

Customised approach to health and medical care

UCSI University's (UCSI) medical students received a glimpse of the future of healthcare when visiting professor Dr Gordon Williams spoke about precision medicine, an emerging treatment model that proposes the customisation of healthcare with medical decisions, practices and products tailored on the basis of the patient's genes.

The Harvard Medical School Professor of Medicine, and Brigham and Women's Hospital's Hormonal Mechanisms of Cardiovascular Injury Laboratory director said: "The cost of healthcare continues to increase around the world and we need to be more specific in terms of treating and preventing the illnesses that affect us.

"Clear treatment guidelines don't exist and the one-size-fits-all treatment model is time-consuming, costly, exposes patients to unnecessary side effects and is often clinically ineffective. We need to give what the population needs both in terms of appropriate care and feasible costs."

Precision medicine uses the patient's genetic profile to identify

the multiple genetic variations that influence how people respond to medication.

This allows for more accurate predictions as to which treatment or prevention strategies will work best for the patient.

It has been gaining traction in the past decade thanks to advances in genetics and gene sequencing.

However, the approach is far from fully developed and it may take a few more decades for precision medicine to become the new treatment standard.

"Getting it structured for everyone in the next 20 years is not very likely, but I think it might start to happen within this decade.

"If you can take care of 20% of the 1.4 billion hypertensive population, that's still about 280 million individuals treated," said Prof Williams.

His recent visit to UCSI saw him engaging not only the students but also the healthcare community at Kuala Terengganu's Hospital Sultanah Nur Zahirah, where UCSI's students undergo their clinical training.



Precision medicine will give a more accurate prediction of the treatment and prevention strategies that will work best for the patient, says Prof Williams.