

On the forefront of **drug** development research

> Universities are responsible for nurturing the skills for research

EARLY anti-cancer drugs that have been known to save millions of lives were first derived from plants like the pacific yew tree and periwinkle plants. Drug development—especially research studies that involve natural resources—is an exciting process that necessitates the training of young minds. And it is in university laboratories that new drug breakthroughs have been discovered, often with concerted team efforts of postgraduate students.

Under UCSI University's Faculty of Pharmaceutical Sciences, research is an important feature of the faculty's postgraduate programmes, namely the MSc in Pharmaceutical Chemistry and MSc in Pharmaceutical Technology.

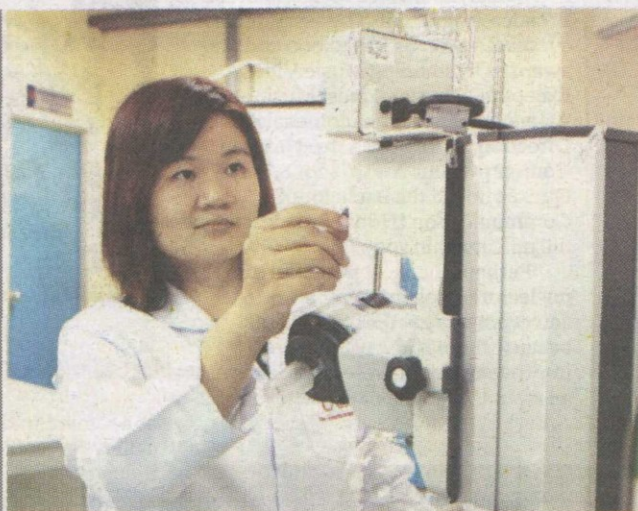
"Young minds and talents are the future of drug discovery and universities are responsible for nurturing the proper skills for research in students," said the faculty's dean, Associate Professor Dr Yeong Siew Wei.

"Research begins with an idea and that idea must reach an outcome, through the guidance of experienced lecturers," she explained. "This is what a postgraduate programme with research (modules) should place emphasis on."

The fact that the faculty strongly encourages interdisciplinary research activities—immersing its students and lecturers in this area—is evidenced by its many collaborative research efforts.

At present, the faculty's academicians are conducting several research projects. One of them focuses on the formulation and characterisation of novel bioconjugated polymeric antibiotic nanoparticles and is funded by the \

Master's student Quah Suk Yen in the midst of her research project in the university's pharmacy laboratory.



university's Centre of Excellence for Research, Value Innovation and Entrepreneurship (CERVIE).

The research aims to develop bioconjugated nanoparticles, improve the efficacy of antibiotics by reducing its loading dose and increase the duration of antibiotic action.

Funded by the Health Ministry, another ongoing research project studies the effects of patient-focused medication adherence in diabetes, and is a collaborative effort between Yeong and the Pharmacy and Internal Medicine Departments of Hospital Kuala Lumpur.

It goes without saying that such projects enable both lecturers and students alike to keep abreast of the latest industry developments. But while it is clear that research is a defining highlight of the faculty's master's programmes, it is certainly not the only key feature of the courses. Both programmes also offer a mixed mode structure that focuses on coursework and research

components.

Students with various science backgrounds—biotechnology, chemistry and biochemistry, among others—have also found the programmes "adaptable and relevant, with flexible class schedules suitable for young working adults".

As the programmes' core focus emphasises on analytical methods and other science-related elements instead of specific areas—such as drug formulation and development—there is much that science students are able to relate to.

By consistently equipping its pharmacy students with the essential hands-on experience, in all aspects, the faculty continues to contribute positive efforts and skilled graduates to Malaysia's pharmaceutical landscape.

For more information on the university's programmes, visit its Open Days on Dec 22 and 23 or drop by for course counselling from Monday to Saturday (9am – 6pm).