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At the heart of IMU lies the united strengths of its schools, centres, departments and supporting services, driven by a dedication to nurturing the capacity of our students. IMU is committed to doing its part in building a workforce that is ready to face the challenges of the modern healthcare workplace.



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MESSAGE FROM THE VICE-CHANCELLOR

Dear Readers.

The year 2019 was very much defined by the consolidation of our strengths as a premier healthcare education institution, research centre and thought leader. During this time, the overall economic environment remained challenging, and this has impacted disposable incomes and the finances that households would normally be able to devote to education in general, and healthcare education in particular.

Throughout the year, IMU focused on maintaining market share by ensuring that we constantly maintained our competitive advantage in the quality and value of our programmes. This is expressed through the quality of our graduates, and our core business at IMU is to ensure that all our graduates are able to respond positively to the changing challenges of the modern healthcare workplace.



Despite these adverse economic conditions, we exceeded our student intake targets for our flagship Medicine programme, which was an appropriate way to mark the 20th anniversary of the establishment of IMU's MBBS programme. We also exceeded targets in our Foundation in Science (FiS) programme, which is a vital pathway for students to enter our undergraduate programmes.

In Pharmacy, the 2019 intake declined slightly, in line with national trends. The Health Sciences sustained positive overall development throughout the year and there was strong growth in our Chiropractic programme, which is the only programme of its kind in the region. This highlights an important fundamental potential in the regional and international role that IMU can and should play as provider of healthcare education: as local demand for medical education shifts over time, there remains a great deal of room for growth in terms of international enrolments for all our programmes. This can potentially create more sources of financial stability and growth for the university even in adverse economic times.

Also in 2019, we unveiled new postgraduate programmes: the Postgraduate Diploma in Diabetes Management & Education comes at a crucial time when Malaysia has the highest number of cases in Asia at 3.6 million (which is also one of the highest in the world).

We also launched a new MBA in Healthcare Management as well as three advanced degrees within the Open and Distance Learning track—the MSc in Analytical & Pharmaceutical Chemistry, MSc in Molecular Medicine, and MSc in Public Health—all underscoring our commitment to helping medical professionals progress within their careers in a way that minimises disruption to their workplace and personal commitments.

AN EMERGING THOUGHT-LEADER

IMU's core business is education, but our social responsibility as an academic institution drives us to research and develop healthcare policies for the benefit of the wider community. One important Government initiative has been the 1 July 2019 implementation of the national "sugar tax". In fact, IMU initiated these discussions among stakeholders and the main recommendations were taken up by Cabinet and incorporated in the policy.

We are also advocating for, promoting and encouraging a healthy lifestyle in what is the first private-led partnership with the Ministry of Health under the Komuniti Sihat Pembina Negara (KOSPEN)-IMU programme.

This initiative seeks to increase awareness of risk factors of non-communicable diseases and to create a conducive environment to promote better lifestyle habits within communities, workplaces and among individuals.

In July 2019, we also partnered with the Southeast Asian Ministers of Education Organisation
Regional Centre for Food and
Nutrition (SEAMO RECFON) to collaborate in providing health and medical research on nutrition, dietetics, food science, medicine, public health and food safety throughout Southeast Asia.

Furthermore, in October 2019, IMU partnered with the digital platform BookDoc to increase the exchange of knowledge and research, and disseminate health information more widely in the community in order to empower individuals to take active charge of their health.

In terms of research grants and publications, IMU certainly met its targets for 2019, and it is important to emphasise that the university received significant funding through contract research—for example, in April 2019 we entered a partnership with a large dental group in Singapore to develop an Alenhanced clinical decision support system—which will lead to greater avenues for sustainability research in the future.

These contributions to public health policy and research are an important impetus for the development of capabilities within IMU—but more importantly they will greatly enhance our capacity in terms of research potential and contribute significantly to the university's relevance as a vital institution at the forefront of medical research in Malaysia.

DATA, TECHNOLOGY AND THE FUTURE

Research is certainly the way forward: the healthcare environment today is very different

from what it will be in five, 10, or 20 years, and we anticipate that the entire healthcare profession will be driven increasingly by changes in technology, particularly big data, data analytics and artificial intelligence. At the same time, expected demographic changes will result in a greater need to cater to a growing population of older patients as well as the need to manage more non-communicable diseases outside hospital environments.

Our graduates must understand this evolving landscape and develop the skills necessary to excel in this environment. Thus, at IMU we ensure that every programme now incorporates foundational competencies in data science including core topics such as the value of data. A doctor does not need to be a data scientist but he or she must understand how to use data to improve patient outcomes and must also be attuned to issues surrounding data confidentiality, ethics and other social impacts.

Importantly, we are also developing undergraduate as well as postgraduate programmes around data science and data analytics, which we intend to roll out in the near future. We are also making investments in appropriate technologies not just to enhance our educational offerings but to improve our internal operational efficiencies.

IMU will remain committed to the principles of value-creation and operational efficiency to ensure that the best quality is constantly provided to all our stakeholders: students, sponsors, parents, patients, staff, partners, and the wider community.

To this end, we have embarked on a programme to enhance academic-industrial partnership. In 2019, we signed an important agreement with Fusionex that will enable collaboration in several areas of medical research and development including cancer informatics, advanced drugs, vaccine design, and healthcare analytics.

GREATER IMPACT: THE YEAR AHEAD

We expect the economic outlook in 2020 to remain demanding. Although we have done well in 2019 to maintain revenue and market share, IMU will continue to focus on enhancing the quality of its programmes to provide students and patients with a "Six-Star" experience even as we face economic and environmental challenges and increasing operational costs.

For the coming year, IMU will continue on its current trajectory of consolidation and growth: foremost among our concerns will be the continuing progress of the IMU Hospital, which will be operational in mid-2021, as well as the rollout of significant new programmes in Dentistry (a Postgraduate Diploma in Endodontics and a Postgraduate Diploma in Prosthodontics), Mental Health (a Master in Counselling, which is a progression from the current undergraduate degree in psychology), and Masters, Postgraduate Diploma and Postgraduate Certificate programmes in Healthcare Analytics that will bring together the disciplines of IT, business and healthcare.

In terms of infrastructure, IMU will continue renovating and renewing facilities for students and staff.

Major corporate functions have already been relocated to Aurora Place, Bukit Jalil, and by March 2020 all staff will be settled in their new clusters, while students can look forward to new teaching and learning spaces at the Bukit Jalil campus.

Going forward, IMU will remain committed to the principles of value-creation and operational efficiency to ensure that the best quality is constantly provided to all our stakeholders: students, sponsors, parents, patients, staff, partners, and the wider community. This guide has served us well in the past, and it will continue to shape our future as a world-class educational and healthcare institution.

Thank you.

Prof Abdul Aziz Baba Vice-Chancellor

International Medical University

UNIVERSITY HIGHLIGHTS 2019



28 FEBRUARY

IMU signed a Memorandum of Understanding with the Ministry of Health (MoH) Malaysia to collaborate in developing an interactive online training module on patient safety complete with self-assessment tools for junior healthcare professionals and medical students prior to their housemanship training.

At the same event, IMU also became the first private-led partner to sign an MoU with the ministry to adopt the MoH's Komuniti Sihat Pembina Negara (KOSPEN) programme.

4 MARCH

IMU welcomed the pioneer cohort of students into the MBA in Healthcare Management and Postgraduate Diploma in Diabetes Management and Education programmes.





16 APRIL

IMU officially opened its
IMU Advanced Microbiology
Collaborative Research Laboratory
(AMCRL), a research facility
to promote stronger research
collaboration and technology
transfer between Malaysia and
international partners.

JUNE

IMU was accredited to conduct the Food Handlers Training Programme (Kursus Latihan Pengendali Makanan, LPM) by MoH Malaysia.





29 JUNE

IMU co-founder Dr Mei Ling Young was conferred with the Honorary Doctor of Medical Education at the University's convocation.

18 JULY

IMU signed an MoU with MERCY
Malaysia to collaborate in
research and development in
the field of health research,
provide joint training, teaching
and learning pertaining to the
field of health, communities
and humanitarian assistance
in general, and collaborate in
community service activities to
provide and raise awareness
of better health among
communities.





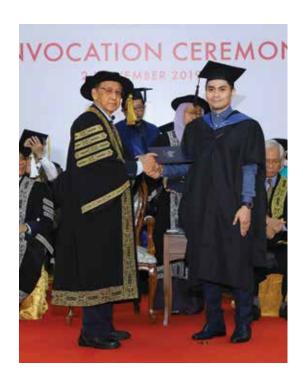
23 JULY

An MoU was signed with the Southeast Asian Ministers of Education Organisation Regional Centre for Food and Nutrition (SEAMEO RECFON) to collaborate in health and medical research on nutrition and food safety training in Southeast Asia.

13 SEPTEMBER

IMU collaborated with the multiaward-winning data technology provider, Fusionex, to integrate Big Data Analytics (BDA) and Artificial Intelligence (AI) into IMU's medical and health sciences programmes.





2 NOVEMBER

IMU celebrated the graduation of the first cohort of students for the Postgraduate Certificate of Business Administration in Healthcare Management. Dr Mohd Abdul Hadi Hairan (in photo) was one of eight who received the certificate on the day.

15 NOVEMBER

IMU once again won two
awards under the "2019
Malaysia's Healthiest
Workplace" by AIA Vitality.
The awards received were
the "Healthiest Workplace"
and "Healthiest Employer"
in the medium-sized
organisation category.



VISION

IMU shall be an innovative global centre of excellence in learning and research, supporting a community of scholars and professionals committed to serving society, promoting the development of students to reach their true potential in becoming competent, ethical, caring and inquiring citizens and visionary leaders.

IMU is committed to academic freedom and the principles of equal opportunity in the pursuit and application of knowledge, the highest standards of intellectual, educational and research productivity; and the establishment of a learning organisation that respects the individual.

EDUCATIONAL MISSION

As an educational institution, our mission is:

- To further strengthen IMU as a centre of excellence for undergraduate programmes in medicine, pharmacy and other health sciences programmes
- To establish IMU as a centre for higher education providing training through multidisciplinary programmes
- To establish IMU as a centre for postgraduate training and Continuing Professional Education
- To train knowledgeable and skilful professionals with high ethical standards who will be dedicated to serve and improve the quality of life of the community
- To train competent professionals with the use of innovative technologies of knowledge especially ICT in the teaching-learning process

CORE VALUES

Our organisational culture is to be based on our value system: We will be an organisation driven by its values. These core values, encapsulated in the acronym TRUST, are:

Trustworthy

We are trustworthy and stand for integrity, reliability and commitment

Responsive

To change, and to the needs of individuals and communities

Unity

Of vision and in working towards the achievement of common goals

Service

A commitment to providing outstanding service

Tenacity

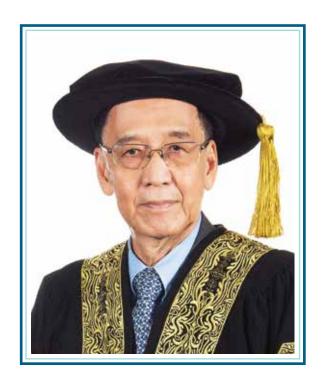
In the pursuit of excellence

We expect staff and students to embrace, live and demonstrate these values, so that they may become role models. These values are integral to our culture; they underpin our work, communication and interaction, and explain why we do business in the way that we do. Our culture and its embedded values will help us realise our vision of becoming a great organisation, and of producing graduates capable of being leaders.

QUALITY POLICY

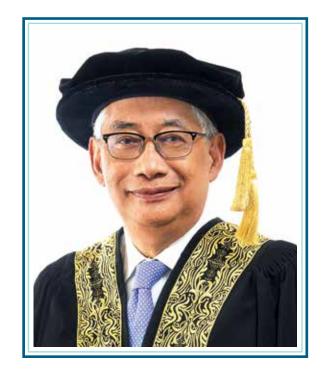
We aim to be an innovative centre of excellence in learning and research, producing competent, caring and ethical professionals who are lifelong learners. We are committed to achieving the highest standards of intellectual, educational and research productivity.

CHANCELLOR & PRO-CHANCELLOR



CHANCELLOR

YBhg Dato' Dr Gan Ee Kiang BSc (Hon), PhD (UWA), PKT, BCN, JMN, DSPN



PRO-CHANCELLOR

YBhg Tan Sri Dato' Dr Yahya Awang MBBS (Monash), FRCS (Glasgow), SMJ, KMN, DPMJ, DMPN, DSAP, PSM, Hon Doct (UKM)

BOARD OF GOVERNORS

YBhg Dato' Dr Gan Ee Kiang (Chairman)

PhD (UWA), PKT, BCN, JMN, DSPN

YBhg Tan Sri Dato' Dr Abu Bakar Suleiman

MBBS (Monash), MMed (S'pore), DMedSc (UKM), DSc Hon (UPM), PhD Hon (UMS), FRACP, FAMM, FAMS, FACP (Hon), FRCP, FRCPE, FRCP (Glasgow), FRCPI, FRCSI (Hon), FRCSE (Hon), FAFPM, FASc, AMP (Harvard), Hon DSc (Soton), Hon MD (Qld)

YBhg Tan Sri Dato' Dr Yahya bin Awang

MBBS (Monash), FRCS (Glasgow), SMJ, KMN, DPMJ, DMPN, DSAP, PSM, Hon Doct(UKM)

YBhg Prof Datin Paduka Dr Aini Ideris

DVM (UPM), MVSc (Liverpool), PhD (UPM), DSIS, PSK, KMN, FASc, FIAS, FMCVS, FMSA

YBhg Prof Dato' Dr Abu Bakar Abdul Majeed

BPharm (Egypt), MBA (USM), PhD (Neurophysiology) (Sheff)

Prof Abdul Aziz Baba

MBBS (Melb), MRCP (UK), MRCP (Ireland), FRCP (Edin), AM

Dr Mei Ling Young

BA, MA (Hons) (Auckland), PhD (ANU), DSc (Strath), LLD (Dundee)

Prof Victor Lim

MBBS (Malaya), MSc (London), MRCPath, FRCPath, FAMM, FASc



SENATE * as of November 2019



Prof Abdul Aziz Baba

Vice-Chancellor

Prof Peter Pook Chuen Keat

Deputy Vice-Chancellor, Academic

Prof Victor Lim

Pro Vice-Chancellor, Institutional Advancement

Prof Toh Chooi Gait

Pro Vice-Chancellor, Strategic Development and International

Prof Vishna Devi V Nadarajah

Pro Vice-Chancellor, Education

Prof Datuk Dr Lokman Hakim Sulaiman

Pro Vice-Chancellor, Research

Prof Chu Wan Loy

Dean, School of Postgraduate Studies & Research

Prof Dr Nafeeza Haji Mohd Ismail

Dean, School of Medicine

Prof Allan Pau Kah Heng

Dean, School of Dentistry

A/Prof Mohd Zulkefeli Mat Jusoh

Dean, School of Pharmacy

Prof Winnie Chee Siew Swee

Dean, School of Health Sciences

Prof Azizi Ayob

Deputy Director, Commercialisation & Support

Prof Leong Chee Onn

Deputy Director, Research (IRDI)

Prof James Koh Kwee Choy

Associate Dean, School of Medicine

Prof Dato' Dr Maimunah A Hamid

Associate Dean, School of Medicine

Prof Nazimah Idris

Associate Dean, School of Medicine

Prof Sharifah Sulaiha Hj Syed Aznal

Associate Dean, School of Medicine

Prof Mallikarjuna Rao Pichika

Associate Dean, School of Pharmacy

Prof Chin Beek Yoke

Associate Dean, School of Health Sciences

Prof Seow Liang Lin

Associate Dean, Clinical Oral Sciences

Prof Khoo Suan Phaik

Associate Dean, Community Engagement

Prof Er Hui Meng

Associate Dean, Teaching & Learning

Prof Zhou Wenxin

Professor, Chinese Medicine

Prof Dato' Dr Kew Siang Tong

Professor, Internal Medicine

Prof Esha Das Gupta

Professor, Internal Medicine

Prof Dr Ong Chin Eng

Professor, Life Sciences

Prof To' Puan Safurah Ja'afar

Professor, School of Medicine

Prof Dato' P Kandasami

Professor, Surgery

Prof Dato' N.Sivalingam

Professor, Surgery

EX-OFFICIO

Christy Chiu Lai Heng

Vice President and Chief Financial Officer

Zuhanariah Mohd Nordin

Chief Librarian

Noor Azlinda Aripin

Legal Counsel, Legal & Secretarial

SECRETARY

Noraidah Yusoff

Registrar

ACADEMIC COUNCIL

Every year, the Academic Council (AC) meets to discuss the issues involved in running the university. It serves as a platform to bring together the University and its Partner Medical and Dental Schools, and enable representatives to share updates as well as discuss administrative and academic matters. Areas reviewed typically revolve around entry requirements, intakes and other admissions issues; evaluations of all curricula: issues related to the development of respective faculties; research, strategies, activities and partnerships; and postgraduate training in both medicine and dentistry. The AC continues to play a core role in ensuring that IMU and its partner institutions remain aligned to the core foundational strategy.

In 2019, the AC held its 30th annual meeting from 15 to 16 April at the IMU Bukit Jalil campus. During the meeting, Partner Medical Schools were informed of the changes to be made in the new medical curriculum. It was estimated that the new curriculum would be introduced in 2020.

During the two days, delegates were also divided into four breakout sessions based on the overall theme of the Fourth Industrial Revolution (IR4.0). The IR4.0 was an extensively discussed subject at the 10th Asian Medial Education Association (AMEA) conference which was conducted at IMU right before the AC meeting. The aspects discussed were:

- Workplace-based assessments
- Professionalising teaching
- Community partnerships in health professional curricula
- The role of artificial intelligence & learning analytics



At the end of these deliberations, members agreed that various steps needed to be taken to meet the outputs of each discussion in the light of the new curriculum introduced by both the School of Medicine and the School of Dentistry. These will support and enhance the university's path towards meeting the requirements of IR4.0.

On the same day, the Partner Dental Schools (PDS) also held their meeting. The meeting was chaired by Prof Mark Hector, Dean of the University of Dundee Dental School. Prof Allan Pau, the IMU Dental Dean, took the helm to update PDS representatives on the Dental programme at the IMU.

Prof Pau reported that students had transferred smoothly to Partner Dental Schools, with the University of Dundee receiving its first group in 2019. The representatives were also informed that the Bachelor of Dental Surgery (BDS) curriculum review had commenced and would be tabled before the Professional Education Advisory Committee (PEAC) in October. The proposed implementation of the revised curriculum would come into effect in 2021.

Concurrently, the School was also ready for the BDS re-accreditation. The documents would be submitted by October to the Malaysian Qualifications Agency (MQA). It was estimated that the

re-accreditation visit would take place by September 2020.

The PDS members were also updated that Senate approval had been obtained for new Postgraduate Diploma programmes in Endodontics (PGDEndo) and Prosthodontics (PGDPros). Registration with the Malaysian Qualifications Agency (MQA) had been applied for, and the initial target launch was in October 2019. However, upon evaluation of programme commencement, the two new postgraduate diploma programmes—Postgraduate Diploma in Prosthodontics (PGDPRos) and Postgraduate Diploma in Endodontics (PGDEndo)—will only have their inaugural intakes in April 2020.

Other presentations included:

- Student and Alumni Experiences of the Partnership Dental Programme by Dr Mandakini Mohan.
- Update on Strengthening Partnership: Wikipedia Collaboration of Dental Schools by Dr Umer Daood.
- MOOC in Basic Skills Course for Tobacco Cessation: A Guide for Health Care Professionals by Dr Sobia Bilal.

30th ACADEMIC COUNCIL MEETING





PROFESSIONAL EDUCATION ADVISORY COMMITTEE



The Professional Education
Advisory Committee (PEAC) is
a sign of IMU's commitment to
continuous improvement of our
educational programmes. The
committee plays an advisory
role and works together with all
Deans, including those from our
partner institutions, to ensure that
we evaluate and evolve all aspects
of our educational programmes.
Our findings are collated in an
annual report and submitted to
the Board of Governors.

This year's university-wide review was on "Students as Partners". The review was conducted by:

- Prof Trudie Roberts, University of Leeds, UK
- Prof Richard Hays, University of Tasmania, Australia
- Prof Gary Mires, University of Dundee, Scotland
- Prof Dato' Mafauzy Mohamed, Universiti Sains Malaysia
- Prof Gary Mires, AC Chair and PEAC member, UK
- Prof John J. Norcini, PEAC member, USA
- Prof Danai Wangsaturaka, University of Chulalongkorn, Thailand
- Prof Nairn Wilson, Queen Mary University of London, UK

Five programme reviews were conducted. They were the Review of Dietetics with Nutrition programme, Review of Nutrition programme, Review of the MBBS programme, Review of the BDS programme and Review of the Postgraduate Diploma in Implant Dentistry.

At the main PEAC meeting, delegates discussed the following:

- Progress Report on the Review of Revisiting Professionalism in IMU Students, 2018
- Progress Report on the Continued Implementation of Competency Based Education, 2019
- Progress Report on Online Assessment System (OAS)
- Progress Report on Instituting of Flexible Working for Staff
- Progress Report on Tackling Issues of Space
- Progress Report on Peer Evaluation of Faculty

Several General Topic Exploration (GTE) papers were also discussed:

- GTE 1: IMU Social Media Policy and Guidance
- GTE 2: Partnership with Industry
- GTE 3: Strategy of Continuing Professional Development (CPD)

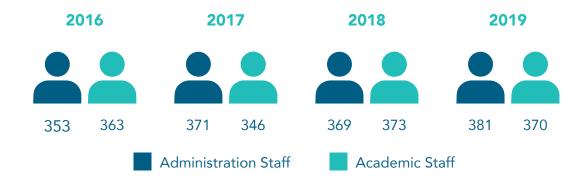
The PEAC also held its Clinic Sessions, which were first introduced in 2017. These sessions are a platform for staff to meet PEAC members to discuss issues that have been brought up by the staff. This year, the Clinic Sessions revolved around the following topics:

- Update on Assessment in the Medical Undergraduate Course
- Update on People-centred Healthcare Approach in the Medical Curriculum
- Updates on Review of the Bachelor of Science (Honours) in Dietetics with Nutrition and

- Bachelor of Science (Honours) in Nutrition
- Social Entrepreneurship in the MBBS Curriculum
- Social Cultural Competency Double Marking—Is it an Easy Puzzle to Solve?
- Digitisation of Curriculum in the School of Pharmacy
- Confidentiality in Supporting Students with Mental Health Issues
- Augmented Reality (AR) and Virtual Reality (VR) in teaching and learning

The discussions generated feedback and recommendations from PEAC members. These have been circulated and will be further deliberated upon at the next PEAC meeting.

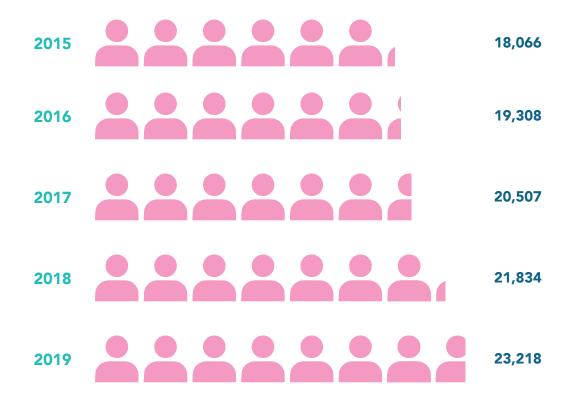
IMU STAFF POPULATION: as of 30 November



IMU STUDENT

POPULATION:

as of 31 December



^{= 3,000} Students

^{*} total includes alumni as of 30 November 2019

EDUCATION

CENTRE FOR PRE-UNIVERSITY STUDIES

2019 Highlights

- 5th anniversary of FiS
- April 2019 intake saw a record number of students for any single
 FiS intake since the programme's inception in 2014
- MoU signed for direct entry to NUI-Galway business courses
- FiS Buddy System launched

PROGRAMMES



HE Foundation in Science
(FiS) programme at IMU's
Centre for Pre-University
Studies is the ideal first step for
those considering undergraduate
studies in the sciences and
other fields. By providing a solid
introduction to scientific methods and
areas of study, the programme helps
students transition smoothly to the
undergraduate level. Whether at
IMU or at our partner universities,
FiS students enjoy a variety of
academic opportunities and
pathways.

At the Centre for Pre-University
Studies, the FiS programme turned
five in 2019 and we kicked off the
year with a celebration to mark this
major milestone. The FiS is now well
established and this together with its
importance to IMU were showcased
at the "Homecoming of the Stars"
event in January.

Throughout the year we concentrated on providing students with a solid academic experience, through high-quality teaching and learning, along with intensive mentoring and support.

The number of former FiS students now graduating from IMU undergraduate programmes has increased, creating a growing alumni footprint.

In 2018 the FiS programme saw a 55 percent growth in student numbers, and an 85 percent progression rate to IMU undergraduate programmes. In 2019 the high quality of our flagship programme continued to be recognised by prospective students, as reflected in a further five percent increase in growth which saw 220 students joining the April intake.

Thanks to the hard work and dedication of the Centre's staff, many prospective students continue to choose IMU's FiS programme.

To accommodate these greater numbers, more first-floor annex teaching facilities were allocated to the FiS. The ongoing cluster re-organisation will release additional space in 2020.



The number of former FiS students now graduating from IMU undergraduate programmes has increased, creating a growing alumni footprint. We are also seeing individuals excelling in their respective journeys: one former FiS student who recently graduated from the IMU Chiropractic programme has joined the University as a lecturer, while other FiS alumni have started graduate studies at IMU.

FIS BUDDY SYSTEM AND BRIEFING EVENTS

We also launched the FiS Buddy System for prospective and current FiS students. The system is designed to assist them with challenges associated with the early stages of their experience as pre-university students, as well as later when they progress to their chosen IMU undergraduate courses.

Under the FiS Buddy System, FiS seniors now at the undergraduate level support prospective and current FiS students by sharing experiences, providing insights into university life, and responding to questions and concerns. International FiS alumni are encouraged to contribute their perspectives on student life abroad.

FURTHER MOU WITH NUI-GALWAY

This year, we signed a further Memorandum of Understanding (MoU) with our partner university, the National University of Ireland, Galway, to permit direct entry from the IMU FiS to courses in NUI-Galway's Business Faculty. This is an expansion of the 2018 MoU that has opened up direct entry to NUI-Galway science-related courses not available at IMU.

Centre For Pre-University Studies:

The year in numbers

- FiS turns 5
- Since 2017: 60% growth

in student numbers • 220

students for April 2019 intake



"Even as undergraduates, many former FiS students return to their FiS mentors for advice and encouragement. And now at IMU convocations FiS staff are proudly seeing their former students mature into IMU alumni."

 Dr James Walsh, Head, Centre for Pre-University Studies This year we also continued to develop and expand our undergraduate briefing events for students. These briefings are intended to inform students in an academically engaging manner about their future IMU undergraduate options.

MOVING FORWARD

In the coming year we plan to further develop the FiS curriculum to reflect new academic areas being introduced at IMU. These include Data Analytics, which is being developed as an undergraduate programme.

We also intend to broaden the scope of the Foundation courses to embrace students from a larger academic demographic, such as Business and IT-oriented students. The NUI-Galway MoU is an important first step in our efforts to move beyond current perceptions of IMU as purely a health sciences-oriented university.

SCHOOL OF MEDICINE

2019 Highlights

- 20th anniversary of the IMU MBBS programme
- Ongoing IMU Medical Curriculum Review
- Master of Counselling programme approved by MQA, MoE
- Development of Centres of Excellence for the IMU Academic Health Centre
- IMU-JKNNS District Partnership Initiative strengthened
- New student mobility programme in the US

TTHE School of Medicine, we focus on nurturing doctors and psychologists who embody professional expertise, passion and compassion. We empower students with skills and knowledge while instilling empathy, team spirit and a sense of community service. Our extensive curricula, clinical training and partnerships ensure that our students receive an academic experience that prepares them well for fulfilling careers in healthcare.

The year was a busy one at the School of Medicine (SOM). We focused on our core priorities: providing top-quality learning experiences, meeting faculty needs, supporting research endeavours and forging mutually beneficial collaboration.

PROGRAMMES









Students at SOM's Psychology Week

Additionally, we made good progress on ongoing initiatives while also embarking on new projects. We also took time to mark a special milestone: the 20th anniversary of the IMU MBBS programme.

THE IMU MEDICAL CURRICULUM REVIEW

The IMU Medical Curriculum Review (ongoing since 2017)

entered an important phase in 2019 with the preparation of documents for submission to the Malaysian Qualifications Agency (MQA). The new curriculum is slated to debut in January 2021.

This review enables our curriculum to remain a top notch academic programme by staying relevant and aligned with the evolving nature of healthcare and stakeholders' needs.

During the review process we sought feedback from stakeholders and globally renowned medical education experts. Developed based on the philosophy of making medicine humane and personcentred, the new curriculum will see students being trained largely in the community. It will also encourage them to acquire multiple talents beyond medicine, including leadership skills that they need to be effective change agents.

THE MASTER OF COUNSELLING POSTGRADUATE PROGRAMME

Progress on our new postgraduate offering, the Master of Counselling (MOC), advanced steadily in 2019. It was provisionally approved by the MQA on 24 May, and on 30 September it was approved by the Ministry of Education. The MOC is expected to be launched on 7 September 2020. A psychology laboratory is being constructed and will be ready by the first intake.

THE IMU-JKNNS DISTRICT PARTNERSHIP INITIATIVE

First formalised in 2018, the IMU-JKNNS District Partnership Initiative (DPI) is a joint effort with the Negeri Sembilan State Health Department (JKNNS). The DPI was strengthened in 2019 with the formation of the IMU DPI Steering Committee. A five-year DPI roadmap was approved, and the first project, the DPI Adolescent Health Project, was launched in September with three components: service, research and training.

Under the service component, a student-led project incorporates screening as well as health promotion and education for Form One students and teachers at Sekolah Menengah Kebangsaan Senawang, Taman Marida.

Under research, IMU's Joint
Committee on Research and Ethics
approved a research proposal
in August on the prevalence of
health-related problems among
school-going adolescents screened
at the Senawang Health Clinic.
Finally, under training, a half-day
Adolescent Medicine Seminar

"The healthcare profession is a special vocation and is not meant for just anyone. If you feel you are up to the challenge, half the battle is already won. IMU has the capacity to provide you with the best training and learning experiences, locally and abroad. We will take you through the exciting journey of developing your professional identity and we will help you achieve your dream of becoming a compassionate professional and an advocate of change in the healthcare landscape of the future."

— Prof Nafeeza Hj Mohd Ismail, Dean, School of Medicine

was held in association with the Malaysian Paediatric Association on 12 December at IMU's Seremban Clinical Campus.

THE AHC CENTRES OF EXCELLENCE

The nascent IMU Academic Health Centre (AHC) is central to IMU's strategy for the future. When fully realised, the AHC will see IMU integrating education, healthcare services and research to produce an ecosystem that will support better-equipped students and graduates and ultimately better patient care. The IMU Hospital, with its Centres of Excellence, is targeted to open its services to the public in 2021 and will deliver value-based, patient-centric care.

The School's contribution to the AHC took the form of developing a five-year road map for the IMU Hospital's clinical services and development of the Centres of Excellence.

In 2019, the focus was on developing the Centre of Excellence for Diabetes.
Discussions with Brigham and Women's Hospital, Boston for collaboration were initiated.

PARTNERSHIPS

The School signed Memoranda of Understanding (MoUs) with three new partners in 2019. In February we signed an MoU with the Ministry of Health Malaysia (MoH) to collaboratively develop the Online Patient Safety Module which will be used in MoH hospitals around the country.

We also signed an MoU with MERCY Malaysia, a civil society organisation, for collaborative work in community health and humanitarianism. Our third MoU, with Universitas Ciputra, Indonesia, involves CPD, research and student mobility.

School of Medicine:

The year in numbers

- 73 research publications (as of 30 October) 16 CPD courses
- RM1.04 million in grants FRGS grants totalled over RM700,000
 - Internal grants totalled over

RM300,000 • 3 MoUs signed

STUDENT MOBILITY PROGRAMME IN THE US

Foundation in Science students who enrolled in our MBBS programme in February 2019 will get a taste of life in America, thanks to a new mobility programme. For these students, there will be 40 fully-sponsored clinical elective placements at South Texas Health System in McAllen, Texas. The sponsorship includes elective fees, airfare, accommodation and insurance. On a pilot run, three students successfully completed the selection process and will be doing their four-week clinical elective in McAllen in 2020.

RESEARCH

In research, highlights for the year included:

 Publications. As of 30 October, the School of Medicine had 73 publications. An estimated 98 percent were in journals, and 72 percent were indexed with SCOPUS/WOS/ERA.



- **Grants.** Grants received in 2019 amounted to RM1.04 million. Five faculty members received FRGS grants totalling more than RM700,000. Internal grants received totalled more than RM300,000.
- IMU National Undergraduate Students Research Day
 2019. This event was held on
 7 November at the Clinical Campus in Seremban in conjunction with the 20th anniversary of the IMU MBBS programme.

 QR-code-based self-reporting of publications. This system was introduced for faculty of the School on 1 July. It enables research publications not indexed in SCOPUS/WOS/ERA to be accurately and seamlessly captured.

CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

SOM held a total of 16 continuing professional development (CPD) courses during the year. One area of focus was in providing support for young medical professionals preparing for their membership examinations. CPD courses included the MRCP PACES Prep Course, the IMU Family Medicine Clinical Skills Course and the IMU Family Medicine FRACGP Part 2 Examination Preparatory Course. Our newest CPD, the MRCOG Part 2 Mock Exam, was well received by healthcare professionals preparing for the UK membership examination.

MOVING FORWARD

Initiatives for 2020 include further development of the clinical service plans for IMU Hospital's Centres of Excellence, and more high-quality CPD courses for healthcare professionals.

Steps to strengthen research will possibly include: workshops with the Clinical Research Centre, Hospital Tuanku Ja'afar; finetuning the publication declaration process; department-led research projects as KPIs; prizes for published student research papers; and promoting the IMU E-journal to clinicians at HTJS.

Plans to enhance students' experience and mobility includes: subscribing to GEMx; building on MoUs with various institutions; and exploring the possibility of summer research studentships, clinical electives, and research through gap-year programmes at various universities.

The School will also continue to prepare graduates to transition smoothly into advanced clinical training or work environments, possibly through peer tutoring in advanced clinical training, the organising of conferences, and training of students by students.



SCHOOL OF DENTISTRY

2019 Highlights

- 100 percent pass rate achieved by BDS graduates
- Ongoing development of the new BDS 2021 curriculum
- Prosthodontics and Endodontics postgraduate programmes approved by MQA
- In research, 1.9 publications per FTE of faculty
- 83 percent of research papers published in Tier 1 and 2 journals

T THE School of Dentistry, we are committed to producing exemplary, compassionate and responsive clinicians capable of delivering patientcentred comprehensive care to the highest standard using contemporary technology. They will be resilient in adapting to diverse and changing environments, and in advocating for better oral health and healthcare through leadership, entrepreneurship and inter-professional collaboration. Our dynamic programme, wellequipped facilities and experienced faculty combine to create a comprehensive dental education experience. These strengths, coupled with an extensive clinical training component, ensure that graduates are relevant and sought after in the workplace.

PROGRAMMES







During the year, the School of Dentistry (SOD) worked on several key areas in addition to our core function of delivering dental education programmes to students. These included enhancing the Bachelor of Dental Surgery (BDS) programme to embrace contemporary developments in education; developing dental postgraduate education and training; offering

continuing professional development (CPD) courses; and enhancing research capability and productivity. We also continued to undertake meaningful community engagement throughout the year (see "Serving the Community").

STUDENTS AND FACULTY

Compared to the previous year, the BDS programme saw a slight

increase in enrolment, with 77 students enrolling in February 2019.

Convocation for 37 BDS students was held in June, and all students in the cohort passed the final examination at the first attempt. The 100 percent pass rate was achieved through the students' hard work and the dedication of the faculty in supporting students' learning.

The School also achieved higher average iBarometer Survey scores compared to the scores for Malaysia and the IMU. This achievement in the 'Learning' domain highlights student confidence in standards in terms of faculty and learning opportunities provided by the School.

Our faculty members of course play a pivotal role in the delivery of dental education programmes. Our priority is to ensure students continue to benefit from being taught by the best. In this regard, an important measure taken in 2019 was the selection of three trainee lecturers under a sponsorship programme to pursue postgraduate training.

School of Dentistry:

The year in numbers

- 13 CPD courses conducted
- 67 research papers published (56 were in Tier 1 and 2 journals)
- RM1.5 million in external funding for research

THE BDS 2021 CURRICULUM

A key initiative in 2019 was the review of the Bachelor of Dental Surgery (BDS) curriculum. This was undertaken to identify areas in which the BDS could be further enhanced to meet contemporary expectations of dental education. The revised curriculum will be implemented in 2021. Known as the BDS 2021 curriculum, its

development was guided by three principles: integration, personalisation and authentic learning.

The review process involved engagement with key stakeholders, including the Ministry of Health, the Ministry of Defence, the Malaysian Dental Association, employers of our graduates, alumni and current

students. A review was also conducted by IMU's Professional Education Advisory Committee (PEAC).

PROSTHODONTICS AND ENDODONTICS: TWO NEW POSTGRADUATE PROGRAMMES

Substantial effort went into developing two new postgraduate programmes in 2019: the Postgraduate Diploma in Prosthodontics and the Postgraduate Diploma in Endodontics. Both programmes have been registered by the Ministry of Education and received approval for launch from the Malaysian Qualifications Agency in July. Since then, efforts have been made to further develop the curricula and market the programmes.

CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

Throughout the year, the School was active in delivering courses tailored to general dental

practitioners and auxiliary staff.
Our faculty, together with industry partners and suppliers, delivered 13 continuing professional development (CPD) courses and workshops in 2019. These were attended by over 100 participants. In addition, the School also designed and delivered a series of evening lectures on topical subjects in Dentistry.

RESEARCH

Enhancing research capability was an important initiative at the School this year. Several workshops were organised for faculty with the aim of promoting research interests and competence. These included workshops on systematic reviews/meta-analyses and manuscript writing. In 2019 one faculty member completed writing his PhD thesis, while two others completed their data collection. Three more started on their PhD projects.

The emphasis on enhancing research capability has helped

improve research productivity as reflected in the increase in publications per full-time equivalent (FTE) from 1 in 2018 to 1.9 in 2019. The School published 67 research papers in 2019, of which 56 (83 percent) were in Tier 1 and 2 journals. Additionally, the School secured approximately RM1.78 million in external funding for research.

MOVING FORWARD

Key plans for the future include preparations leading up to the implementation of the BDS 2021 curriculum, and the development of postgraduate training. We will continue to expand CPD offerings as the School builds its capabilities and positions itself as the place of choice for dental practitioners to improve their skills and knowledge. We will also continue to enhance research capability to ensure an improvement in research productivity. PhD training will be encouraged and supported, and recruitment of new staff will emphasise research expertise and experience.



Oral Health Week

SCHOOL OF PHARMACY

2019 Highlights

- BSc (Hons) in Pharmaceutical Chemistry accredited by Royal Society of Chemistry
- Second StakeholdersMeeting held
- Pharmaceutical Chemistry
 Week (PCW) organised
- **135** research publications

MU's School of Pharmacy offers an environment of excellence and a dynamic learning experience to ensure that graduates are well-prepared to enter the workplace. Among Malaysian private pharmacy schools, we have the largest number of faculty members, alumni and students. We also have a track record of producing pharmacists and pharmaceutical scientists who not only excel in their work, but are leaders in the healthcare profession.

At the School of Pharmacy (SOP) our focus for 2019 was on deepening engagement with our students as well as external partners in teaching and learning. These included universities, hospitals, community pharmacies and industry partners. We also engaged with employers, keeping abreast of expectations to ensure our graduates transitioned smoothly into the workplace.

PROGRAMMES





The School has extensive links across the world through the International Pharmaceutical Federation (FIP), of which it is a member. The FIP is a global body representing pharmacy, pharmaceutical sciences and pharmaceutical education.

ACCREDITATION BY THE ROYAL SOCIETY OF CHEMISTRY

In 2019 IMU continued to be among the handful of prestigious universities to have gained international recognition from the Royal Society of Chemistry (RSC) for accreditation of our Bachelor of Science (Hons) in Pharmaceutical Chemistry programme. The accreditation is valid for five years from March 2019.

The programme underwent a rigorous assessment process to be accredited, satisfying all 16 key requirements in categories including breadth and depth of knowledge, practical skills, research, professional skills and more.



STAKEHOLDERS MEETING

The second Stakeholders
Meeting was successfully held on
19 April. The School welcomed
the participation of more than 20
stakeholders.

The aims of this meeting were to identify and understand employers' expectations with regard to graduates' knowledge, skills and attitudes. It also discussed current and future trends of the profession, graduate attributes and future partnerships. Subsequent meetings were held to reflect on the suggestions given and identify ways to incorporate them into the School's strategic planning and improvement of curriculum content and delivery.

PRP POSTINGS FOR GRADUATES, AND NEW CREDIT TRANSFER AND ARTICULATION PATHS

Since the end of 2018, the School has been engaging community pharmacies (among them
Caring, AA and Alpro) to offer
Provisionally Registered Pharmacist
(PRP) postings to graduates of our Bachelor of Pharmacy (Hons) programme. Discussions with hospitals and pharmaceutical companies are ongoing.

We also explored new credit transfer and articulation paths with two universities:

University of Dundee:

credit transfer for our BSc (Hons) in Pharmaceutical Chemistry programme, leading to BSc (Hons) Biological Chemistry and Drug Discovery, other BSc degrees, and options for progressing to MSc degrees.

University of South Australia: credit transfer to Bachelor of Pharmaceutical Sciences and Bachelor of Pharmacy (Hons) programmes.

SHOWCASING THE SCHOOL

Throughout the year we endeavoured to increase public awareness of the profession as well as of student life at the School, using social media channels to share industry updates and inspirational achievements of our students.

For secondary-school students, outreach programmes were held at Ave Maria (Ipoh), Foon Yew (Kulai), Kuen Cheng (KL),



Earning a place in the Malaysia Book of Records for building the largest 3D Periodic Table at the Pharmaceutical Chemistry Week

2019 PUBLICATIONS FOR THE SCHOOL OF PHARMACY

Department	Publications	Cumulative IF*	FTE**
Life Sciences	44	115.397	2.705
Pharmaceutical Chemistry	32	88.512	1.214
Pharmaceutical Technology	24	84.99	4.0
Pharmacy Practice	26	79.45	1.625

*IF: Impact factor **FTE: Full-time equivalent

Sam Tet (Ipoh), SMK USJ13 (Subang Jaya), and Sirius Scholar Study Skills (USJ, Subang Jaya). Closer to home, we held programme briefings and student engagement workshops for IMU's Foundation in Science (FiS) students.

In August, students and faculty of the Pharmaceutical Chemistry Department entered the Malaysia Book of Records for building the largest 3D Periodic Table made from recycled materials. This feat was achieved as part of the launch of Pharmaceutical Chemistry
Week (PCW) on 27 August. It also marked the 150th anniversary of the Periodic Table of Chemical Elements created by Dmitri
Mendeleev.

RESEARCH

This year, the School received a total of RM 1.86 million in external funding. It also published 135 research papers out of which 114

were in Tier 1 & Tier 2 journals. The full-time equivalent (FTE) was 1.99.

MOVING FORWARD

In the year ahead we intend to continue focusing on staff development and efforts to improve performance in terms of teaching, research and administration. Measures will include training staff to upgrade competency levels in technology related to teaching and learning.

SCHOOL OF HEALTH SCIENCES

2019 Highlights

- MoU with SEAMEO RECFON for collaboration in nutrition and food safety
- MoU with CryoCord for collaboration in medical biotechnology
- Biomedical Science Day
- Medical Biotechnology Day
- Inbound student mobility for Nursing programme from China
- Inaugural cohort for the PG Diploma in Diabetes Management and Education (PGDME)

REAS of study at the **School of Health Sciences** range from nutrition and dietetics to nursing, biomedical science and medical biotechnology. As a school with multiple divisions, we believe in the principles of inter-professional education, service learning and evidencebased practice. Regardless of their chosen field, all students work towards becoming accomplished, passionate and committed professionals who prioritise patients' welfare and contribute to advancing healthcare.

PROGRAMMES



Bachelor of Science (Hons) in Dietetics with Nutrition



Bachelor of Science (Hons) in Nutrition



Bachelor of Science (Hons) in Biomedical Science



Bachelor of Science (Hons) in Medical Biotechnology



Bachelor of Nursing (Hons)



Postgraduate Diploma in Diabetes Management and Education



Biomedical Science Day

The School of Health Sciences (SOHS) encompasses multiple fields but our core priorities—such as graduate employability—cut across all divisions. On 16 October the School held its second annual Graduate Preparedness Advisory Committee (GPAC) Industry Forum on the topic of "Managing Expectations in the New Workplace". Besides the Forum

and Q&A, there were informal tête-à-tête sessions between final-year students and their paired industry line managers. Two hundred and fifty-five students and GPAC members attended the Forum.

Another School-wide event was the showcasing of the talents of final-year students at our second annual Research Day, also on 16 October. Research Day aims to acknowledge and share highlights from a semester's worth of research work by undergraduate students. Two representatives from each programme presented their final-year projects to peers and judges. The audience was also treated to talks highlighting the journeys of novice and experienced researchers.

NUTRITION AND DIETETICS (N&D)

Collaboration and Agreements

On 23 July, IMU signed a Memorandum of Understanding (MoU) with the Southeast Asian Ministers of Education Organisation Regional Centre for Food and Nutrition (SEAMEO RECFON), formalising collaboration in research on nutrition and food safety training in Southeast Asia. Both parties will jointly publish and present scientific data; exchange research materials and conduct joint training in nutrition and food safety. Initial activities included a series of online lectures on nutrition, SOHS Dean Prof Winnie Chee delivered the inaugural talk on 24 October, speaking on "Meeting Calcium Intakes in Asia", while Dr Yang Wai Yew delivered the subsequent lecture on "Association between Obesity and Dietary Patterns in Children of Developing Countries in Asia" on 19 December.

As one of three recipients of the Pancreatic Cancer Challenge Grant (amounting to RM50,000) under IMU's Institute for Research, Development, and Innovation's (IRDI's) Centre for Cancer and Stem Cells, Dr Sangeetha Shyam from N&D led a collaborative project with the University of Leeds. IMU also entered into a Collaborative and Data Sub-Licence Agreement with the University of Leeds for the project, titled "Diet and the Risk for Pancreatic Cancer: Analysis of the Evidence from the UK Women's Cohort Study UKWCS (1995 -2015)".

Also, Dr Sangeetha Shyam, Dr Megan Chong and Dr Tan Seok Shin were co-awardees of the BASF 2018 Newtrition® Asia Research Grant amounting to RM139,150. Towards completing this project, IMU entered into a Research Agreement with Universiti Teknologi Mara. The project is titled "The Effect of Co-Administration of Omega 3 Fatty Acids and Bioactive peptides (peptAlde) in Improving Exercise Performance, Muscle Turnover, Immune and Inflammatory Response among Athletes: Randomised Controlled Trial".

School of Health Sciences:

The year in numbers

• 51 publications • Over 200

visitors on Biomedical Science Day

 Over 200 visitors on Medical Biotechnology Day

Educational Events

During the year in review, SOHS in collaboration with IRDI organised seminars under the Translational Research Seminar Series. Speakers included two visiting faculty at SOHS (see "Students and faculty").

On 18 July A/Prof Snigdha Misra, Dr Yang Wai Yew, Dr Megan Chong and Dr Tan Seok Shin conducted a refresher course for the healthcare staff of the International Organisation for Migration (IOM), Kuala Lumpur.

The GP Symposium: Clinical Nutrition Updates—GPs as Community Wellness Advocates was organised by IMU Healthcare and PMCare on 29 September. This event aimed to shed light on clinical nutrition approaches in the care of patients commonly seen at GP clinics. Speakers from SOHS included Prof Winnie Chee, Dr Lee Ching Li, Kanimolli Arasu, Alina Azhar, Dr Chen Seong Ting and visiting adjunct professor Dr Anthony Leeds.

From 14-15 November N&D organised a continuing professional development (CPD)



short course for practising dietitians and food service personnel in healthcare.
"Accreditation for Healthcare Dietetics and Food Service: Are You Ready?" addressed challenges relating to local and international accreditation standards in healthcare dietetics and food service in hospitals. It was attended by 19 dietitians from 11 major hospitals in the Klang Valley.

Students And Faculty

In May we welcomed visiting lecturer Jia Qing, lecturer in the Department of Nutrition and Food Hygiene, School of Public Health, Guangdong Medical University, China. During her six months at IMU, she shared her experience in food safety while learning about the pedagogy in N&D at IMU.



Medical Biotechnology Day

Visiting faculty Dr Damien
Belobrajdic spoke at the
Translational Research Seminar
Series on 27 June, on the
"Development of New Food
Products with Substantiated
Health Benefits: An Australian
Perspective". He is a Senior
Research Scientist at CSIRO Health
and Biosecurity, Commonwealth
Scientific and Industrial Research
Organisation (CSIRO) in Australia.

Dr Anthony Leeds, Adjunct
Professor to the N&D
programmes, visited us from
23 September to 4 October.
He developed two clinical case

scenarios for cased-based learning (CBL), conducted an IPD case-based discussion with Semester 7 students, and a clinical case study abstract writing workshop. He also spoke at the IMU Translational Research Seminar (23 September) on "The Revolution in Osteoarthritis Care and Obesity Comorbidities for the 2020s".

In November SOHS Dean Prof Winnie Chee was a Visiting Academic to the Institute of Physical Activity and Nutrition (IPAN) in the School of Exercise and Nutrition Sciences, Deakin University, Victoria, Australia. She delivered two lectures:
"Transforming IMU Dietetics
Curriculum into Competencybased for ICDA Accreditation for
Dietitian-Nutritionists" and "Diet
and Lifestyle Intervention for
Diabetes Control—Experiences
in Malaysia". Meetings were also
held regarding credit transfer for
IMU's nutrition students to the
Bachelor of Nutrition Science
programme at Deakin on a 2+1
pathway.

Exclusively for N&D, a workshop on nutritional epidemiology was conducted in July by A/Prof Dr Moy Foong Ming and Prof Sanjay Rampal of Universiti Malaya.

Aliquot, a supper club, was piloted on 13 December. Besides gaining culinary skills while applying their knowledge of nutrition, students were exposed to aspects of leadership, team work and entrepreneurship. At the N&D Food Lab they served their first guests (from the IMU Senior Management team and heads of several departments) a five-course dinner with a sustainable diet theme.

Other Initiatives

IMUxNaluri HEAL PLUS, which we rolled out in November, was a 12-week workplace wellness programme supported by IMU's HR Department and involving 28 participants at high risk of obesity-related co-morbidities. The programme helped participants lose weight and improve their blood pressure, blood cholesterol, blood glucose and mental health (depression, anxiety, stress).

"Do Right, Be Bright", an interprofessional project aimed at preschool children at Beacon House, an international school, was approved by the IMU Joint Committee on Research and Ethics. This project involved Dentistry, Nutrition and Community Medicine in the healthcare team and won a grant of RM20,000. The Co-Principal Investigator from N&D was A/Prof Snigdha Misra, with Dr Tan Seok Shin as a team member.

APPLIED BIOMEDICAL SCIENCE AND MEDICAL BIOTECHNOLOGY (ABSB)

The annual Biomedical Science
Day was held on 22 March with
the theme "Haematology". All
booths and activities were directed
towards the study and treatment
of blood such as blood pathology,
microbiology, blood biochemistry,
blood typing, phlebotomy and
blood forensics. More than 200
participants attended the event
organised by Biomedical Science
(BM) faculty and students. IMU
Vice-Chancellor Prof Abdul Aziz
Baba delivered the keynote

presentation on acute myeloid leukaemia and chronic myeloid leukaemia.

Medical Biotechnology Day on 24 April was themed "The Amazing World of Virus".

Organised by Medical Biotechnology (MB) faculty and students, the event also drew over 200 visitors. One highlight was the Virus Model Building Competition for secondary school and preuniversity students. Participants created beautifully-crafted virus models and delivered impressive oral presentations.



Virus Model Building Competition

On 10 June, taking the lead from the Medical Biotechnology programme, IMU signed a Memorandum of Understanding (MoU) with CryoCord Sdn Bhd, a leading stem cell bank in Southeast Asia, to collaborate on aspects of medical biotechnology, in particular stem cells and immunotherapy.

The Diagnostic Lecture Series 2019: Basics of Peripheral Blood Film was held on 22 August. Organised by ABSB, this continuing professional development (CPD) workshop delivered the fundamentals of peripheral blood film interpretation and its underlying principles via interactive lectures and case studies. The 78 participants represented professions from diagnostic laboratories, hospitals and universities in Malaysia and Singapore.

This year's Medical Biotechnology
Forum with Industry Experts
was themed "Current Trends

in the Biotechnology Industry:
Market Needs and Demands
in Malaysia and Abroad—The
Requirements of New Recruits
in Terms of Work Ethics and
Academic Performance". Held
on 26 September, the Forum
enabled students to benefit from
the valuable experience shared
by guest speakers from leading
biotechnology companies.

In November ABSB organised a talk on Act 774 (the Allied Health Professions Act). Delivered by Saravanankumar Maniam, Deputy Director of the Allied Health Sciences Division, Ministry of Health, the talk aimed to create awareness among our allied health staff and students on the enforcement status of the Act.

Entrepreneurship is a popular career path among our Medical Biotechnology graduates, who benefitted from a full-day Digital Marketing Workshop conducted on 12 November. Topics included leveraging new models in e-commerce, successful social media techniques and marketing oneself and one's products.



The Biomedical Science Alumni Homecoming 2019 held in November enabled current students to gain insights from alumni on postgraduate studies and working in various industries.

NURSING

Dr Lim Swee Geok of the Nursing
Division was invited to participate
in the 2019 Traditional Chinese
Medicine Workshop for High-End
Professionals Along the Belt and
Road. The three-week workshop
was held beginning in October at
Shanghai University of Traditional
Chinese Medicine (SHUTCM).
This flagship programme by the
Government of China aimed
to promote the integration of
Western medicine and traditional
Chinese medicine (TCM) in
countries along the Belt and Road.

From August to November, nine nursing students from SHUTCM successfully completed their three-month inbound mobility programme at IMU.

They experienced nursing education at IMU while also learning about Malaysian culture.

POSTGRADUATE DIPLOMA IN DIABETES MANAGEMENT AND EDUCATION (PGDME)

In March the School welcomed the inaugural cohort of the PGDME, with a second cohort beginning in July. The launch was timely as Malaysia has the highest rate of diabetes in Asia. The PGDME is designed to train Diabetes Educators to educate, support and advocate for people affected by diabetes.

In November the PGDME successfully underwent the full accreditation exercise required by the Malaysian Qualifications Agency (MQA).

RESEARCH

Many of the initiatives mentioned above had significant research components. Additionally, in 2019, the N&D Division published 17 papers and two book chapters, while the ABSB Division published 26 papers and two book chapters. The Nursing Division published four papers.

Under ABSB, Dr Anil Philip Kunnath and Dr Lim Chooi Ling collaborated with the National Heart Institute for the MB final-year research project module.
Also, A/Prof Dr Wong Nyet Kui collaborated with Cryocord Sdn Bhd for the MB final-year research project.

MOVING FORWARD

For N&D, planned activities with **SEAMEO RECFON for 2020** include student and faculty mobility, the ongoing online faculty lectures, and a CPD or workshop. N&D plans to launch the Centre for Transformative Nutrition and Health (CTNH) in 2020, as well as host the 2nd **ASEAN Food Science & Nutrition** Network Meeting. For ABSB, plans include organising a Diagnostic Workshop Series. IMU will also be the first private university to host the 11th Malaysian Symposium of Biomedical Science (MYSYMBIOS) in April 2020. In Nursing we intend to build on the success of this year's programme with SHUTCM, and continue enhancing mobility for students and faculty in 2020. For PGDME, the next step will be to seek international accreditation by the Australian Diabetes Educators Association.

CENTRE FOR COMPLEMENTARY & ALTERNATIVE MEDICINE

2019 Highlights

- Chiropractic Programme Industry Advisory Committee established
- MoU with the Academy for Silent Mentor
- World Spine Day
- Chinese Medicine Week

PROGRAMMES



Bachelor of Science (Hons) in Chinese Medicine



Bachelor of Science (Hons) in Chiropractic



Master of Science in Acupuncture

and Alternative Medicine
focuses on developing worldclass education, service and research
in complementary and alternative
medicine. Our undergraduate
programmes in Chiropractic and
Chinese Medicine meet regional
and international standards as well
as requirements for licensure. For
healthcare professionals seeking to
broaden their scope of practice, we also
offer an MSc in Acupuncture.

The Centre for Complementary and Alternative Medicine (CCAM) is IMU's newest centre. In our second year we continued building on foundations, in ways that would enable us to further develop integrated and internationally recognised curricula in our areas of specialisation.

Major initiatives for the year included strengthening the two undergraduate programmes and conducting an ongoing curriculum review.



We also worked on building awareness of the Centre by organising continuing professional development (CPD) events. We believe there is potential for us to be known in particular for CPDs in Chiropractic, given that IMU remains the only university in Southeast Asia to offer a Chiropractic degree programme.

The year saw the departure of CCAM Director Prof Michael Haneline. As we continue to

grow and expand, we gratefully acknowledge his contributions to the Centre.

CHIROPRACTIC

The Chiropractic programme successfully held its first Industry Advisory Committee meeting on 7 March. The committee was formed to enable us to seek input from external stakeholders on our Chiropractic programme.

Given the expected growth in student numbers in the future, one of our priorities for 2019 was to continue engaging with IMU Healthcare on expanding the physical facilities available for skills training and student practicum, including the possibility of developing another chiropractic centre where students can undergo their clinical internships in their fourth year of study.

CHINESE MEDICINE

One of the main thrusts in 2019 was to build specialised clinical services in Chinese Medicine to promote the IMU Healthcare - Chinese Medicine Centre (ICMC) and IMU programmes. Here, too, we continued to engage with our colleagues at IMU Healthcare to discuss how ICMC facilities might be expanded to support our specialised services.

Another development for Chinese Medicine in 2019 was the introduction of assisted reproductive therapy at ICMC. We also began making plans for an Acupuncture Clinic.

Centre for Complementary and Alternative Medicine:

The year in numbers

• 1st meeting of the Chiropractic
Programme Industry Advisory Committee

9 new students MSc in Acupuncture
 (MSA) programme
 1 MoU with the

 Academy for Silent Mentor
 2 CPD courses

Our MSc in Acupuncture (MSA) programme—the first of its kind in Malaysia—saw a change in student profile. The inaugural batch in 2018 consisted of eight Western Medicine doctors, while in 2019, nine students enrolled: six Western Medicine doctors and three Chinese Medicine practitioners.

MOU WITH THE ACADEMY FOR SILENT MENTOR

On 4 November IMU signed a Memorandum of Understanding

(MoU) with the Academy for Silent Mentor. The MoU represents a step forward in a partnership initiated by CCAM's Chinese Medicine team. The main objective of the MoU is to foster collaboration in terms of joint research efforts and teaching and learning activities, and to enable IMU students to continue participating in the Silent Mentor programme. At CCAM, the programme serves as a platform for our MSA students to practice acupoint anatomy.

JOINT CHIROPRACTIC AND CHINESE MEDICINE CPD

One of our goals for 2019 had been to conduct a joint CPD event for Chiropractic and Chinese Medicine. This was achieved when we successfully held CPD courses in these two areas concurrently from 12-13 October.

The joint Opening Ceremony was officiated by Ng Angeline, Principal Assistant Director of the Policy and Development Section, Traditional & Complementary Medicine Division, Ministry of Health. Ng is an IMU BPharm graduate.

The Chiropractic CPD was titled "Chiropractic Manipulative Techniques for Cervical and Upper Thoracic Syndromes", and featured renowned US-based speaker and publisher Dr Leonard John Faye. The Chinese Medicine CPD was on "The Management of Common Childhood Diseases by Paediatric Tuina" and featured Prof Liao Pin Dong from Chengdu University of Traditional Chinese Medicine.



Students demonstrating ear acupressure points at the Chinese Medicine Week

OTHER EVENTS

This year the Chiropractic students again successfully organised World Spine Day in October under the guidance of Dr Kamal Parbhoo. Activities included educational booths, games, free spinal screenings and food trucks. The event was officiated by Prof Abdul Aziz Baba and Prof Peter Pook.

Our initiatives to highlight the importance of spinal health

were recognised in the World Federation of Chiropractic (WFC) World Spine Day 2019 Competition, in which IMU won Second Prize in the Educational Institution category.

Under the guidance of Dr Chep Lee the Chinese Medicine students organised Chinese Medicine Week from 4-6 November, with the theme "The Circadian Clock of TCM". The event generated an overwhelming response. Featured activities included tuina, cupping, ear acupressure, diagnosis and healthy food sales. The event was officiated by IMU Senior Management and guests from the Academy for Silent Mentor.

MOVING FORWARD

In the year ahead we plan to organise more CPDs on Chiropractic and Chinese Medicine. We will also endeavour to strengthen collaborations with external stakeholders for teaching, research and clinical practice/preceptorship. Should we encounter an unavailability of local subject matter experts for collaboration in research and clinical practice, we shall look into getting suitable experts from abroad.

Other plans include measures to expand our clinical services to better serve the community. We also hope to resume discussions with Shanghai University of Traditional Chinese Medicine (SHUTCM) on the IMU Centre of Excellence for Chinese Medicine. Other priorities include securing space, and building capacity and capability to ensure adequate numbers of clinical staff.

SCHOOL OF POSTGRADUATE STUDIES

2019 Highlights

- Three new ODL courses launched
- Inaugural intake for the Master of Business Administration in Healthcare Management
- MSc Analytical and Pharmaceutical Chemistry (MAPC) accredited by the Royal Society of Chemistry

Studies supports, administers and coordinates the University's higher degrees (Masters and PhD) by research, and taught Masters programmes. Our aim is to deliver the highest quality in all aspects of the postgraduate experience. In doing so, we hope to see postgraduate students not only fulfilling their own academic aspirations, but also enriching the intellectual life of the IMU community as a whole.

PROGRAMMES



PhD in Medical & Health Sciences



MSc in Public Health



MSc in Analytical & Pharmaceutical Chemistry



MSc in Medical & Health Sciences



MSc in Molecular Medicine



Master in Pharmacy Practice



Health Professions Education (Postgraduate Certificate/ Postgraduate Diploma/ Master)



Business Administration in Healthcare Management (Postgraduate Certificate/ Postgraduate Diploma/ Master) In 2019 we remained focused on accomplishing our mission of being a preferred postgraduate school, recognised by students, peers and industry for our quality programmes. The School saw a total of 41 students graduating from its programmes this year.

GREATER VARIETY OF POSTGRADUATE OFFERINGS

Several important developments occurred in 2019 that reflected the increasingly varied range of options for postgraduate study available at SOPGS.

Open and Distance Learning

(ODL). In 2019 we advanced in terms of offering new, more flexible modes of delivery with the launch of three ODL programmes in September: the MSc in Public Health (MScPH), the MSc in Molecular Medicine (MMM)



and the MSc in Analytical and Pharmaceutical Chemistry (MAPC). The ODL approach offers working professionals the opportunity to earn a Master's degree without interrupting their careers.

Master of Business
Administration in Healthcare
Management (MBAHM). In March
we were delighted to welcome the
pioneer cohort of 10 students to
this programme.

PhD by Published Work. Our first student pursuing this programme enrolled in April. The programme is specially catered to students who intend to compile their publications as part of their doctoral thesis.

Dual Award Doctoral Degree (DADD). Kaeshaelya
Thiruchelvalam, the pilot candidate
for our DADD programme, entered
her second year. Under the DADD,
a candidate will receive doctoral

degrees independently from both IMU and a partner university upon successful completion. Kaeshaelya will spend the first two years at the University of Newcastle, Australia, and the third year at IMU.

Double Degree Programme.

Our double degree programme, the MSc in Molecular Medicine (IMU) and MSc in Genomic Medicine (Queen Mary University of London), will be launched in September 2020.





MSc Programmes. There was good news for those considering full-time study in three MSc programmes: Public Health (MScPH), Molecular Medicine (MMM) and Analytical and Pharmaceutical Chemistry (MAPC). We obtained approval from the Ministry of Education (MoE) to deliver these programmes in one year instead of one and a half years, thus making them more

attractive to students wishing to obtain a Master's degree within the shortest period of time.

Accreditation. During the year in review we attained full accreditation status for two programmes: Postgraduate Certificate in Health Professions Education (December 2018) and Master in Pharmacy Practice (February 2019).

In March we were proud to see our MSc in Analytical and Pharmaceutical Chemistry (MAPC) programme receiving international recognition when it was awarded five-year accreditation by the committee for Accreditation and Validation of the Royal Society of Chemistry (RSC).

None of the above initiatives would have been possible without the leadership of the Deputy Vice-Chancellor (Education) and Registrar, hard work from the Programme Directors and their teams, and support from the Regulatory & Recognitions Department, Academic and Student Services and the Teaching and Learning Office, as well as our colleagues in the other Schools at IMU.

GREATER VISIBILITY, AND ENGAGING WITH STAKEHOLDERS

Throughout the year we undertook activities that enhanced the School's visibility, including feature articles in newspapers, IMU News and social media, as well as organising visits to industrial partners and government agencies.

We also co-created curricula for postgraduate programmes with industrial partners such as healthcare providers, pharmaceutical industry and government agencies. One example was the Clinical Research specialisation for the Master in Pharmacy Practice programme, which was created with input from Clinical Research Malaysia (CRM).

In addition, a Stakeholder's
Consultation Meeting was held
in July to obtain input from
industrial partners in reviewing
the curriculum for the Master
in Business Administration and
Healthcare Management (MBAHM)
programme.

BURSARIES, INTERNATIONAL STUDENTS AND INBOUND MOBILITY

This year we introduced a special bursary of up to 25 percent for IMU alumni who enrolled in our PG programmes. There was also a bursary for the inaugural batch for the ODL programmes.

Our international students hailed from countries such as India,

Philippines, Syria, Myanmar,
Nigeria, Yemen and Bangladesh.
In 2019 we enrolled our first
PhD student from China. Zhang
Shiming holds an MSc in
Pharmaceutical Chemistry from
Shandong University of Traditional
Chinese Medicine and is currently
undertaking a doctoral project to
study mechanisms in attenuating
atherosclerosis by ginger
bioactives.

Under our inbound Student
Mobility Programme this year the
SOPGS hosted Thitiya Lasing from
Chulalongkorn University, Thailand,
for four months beginning July.
Her attachment was supported by
the Development and Promotion
of Science and Technology
Talents Project (DPST) under the
Royal Government of Thailand
Scholarship.

RESEARCH

In 2019 IMU researchers secured more than RM1.16 million in FRGS grants, an important source of funding that supports postgraduate research. The School produced 26 publications, with an output of 20 Scopus-indexed journal papers and four book

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- 9. Mak KK, Kamal MB, Ayuba SB, Sakirolla R, Kang YB, Mohandas K, Balijepalli MK, Ahmad SH, Pichika MR (2019). A comprehensive review on eugenols antimicrobial properties and industry applications: A transformation from ethnomedicine to industry. *Pharmacognosy Reviews* 13(25): 1-9.
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BOOK CHAPTERS

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 E: Chemistry and Nutritional Benefits, 2019. The Royal
 Society of Chemistry, UK. 270 p.

MOVING FORWARD

The SOPGS plans to offer certified non-degree courses for adult learners in the future. We aim to tap the rich resources of modules in the various postgraduate programmes to offer online courses. The ODL modules may be mixed and matched to create specialised continuing professional development (CPD) courses with certification.

2019 PHD AND MSC GRADUATES AND THESIS TITLES

PhD in Medical and Health Sciences

1. Jestin Chellian	Exploring the potential for quercetin-potentiation of the cardiovascular effects of metformin, a biguanide antidiabetic drug
2. Lim Wei Meng	Identification of new molecular targets for treatment of endometrial cancers
3. Nur Alia Johari	Epidemiology of dengue in Malaysia and the dynamics of dengue virus-vector-host interactions
4. Tan Yuen Fen	Development of <i>in-vitro</i> and <i>in-vivo</i> delivery systems for siRNA-based therapeutics using functionalised single-walls carbon nanotubes (SWNT)
5. Tiong Yee Lian	The potential role of melatonin in preventing diabetic neuropathy and cardiovascular disease: a focus on molecular mechanism involved
6. Tsen Min Tze	Isolation, characterisation and functional analysis of cancer stem cells from nasopharyngeal carcinoma

MSc in Medical and Health Sciences

 Andy Goh Wei Shen 	An investigation into the therapeutic modulation of
	aquaporinfive expression in salivary gland cells treated with
	natural substances
2. Melissa Leong En Ying	Vitamin D supplementation, parathyroid hormone (PTH) and
	plasma vitamin D response among Malaysian female adults:
	double blinded, randomised clinical trial of efficacy
3. Puvaneswari	Synthesis of novel tetrahydrothiazolo(5,4-c)pyridines and
Marappan	in-vitro evaluation of their anti-inflammatory activity
4. Tan Si Hoey	Proteomics analysis of p21-activated kinase 4 (PAK4)
	depletion reveals novel targets of PAK4 in oral squamous
	cell carcinoma (OSCC)
5. Wong Yi Hao	DNA-methyltransferase gene silencing in Acanthamoeba
	castellanii: possible involvement of epigenetics in the

regulation of parasitic virulence

FEATURE

ENHANCING THE LEARNING ENVIRONMENT AT IMU

DUCATIONAL enhancement is the key responsibility of a cluster of departments including the **IMU Learning Resources Department** (comprising eLearning, the IMU Library, Medical Museum) and the IMU Clinical Skills and Simulation Centre, which provide critical support and learning services and resources for members of the University; the IMU Centre for Education (ICE), which provides teacher training programmes, data collection for academic quality assurance, and research into medical and health professional education; and the Centre for Lifelong Learning, which provides the IMU's continuing professional development (CPD) programmes in research, medicine, dentistry, pharmacy and health sciences.

2019 Highlights

- New Government eLearning partnerships
- New Library system and Open
 Distance Learning portal
- Successful AMEA Symposium
- Excellent research output and community engagement
- More CPD programmes at high quality

LEARNING RESOURCES— ENHANCING OUTCOMES

The IMU Learning Resources
Department consists of three
units—the eLearning Unit, which
promotes technology-enhanced
learning solutions, the IMU Library
and the Medical Museum. The
Department collectively supports
students and faculty throughout
their learning journey at the
University.

In 2019, the **eLearning Unit** collaborated closely with the

Malaysian Ministry of Health (MoH) to develop two eLearning courses for healthcare professionals and paramedical staff, namely: Pengurusan Wabak Penyakit Dalam Kesihatan Awam (Managing Epidemics in Public Health) and Patient Safety Awareness for Junior Health Care Professionals.

Pengurusan Wabak Penyakit
Dalam Kesihatan Awam was
completed and showcased to
the Health Minister, Datuk Seri
Dr Dzulkefly Ahmad, during the
MoU Signing Ceremony between

MoH and IMU and the launch of KOSPEN IMU on 28 February 2019. The target learner is the Pegawai Kesihatan Persekitaran (Environmental Health Officer), and the eLearning Unit worked closely with the CDC, Negeri Sembilan State Health Department, which was the subject-matter expert providing and reviewing materials for the development of the course.

The Patient Safety Awareness for Junior Health Care Professionals course is a short interactive online course developed based on an MoU between MoH and IMU also signed on 28 February 2019. The course consists of seven modules intended to provide junior healthcare professionals and university students sufficient knowledge of safe practices as well as to provide awareness of safety skills such as anticipation and mindfulness of hazards; and flexibility as well as adaptability, including recovery from error.

At the time of writing the course was still in development and was scheduled for completion in March 2020.

Meanwhile, IMU's new Open
Distance Learning portal received
10 new students (MSc in Public
Health and MSc in Molecular
Medicine) in its inaugural intake
in September 2019. Prior to
commencement, the eLearning
Unit trained ODL lecturers in
key practices such as student
interaction via the forum,
providing feedback and marking
assignments, creating quizzes and
interacting with students using the
Zoom meeting application.

The eLearning Unit also successfully launched several blended learning programmes in the course of the year—namely, the MSc in Acupuncture, Postgraduate Diploma in Diabetes

Management and Education, and MBA in Healthcare Management—and also successfully completed the Travel Medicine Massive Open Online Course (MOOC), which at the time of writing was undergoing user acceptance testing in preparation for launch. It also initiated development of a new MOOC—Basic Skills Course for Tobacco Cessation: A Guide for Health Care Providers (MOOC)—which was expected to be finalised in 2020.

For **the IMU Library**, a key achievement in 2019 was the full operation of the Koha Library Management System. This implementation of Koha was fully developed by IMU

librarians and its modules included circulation, cataloguing, acquisitions, serials, course reserves, patron management and branch relationships. The system is appropriate to the IMU's teaching, learning and research activities due to its interactive features and the availability of the course reserves module which links students and faculty in accessing the recommended textbooks of a particular module with a single click. Since implementation, the Koha system has reduced the Library's annual spending by about RM40,000 to RM50,000.

Another significant initiative for the Library in 2019 was the provision of the Shibboleth search engine



commencing in September 2019 as an alternative to the existing EzyProxy system. This engine allows the IMU community to search and retrieve restricted access materials from paid Online Databases, e-Journals and e-Books through Google and any other common search engine. Users can retrieve full text articles faster and more efficiently than previously possible. This initiative was successfully implemented with the support of the ITS Department and SIFULAN (Secure Identity Federation on Unified Lightweight Access Management) Malaysia.

Meanwhile, the IMU Medical Museum's overall vision and focus for 2019 was to become an outstanding resource centre for knowledge and reference especially on the subject of anatomy for IMU students, faculty and staff, as well as the community, schoolchildren, other educational institutions and the public. In achieving the vision, the Medical Museum worked towards improving its services by identifying the needs and requirements for teaching and learning (T&L) activities and expanding the range and quantity of its anatomy models



Continuous learning at the IMU Learning Resources Festival

and plastinated specimens with the input and leadership of IMU subject-matter experts.

In 2019, the Medical Museum also initiated the digitisation of microscope slides. This initiative will create a database of microscopic images which in turn can be annotated and used for T&L sessions and uploaded onto online platforms. Throughout the year, the Medical Museum remained committed to additional activities such as Open Days, Science Discovery Challenge and Malaysia Brain Bee Challenge and continued to provide support for many student activities, including student participation at various regional and international anatomy quiz competitions. The Medical

Museum is proud of the team of Semester Four medical students which won second place at the Medics Intervarsity Academic Olympiad 2019.

Finally, a key achievement for the Learning Resources Department as a whole in 2019 was the IMU **Learning Resources Festival held** on 9-10 October 2019. The theme for the year was "Personalised Learning: Learning Analytics & Adaptive Learning Technologies", and the event was awarded 10 CPD points by the Malaysian Medical Association. More than 180 participants (internal, external and vendors) participated in a variety of activities including competitions, talks and interactive games. For the first time, the IMU's Illnovasi Competition was made open to other learning institutions, and this saw the participation of 34 representatives from learning institutions throughout Malaysia. The University also responded to the Ministry of Education's reading campaign #Malaysia Membaca, and #Read@Uni and held a soft launch for the campaign during the festival.

CLINICAL SKILLS AND
SIMULATION CENTRE—RAISING
COMPETENCY AND SKILLS

The Clinical Skills and Simulation Centre (CSSC), provides medical training simulations for all stakeholders at different levels of difficulty to increase knowledge and competence. In 2019 the Centre designed a series of training sessions to enhance emergency response among healthcare staff and the general public in order to emphasise the importance of patient safety and early intervention in emergency situations. Especially in the latter case, the CSSC extended its Basic Life Support training certification to employees at an automobile factory and members of a swimming club.

At a more advanced level, the
Centre provided training to
general practitioners as emergency
first respondents. This provided
general practitioners handson experience in managing
emergency situations and also
allowed participants to accrue
CPD points for the renewal of their
Annual Practising Certificates. The
CSSC also organised a training
session for trainers in teaching

patient safety using simulations. The aim of the programme was to raise the competency levels of healthcare staff involved in teaching patient safety by sharing educational frameworks and teaching resources from the University of Adelaide.

Besides patient safety, the CSSC also organised training workshops aimed at improving



Clinical Skills and Simulation Centre

IMU's teaching and assessment quality. In this respect, it organised a communication skills workshop for teachers to exchange teaching skills with their counterparts at the University of Dundee. This was important to ensure that IMU was properly calibrated in preparing students for transfer to the UK and other partner medical schools. The Centre also organised training workshops to give opportunities to graduate students waiting for houseman placements to gain knowledge and experience in teaching methodology.

To maintain the high quality of the IMU's examiners, the CSSC also organised workshops to train Objective Structured Clinical Examination examiners in giving feedback and using the Online Assessment Systems. The Centre also tightened its quality assurance standards by ensuring that the simulated patient received appropriate training for effectiveness in simulation sessions in the areas of consistency, professionalism and feedback to students.

IMU CENTRE FOR EDUCATION— LEADING CHANGE

The IMU Centre for Education (ICE) champions education throughout all facets of daily life at IMU by providing teacher training programmes, data collection for academic quality assurance, and research into medical and health professional education.

A key event for the year was the 10th Asian Medical Education Association (AMEA) Symposium,

which IMU was proud to host from 12-14 April 2019. AMEA has attracted a total of 430 local and international participants. The theme of the conference was 'The 4th Industrial Revolution: Creating a New World for Health Professions Education', and topics revolved how the Fourth Industrial Revolution (Industry 4.0) differed from previous developments through the fusion of the physical, digital and biological worlds. This change will increasingly challenge and interconnect humanity and technology, leading to clear impacts on healthcare and health professions education in the future.



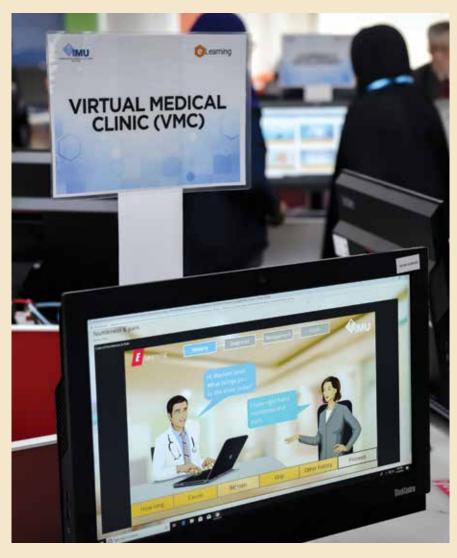
Industry 4.0 will likely affect the development and deployment of healthcare talent worldwide across the lifecycle of an individual, and thus 10th AMEA brought together educational institutions, academics, healthcare professionals and policymakers for informed exchange of ideas, setting of priorities and engagement

for future coordinated action.

Delegates from 36 countries
participated in various sessions
ranging from nine Pre-Conference
Workshops; four plenary meetings,
four symposia; oral, poster and
e-poster presentations; as well as
the IMU Ron Harden Innovation
in Medical Education (RHIME)
Awards and the Global University
Medical Challenge (GUMC).

The IMU RHIME Award was won by a team of researchers from the University of Kelaniya, Sri Lanka, while last year's GUMC champion—the team from University of Chulalongkorn—won the prize for the second time in 2019.

In terms of **Health Professions Education (HPE)** research, the
Centre's efforts in 2019 continued
to focus on enhancement in line
with the IMU's growing reputation
as a regional centre of excellence
in health professions education.
HPE continued to collaborate with
health professions educationists
and researchers locally and
abroad via engagement through
the Malaysian Association of
Educators in Medicine and Health



Showcasing the Virtual Medical Clinic at the AMEA

Sciences (MAEMHS), the Asian Medical Education Association (AMEA), the Asia-Pacific Medical Education Network (APME-Net) and the Association for Medical Education in Europe (AMEE) in the areas of conferences, research collaboration and publication.

Following the success of the AMEA Symposium in April 2019, the team has been collaborating with AMEE to organise the OTTAWA 2020 Conference, as well as with National University of Singapore in organising APMEC 2021. These international conferences are well

known among international HPE educators and researchers, and act as a showcase for IMU's work in the areas of HPE. Importantly, these conferences strategically attract more research collaboration and consultancy opportunities for IMU.

Besides this, ICE has also organised a number of HPE research design and writing workshops in 2019 to encourage more faculty to conduct research in HPE. The list included the APME-Net Writing Retreat on 11 April; workshops in May on "Research and Scholarship in Health Professions Education" by 2019 Ronald-Harden Visiting Professor, Prof Cees van der Vleuten; and a writing retreat conducted by Prof Ray Peterson and Prof Madawa Chandratilake from 27-29 September. These sessions were attended by faculty members from various schools, and the outputs included a number of manuscripts drafted during the workshops/retreats, some of which were submitted to journals within reasonable timelines.

To date, at least six manuscripts have been published in the journal *Medical Teacher*, and more have appeared in other peer-reviewed journals.

ICE has also established a community of practice in HPE through journal clubs, with five sessions conducted on various contemporary topics in HPE. Faculty participation was encouraging, and the sessions have generated great interest in the topics presented, which may potentially lead to further research in these areas.

LIFELONG LEARNING

At the IMU Centre for Lifelong Learning (ICL), the overall focus for the year was the growth and expansion of a range of innovative continuing professional development (CPD) programmes to cater to the growing needs of healthcare professionals as well as the community in general.

Throughout the year, ICL worked closely with the various Schools and Centres of the IMU to identify market needs and develop relevant new short courses, particularly those with



Developing skills through CPD events



Encouraging lifelong learning at IMU

assessment components to ensure that participants possessed the necessary competence to apply the new skills they learned. The Centre also worked to ensure that delivery mechanisms were sufficiently flexible and brought value to learners.

For the year, the Centre organised 53 CPD events as well as two prestigious conferences, the AMEA and the South East Asia Association for Dental Education (SEAADE) meeting for 2019. These reached out to a total of 1,966 participants. Besides the major conferences, one of the main highlights for the year was the repetition of a popular

short course at the School of Dentistry—"Demystifying Molar Endodontics"—which consisted of two modules with four mentorships. The programme aimed to develop the skills of general dental practitioners and guide them in the provision of root canal treatment of molar teeth using the latest technology of rotary instrumentation and microscopes.

As with previous years, ICL remained focused on improving quality and efficiency throughout its programmes, and was gratified to see efforts paying off in 2019: when asked to assess their overall learning experience,

85 percent of participants in the CPD programmes rated their experience "good" or better.

Moving forward, ICL anticipates that the CPD landscape will remain challenging, with competition arising from a growing number of CPD providers in the industry as well as the ever-expanding range of learning modes made possible by new technology. In 2020 the Centre will seek to increase the visibility of its programmes and reach out to new target audiences. It also hopes to increase customer engagement through various promotional campaigns including maximising the use of digital marketing.

ACADEMIC ACHIEVEMENTS & AWARDS

CENTRE FOR PRE-UNIVERSITY STUDIES

Faculty achievements

 FiS staff Sharon Chan, Jessica Leong May Fong and Tung Li Qian won three silver awards and one gold award at the Learning Resources Festival for their respective projects: Mathematical Virtual Escape Room, QR Code on Mathematics Tutorial, Padlet Apps for Mathematics Module and A Synergy of Academic Writing and Technology.

SCHOOL OF MEDICINE

Faculty achievements

- Prof Dr Kwa Siew Kim was recognised by the Academy of Family Physicians of Malaysia for his contribution as a member of the Board of Senior Examiners.
- Dr Sasikala Devi Amirthalingam was appointed Fellow of the Academy of Family Physicians.

- Dr Ismail Burud became
 Fellow of the Royal College of
 Surgeons of England. He was
 later appointed an examiner for
 the MRCS examination.
- A/Prof Dr Erwin Khoo Jiayuan became Fellow of the Royal College of Paediatrics and Child Health (UK).
- Dr Lydia Lee Sze Teng won the 2019 MacJannet Prize for Global Citizenship.
- A/Prof Dr Zainab Abd Majeed received a Certificate for Outstanding Contribution as a Reviewer in 2018 from the Medical Journal of Malaysia. She also received a Certificate of Merit for Outstanding Cumulative Contribution as a Reviewer.
- Dr Htet Htet was appointed an Ambassador by the British Pharmacological Society.
- Dr Chua Siew Houy won Second Prize (Specialist Category) in the Scientific Poster Presentation

- at the Clinical Research Centre, Hospital Tuanku Ja'afar. In 2019 Dr Chua also completed the two-year European League Against Rheumatism (EULAR) Course on Rheumatic Diseases.

Student achievements

- SOM students excelled at the 7th National Medical Student Basic Surgical Skills Competition 2019, organised by the College of Surgeons of Malaysia. Nor Heidi Izzat Nor Azman emerged as champion, while Toh Ee Syuen and Ahmad Kousaibati won second and eighth places respectively.
- Brenda Chin Huey Zin won the Aflame Student Award on IMU's University Day. She received RM1,000 cash, a certificate and the Aflame trophy. She

- also nominated Refuge for the Refugees as beneficiary of a RM5,000 donation.
- At the Intervarsity Clinical Emergency Quiz Competition organised by AIMST, three SOM groups participated, and won first, second and fifth places. The winning group comprised Lee Tzun Kit (team leader), Mustafa Sharief Sayed Mohammed, Leong Piem Jie, Sandy Tan Su May, Jerrold Teo Tze Ren and Nur Illiana Mohamad Zaki.
- Nur Nabila Nasharuddin was Most Outstanding Delegate (National) at the Malaysia World Health Assembly Simulation organised by MyWHA (Malaysia World Health Assembly). She won first place for her position paper and overall contribution.
- Dev Ananthraj, Tan Sue Fen and Lee Ji Yan won first place at the MSSS x AMSA UPM Intervarsity Surgical and Medical Competitions (ISMC) 2019.
- At the 1st Borneo Trauma
 Update 2019 & Trauma Moulage
 Competition, SOM Semester
 9 students Lee Tzun Kit, Tan
 Cheng Liang, Jerrold Teo Tze
 Ren, Sharon Chong Zi Ching
 and Mustafa Sharief Sayed
 Mohammed (with team leader
 Dr Rosdara Masayuni Mohd

- Dani) were the only student team competing against Medical Officers. They won second place in the theory examination and fifth place in the practical.
- At the Malaysian Youth Policy Symposium, the International Champion Best Policy Paper award went to Nur Nabila Nasharuddin and Raja Nur Shahkeerah Raja Kamarul Zaman for their policy paper pushing for the enforcement of the National Immunisation Programme.
- At the 48th World Congress of Surgery 2019 in Krakow, Poland, Yuki Julius Ng We Yong and Aravinthan Kadravello participated in the Future of Surgery programme by the International Association of Students Surgical Societies (IASSS). Both were chosen from 24 candidates from around the world.

SCHOOL OF DENTISTRY

Faculty achievements

The following faculty members received awards on University Day:

 Dr Spoorthi Ravi Banavar received the Teaching Excellence Award and the John Simpson trophy.

- Dr Pulikkotil Shaju Jacob won the Individual Development Award for his Doctor of Philosophy in Oral Epidemiology from the University of Madras, India.
- Dr Venkateshbabu
 Nagendrababu won the
 Research & Publications Award
 for Young Investigator Award
 (Individual Category).
- Dr Sultan Omer Sheriff and Dr Shelly Arora won the E-learning Award for "AR-Development of Palate & Lip".
- Prof Seow Liang Lin, Prof Khoo Suan Phaik, Dr Ranjeet Ajit
 Bapat, Dr Rohit Pandurangappa, Dr Naresh Shetty and Dr
 Pravinkumar Patil received the award under Business Process Improvement for "Implant Clinic Referrals & Clinical Supervision (Group Category)".
- Dr Sultan Omer Sheriff was awarded the MFDS RCPS(Glasg) from the Royal College of Physicians and Surgeons of Glasgow. He also represented the SOD at Kolokium 4.0, hosted by the Ministry of Education, where he presented the augmented reality app, IMU ARX.
- Dr Sultan Omer Sheriff, Dr Shelly Arora, Dr Ekta Priya, Mohd Fadzil Zainal Anuar, Raden

- Yusnaidi Adiputra Alias, Fareeza Marican Abu Backer and Muhammad Aswandi Aminuddin won the SEAADE Innovation award for their project, "Exploring Dental Education with an Interactive Augmented Reality Application as a Learning Tool".
- Dr Sobia Bilal completed her Fellowship in Tobacco Control, at WHO Western Pacific Region, Hong Kong.
- Dr Shekhar Bhatia received Best Educator award from the School of Dentistry during Faculty Appreciation Week.
- Dr Pravinkumar Patil was appointed an Adjunct Professor in the Department of Prosthodontics and Crown and Bridge, Dr DY Patil Dental College and Hospital, DPU, Pune, India. He was invited to speak at numerous international conventions, and won Third Prize for his research poster presentation on "Biomechanical Behaviour of Mandibular Overdentures: 3D Finite Element Analysis" at the International Team for Implantology (ITI) Congress South East Asia 2019. Dr Patil was a Jury member for the Research Awards and interactive session with students on dental research at SDKS
- Dental College and Hospital,
 Nagpur, India. He was also
 invited to attend the Examiner
 Training Workshop for the
 Diploma in Implant Dentistry at
 the Royal College of Surgeons
 of Edinburgh. He became a
 certified reviewer and mentor
 of Publons Peer Reviewer
 Academy, and initiated the
 Collaboration with International
 Team for Implantology (ITI)
 Switzerland: ITI Online Academy
 IMU Malaysia Campus.
- Prof Khoo Suan Phaik received renewal of examinership for the MFDS (Part 2) examination for the Royal College of Surgeons of Edinburgh. She was appointed by the Malaysian Dental Council as Head of DentSEdC Oral Pathology/ Oral Medicine Committee under the Conjoint Technical Committee for the Evaluation of Specialist Dental Program (JTBPPKP). Prof Khoo was also appointed Chairperson of the MQA panel for the Temporary Accreditation for the Doctor of Oral Maxillofacial Pathology & Oral Medicine Programme for Universiti Malaya; Chairperson for the Mentorship Committee for the Malaysian Dental Association; and council member for the Malaysian

- Association for Orofacial
 Diseases. She was co-supervisor
 for two PhD candidates (at
 IMU and at Universiti Sains
 Malaysia) and an invited speaker
 at numerous international
 conferences.
- At the 30th Annual Scientific Meeting of South East Asia Association for Dental Education, Prof Seow Liang Lin won the Best Presentation Award with a project titled "Dental Education Beyond Borders Through Student-Generated Questions: A Collaboration between Two Dental Schools". At the inaugural ConsAsia 2019 Conference, she won the Best Oral Presentation Award with a project titled "Novel Quaternary Ammonium and Riboflavin (QARF) Modified Dentine Adhesive in Enhancing Performance of Adhesive Restorations". Prof Seow was appointed a Council Member of the Malaysian Dental Council, and external examiner for the Bachelor of Dental Technician programme at AIMST University for 2019-2022. She received renewal of appointment as Examiner for the Membership of the Faculty of Dental Surgery (MFDS) of The Royal College of

Surgeons of Edinburgh. She was also invited to speak at various international conferences.

Student achievements

- Kok E, Pau A, Parolia A. Effect of Clinical Audit on the Quality of Molar Root Canal Treatment. 46th APDSA Asia Pacific Dental Student Association Annual Congress 1-4 August 2019, Bangkok Thailand (2nd Best Poster presentation in scientific research competition). Parolia Abhishek was an invited speaker at numerous international conferences in 2019, addressing issues in endodontics and other areas. He also conducted workshops at the International Conservative Dentistry Conference and Exhibition, the South East Asian Association of Dental Education, and IMU.
- This year, two IMU dental students won prizes at the Asia Pacific Dental Students' Association (APDSA) Scientific Research Competition. Kan Ing Zheng, a final year student, won first prize in the Oral Presentation Category while Ester Kok Sook Kuan who is in her fourth year, was the first runner up in the Poster Presentation.

SCHOOL OF PHARMACY

Faculty achievements

- Dean A/Prof Dr Mohd Zulkefeli Mat Jusoh was appointed a Member of the Pharmacy Board Malaysia for three years. He was also appointed a Joint Technical Committee Member.
- Prof Dr Ong Chin Eng (Associate Dean, Academic) was appointed an editor at *Clinical and Experimental Pharmacology and Physiology.* The international journal, founded in 1974, is hosted by Wiley publishers and has an impact factor of 2.092.
- Dr Low May Lee was awarded the Institut Kimia Malaysia (IKM) Oral Prize for her presentation titled "Cu(II) Complexes of Dithiocarbazate Schiff Bases: Synthesis and Bioactivities" at the 7th Asian Conference on Coordination Chemistry (ACCC7). Dr Low was also part of the organising committee for the 9th Biennial Regional Symposium on Total Laboratory Management—Quality, Safety, Environment and Laboratory Informatics (QSEL 2019).
- Dr Mai Chun Wai received the Rising Star Award 2019 from the Malaysia Association of Cancer Research (MACR). He was invited to share his research

- experience at the MACR Scientific Research Conference in December.
- Dr Manisha Pandey supervised BPharm students for the Medical Innovation Idea Challenge— MIIC 2.0, organised by UKM Medical Centre (UKMMC). The team (Lee Khai Shien, Kishen Kunalan, Vilashini Sarvanan and Wong Yee Hua), won the Merit Award for developing the Blefaliner (Medicated Eyeliner) to treat blepharitis (inflammation of the eyelid).
- Dr Palanisamy Sivanandy won the Education Leadership Award from the World CSR Day & World Sustainability Congress at the World Education Congress Global Awards 2019 held in Mumbai, India.
- Dr Vasudeva Rao Avupati won
 Third Prize, Best Poster Award at
 the International Conference on
 Drug Discovery and Translational
 Medicine 2018 (ICDDTM '18)
 for the research poster titled
 "Design, Synthesis, In vitro
 Biological Evaluation, and
 Molecular Docking Studies of a
 Series of p-Toluene SulfonylureaBased Hybrids as a New Class
 of α-Glucosidase Inhibitors".
 He also received the Higher
 Education Leadership Award
 (HELA) 2019 "Young Leader in

- Health and Medical Sciences
 Discipline" at the 2nd Higher
 Education Leadership Meet
 (HELM) 2019. As an invited
 keynote speaker, he spoke on
 "Emerging Trends in Higher
 Education 4.0: Educating for the
 4th Industrial Revolution".
- Dr Manisha Pandey and Rohit Kumar Verma won the Best Poster Presentation Award at the 6th ICPAPS—The 3rd ASEAN PharmNET 2019.
- Chong Chin Pin was appointed Vice Chairperson (Project Operations), to spearhead all MPS-YPC flagship programmes.
- Head of Department Dr Lee
 Choy Sin won a silver medal at
 the International Invention and
 Innovation Exhibition (ITEX)
 2019.

Student achievements

- MSc student Geetha Maniam RPh, who is also our first FRP (Full Registered Pharmacist) from R&D Academia, won Third Prize in the Pertandingan Penyelidikan Inovasi Nanoteknologi (PIN) 2019, a competition organised by the Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC).
- At the Young Entrepreneur Programme 2019, an initiative by the Malaysian Pharmacy

- Students' Association (MyPSA), SOP students (Jocelyn Su Sziou Ting, Tan Qian Ying, Ng Jia Jing, Sarannya Balakrishnan and Hor Cui Jing) won First Prize in the Pitching Competition. They also won the prize for best innovative idea in the programme for their idea to treat oral candidiasis among infants and toddlers.
- Laura Soon won the Best Poster Award for her research poster entitled "Green synthesis and antibacterial potential of Artemisia vulgaris extract in silver nanoparticles against wound bacteria" at the 5th Asian Young Pharmacists Group (AYPG) Leadership Summit.
- Nermesh Singh was named
 International Volunteer
 Leader by MyCorps Mission 7:
 Southeast Asia 1/2019 in Albay,
 the Philippines. He also received
 the "Young Leaders Award"
 in the Access Programme.
 He presented his topic on
 "Incompliance of senior citizens
 to their daily medications
 increases the risk of health related complications" and was
 invited by the organisers to
 New York City, New York, and
 Burlington, Vermont, in the US.
- SOP students supervised by Dr Manisha Pandey won the "Merit Award" in the Medical Innovation Idea Challenge

MIIC 2.0, held at UKM Medical Centre, for the development of "Medicated Eyeliner".

SCHOOL OF HEALTH SCIENCES

Faculty achievements

Nutrition & Dietetics

- Dr Sangeetha Shyam served as Guest Editor for the AIMS Medical Science special issue on Nutrition and Diet in Gestational Diabetes Mellitus. She was also appointed External Examiner at Universiti Teknologi Mara for MSc (Sports Science), and External Reviewer for the BMC Journal of Population, Health and Nutrition Supplement 2019 as well as BMC Nutrition 2019. Also in 2019, she was appointed an Editorial Board member of the Malaysian Journal of Nutrition.
- A/Prof Snigdha Misra was appointed Senior Advisor to the Choices regional secretariat for East Asia, covering China and the ASEAN region, where she will help to promote positive front-of-pack labelling on foods. She also organised a Round Table for 7 ASEAN Logo Countries, at the Asian Congress of Nutrition, and was appointed an external examiner for a PhD candidate at Mother Teresa Women's University, Kodaikanal, India.

- Applied Biomedical Science and Medical Biotechnology
- Dr Amalraj Fabian Davamani was appointed external examiner for a PhD candidate at the University of Madras. He was also appointed external examiner for a Master of Medical Science candidate at Universiti Kuala Lumpur.
- A/Prof Dr Anna Ling was appointed external examiner for a PhD candidate at the University of Madras.
- A/Prof Dr Chye Soi Moi was appointed external examiner for a Master of Science candidate at Universiti Putra Malaysia.

Student achievements

Nutrition & Dietetics

- Melissa Leong En Ying was awarded the MSc Thesis Prize at the Nutrition Society of Malaysia Conference 2019. Her topic was "Vitamin D supplementation, parathyroid hormone (PTH) and plasma vitamin D response among Malaysian female adults: double blinded, randomized clinical trial of efficacy."
- Teo Chun Yi was awarded the Undergraduate Thesis Prize at the Nutrition Society of Malaysia Conference 2019. Her topic was "The effect of using different spoon size on postprandial glycaemia, hunger and satiety of

- overweight and obese subjects consuming brown rice."
- Also at the Nutrition Society of Malaysia Conference 2019, Kanimolli Arasu won the Young Researchers' Symposium 3rd Prize with the topic "Are Malaysian children with low calcium intakes having low bone mass?"

Applied Biomedical Science and Medical Biotechnology

- Biomedical Science student
 Genieve Yeo Ee Chia won the
 Third Prize Oral Presentation
 at the 2019 SOHS Research
 Day at IMU. Genieve
 presented her final-year
 project entitled "Biofilms and
 genotypic resistance assay for
 Pseudomonas bacteria isolated
 from patients in Malaysia's
 National Heart Institute".
- Biomedical Science students of BM1/19 cohort won the IPL Best Poster 2019 award at the IMU Interprofessional Day.
- A total of seven Medical
 Biotechnology students
 completed internships abroad.
 These students were attached to
 institutions such as Max Planck
 Institute in Germany, National
 Neuroscience Institute, DukeNUS and Agency for Science,
 Technology and Research
 (A*Star), Singapore.

Nursing

 Jayshini Ganapathy successfully completed a two-week summer course on Emergency and Trauma Care at Universitas
 Gadjah Mada Indonesia. Besides lectures on Emergency and Trauma nursing, participants were also involved in handson sessions on casting and application of splint. They also spent six days at Magelang Mother and Child Health Clinic and stayed with a host family.

SCHOOL OF POSTGRADUATE STUDIES

Student Achievements

- At the 25th Malaysian Dietitians'
 Association Conference 2019,
 Dr Lee Ching Li received the
 Best Postgraduate Thesis
 Award (PhD) for her thesis
 titled "Low calorie diet using
 liquid meal replacements versus
 conventional food for weight
 loss in obese Malaysian adults
 with Type 2 Diabetes in an
 outpatient clinic setting".
- Melissa Leong En Ying won the MSc Thesis Prize at the Nutrition Society of Malaysia Conference 2019 for her thesis titled

- "Vitamin D supplementation, parathyroid hormone (PTH) and plasma vitamin D response among Malaysian female adults: double blinded, randomized clinical trial of efficacy."
- Kanimoli Arasu (PhD student)
 won the Young Researchers'
 Symposium Third Prize for her
 project titled "Are Malaysian
 children with low calcium intakes
 having low bone biomass?"
- Amala Muniandy (MSc student)
 was a member of the team led
 by Dr Lee Choy Sin which won a
 silver medal under the category
 of "Medical and Health"
 for their invented product,
 hyperbranched poly(glycerol
 esteramide) (HPGEA) at the
 International and Innovation
 Exhibition (ITEX) 2019.
- Geetha Maniam (MSc student)
 won Third Prize at the
 Pertandingan Penyelidikan
 Inovasi Nanoteknologi
 (PIN) 2019 under the
 NanoKebangsaan 2019
 programme organised by the
 National Nanotechnology
 Centre of the Ministry of
 Energy, Science, Technology,
 Environment & Climate Change
 (MESTECC).

ENHANCING SERVICES & **RESOURCES**

QUALITY IMPROVEMENT

2019 Highlights

- IMU Quality Management System updated to the latest ISO 9001:2015 requirements
- IMU Research
 Laboratories
 Accreditation updated
 to the latest ISO/IEC
 17025:2017 standard
- Programmes benchmarked to QS Stars, SETARA and MyRA

S A KEY component of IMU's commitment to becoming a regional centre of excellence in health education, we strive to achieve the highest quality of intellectual, educational and research productivity throughout all aspects of university life.

Every year, IMU works to ensure the effective and efficient delivery and management of its academic programme through the process of accreditation and certification. We engage with a wide variety of partners to ensure we meet the expectations of all stakeholders, and to maintain the quality of the University's programmes and curricula at high-level global standards.



GLOBAL AND LOCAL BENCHMARKING

In 2019, the Quality Improvement Unit worked with the relevant departments and programmes to ensure that continuous improvements were made to student arrivals, teaching, learning and living at IMU.

"Quality is everybody's responsibility" — Deming W. Edwards

In this regard, bi-annual Student
Satisfaction Surveys are conducted
to identify opportunities and areas
for improvement, benchmarked
to local and international higher
education institutions. This
has brought the IMU Quality
Management System on par with
the latest management standards
under ISO 9001:2015.

We also updated the IMU Research Laboratories Accreditation to the latest ISO/IEC 17025:2017 standard, and ensured that the University measured up internationally under the globally recognised QS Stars system, as well as locally under the Education Ministry's Rating System for Malaysian Higher Education (SETARA) and the Malaysian Research Assessment (MyRA) system, to identify opportunities for improvement.

Besides these initiatives, we also implemented new standards for the safety and health of the University by establishing an occupational, safety and health management system to help us monitor and remedy perceived deficiencies.

MAINTAINING STANDARDS THROUGH SELF-ACCREDITATION

We are pleased to report that the Malaysian Qualifications
Agency remains satisfied with
IMU's implementation of selfaccreditation processes in the
University two years after being
awarded the right to do so. This
success is a testament to the hard
work of all parties involved in the
implementation and maintenance
of IMU's rigorous quality policies
and procedures.

From 2017 to 2019, IMU conducted 12 Provisional Self-Accreditation of new programmes, and eight Full Self-Accreditation of existing programmes. In 2019, IMU denied Provisional Accreditation to one of its postgraduate programmes—this is the first time a denial has occurred, and it demonstrates our commitment towards ensuring that all IMU programmes have the requisite competencies, support and resources necessary for its satisfactory delivery.

That said, IMU has been conducting an increasing number of self-accreditation exercises each year, and maintaining the availability of a competent and experienced panel of assessors has been an on-going challenge.

In view of this, IMU has been organising annual training programmes covering the regulatory requirements and code of practice for programme accreditation for the past two years. IMU began with an initial team of 15 assessors trained by the MQA in 2017, and with the subsequent training programmes, the pool of qualified assessors doubled in 2018 and expanded to four times the initial team in 2019.

MOVING FORWARD

The IMU Safety and Health Committee (established in 2003) has been taking active steps to ensure full compliance with the Malaysian Occupational Safety and Health Act 1994 (Act 154). In 2019, IMU established its ISO 45001:2018 Occupational Health and Safety Management System to identify, minimise and control health and safety risks in the University. In the coming year, we will strive to ensure that this system is well maintained and that the quality of occupational safety and health at IMU is continually improved.

"Apart from ensuring compliance with standards and continual improvement activities, IMU must strive to develop a Quality Culture among all staff and students so that quality becomes part and parcel of daily routine activities."

— Prof Victor Lim. Pro Vice-Chancellor Institutional Advancement

INDUSTRY PARTNERSHIP & CAREER DEVELOPMENT UNIT

2019 Highlights

- Record number of Industry engagements
- Successful inaugural
 Graduate Career Fair
- Launch of the Career Readiness Passport

NDUSTRY Partnership (IP) is responsible for providing leadership and strategic direction to facilitate and accelerate sustainable partnerships between IMU and industry, especially those related to health. Partnership with various companies, organisations and governmental bodies are established to enhance collaboration for quality education, research and healthcare. Partnerships also support the experiential learning of our IMU students and enable them to be work-ready upon graduation.

The Career Development Unit (CDU) was established to assist students in career development and research, and to advise them about professional opportunities. The CDU analyses the information from IP and assists in disseminating that information to students for career planning and development (this facility is also available to alumni). Other activities include workshops and seminars on CV-writing, mock interviews, use of social media for job exploration, and as well as the development of essential skills such as communication for job preparedness.

One of the main goals for the Industry Partnerships and Career Development Unit in 2019 was to provide a wider industry connection relevant to the various programmes as well as to increase student engagement with the related industries for internships and facilitate their career exploration prior to and upon graduation. As such, the Unit successfully progressed to prepare and connect students to industries as part of the IMU's quest to create greater opportunities for student internships, collaborative research and employability. The Unit will continue to seek sustainable collaboration with key leading industry players through its "Partnership with Industry" programme.

INDUSTRY PARTNERSHIPS

In 2019 IP developed several mutually beneficial collaborations to help drive sustainable engagements between the university and industry stakeholders in line with Malaysia's progress towards the Fourth Industrial Revolution.



At the Graduate Career Fair

These collaborations have, directly and indirectly, enriched the IMU's three key domains of research, education and healthcare.

In 2019, the Unit successfully brought in 121 companies to IMU for engagement with students, far exceeding the 83 companies in 2018. The 2019 companies were drawn from the medical, healthcare

provider, pharmaceutical, retail pharmaceutical, wellness, food and beverage, insurance, banking, as well as human capital and education-provider sectors.

This achievement was the result of the alignment and harmonisation of processes established between the Unit and the various Schools. The various departments acted in concert towards achieving

The Career Development Unit (CDU) was established to assist students in career development and research, and to advise them about professional opportunities.

at both country and global level. These included agreements with BookDoc, CryoCord and the Southeast Asian Ministers of Education Organisation Regional Centre for Food and Nutrition (SEAMEO RECFON).

the IMU's mission as well as its international quality ranking in terms of employer engagement with students on campus.

Twenty-four companies attended the Graduate Career Fair in August 2019, testifying to a significant bond between IMU and industry players. Since the date of the Graduate Career Fair, companies have been requesting for graduating students in the relevant fields either as potential employees or interns.

GRADUATE CAREER FAIR 2019

IMU's inaugural Graduate Career Fair was held on 21 August 2019 with the participation of 24 industry partners from the medical, healthcare provider, pharmaceutical, retail pharmaceutical, wellness, food and beverage, insurance and banking industries. This fair will become an annual IMU event.

The fair allowed graduating students and alumni from various IMU schools to introduce themselves and make important connections with potential employers. The fair included five concurrent side-talks on various topics related to career development, delivered by participating industry experts, which had been pre-selected by students.

This collaborative programme provided students with opportunities for exposure and internship placements with industry partners. In 2019, IMU signed five MoUs with related industries for collaborative work,

CAREER READINESS PASSPORT

The Unit launched IMU's Career Readiness Passport on 21 August 2019. This passport serves to document students' complete university journey and aid the acquisition of knowledge and essential skills for job preparedness.

There are four 'checkpoints' in the passport, and each checkpoint outlines key activities to be followed and taken up by students. The Career Readiness Passport programme will give students access to career talks and seminars by inspirational leaders and entrepreneurs. All these activities will be recorded and verified in the passport, and the checklist ensures consistency and completion of each task with the guidance of the Career Development Unit.

The Career Readiness Passport will assist students to develop job-search skills and also acts as a platform where all the elements needed to prepare a student for a future career can be clearly described. This includes acquiring interview skills, writing appropriate cover letters and curriculum vitae as well as developing a professional portfolio online.

MOVING FORWARD

For the future, the Unit will strengthen its database of industry partners by working more effectively with all IMU Schools and Programmes. This database will serve as a central reference for different Schools to establish linkages with relevant industries. This enhanced database will also help IMU build a more systematic engagement process with the

various industries, enabling the establishment of a long-term shared vision on partnerships for a win-win situation. To achieve this, institutional alignment and commitment from all parties at various levels must be obtained. The Advisory Committee for Industry Partnership, chaired by the Vice-Chancellor, plays a major role in providing strategic direction for the development of these partnerships.



STUDENT SERVICES HUB

2019 Highlights

- Identified seven areas for IMU-Alumni collaboration
- Launched a new Student
 Portal
- Hired one additional clinical psychologist to support students
- Launched the Pantai
 Gleneagles Scholarship
- Established the **Dental Alumni** Chapter

T THE Student Services Department, 2019 was exciting, challenging and rewarding. The year focused on enhancing the experience of current students as well as alumni through service-level enhancements. There was also a strong commitment towards ensuring mental health support services for those who needed it. Internally, the Department encouraged the development and empowerment of staff members and streamlined the mobilisation of resources to achieve the best outcomes.

In line with IMU's ASPIRE 2 targets, the Department identified several areas in which IMU and its alumni could collaborate, namely: student experience and recruitment; academic, research, community engagement; industry linkages; healthcare and entrepreneurship.

With these, the Department has set clear and focused plans to increase alumni participation and contribution and establish lifelong partnerships with its alumni base. The Department has also kept in touch with fresh graduates of IMU to ensure that they were supported by university in their growth.

The Department has identified new opportunities for alumni from partner schools to take part and contribute, such as the Enrichment Course for Medicine Students where alumni have a chance to contribute case studies and run sessions for students.

IMU-ALUMNI: AREAS OF COLLABORATION

STUDENT EXPERIENCE AND RECRUITMENT ACADEMIC HEALTHCARE INDUSTRY LINKAGES COMMUNITY ENGAGEMENT



Earthfest

The Department also established its Dental Alumni Chapter—the first ever alumni chapter—which will connect and further develop the dental alumni network.

TECH-ING IT TO THE NEXT LEVEL

Taking advantage of technology, the anticipated Student Portal was launched in August and subsequently entered into its second phase of enhancement. The portal is a gateway for students and provides many convenient platforms. Some of the key highlights are:

- Online results publication
- Online counselling appointment booking
- Online conference funding application
- Online Student Ambassadors
 Programme application and interviewing process
- New convocation centralised graduates invitation and RSVP system

In the same vein, the Alumni portal project kicked off this year to forge closer connections between IMU and its alumni. Expected to be launched by June 2020, the portal would offer various functions including alumni mentoring, a centralised announcement system, career support module, a platform for written and video stories as well as an enhanced data capturing and management system, and single touch reporting for higher management.

OPENING DOORS WITH SCHOLARSHIPS

2019 saw the first recipient of a new scholarship set up jointly by IMU, IHH and the Kuok Foundation. The Pantai Gleneagles Scholarship is targeted at students with financial difficulties who are looking to pursue studies in Medicine and Nursing programmes. The scholarship will open the door to higher education, as well as support students in both tuition fees and accommodation alongside personal, academic and career development. Muhammad Syakir Iman Shahrudilizani from ME2/18 was the first recipient of the scholarship.

IMU also received 10 students sponsored by MARA for the July intake of our foundation programme. In time, MARA will also be sponsoring them in the Medicine programme.

The Financial Aid Unit collaborated with the Self Development Unit to put together programmes and activities for sponsored students. In October, the units coordinated the very first engagement programme for new sponsored students, both local and international. This included briefing sessions and a time management workshop.



"Learning happens everywhere. We need to recognise opportunities and learn as much as possible, while still having fun. Always aim to explore untapped knowledge and work towards creating a better world for everyone."

— Saravanan Muthiah, Head of Student Services Hub

(For more on scholarships, see page 111.)

STUDENT AMBASSADORS

The 2019 Student Ambassadors team initiated 11 projects, including Earthfest, which was a highlight for the team. Earthfest was an initiative in June that encompassed environmental activities such as Earth Hour and tree planting exercises. Activities will continue to be rolled out throughout 2020.

MOVING FORWARD

In order to enhance our support services for students, we will be engaging focus groups consisting of students from various backgrounds. We have also improved communication among students and staff across the campuses by using more platforms such as the student portal, email, mobile signage stands and social media.

Starting in 2020, the Student
Town Hall will be held once every
quarter. This session will give the
university a platform to share
with the students all the latest
happenings and new initiatives by
the university, as well as gather
feedback from students, and most
importantly share actions taken
based on student inputs.



The Department has developed a holistic framework to address the needs of new students, existing students and alumni. With this in mind, the next five years will focus on:

- On-boarding experience for new students
- Professional development
- Welfare Support
- Mental and Physical wellness (This year, the Department secured approval to hire two additional clinical psychologists to support students.)

We will also be working to further enhance alumni engagement in the identified areas with a focus on increasing alumni presence on campus. This, we believe, will contribute to the alumni themselves, as well as to students, IMU and the communities around us.

AFLAME STUDENT AWARD 2019 WINNER



Brenda Chin Huey Zien received the Aflame Student Award 2019—an award that acknowledges a graduating student for his/her contributions to the community.

In her time at IMU, Brenda led the Kampung Sebir Education Project under IMU Cares which ran weekly guidance classes for children. She also organised public health screening services and public health awareness campaigns through the Asian Medical Students' Association (AMSA).

As the winner, she was awarded RM1,000 cash along with a certificate and the Aflame trophy. She was also given the opportunity to nominate a beneficiary to receive a donation of RM5,000. This year, the recipient of the donation was Refuge for the Refugees.

"I have come to see that we cannot—perhaps we do not need to—fix the entire world. I believe we do, however, need to actively play our part to seek to change as many 'individual worlds' as we can; to be as kind and intentional as we can, to do as much good as we can, to be as competent as one can be."

— Brenda Chin Huey Zien, winner, Aflame Student Award 2019.

ALUMNI ACHIEVEMENTS

Name	Programme	Achievement
Charmaine Lavinia	Nutrition and Dietetics	Won MDA Conference 2019: 1st prize Oral Case Study Presentation for Dietitian Category.
Jagjeet Singh	Medicine	Elected as an International Member of American Society of Plastic Surgeons.
Jamilah Abd Jamil	Master of Science in Public Health	Won MDA Conference 2019: 1 st Prize Oral Research Presentation (Free Paper on Online Web-Based Dietetics).
Joanne Chong Mei Sin	Nursing	Received the Belt and Road Scholarship from the HKSAR Government.
Lau Sie Chai	Pharmacy	Won 'Best Paper' for Basic Research on Tropical Medicine from BRTMA-Malaysia International Congress on Tropical Medicine.
Laura Soon Cheau Lin	Pharmacy	Best Poster Award, '5 th Asian Young Pharmacists Group (AYPG) Leadership Summit', held at Yogyakarta, Indonesia.
Lydia Lee	Medicine	Second Place for the 2019 MacJannet Prize for Global Citizenship.
Mak Kit Kay	Pharmacy	Received an award for Artificial Intelligence Molecular Screen (AIMS) Awards from Atomwise, USA.
Regine Li Wen Phua	Dentistry	Won a New Zealand Research Foundation Prize.
Taha Fathima Khan	Medicine	Received the Seiden Denny Scholarship for Children's Health from Harvard University.
Dr Rosdara Masayuni	Medicine	First Prize for poster: 'An Experience in Perak Para Sukma 2018 Medical Standby' at the Borneo Trauma Update 2019 and Trauma Moulage Competition.

Name	Programme	Achievement
 Ahmad Kousaibati Nor Heidi Izzat Nor Azman Toh Ee Syuen 	Medicine	At the Grand Final 7 th National Medical Student Basic Surgical Skills Competition 2019, held at Advanced Surgical Skills Centre, UKMMC: Nor Heidi Izzat Nor Azman (First place) Toh Ee Syuen (Second place) Ahmad Kousaibati (8 th place)
		Nor Heidi Izzat will receive the President's Medal at the College of Surgeons Academy of Medicine of Malaysia (CSAMM) Gala Dinner.
 Aravinthan Foo Chuan Yi Jerrold Teo Kor Win Sheng Lee Tzun Kit Leong Piem Jie Michael Lim Muhd Marsaid Muhd Mujibuddin Muhd Naim Mustafa Sharief Nur Illiana Richard Ngu Sandy Tan Sharon Chong Tan Chen Liang Yap Woei Cong Yong Foo Ken 	Medicine	 IMU sent three teams to the Intervarsity Clinical Emergency Quiz Competition 2019 organised by AIMST University. They emerged as: Champion: Team 1 (semester 9 students): Lee Tzun Kit , Mustafa Sharief, Leong Piem Jie, Jerrold Teo, Sandy Tan, Nur Illiana Second Place: Team 2 (semester 9 & 10): Richard Ngu, Aravinthan, Muhd Marsaid, Muhd Naim, Yap Woei Cong, Yong Foo Ken Fifth Place: Team 3 (semester 7 & 9): Tan Chen Liang, Sharon Chong, Muhd Mujibuddin, Kor Win Sheng, Foo Chuan Yi Michael Lim

Name	Programme	Achievement
• Nur Nabila Nasharuddin (ME1/16)	Medicine	Nur Nabila Nasharuddin won first place for her paper on the Healthcare System of Vietnam at the Malaysian World Health Assembly Simulation organised by Asian Medical Student Association (AMSA) IMU, in collaboration with AMSA Malaysia. The paper covered issues of malnutrition and stunted growth, premature mortality, HIV/AIDS, substance abuse and suicide. She was also awarded The Most Outstanding Delegate out of 73 delegates.
• Chang I Sheun (BM1/16) • Voon Shee Man (BM1/16)	Biomedical Sciences	At the 10 th Malaysian Symposium of Biomedical Science (MYSYMBIOS) held at Universiti Sains Malaysia, Kelantan from 27 - 28 April 2019: 1. Voon Shee Man won the Second Prize Poster Presentation for Non-communicable Diseases Category for her paper: 'Effects of amyloid precursor protein overexpression on RHO-GTPase pathway in neuronal cells'. 2. Chang I Sheun won the Third Prize Oral Presentation for Therapeutics & Diagnostics Category for his paper 'Melatonin induced autophagy via activation of AMPK and ERK pathways and inhibition of MTOR pathways in Jurkat cells'.
• Amala Muniandy	Pharmacy	At the 30 th International Invention, Innovation and Technology Exhibition 2019 (ITEX), IMU's research team consisting of two School of Pharmacy staff (Dr Lee Choy Sin, Prof Dr Mallikarjuna Rao Pichika) and one MSc student (Amala Muniandy), in collaboration with the Malaysian Palm Oil Board (MPOB), won the Silver Medal under the category of 'Medical and Health' for their research product: 'Poly(Glycerol Esteramide) (Hpgea), a Palm-Based Oleochemical Derivative Materials, as Excipient for Poorly Water Soluble Drugs'.

Name	Programme	Achievement
• Gursharon Kaur Gill (DN1/15) • Ng Hui Ru (DN1/15)	Nutrition & Dietetics	At the 25 th Malaysian Dietitians' Association conference at Hotel Istana Kuala Lumpur, 23 to 24 June 2019: • 1 st prize, Oral case study presentation (student category): Gursharon Kaur Gill. Title: Babies' Firs Bites: Weaning Diet for an Underweight Paediatrics Patient. • 1 st prize, Poster case study (student category): Ng Hui Ru. Title: Coordination of Care with Family Promoted Delivery of Optimal Nutrition in a Patient with Compromised Functional Status and Self-Feeding Difficulties.
• Gan Yee Hung (CM1/17) • Yong Yung Chien (CM1/18)	Chinese Medicine	 The TCM Camp & Olympiad Cup 2019 held from 3 May to 2 June at Xiamen University Malaysia (XMUM), Sepang, saw: Gan Yee Hung emerge as the first runner-up in the senior category. Yong Yung Chien emerge as the top ten in the junior category. Yung Chien's team crowned as champion of the competition in the buzzer round.
 Kanimolli Arasu Melissa Leong En Ying Teo Chun Yi 	Nutrition & Dietetics	 IMU students' accomplishments at the 34th Scientific Conference of the Nutrition Society of Malaysia: MSc thesis prize: Melissa Leong En Ying; Supervisor: Dr Megan Chong, Emeritus Prof Dr Khor Geok Lin. Topic: Vitamin D supplementation, parathyroid hormone (PTH) and plasma vitamin D response among Malaysian female adults: double blinded, randomized clinical trial of efficacy.

Name	Programme	Achievement
		 Undergraduate thesis prize: Teo Chun Yi; Supervisor: Dr Sangeetha Shyam, Dr Rohana Abdul Ghani. Topic: The effect of using different spoon size on postprandial glycaemia, hunger and satiety of overweight and obese subjects consuming brown rice. Young Researchers' Symposium 3rd prize: Kanimolli Arasu; Supervisor: Prof Winnie Chee. Topic: Are Malaysian children with low calcium intakes having low bone mass?
Team from ME2/14 (Batu Pahat): • Dev Ananthraj • Lee Ji Yan • Tan Sue Fen Team name: Dooit	Medicine	Team Dooit won 1 st place at the Intervarsity Surgica and Medical Competition (ISMC) 2019 held at Universiti Putra Malaysia (UPM) on Saturday, 29 June 2019.
Team from ME1/15 Jerrold Teo Tze Ren Lee Tzun Kit Mustafa Sharief Sharon Chong Tan Cheng Liang	Medicine	The team led by Dr Rosdara Masayuni (IMU alumni) was the only student team competing with Medical Officers in the Trauma Moulage Competition, organised by Hospital Tawau, Surgery Department and Emergency & Trauma Department. The team came in second in the theory examination and fifth in practical.

Name	Programme	Achievement
• Esther Kok (DT1/16) • Kan Ing Zheng (DT1/15)	Dentistry	 At the 2019 Asia Pacific Dental Students Association (APDSA) Annual Congress held in Thailand: Kan Ing Zheng won First Prize in the Oral Presentation, Scientific Research Competition (SRC) for his paper: 'Evaluation of anatomic variations of mandibular lingual canal by using Cone Beam Computed Tomography (CBCT) in the Malaysian population'. (Co-researcher: Sugunadevi A/P Rajendran.) Esther Kok won Second Prize in the Poster Presentation, Scientific Research Competition for her paper: 'Effect of Clinical Audit on the Quality of Molar Root Canal Treatment'.
Ng Qi EnTan Jun HongTan Vei Xhion	Dentistry	The three students won Second Prize for their Research Presentation titled 'Comparing nanoleakage and conversion in three adhesive systems' at the Malaysia-International Dental Exhibition and Conference (MIDEC 2019) organised by the Malaysian Dental Association. The competition was open to all and our winners were the only students in the competition.
Carmen Ching Hui YeeGan Soon JianLim Li Rong	Medicine	The three students emerged Gold Medallists at the Anatomy Viva and OSCE ("Medics intervarsity Academic Olympiad 2019") organised by AMSA Perdana University and AMSA University Putra Malaysia.
 Lee Khai Shien Kishen Kunalan Vilashini Saravanan Wong Yee Hua 	Pharmacy	The team of four won the Merit Award at the Intervarsity Medical Innovation Idea Challenge-MIIC 2.0 held at the UKM Medical Centre (UKMMC) on 30 March 2019. They developed the Blefaliner (Medicated Eyeliner) to treat blepharitis (inflammation of the eyelid). The students were encouraged to further develop, validate and patent the product.

Name	Programme	Achievement
• Kiranjeet Kaur (PS2/17)	Psychology	Kiranjeet Kaur was the only Malaysian selected to attend the Global Youth Summit 2019 in Zurich, Switzerland which took place in July. Of the 1,076 applicants, 60 were selected.
 Nur Nabila Nasharuddin (ME1/16) Raja Nur Shahkeerah Raja Kamarul Zaman (ME2/18) Team name: Making a Vas Deferens 	Medicine	At the Malaysian Youth Policy Symposium (held at Sunway University on 20 July 2019), the duo beat students from international universities such as King's College London, Imperial College London, University of Warwick and University of Nottingham to win the policy competition. Their policy paper was titled: Making National Immunisation Programme (NIP) Compulsory.
• BPharm Graduates	Pharmacy	IMU's recently graduated BPharm students won the Best Poster Award at the 5 th Asian Young Pharmacists Group (AYPG) Leadership Summit held at Yogyakarta, Indonesia from the 7 to 10 Novembe 2019. Their research poster was entitled, 'Green synthesis and antibacterial potential of Artemisia vulgaris extract in silver nanoparticles against wound bacteria'.

STUDENT AWARDS FROM EXTRA-CURRICULAR ACTIVITIES

For the year in review, our students continued to gain recognition in other areas.

Name	Programme	Achievement
• Malay Cultural Society	Traditional Culture	The team from the Malay Cultural Society won 3rd Place in the Traditional Dance Competition at the Festival of Colours of the World (FESCO) 2019 held at Universiti Teknologi Petronas (UTP), Seri Iskandar, Perak.
IMU Team 2 • Hor Cui Jing • Jocelyn Su Szion Ting • Ng Jia Jing • Sarannya Balakrishnan • Tan Qian Ying	Pharmacy	At the Young Entrepreneur Programme 2019 organised by the Entrepreneurship Officer of Malaysian Pharmacy Students' Association (MyPSA), the IMU Team 2 emerged as national champion. The team also won the Best Innovative Award. They presented the idea of "Mico Binky" which is a pacifier coated with Miconazole to treat oral candidiasis in children.
• Chew Ming Ann (Team captain)	IMU Netball Club	The IMU netball team won the MAPCU Netball Competition held at the Shah Alam National Sports Complex Panasonic. The competition is an annual event organised by the Malaysia Association of Private College and University Council (MAPCU).
Cheerleading team	IMU All Star Cheer Team	The IMU All Star cheer team emerged as the National Champion at the annual C3 (Charm Cheerleading Championship), organised by CHARM (Cheerleading Association and Register of Malaysia)
• Lee Ping Nee (Team captain)	IMU Dodgeball, Basketball, Athletic Club	The IMU athletic team who took part in the MAPCU Sports Carnival 2019 won four gold, four silver and four bronze medals.

STUDENT AWARDS FROM EXTRA-CURRICULAR ACTIVITIES

For the year in review, our students continued to gain recognition in other areas.

Name	Programme	Achievement
Amy Chong Siew PengKerry Lee Pui YiLim Yee Siew	IMU Taekwondo Club	At the SEGI International Taekwondo Poomsae Championship 2019, the Taekwondo club won the following medals: Gold: Lim Yee Siew, Silver: Amy Chong Siew Peng and Kerry Lee Pui Yi, Bronze (pair): Lim Yee Siew and Kerry Lee Pui Y
Daryl Wong Cheng LimKeshvien Inbashekaran	Board Games Club	The IMU Board Games Club were at podium finish (Medical Student Special Category Award) at the Perdana University International Medical Open Chess Tournament 2019.
 Ho Jo Yin Janice Low Shin Huey Kerry Lee Pui Yi Kirthik Geervan Visvanathan Lim Yee Siew Russell Tseu 	IMU Taekwondo Club	At the UKM-TAEKWONDOMAS Poomsae Carniva 2019, the IMU team brought back 7 medals: Gold: Tan Chen Hui Silver: Kerry Lee Pui Yi, Kirthik Geervan Visvanathan Bronze: Lim Yee Siew, Janice Low Shin Huey, Ho Jo Yin, Russell Tseu Ket Loong

EMPLOYEE ENGAGEMENT & WELLNESS

2019 Highlights

- Commitment to KOSPEN (Komuniti Sihat Pembina Negara) programme
- Health Promotion and Wellness Week 2019
- Awarded AIA Vitality's 2019 Malaysia's Healthiest Workplace
- Awarded AIA Vitality's 2019 Malaysia's Healthiest Employer

APPY employees bring about a productive workplace, and at IMU, we care deeply about our staff from lecturers and professors to administration and operations personnel. We strive to initiate programmes that cater to their wellbeing both in body and mind, ranging from health screenings and awareness talks to teaming up with external parties to enhance the quality of our workplace.

One of the most significant initiatives this year was the signing of the MoU with the Ministry of Health (MoH) in February. The MoU signalled the commitment of IMU to the KOSPEN (Komuniti Sihat Pembina Negara) programme. This was the first privateled partnership in the adoption of the MOH's KOSPEN programme.



Raising awareness of healthy dietary habits at the Health Promotion and Wellness Week

The partnership encompassed three focus areas:

- KOSPEN Komuniti (initiative for communities)
- KOSPEN PLUS (initiative for staff at workplace)
- KOSPEN Activ (initiative for individuals)

The objective was to increase awareness concerning risk factors of Non-Communicable Diseases (NCD) and create a conducive environment in various communities for better lifestyle habits.

KOSPEN was established by the MoH in 2014 to address the increase in NCD cases in the country. The objectives were to elevate the quality of life among Malaysians through community empowerment and involvement in public health programmes. The KOSPEN-IMU partnership was essentially a public health service transformation initiative to encourage IMU staff and students to adopt simple daily practices that would have a positive impact on their health.

HEALTH AND WELLNESS WEEK

The Student Services Hub had also successfully organised a health promotion week in conjunction with our inaugural Wellness Week. Held for five days in September, the theme was early detection and lifestyle action. The objectives of the Health Promotion and Wellness Week 2019 were to promote the importance of well-being among the community, raise the awareness of current health issues faced by Malaysians, advocate

and disseminate healthy dietary management knowledge and skills as well as to inspire and motivate the IMU community to practice a healthy lifestyle. We provided free screening for body mass index (BMI), blood glucose level and blood pressure. As part of our commitment under KOSPEN, we ensured that at least 50 percent of our employees underwent health screening.

BONDING OVER FUN

As part of our tradition over the years, the company staff trip has become an important engagement intervention to boost staff morale, commitment and teamwork. In July, 180 employees with 22 spouses in five groups were sent on a four-day, three-night trip to Yogjakarta, Indonesia. In a survey carried out later, the employees said they felt that the trip had enhanced their internal

networking, relationship building and motivation.

AWARDS AND RECOGNITION

One of the greatest achievements in our employee engagement and wellness programme was the winning of two awards under AIA Vitality's 2019 Malaysia's Healthiest Workplace. IMU was awarded "2019 Malaysia's Healthiest Workplace" and "2019 Malaysia's Healthiest Employer"



AIA Vitality's 2019 Malaysia's Healthiest Workplace and Employer awards

in the medium-sized organisation category. These awards were presented during the Malaysia's Healthiest Workplace Summit 2019 on 15 November 2019 in which our Chief HR Officer, Francis Wen, was a panel speaker for the discussion on "Enabling Health at Work".

This success was made possible through the collective effort and the teamwork of IMU Staff as well as support from the IMU Wellness working group which worked tirelessly to put various key initiatives in place for the benefit of staff and students.

These initiatives covered five core areas:

- Health risk assessment
- Lifestyle management to reduce health risks and encourage a healthy lifestyle
- Disease management activities to support staff with chronic disease conditions
- Smoking cessation
- Mental health and stress management

We had also successfully converted our canteen, Pandan Serai Café, into a healthy cafeteria, which won us the MyBESS Award by Ministry of Health, Malaysia in 2017.

OTHER INITIATIVES

In 2019, we established a Sports Committee to look into organising and managing sports activities for employees. Regular sports such as badminton, futsal, bowling and netball were carried out and annual participation in the Inter-Varsity Games were also encouraged. Competitions such as "Biggest Losers", and activities like jungle trekking were rolled out by our Wellness Ambassadors.

We have also started an enhanced IMU-Naluri HEAL Plus Programme in 2019 to help employees address chronic disease conditions. The IMU-Naluri HEAL Plus Programme began as a four-week group nutrition education activity known as IMU HEAL in 2018. This was revamped as IMU-Naluri HEAL Plus for measurable health outcomes. The Programme involves our own

Nutrition & Dietetics employees as facilitators, for example in face-toface group nutrition educational sessions. These sessions included integration of research evidence in the form of a structured meal plan proven to help Malaysians lose weight as well as the use of a mobile health app for digital health coaching and self-monitoring. The objective of this programme was to help participants lose weight and improve their blood pressure, blood cholesterol, blood glucose levels as well as their overall mental health.

THE WAY FORWARD

In the year ahead, we hope to get more employees to participate in our engagement and wellness initiatives. In order to drive change behaviours we have also put into action plans to create awareness among staff of our initiatives. This includes health talks, seminars, workshops, booth fairs and email blasts. We have also signed our employees up with BookDoc to reward employees who are active in accumulating their daily steps.

FEATURE

THE BEST SHOT AT LIFE

or everyone has the funds to see them through a medical degree. At IMU, scholarships and bursaries help deserving students to achieve their dreams and fly higher than they ever expected. Dr Chew Chien Yung (MBBS, 2003-2008) shares how the IMU scholarship helped him start his journey to a fulfilling career and taught him to always give his best.

Now an Occupational Health Physician at PETRONAS Bhd, Dr Chew Chien Yung was born and raised in Sarawak where his father—the family's sole breadwinner—was a secondary school teacher. Determined not to let his humble origins deter him from his dream of working in the medical field, Dr Chew ("Jack" to his friends) excelled in school and scored well in the STPM examinations, winning a place at a university in his home state to read Marine Biology.



Dr Chew Chien Yung (first from right)

"This was not what I wanted in life," he says. "I was totally not interested in Marine Biology—not to mention the fact that I didn't even know how to swim! I wanted to save lives and help people, especially the underprivileged. But because of my family's own financial situation, I couldn't enrol in a medical course at a private medical school, so I had to find another way to achieve my burning desire to be a doctor."

Dr Chew scoured the internet and local newspapers for notices advertising scholarships and educational loans that would help him get into a medical school. Finally, he chanced on an advertisement for a scholarship at IMU in Peninsular Malaysia. "I talked to family friends who had children studying in IMU, and I learned that it was one of the best private medical schools in the country. I printed out the

application forms and filled them up right there in my dormitory."

The scholarship application process was divided into two stages. First, Dr Chew had to submit an essay stating why he wanted to study medicine. Only after this essay was shortlisted would he receive a call to face an interview panel consisting of IMU Deans of Faculty as well as various consultants.

"Frankly speaking, this was one of the toughest interviews I have ever had in my life. I was competing with 500 applicants, and the interview took two or three hours. I was questioned by the best minds at the IMU: Prof Peter Pook, Prof Dato' Dr P. Kandasami, Dr Mei Ling Young, Prof Dr Paul Chen, and others.

"When I was informed that I had been awarded a scholarship to study in IMU, it took me half a day to digest the news. I looked up at the sky and said 'Oh God, what have I done to deserve this scholarship?' It was unbelievable."

Receiving the scholarship
"changed my life forever," Dr
Chew said. "I learnt to treasure
every moment of my life in
achieving my goals. I knew that
this scholarship was the best
chance I would ever get to pursue
my dream of becoming a doctor."
He quickly learnt exactly what
planning he needed to do for his
five years of study to stay on track
until graduation, and by force
of discipline he became good at
managing his time and planning
his activities.

"Overcoming the fear of losing my scholarship was one of the best things to happen during my student days."

The life of a medical student then was much simpler than it is today, Dr Chew says. There was a strong focus on academic work balanced by many outdoor activities organised on campus. "We were encouraged to be involved in corporate social responsibility from the beginning of our student lives, and there wasn't much distraction or screen-time compared to what students have today."

Gaining a scholarship to study at IMU "brought out the best in me and made me a better person especially in terms of focus and

results," he says. "The hardships
I faced during the scholarship
application process made me
learn that no matter how hard a
situation is, keep focused and keep
on going—keep on learning and
appreciating what life has to offer,
even in the smallest things. This
mental resilience is what brings us
far in our careers.

"My personal advice to prospective students seeking for scholarships from IMU is: research the field that you want to apply for. Have some basic understanding of what the field is all about.

Secondly, be sincere and tell the story from your own perspective; and finally: give it your best shot as if your life depends on it. All the best!"

"Research the field that you want to apply for. Have some basic understanding of what the field is all about. Secondly, be sincere and tell the story from your own perspective; and finally: give it your best shot as if your life depends on it!"

- Dr Chew Chien Yung

HEALTHCARE

IMU HEALTHCARE

2019 Highlights

- Embarked on Service
 Transformation for
 Excellent Performance
 (STEP) programme
- Construction on IMU
 Hospital proceeds on schedule

S PART of Malaysia's first and most established private medical and health science university, IMU Healthcare uses the latest in international standards and research incorporated with individualised care to provide quality outcomes for patients.

IMU Healthcare is an integrated healthcare facility offering five main services, namely Medical, Dental, Chiropractic, Chinese Medicine and Dialysis to its patients. From basic healthcare to advanced specialties and sub-specialties, IMU Healthcare provides comprehensive services to people of all ages and backgrounds. The team of clinicians with interconnected skills and experiences is focused on assisting patients with the knowledge of available treatment options that can help them to restore as well as maintain their health.



Brand positioning workshop

SERVING YOU BETTER

This year, the healthcare team have been focussed on service culture transformation through its Service Transformation for Excellent Performance (STEP) programme. The objective is to evolve current practices into a world-class customer service culture.

The team undertook STEP to match customers' current expectations of healthcare services and its delivery, to uplift IMU Healthcare's image and to enhance

its reputation as a service provider that is both skilled and warmly human. STEP was not organised to be just a training programme or a trend, but to be something that would enable service standards to be institutionalised and ultimately become 'the IMU Healthcare way'. A steering team was set up to develop the standards for adoption and to incorporate these into a training manual; the steering team will then oversee ongoing implementation both within the existing clinics as well as in the future IMU Hospital.

A STEP pocketbook is in production now—it includes service standards and practices such as basic courtesy standard operating procedures. In tandem with this service transformation, Healthcare staff have also been trained in '5S' methodology an organisational tool for the workplace based on the principles of: sort, set in order, shine, standardise and sustain. Other programmes include grooming skills and English proficiency skills development—the latter is with the British Council.



Construction on the IMU Hospital is on schedule

In line with enhancing its customerfacing services, several workshops, focus groups and quantitative surveys were commissioned on the Healthcare identity and brand positioning. Debates on vision and brand promise were carried out to ensure that IMU Healthcare was kept up-to-date and future-ready.

THE IMU HOSPITAL

With an aim to provide healthcare in a state-of-the-art environment, the upcoming IMU Hospital is being built adjacent to the International Medical University (IMU), and is expected to commence operations in 2021. Construction on the IMU Hospital continues according to schedule, with the fourth floor of the hospital under construction at the time of

writing. Procurement tenders were run in the second half of 2019 for Diagnostic Radiology machines as well as central sterilisation, Intensive Care and Operating Theatre equipment.

CARING FOR COMMUNITY

IMU Healthcare continued to play a role in the healthcare of the refugee community in the country with its collaboration with the International Organisation of Migration (IOM). The team worked together to help ensure the orderly and humane management of refugee resettlement and assisted in the search for practical solutions to migration problems. The service to IOM refugees included health screening and optimisation of health and nutrition statuses of

all malnourished children seeking asylum (as well as their families) and waiting for resettlement in the United States. Our paediatricians and dieticians provided expert advice in addressing the health challenges, sharing information and spreading best practices as well as facilitating child health-focused solutions for these families.

In 2019, we saw a total of 103 malnourished child refugees in the clinic from all over the country.

Some of them had multiple medical problems such as anaemia, gastroesophageal reflux, cerebral palsy, congenital heart disease, and neural tube defects on top of psychosocial issues.

THE WAY FORWARD

The year 2020 will see the continuation of the STEP programme and the ongoing construction of the hospital.

A major project involves the selection of the Healthcare Information System (HIS) which includes the electronic medical records and healthcare administrative functions. HIS will be the technology platform of the Academic Health System.

FEATURE

SUPPORTING STUDENTS THROUGH SCHOLARSHIPS

MU recognises that the cost of an education in healthcare today can place large pressures on households. In this respect the University is proud to support those who show outstanding academic results through the provision of scholarships and bursaries at Foundation in Science, Undergraduate and Postgraduate levels. These scholarships and bursaries are a vital means of helping outstanding young Malaysians to achieve their dreams and eventually to contribute back to society as conscientious and dedicated members of the Malaysian healthcare profession.

Foundation in Science scholarships of up to RM12,450 deducted over three semesters are available to top-scorers entering the Foundation in Science programme; and for those who successfully complete the programme and progress to any IMU undergraduate programme, a further bursary of 50 percent of the Foundation in Science fee may be deducted from the undergraduate tuition fee. Since 2017 to date (2020), a total of RM18.8 mil bursaries have helped 1,365 students.

At the undergraduate level, full (100 percent of fees) and partial (50 percent of fees) scholarships are available to Malaysian students applying for local degrees who demonstrate outstanding academic excellence, extra-curricular participation and leadership qualities; and a bursary of RM16,000 is available to eligible students in the Nursing programme.

Besides these, there is also the Pantai-Gleneagles Scholarship for undergraduates enrolling into the Bachelor of Medicine & Bachelor of Surgery or Bachelor of Nursing programmes. Launched in 2019, the Scholarship is open to Malaysian students from B40 and M40 households (i.e. households with incomes of up to RM3,000 and RM6,275 per month respectively). The Pantai-Gleneagles sponsors tuition fees for successful candidates while IMU provides accommodation support.

IMU has disbursed almost RM32 million in scholarships to 187 recipients since 2002.

Meanwhile, for Malaysian postgraduate students, alumni

FULL UNDERGRADUATE SCHOLARSHIPS

- Medicine
- Chiropractic
- Chinese Medicine
- Psychology
- Pharmaceutical Chemistry
- Pharmacy
- Biomedical Science
- Medical Biotechnology
- Dietetics with Nutrition
- Nutrition
- Nursing

PARTIAL UNDERGRADUATE SCHOLARSHIPS

- Chinese Medicine
- Psychology
- Pharmaceutical Chemistry
- Biomedical Science
- Medical Biotechnology
- Dietetics with Nutrition
- Nutrition
- Nursing

bursaries are available for eligible self-funding students (who are graduates of IMU) covering up to 25 percent and 15 percent of fees respectively for two different

groups of postgraduate degrees, while international students may seek bursaries of up to RM12,000 for taught postgraduate programmes.



SCHOLARS SPEAK Nadia Rashid (Medicine)

"I remember the day I received the news that I had been awarded an IMU Scholarship in Medicine. It was on my mother's birthday. When I showed her the email, I vividly remember her saying that it was the best birthday present that she ever had. As a daughter,



Foong Keng Wah (second from right)

I want nothing more than to see my parents' happiness and smiles, so I'm forever grateful to IMU for giving me the chance to do that. "I chose IMU because I always wanted to study in a diverse community. As a future doctor, I would have to care for patients who come from all walks of life, so being able to interact with those of different cultures and backgrounds was important to me. I also wanted a lot of clinical exposure, and I was drawn to the IMU curriculum (especially the Senior Clerkship) and its vision. Getting the scholarship not only relieved the

financial burden on my family but studying at IMU also had helped build my personal growth. I made friends from all over the world, and had the chance to learn from the best.

"My clinical mentor, Prof Dato' Dr P. Kandasami, always emphasised the importance of having a good portfolio and a clear goal. My dream is to be a surgeon one day and I'm well aware that it is a long, arduous and competitive journey. So, currently, while waiting for my housemanship, I am conducting my own research

with two batchmates under Prof Dato' Dr Kandasami's guidance at Hospital Tuanku Ja'afar, Seremban. I am also working as a Research Assistant in the National Institute of Health at Hospital Selayang."

Foong Keng Wah (Pharmacy)

"I thought I knew everything about what a pharmacist does but I was so wrong. I realised this when I joined IMU and was exposed to the various roles of a pharmacist and what it takes to be a great one early in the pharmacy programme, ensuring that we had the proper mindset and expectations. Pharmacists are also versatile and have plenty of career paths to pick from, apart from the more traditional ones.

"My parents have always believed that education is of upmost importance and they strive to provide the best for my siblings and I. Since IMU is known to be one of the leading private healthcare universities, IMU had always been one of my choices to pursue a degree in. I finally made the decision to enrol in IMU due to their excellent track record in producing top quality

25% BURSARY

- MSc in Public Health
- MSc in Analytical and Pharmaceutical Chemistry
- MSc in Molecular
 Medicine
- Master of Pharmacy Practice
- Postgraduate Diploma in Implant Dentistry
- Postgraduate
 Certificate in Health
 Professions Education
- Postgraduate Diploma in Health Professions Education
- Master of Health
 Professions Education

15% BURSARY

- MSc in Medical and Health Sciences
- MBA in Healthcare
 Management
- Postgraduate Diploma in Diabetes Management and Education
- MSc in Acupuncture
- PhD in Medical and Health Sciences

P.G. Lingeshan (Medicine)

"The fact that IMU provided me with a scholarship is a form of my support system [besides my mother Gnana Jothi, who raised me and my sister alone]. Consequently, knowing Prof Dato' Dr Kandasami and Prof Datuk Dr N. Sivalingam during my clinical years helped me to face my daily clinical-related battles and they have provided me so much mental strength to do better in medicine. This goes to the many other lecturers who played a huge role in my development as a doctor. Last but not least, good friends are tough to come by but I am grateful to have some who were willing to share their journey with me.

pharmacists and the chance for a full scholarship. Thankfully, I was awarded the scholarship by IMU and was offered a place in February 2015 intake.

"Several months after completing my finals, I joined the Ministry of Health to undergo my training as a provisionally registered pharmacist (PRP). I have been attached to several departments. It has been an eye-opening experience as the expectations are now different and I am able to truly see the impact of the roles that pharmacists play in a hospital setting. Although there is still plenty of new knowledge to acquire from the training, I am confident that IMU had prepared me with the relevant skills needed."



P.G. Lingeshan

"Everything happens for a reason. Start appreciating moments in our lives with your heart. Honour the souls who have sailed and will be sailing alongside with you through your life journey. You are meant to be doing what you are doing now. Seek beyond what your eyes show you. You are the captain of your ship—steer soulfully to your desired direction."



Hossein Jahedi

Hossein Jahedi (Biomedical Science)

"Receiving the IMU Scholarship, which I am extremely grateful for, allowed me to continue my studies without having to worry about the financial burden my family had to go through. And that's how my journey in IMU began!



Pichien Mongkolthanit

"Without doubt, IMU and its personnel, lecturers, mentors, and supportive university staff (special shout-out to the Student Services Department) played a huge part. I am thankful to you all! I can't count the number of times I approached them to bring up a problem, clarify an issue whether academic or personal, or even just rant about how stressed I was feeling. In the end, graduating from IMU was bitter-sweet; having to leave my IMU family was sad, but I feel excited moving forwards.

"Graduating with first class honours from IMU's three year honours programme, with a bunch of other achievements to my resume, has gotten me a full tuition fee and living allowance scholarship from University of Auckland in New Zealand to pursue my PhD in Biomedical Science."

Pichien Mongkolthanit (Medical Biotechnology)

"I am extremely grateful to have been awarded the IMU scholarship, which covered my full tuition fees. This allowed me to pursue my studies with a peace of mind, knowing that I was not financially burdening my family during my time in IMU. As part of the IMU scholars, I had the chance to meet brilliant minds from different programmes across the university! Everyone had their own experiences and aspirations to share, and it is amazing that we all share a common goal: to use our burning passion and sense of innovation in hopes of contributing to the betterment of healthcare.

"I'm grateful to IMU for providing the means for its students to not only pursue academic excellence, but to pick up or enhance their interests in co-curriculars as well. For me, it has been a wonderful experience to practise my craft in photography as part of the IMU Photography Club, and to serve as its president later on. This, along with other leadership roles I've committed to in my journey as a Student Ambassador has allowed me to grow to be a better leader. It has been a joy to have worked with many inspiring people here in IMU, and a privilege to have had the chance of learning from them.

"My hope is to one day contribute to the growth in the Malaysian biotechnological sector. My immediate plans are to further my postgraduate studies in one of the few other countries that are more biotechnologically advanced and, who knows where my path may

lead me. Malaysia is my home, and hopefully, I can help make it a better one. Wish me luck!"

Wong Pui Mun (Traditional Chinese Medicine)

"After completing my high school education, I decided to join International Medical University (IMU) as a Chinese Medicine student and entered into another milestone in my life. The reason for me to choose Chinese Medicine as my degree is that I wish to help more people who are in need. Just as simple as that!

"The moment I realised all my hard work paid off is when patients recovered after my treatment and the smile and thanks that appeared on their faces. I have never felt such happiness and sense of achievement before. It inspires and ignites my passion in doing better and working harder to help more people.

In addition, I would never be this successful and competent without the guidance of all the lecturers from Chinese Medicine. They are always helpful, responsible and patient in guiding us, encouraging us and nurturing us in becoming a competent physician of the future.

"My dream will never have been realised without the financial support from IMU. I am honoured to be awarded a partial IMU scholarship since the first year of my degree. I come from a single parent family and thus financial problems are the biggest obstacle to enter university. However, IMU has given me a chance to pursue my dream by providing me a partial scholarship throughout the whole journey of my degree course. It helped to reduce my family's financial burden and I was able to enjoy my university life with no worries."



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INSTITUTE FOR RESEARCH, DEVELOPMENT & INNOVATION

2019 Highlights

- Research funding up by 91 percent to a record high of RM7.42 million
- A total of 308 original and review articles published; more than 84 percent of which were in Tier 1 and Tier 2 journals
- **Five strategic alliances** established to enhance research capacity
- Established a Business Engagement
 Office to facilitate university-industry partnerships
- Launched the IMU Advanced
 Microbiology Collaborative Research
 Laboratory (AMCRL) to promote
 collaboration and tech transfer
- The country's first Al-powered medical R&D laboratory established with Fusionex International

HE two main functions of the **Institute**for Research,

Development and Innovation

(IRDI) are research, and commercialisation and support services. IRDI's five centres cover bioactive molecules and drug delivery, cancer and stem cell research, environmental and population health, translational research, and health professions education research. With our multidisciplinary and integrated approach to research into academic and global issues, we aim to continue making important contributions to the advancement of science. healthcare and education.

In the second year of our Strategic and Action Plan 2018-2023 we remained focused on the five main thrusts: accelerating research in diabetes and obesity, pancreatic cancer and infectious diseases; increasing research funding and productivity; attracting and retaining the best brains; increasing commercialisation activity; and improving business processes and ensuring compliance.

Additionally, we recognised big data analytics as an overarching enabler for building innovative bridges to link our priority research areas. This emphasis is reflected in several 2019 activities, notably our third IRDI Policy Dialogue and our partnership with Fusionex International (see details below).

INITIATIVES TO ACCELERATE RESEARCH

Ongoing efforts to accelerate research in 2019 included the IMU Innovation Challenge Grant, a programme launched in 2018 that offers grants for integrated, multiproject research.

We also continued the Translational Research Seminar



series, with various IMU Schools. Sponsored by biotech companies and academia, the series aims to foster talent, excellence and creativity in research. The seminars in this year's series attracted more than 1,000 attendees.

In 2019 IRDI's five Core Facilities continued to provide state-of-theart technology and consultancy to IMU and non-IMU researchers. Our newest Core Facilities are the Biostatistics Core Facility and the Microbial Repository Core Facility. We also created opportunities for IMU researchers to develop new skills with our continuing professional development (CPD) workshops. We organised eight CPD workshops, training more than 400 professionals.

STRATEGIC PARTNERSHIPS

In 2019 we established five strategic partnerships, each bringing unique opportunities in terms of research collaboration.

In February, IMU signed a Memorandum of Understanding (MoU) with the Ministry of Health Malaysia (MoH) to mark the first private-led partnership in the adoption of MoH's Komuniti Sihat Pembina Negara (KOSPEN) programme. The KOSPEN-IMU partnership encompasses three initiatives: communities, staff at the workplace and individuals. The aim is to increase awareness of noncommunicable diseases (NCD) and create a conducive environment in communities for better lifestyle habits.

Meanwhile, the joint research collaboration between IMU and the University of Southampton will look into the "Carriage rate of upper respiratory tract pathobionts

Total research funding secured, 2015 - 2019



Research publications in IMU, 2015 - 2019

YEAR	NO. OF SCOPUS-INDEXED JOURNALS	% OF PUBLICATIONS IN JOURNALS
2015	202	67.82
2016	237	69.20
2017	250	73.60
2018	256	82.35
2019	308	84.00

Revenue from testing and analytical services, 2015 – 2019

YEAR	REVENUE (RM)
2015	56,960
2016	71,883
2017	20,046
2018	63,144
2019	92,883

and their association with host metabolomics profiles and gut microbial composition in diabetic patients". The aim is to investigate the role of gut bacteria specifically in the development of diabetes mellitus among Malaysians.

In June, IMU signed an MoU with CryoCord Sdn Bhd, a leading stem cell bank in Southeast Asia, to collaborate in the field of medical biotechnology, in particular in stem cells and immunotherapy. Both parties will collaborate in R&D activities by sharing resources, providing cultural and intellectual enrichment opportunities to staff and students, and collaborating in community service activities to raise awareness on stem cells and its application within the community.

In July, IMU signed an MoU with the Southeast Asian Ministers of Education Organisation Regional Centre for Food and Nutrition (SEAMEO RECFON) to collaborate in research on nutrition and food safety training in Southeast Asia. Under the three-year agreement, IMU and SEAMEO RECFON will: strengthen medical and health research and development, jointly publish and present scientific

data, exchange research materials on nutrition and food safety, and conduct joint training in nutrition and food safety.

In September, IMU signed a Memorandum of Agreement (MoA) with Fusionex International to establish the country's first Alpowered medical R&D laboratory. The objective is to jointly develop research and training focused on innovation in data science and big data analytics, evidence-based decision making, and education and healthcare services.

RESEARCH FUNDING AND PUBLICATIONS

It was a banner year for IRDI with regard to research funding: we received a record RM7.42 million in external funding, internal funding and contract research.

In 2019 IRDI received RM2.4 million in external funding, a jump of 79 percent from RM1.34 million the previous year. Eight IMU researchers secured more than RM1.16 million in research funding under the Fundamental Research Grant Scheme (FRGS), bringing the success rate to 26.7 percent in 2019.

An IMU research team successfully secured the 2019 Sultan Mizan Antarctic Research Foundation (YPASM) Berth Support (£27,500) grant to apply molecular techniques in the study of fundamental ecological theories using Antarctic soil samples. IRDI also received the Hubert Curien Partnership-Hibiscus (PHC-HIBISCUS) international grant in 2019.

Internal funding from the University amounted to RM2.97 million in 2019—the most we have received so far. The funds were used to support faculty, postgraduate and undergraduate research.

Meanwhile, contract research for 2019 amounted to RM1.9 million (see 'Commercialisation and support services').

During the year in review, IRDI produced 308 Scopus-indexed publications, a slight increase from 281 in 2018. Approximately 84 percent of the articles were published in Tier 1 and Tier 2 journals.

IRDI POLICY DIALOGUES

In 2019 we again organised the IRDI Policy Dialogue, an initiative



launched the previous year with various organisations to address issues pertaining to national health. Through these dialogues we hope to gather ideas and opinions as well as garner support for proposed recommendations to policymakers.

Our first two dialogue sessions, organised in 2018 with the Malaysian Public Health Physicians Association (PPPKAM), led to recommendations on the control of sugar sweetened beverages and the inclusion of Pneumococcal Conjugate Vaccine (PCV) into the National Immunisation Programme (NIP).

In September 2019, we organised our third Policy Dialogue, themed "Healthcare Big Data Analytics: Reengineering Healthcare Delivery through Innovation". The dialogue explored opportunities and challenges facing the Malaysian and global healthcare industry in regard to the Fourth Industrial Revolution (IR 4.0). The dialogue was co-hosted with the Malaysia Digital Economy Corporation and Fusionex International during AI & Data Week Kuala Lumpur 2019.

COMMERCIALISATION AND SUPPORT SERVICES

In line with our expansion plans in commercialisation, we established a unit this year to coordinate business development activities.
Our new Business Engagement
Office (BEO) helps IMU researchers
secure projects and facilitates
patent filing and registration to
enhance income generation and
networking with external parties.

Initial results have been encouraging. In its first year the BEO secured two collaborative projects with Singapore-based groups amounting to RM1.9 million.

The first, with Q&M Dental Group, involves the development of a Clinical Decision Support System (CDSS) for the management of caries, periodontal diseases and missing teeth, using machine learning, knowledge representation and data mining led by IMU's School of Dentistry. The first phase started in March.

In the second project, with Abbott Nutrition (Abbot Laboratories, Research & Development, Asia Pacific Centre), IMU's Nutrition and Dietetics Department will conduct a controlled trial on individuals with Type 2 diabetes using Abbott's specific formula. The study is expected to start in 2020. The BEO has also filed two patent applications and is in the

process of filing a third. These are for: an antimicrobial agent for coatings developed by IMU and the Malaysian Palm Oil Board; a dental filler developed by IMU's School of Dentistry; and blood-free media for cultivation of bacterial pathogens with partial/obligate requirement of blood.

RESEARCH LABORATORY AND SERVICES

As part of the expansion of our lab testing services in 2019, IRDI restructured the Research Laboratory into three entities for testing services: the Microbiology, Analytical and Pharmaceutical laboratories.

The Microbiology laboratory, known as the IMU Advanced Microbiology Collaborative Research Laboratory (IMU AMCRL), was officially launched on 16 April. In fostering crossdisciplinary research on infectious diseases, the IMU AMCRL aims to maximise the synergy from microbial genomics, ecology and functional genetics in order to address challenges in infectious diseases in developing countries. Besides serving as a teaching/ research facility for microbiology research, the lab also allows IRDI

staff to undertake development of new testing services.

The Analytical and Pharmaceutical laboratories are currently in the pre-construction stage.

With regard to our testing services in microbiology, three new tests were developed in 2019 and are now ready to be offered for the detection of heavy metals in: (1) food, (2) cosmetics, and (3) herbs and natural products. The fourth test, currently being validated, is a test to enumerate microorganisms by Total Plate Count (TPC) in food samples.

The Research Lab also generated revenue totalling RM92,883 of which 59 percent came from testing services and 41 percent from rental of laboratory space and equipment.

OTHER HIGHLIGHTS

The year began on a solid foundation of research milestones achieved in at the end of 2018. In the fourth quarter of 2018, four IMU Semester 7 students from the School of Pharmacy (Er Jia Lin, Goh Pei Ni, Lee Chen Yuan and Tang Ying Jie) identified new



combinatorial therapeutics for pancreatic cancer using machine learning.

In 2019 our faculty continued to play key consultative roles at national and international levels. Prof Datuk Lokman Hakim Sulaiman was a Member of the WHO Pandemic Influenza Preparedness Framework Advisory Group in Geneva, and also the Accelerator Advisory Committee for India (AACI). At the Malaysian Ministry of Health, Prof Lokman chairs the Committee for Reduction of Demand for Tobacco and Tobacco Products.

Prof Azizi Ayob served as
Chairperson, IMU MyRA assessor
under the Ministry of Education
(MoE). He is also Research
Fellow at INFAD, University
Sains Islam Malaysia; Member
of the Board of Studies, Public
Health Postgraduate Programme,
Universiti Pertahanan Nasional
Malaysia; and Deputy President,
I-MEDIK (Association of Malaysian
Muslim Medical & Health
Practitioners).



MOVING FORWARD

In the year ahead we plan to continue forging mutually beneficial collaborations with existing and new partners.

New testing services are being planned for 2020 and 2021,

including six new tests for microbiology. At the midpoint of our Strategic and Action Plan we will take stock of progress thus far to ensure that research at IMU not only remains of the highest academic standards, but also leads to tangible improvements in people's lives.

SERVING THE COMMUNITY

COMMUNITY ENGAGEMENT

2019 Highlights

- Received two external awards for excellence in community work
- Produced two publications based on community engagement
- Raised a record
 RM330,000 for the
 Humanitarian Aid Fund
 through Chariofare 2019
- Reached over 965
 people through health
 screening programmes

OMMUNITY service is justified only when the benefits for the community are prioritised over what we can gain from community experience. With this mantra in mind, IMU University Community Engagement forged through the year with passion and drive to serve the community. In particular, the team focused on ensuring the sustainability of its activities.

The third United Nations Sustainable Development Goal (UN SDG) advocates the promotion of good health. In line with this, many IMU Cares activities were centred on encouraging healthy lifestyles and providing access to health services through health awareness projects and health education, health screenings and primary medical management in underserved communities. To ensure sustainability, outcomes and accountability were emphasised and documented.

ENGAGING WITH COMMUNITY

This year, our teams reached out to four homes for the physically challenged with a total estimated population of 615 residents.

An MoU was also signed to formalise collaboration between IMU Cares and the Latter-Day Saint (LDS) Charities to provide disability aids to organisations, including exercise equipment. Under this new programme, the Wheelchair Champion, a Provisioning System project is underway where IMU will be providing wheelchairs to the community in need. This initiative also supports capacity building among wheelchair users and their communities through rehabilitation exercises done while seated in a wheelchair as well as skills training on wheelchair use, care and maintenance.

The Beautiful Gate Foundation for the Disabled received a MotoMed machine—a motorised movement therapy machine from LDS Charities. Consequently, more than 70 percent of the home's residents participated in regular exercise using the sponsored equipment to develop their muscle mass.

We also marked World Alzheimer's Day 2019 with health screenings both for patients with dementia as well as their caregivers. The day's activities included Dental and Chiropractic screening and education by IMU alumni and students, followed by talks and discussions on different aspects of dementia by IMU Psychology faculty and students.

Throughout the year, our key activity of providing accessibility to healthcare beginning with health screening reached over 965 people. We provided screening in oral and general health, promotion of mental health as well as education on nutrition, chiropractic and Chinese medicine. As a result, these projects reported an increased awareness on early detection and health monitoring in addition to reduction in morbidity with early referrals and treatment among the communities screened. Publications—by researchers from IMU and the Ministry of Health





(MoH)—based on these projects are also underway.

During the year, the School of
Dentistry also reached out to
communities in need, focusing on
older people, urban poor families
and refugee children. One hundred
participants were referred to and
treated at the Oral Health Centre
by dental students. Costs were
supported by the Humanitarian
Aid Fund and Lion's Club Subang
Jaya.

In February and March students from the School of Health Sciences, BM1/17 cohort, successfully completed several community service projects as part of their module requirements. This included visits to welfare homes, awareness programmes on blood, blood-borne diseases and blood donations as well as the 'Upcycling of Hotel Linen' project.

COMMUNITY-ENGAGED RESEARCH

Scholarly and research activities provide evidence to drive sustainability of community projects. Three research activities under IMU Cares have been implemented:

 "Development and implementation of a health intervention model among pre-school children through "Do Right, Be Bright!" a multidisciplinary community-

- engaged initiative: A pilot study". Researchers from IMU—Dr Sobia, Prof Khoo, Dr Sumaira, Dr Snigdha, Dr Ekta.
- "Prevalence and risk factors of pre-diabetes and the efficacy of community-based behavioural interventions at Desa Petaling KOSPEN site". Researchers from IMU—Prof Datuk Dr Lokman HS, Prof Khoo SP, Nur Alia J, Dr Elaine Chan WL, Dr Sangeetha S; from MoH—Dr Rosnah R, Dr Juliena MZ, Dr Suzana A, Dr Sri Rohen DTM, Dr Khairul HA.
- "The experiences and the coping strategies of adult children as primary caregivers of Alzheimer's disease parents in Malaysia". Researchers from IMU—Dr Zahra FK, Dr Teoh GK, Ong Shi Joe, Khairul Nisya.

FUNDRAISING THROUGH CHARIOFARE 2019

Despite the cancellation of the annual Charity Run due to a high air pollution index (caused by the haze), Chariofare 2019 carried on with its fundraising carnival in September. This year saw a significant rise of 50 percent in student and staff participation rates. The Chariofare raised

a record RM330,000 for the Humanitarian Aid Fund through the overwhelming support and efforts of IMU students and staff, as well as sponsors. The funds will be used to reach out to aid-deserving underprivileged communities in the areas of healthcare, education and disaster relief.

OTHER KEY ACHIEVEMENTS

Awards. Two external awards were received for community work. The Mac Jannet Award (2nd Prize) was awarded to Dr Lydia Lee Sze Teng for her IMU Cares Team's contribution to the impoverished community in Kapar, Selangor, which has now become self-reliant and sustainable. The Outreach Multicultural Scholastic Award from University of North Texas was awarded to Dr Zahra Fazli Khalaf for her involvement in IMU Cares activities in the area

of sexual health education for underprivileged children at Dignity For Children (DFC) and sexual health education for disabled young adults at Bloomer's.

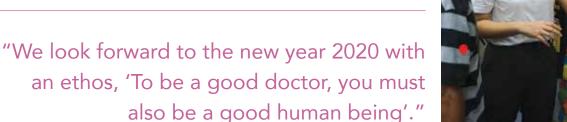
Publications. Two publications based on community engagement were produced by IMU faculty, while four faculties presented their IMU Cares projects at international conferences.

ADVOCATES FOR COMMUNITY ENGAGEMENT (ACE) PROGRAMME

This is a co-curricular programme initiated by the IMU Community Engagement team to develop leadership in community engagement among the students. The programme has received the first batch of student participants and will formally begin in January 2020.

MOVING FORWARD

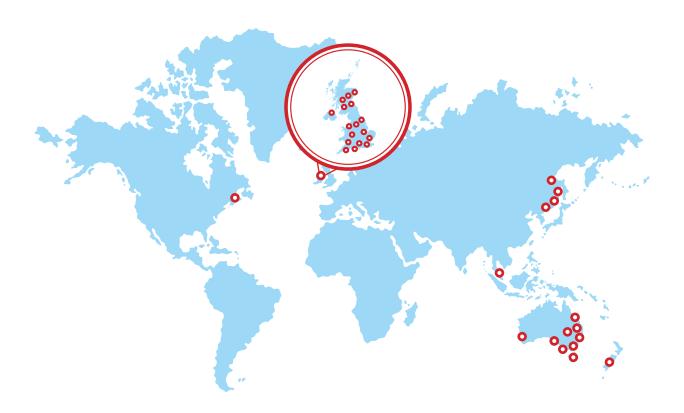
In the year ahead, IMU Cares will continue to instil the UN SGD as our target for community engagement. We will maintain space for clarification, open dialogues, refinement over the process to attain the SDG, and provide relevant training with the aim of shaping community projects to be sustainable and impactful. We hope to continue to develop community-engaged research and institutionalise community engagement across the university as well as balancing student-centred service learning with community-centred service learning.



— YBhg Tan Sri Dato' Dr Abu Bakar Suleiman, Chairman, IMU Group



PARTNER UNIVERSITIES



IMU's pledge to offer only the best educational experiences for its students extends far beyond its borders. With a secure and long-established global network of 32 partner institutions of higher learning, IMU is committed to opening doors to education and training opportunities outside Malaysia via our credit transfer programmes. These collaborations

in health professional education cover most of the undergraduate programmes offered at the University which makes the dream of studying overseas more accessible to Malaysians. Similarly, IMU is unique in fostering and establishing collaborations for the training of practitioners in complementary therapies. Building and developing these worldwide

relationships also strengthens the University's ability to secure global talent, which in turn helps attract the brightest and the best to come and study at IMU. Since 1995, IMU's Partner Schools have conferred degrees on more than than 3,000 individuals. Having established itself as a household name in Malaysia, IMU is well on its way to international recognition.

AUSTRALIA









































UNITED KINGDOM

































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