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PHARMACYCONNECT

NEWSLETTER

September 2020

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DEAN'S MESSAGE

Associate Professor Dr Mogana Sundari Rajagopal, Dean

The Fourth Industrial Revolution is changing the technological landscape of the healthcare industry and personal care sectors, where both pharmacists and formulation scientists will play a pivotal role. There is a great demand for innovative and dynamic pharmacists and formulation scientists in this field. Getting an ideal start has never been more important.

The Faculty is proud to announce the soon-to-be-launched, industry targeted undergraduate programme, Bachelor of Formulation Science (Honours) and a full research postgraduate programme, MSc (Pharmaceutical Sciences).

The Bachelor of Formulation Science (Honours) is the FIRST programme in Malaysia where graduates will be experts known as formulation scientists. They will create and develop novel formulations and delivery systems for new and existing products. These individuals will collaborate with other R&D professionals to explore and test proof of concepts and introduce novel formulation concepts into practice. They will also lead in the development and commercialisation of advanced formulation technologies and products. The graduates will also be able to provide subject matter expertise in technology transfer, product registration, and process scale up for the above-mentioned concepts. These individuals will be skilled in the conception and development of formulations for the agricultural, pharmaceutical, nutraceutical, cosmeceuticals, herbaceuticals, personal care or related industries.

The Master of Science (Pharmaceutical Sciences) programme of FPS is the first Master's programme in Malaysia offering specialisation in the multidisciplinary areas of pharmaceutical sciences. Graduates of this programme will pursue advanced research leading to development of safe and effective medications. They will apply scientific concepts from multiple disciplines such as chemistry, physiology, pharmacology, microbiology, pharmacokinetics, pharmaceutics, formulation science and clinical pharmacy. There is a huge demand for such professionals in the pharmaceutical industry, which is growing by leaps and bounds.

FPS ensures that world class teaching and research experience are provided to the students by an experienced team of professors and academicians who have strong ties with leading players of the pharmaceutical industry. Take the opportunity to be mentored by them and fulfil your potential in a dynamic and lively environment that encourages exploration and discovery.

Do stay tuned for the launching of these programmes and further details in our next newsletter!

Inside this issue:

PHARMACYCONNECT newsletter is a bimonthly publication of the Faculty of Pharmaceutical Sciences (FPS), UCSI University, Kuala Lumpur.

UCSI University®
FACULTY OF PHARMACEUTICAL SCIENCES

FPS ANNOUNCES FIRST PhD GRADUATE

FPS's PhD (Pharmaceutical Sciences) programme has produced its first graduate, Dr Marwan Maki. The achievement is doubly noteworthy as it falls within four years of the launch of the programme in 2017.

Dr Maki's doctoral thesis focused on the development of bioactive peptides encapsulated in nano-carriers for targeted drug delivery against cancer.

Dr Maki said that he was thrilled to be the first PhD graduate of FPS for his thesis: Preparation and Evaluation of Recombinant Growth Factor-Loaded Nanoparticles for Mucosal Delivery.

Furthermore, he said "My PhD research was about the preparation and evaluation of bioactive peptides encapsulated in nano-carriers for targeted drug delivery. In which, we have designed a new class of a potential anticancer complex to improve the efficacy of mTOR inhibitor; everolimus. The developed complex possesses greater cytotoxic activity than everolimus by inhibiting the growth, reproductive integrity and mobility of colorectal cancer cells."

"I am grateful that I had the opportunity to work under the guidance of Dr Palanirajan Vijayaraj Kumar for my PhD degree at UCSI University. He is a leading scholar in Nanotechnology and targeted drug delivery. His expertise, as well as kindness and detailed guidance, played critical roles in the success of my doctoral research project," he said.

"My fabulous supervisors inspired me to recover from setbacks and keep advancing my research. I am lucky that 2017 was the year FPS launched PhD programmes! I am grateful to have had this incredible honour!" he said.

Finally I will be always thankful to all who contributed to my PhD research in one way or another and I would like to extend my appreciation especially to Dr Cheah (Faculty of Medicine and Health Sciences, UCSI University), Dr Lionel (Faculty of Applied Sciences, UCSI University) and Dr Manogaran (FPS) for their support and insightful suggestions. Reach out and fulfil the mission 'Hands to serve, Hearts to love'' he said.

While telling about his decision to pursue his PhD, Dr Maki said that he was grateful that he decided to pursue the PhD: "However, although my PhD journey had many joys, it was also very challenging."

CCP @ FPS

Complementary competency programme (CCP) titled "How safe are your medicines" was conducted on 27 April 2020 by Por Choo Shiuan, Lecturer from the Department of Clinical Pharmacy, FPS. A total of 256 participants registered, and 127 participants attended the CCP. The programme was designed with the objective to increase public awareness on the safety and side effects of medicine and educate the public on ways to identify the authenticity of medicine.

From a survey conducted in 2013, almost 5% of medicines sold in Malaysia was fake. Serious concerns have been raised in the country on the emerging issue of fake medicine. In this CCP, Por shared several ways to identify the authenticity of the medicines. "In Malaysia, the Meditag Hologram and registration number on the packaging medicine can be used to check whether the medicine is fake," said Por. In this era of technology, information of medicine can be obtained from the internet with a few clicks. However, misleading information available online may put the patient's health at risk. Therefore, pharmacists play a vital role in disseminating correct information regarding the use of medicines.

STAFF ACHIEVEMENT: BEST RESEARCHER AWARD

Congratulations to Assistant Professor Dr Ashok Kumar Janakiraman from FPS, UCSI University for being nominated by the VDGOOD committee members for the Best Researcher Award for the year 2020.

He was conferred with the award during the 7th International Scientist Awards on Engineering, Science and Medicine to recognise his contribution towards pharmaceutical research.

The virtual award ceremony was held on 4 – 5 July 2020 at Coimbatore, in India and was organised by the VDGOOD Professional Association.

Dr Ashok has more than 12 years of research experience in pharmaceutical product development. His focus has been on solubility enhancement for poorly soluble drugs through various innovative formulation approaches.

DID YOU KNOW?

Pharmacy was separated from medicine as a distinct specialty way back in 1240 CE.

STAFF SPOTLIGHT: LEE MING TATT

Dr Lee Ming Tatt is an Assistant Professor in the Pharmaceutical Biology Department of FPS.

He completed his PhD in Physiology from University Putra Malaysia in 2013 and started his academic career at FPS, UCSI University also in 2013.

He has been associated with FPS ever since and has been actively involved in research and academic administration.

He served as the Head of Postgraduate and Research of FPS from 2015-2017, during which he founded and successfully launched the PhD (Pharmaceutical Sciences) and Master of Clinical Pharmacy Practice programmes.

Dr Lee has lately been concentrating on his research projects. During his postdoctoral fellowship at National Taiwan University from 2018 - 2020, Dr Lee published several high-impact papers on novel neuropharmacological and neurobiological signaling of chronic pain, addiction, and other preclinical models of neuropsychiatric disorders.

Dr Lee has recently rejoined FPS and will continue to contribute to the research output of FPS.

STAFF ACHIEVEMENT: WEBINARS

Kudos to Assistant Professor Dr Dharmendra Kumar for being invited to deliver a talk on the topic "Recent Advancement of Natural Product for Antineoplastic Agents." in the Virtual Faculty Development Programme on "New Paradigm in Pharmaceutical Education and Research", organised by Glocal University, India on 25 June 2020.

Dr Dharmendra was also invited to deliver a talk during PharmTech Web Series – 2020 organised by Chitkara College of Pharmacy, Chitkara University, India on 19 June 2020. He spoke about the role of natural product in drug discovery and development.

Both the talks were well-received and much appreciated by the students and staff of the respective Universities and external participants as well.

ESTABLISHMENT OF PICE @ FPS

Continuing in the direction of promoting close engagement with industry, community and enhancing international academic and research collaborations, FPS has established the Department of Praxis, Industry, and Community Engagement (PICE) under the aegis of Centre of Excellence for Research, Value Innovation and Entrepreneurship (CERVIE), UCSI University. Praxis is the trademarked approach of UCSI towards an education that advocates the application of theory into practice. Above all, this approach seeks to connect students to today's world of end-to-end responsibility, not to insulate them from it. Thus, PICE at FPS aims promote and strengthen the praxis approach at the faculty level.

PICE functions as the faculty's referral center for industry and community engagements as well as establish strategies such as student/staff industry attachments, inviting leading experts to UCSI for knowledge sharing and cooperation.

PICE will intently coordinate, promote, and enhance the visibility of the university's engagement with the industry and the community sectors. PICE is looking forward to extending the industry and community linkages as much as the academia. This would certainly increase the opportunities for students and staff of the faculty to acquire practical knowledge, understand the current state and needs of the industry and community.

This will also reduce the existing gap between the classrooms and the industry/community.

Additionally, this will also facilitate the convergence of new ideas.

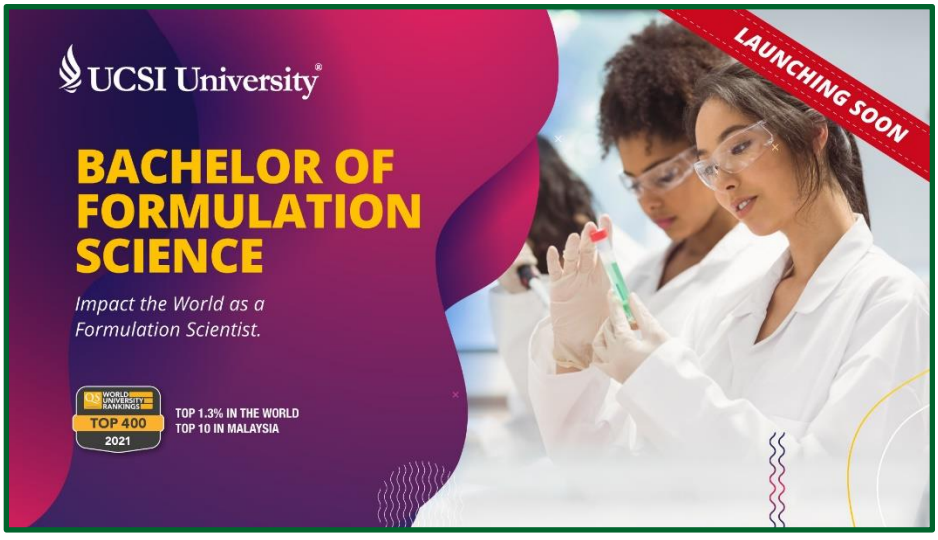
Assistant Professor Dr Ashok Kumar Balaraman has been appointed as the Head of PICE, while Assistant Professor Dr Lee Ming Tatt, Melbha Starlin Chellathurai and Muhammad Ahsan Iftikhar Baig have been appointed as the faculty members of the PICE team.

NEW UNDERGRADUATE DEGREE PROGRAMME @ FPS

Did you know that FPS has recently obtained approval from MQA to launch a new undergraduate degree programme i.e. Bachelor of Formulation Science!

The salient features of the **Bachelor of Formulation Science (Honours)** programme are as follows:

- First formulation science degree programme in Malaysia
- Six weeks intensive PRAXIS training in top industries
- Translate creative ideas into innovative products
- Research opportunities at world top university



ALUMNI SPOTLIGHT: HEAH CHIA MING

Heah Chia Ming graduated from UCSI University in 2013 with a BPharm (Hons) degree. He pursued his pharmacy career as a regulatory pharmacist, currently serving as a Senior Assistant Director at the Malaysia National Pharmaceutical Regulatory Agency (NPRA).

A medical product must meet stringent requirements set by Malaysian laws and regulations before it can be marketed. As drug custodians of the country, pharmacists play a vital role in safeguarding the public from poor quality medications. With this goal in mind, Heah has set very high standard for himself in his career.

Heah's main task in NPRA includes ensuring the safety and quality of medications for publics' use as well as making sure the products comply to established standards. Being in regulatory field, He realized that there are many substandard medicines in the world. Regulatory pharmacists are among the frontliners in ensuring public can access quality and effective medications. He takes pride in contributing to patients' safety by preventing poor quality medicines from entering the market.

FPS is proud to have Heah as its alumni and wishes that he continues to bring glory to the profession!

STUDENT ACHIEVEMENT: YAU XIN YI

Congratulations to Yau Xin Yi for publishing two research articles from her postgraduate research project. Another article of her is still under review and most likely to be published soon.

Xin Yi is a postgraduate student pursuing MSc in Pharmaceutical Chemistry at FPS, UCSI University. She is an alumna of BPharm (Hons) from the same university.

As part of her postgraduate research project, she has worked under the supervision of Assistant Professor Dr BVS Lokesh, on the development of sophisticated non-destructive analytical method for a series of antibiotics.

She has recently completed her provisional training for Provisionally Registered Pharmacist (PRP) at FPS, UCSI University along with her MSc.

Hereafter, she plans to pursue a career as an industrial Pharmacist. FPS wishes all the best to Xin Yi for a bright future and glorious career ahead.

DID YOU KNOW?

A banana has approximately 30% of your daily recommended intake of vitamin B6. Vitamin B6 helps the brain produce serotonin, which is considered a mood stabiliser.

HIGH IMPACT PUBLICATIONS @ FPS

JPHSR Journal of Pharmaceutical Health Services Research

Short Communication

Barriers and facilitators to provision of written consumer medicines information among community pharmacists in Malaysia: a cross-sectional study

Omotayo Fatokun*, Xin Yi Mooi, Osama Helweh and Mogana Rajagopal

Abstract

Introduction

Methods

Heliyon 6 (2020) e04856

Contents lists available at ScienceDirect

Heliyon

journal homepage: www.cell.com/heliyon

Research article

Docking based screening and molecular dynamics simulations to identify potential selective PDE4B inhibitor

Mayasah Al-Nema, Anand Gaurav*, Vannajan Sanghiran Lee

ARTICLE INFO

ABSTRACT

1. Introduction

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A SNEAK PEEK INTO FPS

FPS is soon going to launch a new **Master of Science (MSc) (Pharmaceutical Sciences)** programme. The salient features of this programme are as follows:

- Full research mode postgraduate programme
- Research in multidisciplinary area in pharmaceutical sciences
- Pursue your postgraduate studies while working
- Research attachment in world top universities and industries
- Conversion to the Doctor of Philosophy (Pharmaceutical Sciences) after one (1) year of study in the programme.

FPS offers both undergraduate and postgraduate programmes with the emphasis on serving the community.

<u>Doctoral Programme</u>
- Doctor of Philosophy (Pharmaceutical Sciences)

<u>Masters Programmes</u>
- MSc Pharmaceutical Chemistry
- MSc Pharmaceutical Technology
- Master of Clinical Pharmacy Practice
- MSc (Pharmaceutical Sciences)*

<u>Degree Programmes</u>
- Bachelor of Pharmacy (Hons)
- Bachelor of Formulation Science (Hons)*

<u>Foundation Programme</u>
- Foundation in Science (Pharmacy)

*Launching soon

We are located at:

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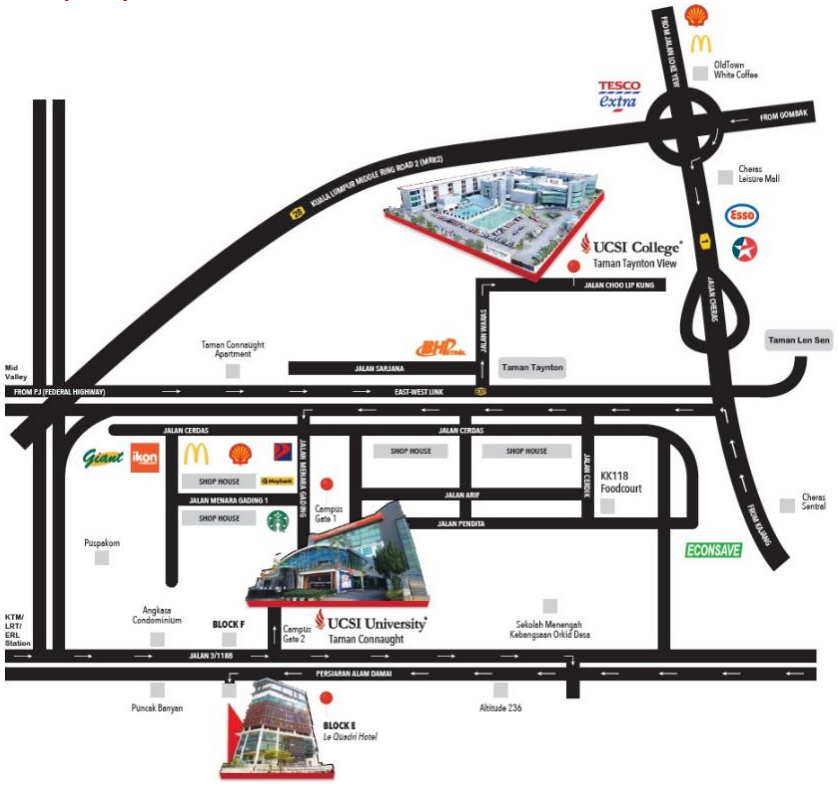

Contributors:

- Assistant Professor Dr Ashok Kumar Janairaman
- Assistant Professor Dr Lee Ming Tatt
- Assistant Professor Dr Ashok Kumar Balaraman
- Dr Marwan Maki
- Yap Chuan Sheng
- Por Choo Shiuan
- Assistant Professor Dr Dharmendra Kumar
- Dr Muhammad Junaid Farrukh

UPCOMING EVENTS @ FPS

- Interview of Dr Mogana Sundari Rajagopal on Astro News Channel 231 (Tamil) on 23 September 2020 at 8.30pm.
- Complementary Competency Programme on “ATIR and FTIR Spectroscopy for Science and Engineering Students” by Dr Shaik Ibrahim Khalivulla and Dr Gabriel Akyirem Akowuah on 13 October 2020.
- Know Your Medicine Talk Series titled “Pharmacovigilance: Bridging Safety Data to Clinical Practice” by Ng Yi Lin (Drug Safety Lead, Roche Malaysia)
- The MPS-UCSI Pre-convention Refresher Course on “Compounding of Cream, Gel, Capsule and Syrup” on 20 October 2020.
- Complementary Competency Programme on “Immunomodulators and Their Effects on Immunity” by Dr Dharmendra Kumar on 23 October 2020.

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