcate, promote and sustain an environment of research integrity among academicians and researchers. Besides, the Faculty held the APACPH Early Career Global Public Health Conference, focusing on how to translate research into the real world for improving population health through Implementation Science.

Enjoy reading!

Professor Dr Ng Chirk Jenn

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# COVER STORY

**UM-GENTING COLLABORATION FOR BETTER DEMENTIA CARE IN FACING THE SILVER TSUNAMI: 28 FEBRUARY 2019**



*Eminence Speakers Conference Series: Group photo on stage after the panel discussion. Looking on are Prof Claude Wischik (left), Prof Ng Kwan Hoong (second from left), Tan Sri Lim Kok Thay (third from left), Prof Tan Maw Pin (fourth from left), Prof Dato Dr Adeeba binti Kamarulzaman (middle), Dr Anders Dale (fifth from left), and Dr Robert J. Hariri (third from right).*

**DR MELISSA KIOH SHENG HUI**  
**DR KEJAL HASMUK**  
 DEPARTMENT OF MEDICINE

## FIRST EVER EMINENT SPEAKERS' SERIES

We are now in an exciting era facing the silver tsunami, but are we ready? As we know, the world's population is ageing: virtually every country in the world is experiencing growth in the number and proportion of older persons in their population. According to data from the World Population Prospects: the 2017 Revision, the number of older persons, those aged 60 years or over, is expected to double by 2050 and triple by 2100, rising from 962 million globally in 2017 to 2.1 billion in 2050 and 3.1 billion in 2100. Malaysia too is preparing to be an ageing nation. According

to the University of Malaya's Social Wellbeing Research Centre, the number of Malaysians aged 60 years and above is projected to hit 3.5 million in 2020 and 6.3 million in 2040 – about 20 per cent of the total population!

Understanding the importance of "Healthy Ageing" and realizing it is not just about adding numbers to the years, the University of Malaya has embraced research and innovations for older adults in an enormous way. Indeed, Active Ageing was made one of the two niche areas under the Health and Wellbeing research cluster last year. In line with this, this year, the Faculty of Medicine, University of Malaya in collaboration with Genting Berhad organized an inaugural or first of its kind - Eminent Speakers' Series entitled

"Navigating towards Healthy Ageing" on the 28th of February 2019. This event was also held in conjunction with the celebrations of Genting Founder's Day, to commemorate the legacy and accomplishments of the late Tan Sri Dato' Seri (Dr) Lim Goh Tong. This premier event saw about 400 members from our public and 100 plus UM fraternity members coming together to listen and engage with some of the world's top and most distinguished life science and biotechnology experts to share their insights and perspectives on some of the latest medical breakthroughs on cognitive health issues, including dementia.

Among the eminent speakers, we had Dr Robert Hariri, Founder & CEO of Celgene Cellular Therapeutics, who has pioneered the use of human stem cells to treat a range of life-threatening diseases and has made transformative contributions in the field of tissue engineering and longevity. He is also a member of the team which discovered the physiological role of TNF (tumour necrosis factor). He shed some insight into augmented immunity and augmented longevity. That 30 minute talk was indeed too short to learn about our longevity!

We also had with us Professor Claude Wischik, co-founder and Executive Chairman of TauRx Pharmaceuticals. A pioneer in Tau research, Prof. Wischik subsequently discovered the Tau protein compositional structure of the Alzheimer tangles and established that it was possible to dissolve tangles with pharmaceutically viable compounds that act as Tau Aggregation Inhibitors. He presented a novel integrated framework for combining genetic information with quantitative imaging, molecular tests, and other health data, to

enable the risk prediction and early detection of Alzheimer's Disease, Prostate Cancer, Coronary Artery Disease, and Type 2 Diabetes. He shared about developing practical strategies for maintaining cognitive function in later life.

Hailing from San Diego, USA, we had Dr. Anders Dale, a Professor of Neurosciences, Radiology, Psychiatry, and Data Science at the University of California. He has led the development of a number of technologies that have had a transformative impact on neuroscience and genetics, and was recently listed in Science Magazine, among the top ten "most influential brain scientists of the modern era. As we know, one of the major challenges in medicine is early detection or prediction of disease and enabling proactive intervention. In a very exhilarating manner, Dr Anders Dale presented on the integration of quantitative imaging and genetics for proactive medicine. This method shows great promise in the risk prediction and early detection of Alzheimer's Disease, Prostate Cancer, Coronary Artery Disease, and Type 2 Diabetes.

Not forgetting one of our very own, Prof Ng Kwan Hoong from University of Malaya, the first Malaysian scientist to receive the Marie Skłodowska-Curie Award in 2018 who presented about the age of precision scanning-decoding the ageing process. As one of the top 50 medical physicists in the world recognized by the International Organization for Medical Physics (IOMP), Prof Ng had very precisely discussed the role of the various imaging tools. The series of talks that were presented along with the every interactive panel discussion, moderated by our very own Professor Tan Maw Pin – senior consultant





Closed-door meeting: Dr Mahathir talking to Tan Sri Lim (second from left) in the presence of Puan Sri Cecilia Lim (left), Tengku Datuk Dr. Mohd Azzman (second from the right) and Datuk Ir. (Dr.) Abdul Rahim Hashim (right)

geriatrician in UMMC was well received by the audiences.

Talk about healthy ageing and the very person to come in mind is our Prime Minister – who is the epitome of ageing gracefully himself! Tun Dr Mahathir Mohamad, who is also the oldest Prime Minister in the world to date, had very graciously arrived at the end of the symposium for a closed-door session with the various stakeholders discussing on how to move the healthy-ageing agenda forward. The entire event concluded at about 1.30 p.m.

#### A NEW DEMENTIA CARE CENTRE

In the evening, we then witnessed the handing over of the Dementia Care Centre, funded by Genting Berhad to the new management team, led by the Geriatric Division, University of Malaya (UM). Genting chairman, Tan Sri Lim Kok Thay, said the centre was built following the signing of a Memorandum of Understanding (MoU) between Genting Bhd and UM during the inaugural Genting Founder's Day held on February last year. Genting Bhd has over the past decade been involved in research and development of new treatments and

new ways for early detection of Alzheimer's disease through their various investments in life sciences companies. "We hope that our investments will benefit Malaysia, through knowledge transfer via collaborations between the world-class companies and researchers with our local universities and local researchers, by bringing cutting edge technology to Malaysia to combat ageing and diseases and through creating employment in Malaysia," Tan Sri Lim had added in his speech at the handover. Over 1,500 employees, guests, corporate partners and business associates attended the event to commemorate the legacy of the Genting Group founder, the late Tan Sri Dr Lim Goh Tong. It was a night of fun, fellowship, good food and mesmerizing musical performances. The ceremony was witnessed by UM's Medicine Faculty Dean, Prof Dr Adeeba Kamarulzaman and Dementia Care Centre patron Puan Sri Cecilia Lim. The Dementia Care Centre, located in Segambut is designed to accommodate up to 50 patients at any one time, including facilities such as a resting room, prayer room, physiotherapy and cognitive stimulation room, consultation rooms, meeting rooms and offices. The centre

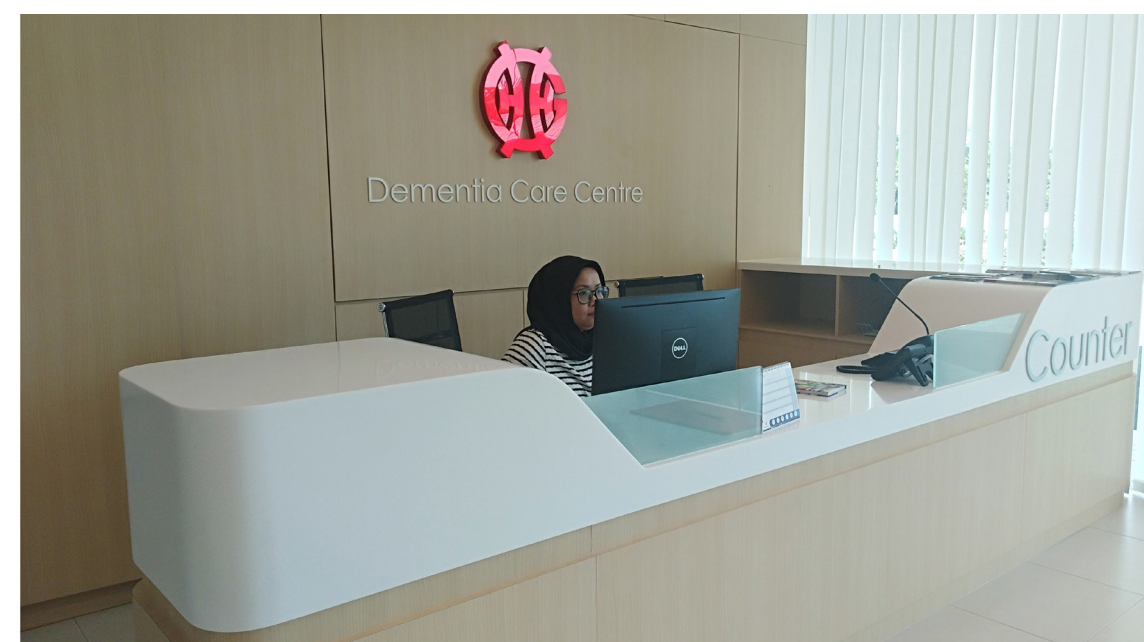
is aimed at providing day care to people living with dementia, so that their family members can continue to work, earn an income and be productive, while the patients can be involved in some cognitive-stimulating activities as well as rehabilitation to maintain their independence.

In a nutshell, the event demonstrated our commitment towards making Active, Healthy Ageing a clear agenda for the university as well as a new desire to work closely with

industry and the private sector as both these approaches are vital towards ensuring UM's reputation both locally and internationally continues to gain prominence. As for ageing, it's vital to celebrate life!

*"There is a fountain of youth: it is your mind, your talents, the creativity you bring to your life and the lives of people you love. When you learn to tap this source, you will truly have defeated age."*

– Sophia Loren



The newly built Dementia Care Centre that was handed over to the Geriatric Unit, University Malaya. A spacious and well-designed space for interaction and also cognitive-stimulating activities (lower left panel). A built-in gym in the dementia centre to improve balance, strength, coordination, motor control, flexibility and endurance (lower right panel).



# RESEARCH SPOTLIGHT

## CANCER RESEARCH FORUM: IMPROVING ACCESS TO AFFORDABLE CANCER TREATMENTS IN MALAYSIA



*The distinguished speakers of the forum.*

From left: Mr Billy S. Urudra (President, Malaysia Organisation of Pharmaceutical industries MOPI), Mr Allen Patino (Vice President, Pharmaceutical Association of Malaysia PhaMA), Dr Ramli bin Zainal (Senior Director of Pharmaceutical Services Programme, MOH), YB Dr Lee Boon Chye and Dr Ros Suzanna Ahmad Butamam (Head, Oncology and Radiotherapy Services MOH)

### PROFESSOR DR NUR AISHAH TAIB DEPARTMENT OF SURGERY

In conjunction with the Union for International Cancer Control's (UICC) World Cancer Day, the University Malaya Cancer Research Institute (UMCRI), together with the Faculty of Medicine, Academy of Medicine and Together Against Cancer Association Malaysia, organised a forum entitled "Improving Access to Affordable Cancer Treatments in Malaysia". The forum was held on 25th February 2019, at the TJ Danaraj Auditorium, Faculty of Medicine, University of Malaya, with 178 participants. Apart from academia, industry and professional bodies, 15 non-governmental

organizations (NGOs) and a government agency i.e. the National Pharmaceutical Regulatory Agency (NPRA), Ministry of Health participated. The forum aimed to share knowledge on research output by University Malaya scholars as well as to create dialogues to solve issues pertaining to financial toxicity and access to affordable cancer treatments to fellow researchers, non-governmental organisations and public service officers.

In his welcome address, Professor Dr. Ng Chirk Jenn, the Deputy Dean of Research of the Faculty of Medicine, recalled the journey of introducing UMCRI back in 2009. He mentioned that the purpose of UMCRI is to

foster interdisciplinary collaboration among the researchers in the Faculty of Medicine and the different faculties in the University of Malaya as well as stakeholders outside the University in fundamental, clinical and public health research in cancer. Over the years, UMCRI has become a full member of the Union of International Cancer Control (UICC) in July 2018 with funding support from the Professor Atiya Cancer Research Fund. UMCRI continues to move towards bidding for the project "Greater Petaling City (Petaling Jaya and Subang Jaya) Cancer Challenge 2025", together with the National Cancer Society Malaysia. This project aims to improve equitable sustainable access of patients to cancer care solutions in these cities to propel them towards World Health Organization sustainable development goals. "University Malaya Medical Centre has been instrumental in moving forward in cancer management and treatment given the comprehensive state of the art treatments, comparable to the world, cutting across from preventive to palliative

care", said Professor Ng.

Although it was only a one-day forum, it was filled with insightful lectures, including a keynote address by Dr. Lo Ying Ru Jacqueline (Head of Mission and WHO representative to Malaysia, Brunei Darussalam and Singapore) who shared about the development and implementation of the World Health Organization (WHO) essential medicine list for cancer. The economic impact of cancer on patients and their families was also discussed by Dr. Nirmala Bhoo Pathy, who revealed that although financial toxicity from medical costs happens mainly in private hospitals, public hospital patients suffer from non-medical costs. Dr. Ros Suzanna Ahmad Bustaman (Head of Radiotherapy and Oncology, Hospital Kuala Lumpur) highlighted the disparity in trained human resource in managing the large burden in the public sector. From regulatory perspectives, Madam Noraishah Mohd Sani (Head, Biologics Section, Centre for Product Registration, National Pharmaceutical Regulatory Agency,



*Prof. Dr. Rosmawati Bt Mohamed chairing the panel discussion*





Press Conference.

From left: Mr Wong Kuan Sing (Together Against Cancer), Prof. Dr. Rosmawati Bt Mohamed (Master, Academy of Medicine), YB Dr Lee Boon Chye, Dr Ramli bin Zainal (MOH), Prof. Dr. Nur Aishah Mohd Taib (Director, UMCRI)

NPRA) reported that NPRA has now refined its role in improving assessment of cancer treatments, with the implementation of Priority Review or Conditional Registration. Some insights on the high medicine prices in developing or low-income countries as well as the national implementation of flexibilities in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) were also shared by Miss Chee Yoke Ling (Program Director of the Third World Network). In addition to these efforts made by different institutions, various other issues were also discussed on policies to reduce the cost of cancer drugs as well as the challenges faced for more affordable cancer treatment.

The forum ended with a lively panel discussion chaired by Prof Dr. Rosmawati Mohamed. The key take-home messages from the forum covered the worldwide issue of affordable

cancer medicines and expedited registration for off-patents and new innovations. The deputy minister gave an assurance that the Ministry of Education hospitals will be included in the pooled procurement by MOH. YB Dr Lim Boon Chye appealed to international bodies to find solutions to skyrocketing cancer drug pricing and gave an assurance that MOH will be working regionally toward solutions to drug pricing and, of course, policing the mark-ups on prices of cancer treatment in the private sector.

On a high note, the WHO representative congratulated the organisers and noted that the forum provides evidence of the collaboration between academic institutions, University Malaya and Ministry of Health agencies, in line with the direction of the new Malaysia and harnessing the full potential of expertise which we have here in Malaysia.

## RESPONSIBLE CONDUCT OF RESEARCH (RCR) WORKSHOP : YSN-ASM AND FACULTY OF MEDICINE, UNIVERSITI MALAYA



**DR ROZAIDA @ POH YUEN YING**  
DEPARTMENT OF BIOMEDICAL SCIENCES  
**DR PHAN CHIA WEI**  
FACULTY OF PHARMACY

An incredible three-day workshop on 'Responsible Conduct of Research (RCR)', was held in the Faculty of Medicine (FOM) last April (4th, 5th and 9th April 2019). The workshop culminated from discussions between Young Scientist Network-Academy of Sciences Malaysia (YSN-ASM) and FOM, UM. It was officiated by our beloved Dean of Research, Professor Dr. Ng Chirk Jenn.

It was our pleasure to have a number of qualified trainers and facilitators in the workshop, including Professor Dr. Abhimanyu Veerakumarasivam from Sunway University and Dr. Chau De Ming from University Putra Malaysia (UPM), also Chair of the YSN Science Integrity working group. Familiar faces of UM's homegrown charismatic leaders are Dr. Chai Lay Ching from Institute of Biological

Sciences, Faculty of Science (Chair of YSN), as well as Dr. Tee Kok Keng from the Department of Medical Microbiology and Dr. Phan Chia Wei (Co-chair of YSN Science Outreach working group) from the Department of Pharmacy, Faculty of Medicine. Eight other trainers jumpstarted conversations that trickled only at first but gushed forth thick and fast as the workshop progressed. Participants comprised researchers, academicians and clinicians of varying levels of seniority and fields in FOM.

The workshop aspired to create awareness and promote the concept of RCR, which is to inculcate, promote and sustain an environment of research integrity among academicians cum researchers for the first time in FOM, UM. The conversations flying back and forth during the workshop revolved around key principles of ethics, research misconduct, authorship, peer review and publication, mentor-mentee relationship, conflict of interest, data management, financial responsibility, culture of safety, collaborative research and strategies



to foster research integrity.

A distinct feature of this workshop is the active learning pedagogy that engaged even the sceptics amongst us, with case studies, team-based learning, peer-instruction and role-play being employed to the hilt. With senior professors mingling with junior lecturers, one of the role-plays tackled topics pertaining to mentor-mentee relationship and authorship in a hilarious manner, while making us contemplate the serious undertones that although the role-play may be fictional, the situation can be real and causes dire consequences when left unchecked. This is the case with research misconduct arising from poor supervision and questionable practices. This is particularly important as the incidence of reported cases of research misconduct has been increasing in academic settings nowadays. Apart from that, case studies also teased out our perception of certain grey areas in publication and conflicts of interest. Many times, the actions of researchers are led by their intentions as appropriate references and guidance are not available.

We even dabbled in painting, with each of us

lovingly applying strokes of water-colours on our first 'draft' of a painting, but then we had to pass around our 'masterpiece' to another colleague who was then instructed to add on to the painting. Surprisingly, some of us turned into 'Monets' out of the 'collaboration' – hidden talents coming to the fore! However, it was not just watercolours and fun – the painting activity brought home the consequences of collaborative research, reiterating the importance of choosing the right collaborators as they can either safeguard or jeopardise our research.

The final curtain was on the reflection of strategies to foster research integrity, and to put in place the best practices, principles and guidelines on conducting research responsibly. Chair of YSN, Dr. Chai Lay Ching prompted us by saying that "change in mindsets and questionable practices will not happen if we simply wait for it; rather we should be the agents of change". It was indeed a workshop where one entered on Day 1 and left by Day 3 with a kindled sense of purpose. It is imperative that such workshops be extended to UM's campus community and that on a regular basis to cultivate research integrity as the very foundation of good science.



## 'GETTING THE ETHICS OF GENOME EDITING RIGHT: ENGAGING MULTIPLE PERSPECTIVES' - FACULTY OF MEDICINE, UNIVERSITY OF MALAYA AND JOHNS HOPKINS BERMAN INSTITUTE OF BIOETHICS



**DR TEO CHIN HAI**  
DEPT OF PRIMARY CARE MEDICINE

Science and technology permeate every aspect of today's world from the life-saving drugs and devices to the research in new technologies and the cure for cancer. The innovations that emerge from these fields continue to change the way we live today but are also accompanied by the emerging ethical issues particularly on the topic of gene editing. Gene editing, the technology that enable DNA sequence alteration by adding, removing or replacing sections of DNA, in theory, has almost a limitless range of possible applications in improving the functions of living things. The CRISPR technique, which is at the forefront of gene editing technology, is theorised to be much faster, cheaper, accurate and efficient compared to any other existing genome editing methods. The use of gene editing technology

to counter human disease is one of the most compelling potential applications capturing research funding and scientists' attention.

On 16 April 2019, over 150 people attended the public conference entitled "Getting the Ethics of Genome Editing Right: Engaging Multiple Perspectives" hosted by the the Faculty of Medicine, University of Malaya, together with the Berman Institute of Bioethics, Johns Hopkins University at the TJ Danaraj Auditorium, Faculty of Medicine, University of Malaya. The signing of the Memorandum of Understanding (MoU) between the Faculty of Medicine, University of Malaya and the Berman Institute of Bioethics, Johns Hopkins University marked a historic international collaboration in healthcare, bioethics and research that launched the public conference.

As the world's most renowned centre in bioethics, the Berman Institute of Bioethics,





Johns Hopkins University, represented by its Director, Professor Dr. Jeffrey Kahn and its Deputy Director, Professor Dr. Jeremy Sugarman, is truly dedicated to identifying and addressing the key ethical issues in science, clinical care, and public health. Witnessed by the Director General of Higher Education, Y. Bhg. Datin Paduka Ir. Dr Siti Hamisah Binti Tapsir, the MoU marked the consolidation of a true partnership between the University of Malaya (represented by the Vice Chancellor, Datuk Ir. Dr. Abdul Rahim Hashim; the Dean of the Faculty of Medicine, Dato' Dr. Adeeba Kamarulzaman; the Deputy Dean Research of the Faculty of Medicine, Professor Dr. Ng Chirk Jenn) and the Johns Hopkins University. Their long-standing collaboration in strengthening research ethics by engaging diverse stakeholders nationally and regionally is a cause for celebration.

Through this effort, a robust Master of Health Research Ethics (MOHRE) programme was established and is now expecting its first intake in September 2019. The active involvement of bioethicists from the Berman Institute of Bioethics, Johns Hopkins University together

with a multidisciplinary group of faculty members from UM in the field of medicine, law and education has led to its successful development. This will increase the capacity for high quality research ethics education, being one of its kind in Malaysia and one of the very few in the Southeast Asian region. The Vice Chancellor believes, that the Master of Health Research Ethics (MOHRE) programme will facilitate its students to have a great understanding of the wide range of ethical challenges in biomedical and social science research and guide them through theory and practice.

The public conference provided a holistic view of gene editing, by looking at the issue from multiple perspectives such as bioethics, policy, law, philosophy, religion, and history. With the ambitious targets set by the Ministry of Higher Education for universities to be highly competitive in research while promoting responsible conduct in research, ethics and integrity, the public conference and the Master of Health Research Ethics (MOHRE) programme are steps in the right direction in achieving these targets. A variety of speakers from all over the world such as

United Kingdom, Qatar, Taiwan and Malaysia were invited to speak at the conference, including representatives from the Berman Institute of Bioethics, Johns Hopkins University and University of Malaya. Prof. Dr Maude Phipps from the Monash University of Malaysia initiated the segment, delivering an interesting view on the realities and myths of human gene editing that gave a fundamental overview of the CRISPR technique. The talk, entitled 'Public Deliberations, Controversies and The Advent of Rogue Science' presented by Prof. Dr. Jeremy Sugarman, offered a piece of the 360° perspective on the topic of gene editing. This was followed by Dr. Sharon Kaur and Dr. Firdaus Abdul Aziz fulfilling the legal perspective with some interesting facts on international and national laws and regulation in relation to gene editing. Prof. Dr Jeffrey Kahn from the Berman Institute of Bioethics, Johns Hopkins University presented a thought-provoking piece calling for morality in human gene editing, highlighting the challenges and the need for governance. The Head of Medical Humanities, Wellcome Trust UK, Dr. Dan O'Connor, spoke on a rather fascinating aspect, the history of gene editing and the lessons it teaches, almost completing the 360° perspective.

The final segment on religion and theology, which had a panel of four distinguished speakers, discussed specifically the different religions and their perspective on gene editing. Prof. Dr. Mohammed Ghaly from Qatar's Hamad Bin Khalifa University addressed the Islamic perspective, Prof. Dr. Daniel Tsai from National Taiwan University shared his thoughts on the Confucianism and Buddhism aspects, Dr. M. Bala Tharmalingam from the National Council of Bioethics presented the perspective from Hinduism and Associate Prof. Dr. Alex Tang Tuck Hon from Monash University spoke on the Christian perspective. The enlightening dialogue was followed by a general forum involving all the distinguished speakers that concluded the public conference with interesting questions from the audience made up of academicians, researchers, IRB managers and members, clinical trial coordinators, research officers and assistants, and students. The conference was informative and covered comprehensive topics pertaining to gene-editing, but the controversies that surround the technology plead careful assessment, which struck a chord with all the attendees.





## APACPH-KL EARLY CAREER GLOBAL PUBLIC HEALTH CONFERENCE 2019 KUALA LUMPUR



### NUR ASYIKIN YAKUB

DEPT OF SOCIAL & PREVENTIVE MEDICINE

The University of Malaya, Kuala Lumpur, Malaysia hosted the APACPH-KL Early Career Global Public Health Conference: Implementation of Science for Improving Population Health on the 11th and 12th of April. The two-day conference was officiated by APACPH-KL President Yang Berbahagia Datuk Professor Awang Bulgiba Awang Mahmud. The conference gathered experts and researchers in public health for exchange and expansion of knowledge and to share experiences so early career researchers can tackle public health issues, which are sometimes borderless.

Organized by the Asia-Pacific Academic Consortium for Public Health, Kuala Lumpur (APACPH-KL), in collaboration with the Centre for Population Health (CePH), and the Department of Social and Preventive Medicine (SPM), Faculty of Medicine, University of Malaya; the conference aimed to leverage on the global public health education and research of Asia-Pacific universities to address global public health issues through interaction with public policy and media. It also hoped to develop and enhance the network amongst international fellow students and early career public health researchers.

Yang Berbahagia Datuk Professor Awang

Bulgiba Awang Mahmud, in his opening remarks, reflected on his own experiences as an early career public health researcher more than 25 years ago. He stressed on the need for young public health researchers to strengthen their networks and to have good mentors to guide them in their careers. He called on these early career researchers to seek out solutions to public health problems and use implementation science to help them achieve their aims of making populations healthier.

In her welcoming speech, Professor Dr. Maznah Dahlui, the Chair of APACPH-KL Early Career Global Public Health Conference 2019, shared that every one of us should aspire to live in healthy conditions and to have access to quality healthcare. "Spending on health should not be seen as a cost, but rather as a long-term investment. Health is a prerequisite for economic development. A population in good health represents a strong workforce that can drive a country's productivity and growth", she added.

The conference offered an excellent platform

for early career public health professionals and students to exchange ideas and network with regional public health thought leaders and researchers. The organisers succeeded in bringing people from industry, academia, NGOs and international organisations to make presentations and have interactive discussions. Participants made oral presentations on Health Systems and Policy, Epidemiology, Occupational and Environmental Health as well as Behavioural and Reproductive Health. They will also have the opportunity to submit articles which will be published in a special issue of a SCOPUS-indexed journal.

This conference hopes to build up the confidence of early career public health professionals and postgraduate students in presenting and publishing articles in well-regarded peer-reviewed journals. It was also the perfect opportunity for them to network and interact with one another. APACPH-KL and the University of Malaya looks forward to more of such activities being conducted in the near future.





## LANDMARK LANCET NEUROLOGY PUBLICATION ON PARKINSON'S DISEASE IN THE ASIA-PACIFIC REGION



Panel of Plenary Speakers and Chairs (left to right):

Prof. Shen-Yang Lim, Prof. Roger Barker (Chair; University of Cambridge, UK), Prof. Jeffrey Kordower (Rush University, USA), Prof. Per Borghammer (Aarhus University, Denmark), Ms. Heather Kennedy (USA) and Prof. Hideki Mochizuki (Co-Chair; Osaka University).

### PROF DR LIM SHEN-YANG DEPARTMENT OF MEDICINE

There is a huge and increasing burden of degenerative disorders worldwide. In fact, the prevalence of Parkinson's disease (PD) was the fastest-growing of all neurological disorders from 1990-2017, according to the Global Burden of Disease, Injuries and Risk Factors Study (GBD), a very extensive epidemiological survey funded by the Bill and Melinda Gates Foundation (Dorsey, 2018).

The Asia-Pacific region is poised to face the brunt of this disease burden, with China alone projected to have the majority of PD patients

within the next couple of decades. In addition, disease heterogeneity has been increasingly recognised to be a crucial aspect of the disease. In the past decade, several Asian countries have emerged among the global top 10 in terms of PD-related publications. Thus, a review on PD in this region is extremely timely. A state-of-the-art discussion on "Parkinson's disease in the Western Pacific Region" was published in the Lancet Neurology (Lim, 2019) in conjunction with the recent World Parkinson's Congress (WPC) in Kyoto, Japan. Prof. Lim was able to highlight some aspects of the Review in his Plenary lecture at the WPC (Figure 1).

Although this review was a collaborative effort involving many key leaders in the Asia-Pacific region and beyond, the paper was initiated and led by University of Malaya (UM) with Prof. Lim Shen Yang, Assoc. Prof. Tan Ai Huey and Dr. Azlina Ahmad Annuar being the first three authors, and Prof. CT Tan providing guidance especially in the nascent stage of manuscript preparation. For Prof. Lim, getting this review published was a fitting culmination to serving in various roles in the International Parkinson and Movement Disorder Society - Asian Oceanian Section (MDS-AOS) including Chair of the Education Committee, and Honorary Secretary over the past decade, as well as lecturing and gaining firsthand experience in many countries in the AOS and beyond under the auspices of the MDS. Prof. Anthony Lang from the University of Toronto, a long-standing collaborator and UM Academic Icon (with an h-index >150!) (Figure 2), was a senior author of the paper.

The review has already been hailed as an "important landmark" and "standard reference" by other leading figures in the PD field, providing a valuable resource to readers and offering numerous critical insights that will help to move the field forwards.

Among some major highlights of the paper:

- Overall, a lower prevalence of PD has been observed in some Western Pacific Region (WPR) countries such as Japan and Singapore, despite the relatively high proportion of aged individuals and the long-life expectancies in these countries. A reversal of the usual male predominance of the disease has also been observed in Japan and South Korea and may

point to important differences, e.g., in environmental risk factors.

- There is likely to be a different weightage for PD environmental risk and protective factors in the WPR, relating to pesticide use, smoking, consumption of tea and dairy products, exercise, diabetes, and infections such as hepatitis C. Many of these require further study and, if confirmed, will have important public health implications as discussed in the Review.
- Some genetic factors underlying PD are distinctly different in WPR populations. Taking the LRRK2 gene as the prototypical example, G2385R and R1628P (known as "Asian variants") are seen in Asians and not Caucasians with PD, whereas the converse is true for the G2019S mutation. In turn, these genetic differences may have important implications in the basic pathogenetic mechanisms (G2019S resulting in increased kinase activity, whereas other mechanisms may be at play with the Asian variants). Recognition and understanding of these inter-ethnic differences are vitally important as the PD field enters the era of genetics-based targeted therapies.
- There are differences in pharmacological management in the WPR which may partly account for substantial differences in clinical features such as motor complications and non-motor symptoms. These factors could potentially be exploited or addressed to improve patient symptomatology.
- Comorbidities such as diabetes, cerebral



small vessel disease and osteoporosis may be even more highly prevalent in WPR populations, with major implications on disease causation and/or disease course. These areas are only beginning to be appreciated by the PD clinical and research communities and deserve to be highlighted.

- There are major gaps in multiple areas in the WPR, including poor awareness and knowledge of PD (such as confusing PD for ageing, poor recognition of non-motor symptoms, and beliefs that alternative treatments can “cure” PD), which could result in people living with PD not seeking medical care, or leading them to obtain unproven, costly and potentially harmful treatments.
- Healthcare resources are insufficient with a shortage of neurologists, PD specialists, and neurosurgeons with expertise in deep brain stimulation (DBS). There is poor or no access to potentially life-changing treatments such as dopaminergic infusions and DBS in many WPR countries. Even levodopa - introduced into clinical use more than 50 years ago - is not universally available in some countries.
- There is a paucity of PD-related clinical trials in the WPR, highlighting a major gap in PD research currently, given that there are likely to be inter-ethnic differences in drug metabolism, therapeutic responses and adverse effects. An example of this, with respect to entacapone (a very widely used PD medication), was highlighted.

- Complementary and alternative treatments are even more widely used in the WPR than in the West, reflecting many factors including cultural history and easy access. Some popular approaches such as tai chi, acupuncture, and herbal preparations were discussed, as well as the need for these treatments to be tested in the same rigorous manner as for conventional therapies to provide an evidence-based rationale for their use.

- The authors provided numerous specific suggestions on how the field can move forward in terms of further research; short and medium-term priorities for care and opportunities for improvements in training and advocacy in the region were also covered.

Importantly, this work showcases the collaborative potential between research groups in this region and elsewhere. Another high-impact paper led by collaborators at the University of Tokyo (Figure 3) involving Malaysian cases provided by Prof. Lim and Assoc. Prof. Tan is currently in press with Nature Genetics (Ishiura, 2019), and a meta-genome wide association study (meta-GWAS) of Asian PD led by close collaborators in Singapore is currently in submission with Lancet Neurology. The Nature Genetics paper describes a new mechanism by which certain genetic mutations (trinucleotide repeat expansions) can cause disease. The full details are currently under embargo, pending online publication.

## COMMUNITY PROGRAMMES

### 50 KELUARGA SIHAT PROGRAM: A COMMUNITY PROJECT IN TAMAN MEDAN CAHAYA



#### ASSOC PROF MOY FOONG MING DEPT OF SOCIAL & PREVENTIVE MEDICINE

The “50 Keluarga Sihat Program” is a community program under the P105 Health thrust. The Health thrust is one of the six key thrusts (Health, Democracy, Empowering Youths, Empowering Women, Housing and Transportation, and Environment) under the P105 “Dignity for all” by Yang Berhormat Maria Chin Abdullah, a member of parliament of Petaling Jaya city. The vision of the P105 Health thrust is “Empowering residents to take ownership of their life” translating into cleanliness, good eating and fitness habits for self, family and community. The ultimate aim is to prevent and manage

non-communicable diseases, to reduce the burden on the government’s health facilities, which subsequently free up resources spent on preventable diseases to be more effectively used for other needs.

Recently, our beloved Dean, Professor Dato’ Dr Adeeba Kamarulzaman was invited to lead the Health thrust to build a sustainable community program with the expertise from the University of Malaya (UM). One of the main activities carried out under the Health thrust is the “50 Keluarga Sihat Program” conducted in the Program Perumahan Rakyat Taman Medan Cahaya. The program was designed based on the household survey and needs assessment that carried out by UM medical students



during their community posting in July 2018. The program took part by volunteers from the community (including some medical graduates waiting for posting), medical professionals and academicians.

This program has been officiated on 12 January 2019, in Taman Medan Cahaya. The program is running for a 9 month period, however, it has started since last October to December 2018 with 3-month low-intensity activities such as Zumba classes, boot camps, health talks, supermarket sweep; followed by a 6-month personalized health coaching program from January to June 2019.

In this program, fifty households were identified and invited to participate, with peer support and peer mentoring elements implemented. Each family was assigned a trained life coach, with individualized healthy living goals set for each participant. During this period, they received intensive coaching on various aspects of maintaining healthy lifestyles (healthy diet, increased physical activity, quit smoking,

manage stress), prevention and management of obesity, mental health, diabetes mellitus and hypertension. Meanwhile, their progress will be well-monitored by their life coaches to help them achieve their ultimate goals. Participants were also sent with educational materials and health diaries in addition to activities conducted regularly (cooking demonstration, exercise / Zumba classes, supermarket sweep, health talks etc).

At the meantime, health screening, treatment and monitoring of the 50 families are performed by the Klinik Keluarga Taman Medan, with constant feedback between healthcare professionals and the life coaches. Until today, the outcome of the program seems promising and it is hoped that the program may be modified and replicated in other residences and localities to suit respective localized conditions and needs. With this, communities enroll in the program could be empowered and proactive to take ownership of their own health.



## RCE WALKING FOOTBALL: A UMCARES INITIATIVE



**DR HAIREEN BINTI ABDUL HADI**  
DEPT OF PRIMARY CARE MEDICINE

The global incidence and prevalence of childhood obesity is on the rise due to the poor quality of food intake and habits, increasing watching time and sedentary lifestyle. In 2015, Malaysia National Health and Morbidity Survey (NHMS) showed that 38% of Malaysia school children are either overweight or obese.

From the survey, it was noted that these children usually have limited opportunities to participate in sports activities due to their limitations in movement and fitness levels. In this regards, it is a known fact that children who are less active with fewer physical or sports activities had been related to poor fitness

level and excessive weight gain. Studies also showed that overweight and obese children have a high tendency to grow into obese adults.

In view of these alarming statistics, the first experiential-based learning initiatives under UMCares - "Walking Football Club (WFC)", was introduced in 2017 to eight primary schools in Petaling Jaya district as a community project to combat obesity in school. With this, children are actively engaging in physical activities, which are in line with the policies and campaign of "Satu murid, Satu sukan" and "10K steps a day" by the Ministry of Education and Ministry of Health, respectively.

This project inculcated encouraging results whereby those who participated in walking football had an improved fitness level, showing



a significant increase in muscle mass and reduction in body fat percentage, where these results were published in an ISI Journal in Sports Medicine. This year, WFC has spread its wings further to involve 16 schools in Petaling Jaya and 4 schools in Penang under the Regional Centre of Expertise (RCE) programme. In brief, walking football is similar to a normal football game except that it is low impact as participants must walk instead of running, which at the same time body contact is not allowed and balls should not go above the participant's shoulder level. In this program, healthy school boys aged 9 - 11-year-old from 16 schools around Petaling Jaya were invited to participate in walking football. The training sessions were held at their school field or futsal court, under the supervision of a school-teacher's during their schooling session. Comprising multiple short six-a-side semi-structured game of 25 minutes per session, totalling up to 150 minutes each week, this program lasted for 12 weeks and ended with an Inter-school Walking Football tournament in September. Approaching the end of the program, four best teams were invited to the National Walking Football Championship between RCE Central and RCE Penang that

was held in University Malaya in November 2018. Among the contestants, SK Minden Height was the champion in the National WFC Championship, SK Seksyen 7 Kota Damansara was in second place and SKDU won the 3rd place.

Throughout the year, walking football club has gained many positive feedbacks, from participants, teachers and parents that had created keen interest for further collaboration in the future. It is hoped that more schools from all over Malaysia will take up this sports event, as it is cheap and easily implemented using the current facilities that are readily available in most schools.

In December 2018, "Walking football: Fat to fit for better personal health" has received RCE Award 2018 at the 11th Global RCE Conference held in Cebu, Philippines. The award is with the designation of Acknowledged Flagship Project for its role in contributing towards Sustainable Development Goal 3: Good Health and Well Being. As the host of RCE Central Semenanjung, we are looking forward to the next step to excel the program by involving primary school girls for our upcoming project next year.



## KEEPABLE CANCER COMMUNITY CENTRE



### ASSOC PROF LOH SIEW YIM DEPT OF REHABILITATION MEDICINE

The name KeepAble (pronounced as 'keep-able') reflects the centre's philosophy to keep cancer survivors able and functional, with a little community support, said centre founder Associate Prof Dr Loh Siew Yim. KeepAble was established to support cancer survivors and enable them to readjust to a new day-to-day routine after completing drastic cancer treatment. The purple Mexican petunias (*Ruellia simplex*) located within KeepAble Cancer Community Centre's garden are beautiful blooms that were purposefully picked to line its ribbon-shaped reflexology path. The flowers, also known as 'survivor' are known for their hardy and versatile properties, and serve as the icon for KeepAble Cancer

Community Centre. Its purple hue, blend in perfectly to represent the purple ribbon, the ribbon symbol for cancer survivors.

"Living with a cancer diagnosis can be challenging, frightening and emotionally draining, but supportive care and patient self management support strategies can facilitate more effective living with the condition. Community creative arts can also remediate impaired cognitive impairments (from chemo brain) and boost creativity, but engaging in psycho-social activities such as counselling is also critical, so that no one is left to feel that they are alone in their cancer journey. Rotary Club of Kuala Lumpur has facilitated the construction of a counselling bay. We have conducted awareness activities like yearly KeepAble walks officiated by Tan Sri Dr M. Mahadevan (ex-



Chief Psychiatrist to the Government), Prof Dr. Awang Bulgiba, Tan Sri Ramon Navaratnam. This year was exceptional because we had difficulty accessing funding. We also did a community colon cancer screening with the minimum staffing, and conducted cancer awareness talks, host international visitors, conducted Survivors day celebrations etc.

KeepAble Cancer Community Centre occupies an old bungalow belonging to the University of Malaya, and is located within a stone's throw from the university main campus. Over the past four years, volunteers and survivors transformed the building and its garden into a community centre, and organised activities tailored for cancer survivors and cancer prevention agenda. Organisations and companies have also sponsored equipment and building materials, or shared expertise to improve the garden soil and plants. The

garden includes a ribbon-shaped reflexology path with 143 steps for the survivors to walk on and meditate. A smaller reflexology path for children and senior citizens, plus a corner shed for counselling and group sharing. It features plants comprising herbs, vegetables, fruits and ornamental. The planting and maintenance of the garden is done through trial and error. It is important to ensure the soil is right. However, without funding and dedicated survivor-volunteers, it is challenging to ensure all the plants thrive or are well maintained. Community gardening allows participants to exercise, encourage an eco-green initiative and get people to focus on a plant-based diet.

KeepAble offers weekly activities such as Qi gong (exercise) led by members from Zhineng Qigong, singing and creative arts. They try to keep the creative arts sessions interesting by



offering different activities, such as macrame (knotting string to make decorations), batik painting, beading, cooking and baking including picnics and outing. Cancer survivors are encouraged to participate in the activities based on their abilities, interest and strength. The place is open to cancer survivors to find their footing and regain a sense of normalcy. We do need the involvement of University of Malaya staff to lend support once a week (or rather a few hours) with the centre activities. This gesture is also fundamentally important to break the barriers between staff and society, and coming in on a friendlier environment to interact and 'give back' to society in a more humane and approachable climate, away from busy work environment. People are more likely to do something as a group and with support." We have engaged survivors to facilitate sessions too. It works well both ways, giving the opportunity to build self efficacy and also breaking down images of 'dysfunction' during survival period.

KeepAble is also a viable training ground for University of Malaya students on fieldwork and for developing empathy, communication, organisational and leadership skills. We encouraged students to be more active by taking turns to lead KeepAble's activity such as Saturday morning walks by guiding survivors to walk around KeepAble's reflexology path and around the University of Malaya's campus lake. This exercise will benefit both groups. Community cancer projects and initiative implemented as a research project should be promoted and we are looking at such projects for more opportunity and engagement of undergraduate and postgraduate students too.

*KeepAble Cancer Community Centre is located at 13, Jalan 16/4, Off Jalan Universiti, Petaling Jaya. The group meets on Saturday from 8.30am to noon. For details, visit [facebook.com/keepablecancercommunity](https://facebook.com/keepablecancercommunity) or email [syloh@um.edu.my](mailto:syloh@um.edu.my)*





# UPCOMING EVENTS

## SEPT 2019

10 Sept

Why E-Learning in Medicine Workshop

11 Sept

Overcoming Barriers to E-Learning Implementation in Medicine Seminar

11-13 Sept

3rd UM-CUHK Certificate Course in Clinical Genetics and Genomics

18-19 Sept

Introduction to Qualitative Research

24 Sept

Immuno-Oncology Symposium in conjunction with World Cancer Research Day

25-26 Sept

2nd ACT4 Health Training the Trainers Workshop

26 Sept

CRL Carnival Day

## OCT 2019

10-11 Oct

International Cadaveric Limb Salvage Course

12 Oct

Masters Orthopaedic Oncology Workshop

## NOV 2019

1-3 Nov

Workshop on Diagnosing and Managing Children with Asthma in Primary Care

7-8 Nov

NOCERAL Foot & Ankle Sawbone boot camp

25-29 Nov

Faculty of Medicine Research Carnival

29 Nov

Holistic Obesity Intervention - H.O.T. Spot 2019

5 KM  
10 KM

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7<sup>TH</sup> DECEMBER 2019

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1

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\*Jointly organised with Malaysian Pharmaceutical Society

2

**THE PSYCHOLOGY OF FALLS**

\*Jointly organised with Life After Falls (LIAF) Research Programme

3

**OTAGO PROGRESSIVE STRENGTH AND BALANCE TRAINING**

4

**FRACTURE LIAISON SERVICE WORKSHOP**

Venue: Impiana Hotel KLCC

Venue: Novotel Kuala Lumpur City Centre

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