Bio-tech in a tech-savvy world

The Education Ministry is emphasising on the need for more science stream candidates, as statistics reveal that only 20% of all secondary school students are enrolled in the science stream.

To achieve its vision of transforming Malaysia into a high-income nation by 2020, the Government is roping in assistance from both public and private universities to nurture quality graduates who are well-versed in the fields of biotechnology, medicine, IT and science.

UCSI University is taking steps to turn this probability into reality.

"In line with the Government's initiative, we launched a series of fun yet educational science-themed activities last year to foster a passion for science among secondary school students," said UCSI Faculty of Applied Sciences dean associate professor Dr Hon Wei Min.

"One of the main highlights included a workshop titled 'Putting U in CSI: The Junior CSI Agent', where over 40 secondary school students were asked to conduct an 'investigation' on Lady Gaga and her infamous meat dress, and to discover where the meat came from, or more sinisterly, who it belonged to."

"Students were enthusiastic being part of the 'forensic team'," she said, explaining that the case study revolved around the fictitious story of Lady Gaga, who had been accused of murder to obtain the meat for her dress.

"The workshop introduced students to various biotechnological forensic techniques - like DNA fingerprinting, DNA extraction and Polymerase Chain Reaction (PCR) - and forensic tools.

"This way, participants were able to develop greater understanding of biotechnology and what it's really about," she adds.

This year, secondary school students can expect three interesting activities from UCSI - a nutrition workshop, biotechnology workshop and another much-awaited 'Putting U in CSI: The Junior CSI Agent Workshop. The biotechnology workshop will familiarise students with the use of a microscope.

Learning more, studying less

The hands-on activities is an example of the faculty's holistic learning and practical research approach - in line with the university's Praxis approach of applying theory to practice.

"With this approach, our students apply what they learn on a daily basis, even outside the classroom," said Dr Hon, adding that co-op placements were also arranged for students to gain real-life industry exposure.

"Biotechnology is a vast field and I believe that such projects will allow students to explore their research interests until they discover one that they will like to turn into a career," she said.

Dr Hon also stressed the importance of researchers being well-versed in both knowledge and scientific methods.

The faculty's top Biotechnology student Khong Mei Li, who bagged the top honour for her presentation at the 23rd Intervarsity Biochemistry Seminar at Universiti Malaya, is an example of a student who is committed to research.

In her presentation, Khong identified two toxin genes from the moon jellyfish that bore similar structural and functional similarities to toxins of the box jellyfish.

Her research aimed to discover if jellyfish toxins can be used as a cytolysin, toxins responsible for cell destruction - for the development of new anti-cancer strategies.

Khong is now aiming to pursue a PhD to further her research on jellyfish.

For details, call UCSI at 03-9101 8882 or e-mail ucsonlineenquiry@ucsi.university.edu.my.

Alternatively, drop by its Kuala Lumpur campus on March 30 and 31 (9am to 6pm) for its Open Day.

Scholarships are also available to deserving students via the UCSI University Trust.
Secondary school students conducting an experiment during the ‘Putting U in CSI: The Junior CSI Agent’ workshop.