

# EXCELLENCE IN EDUCATION

## Sunway leads by example

In recognition of his outstanding research work in biological sciences, Professor Naveed Khan was last year awarded the prestigious Pakistan Academy of Sciences (PAS) Gold Medal in November.

He is currently Sunway University Department of Biological Sciences Head (Academic).

His research interest is on cockroaches and its defence mechanisms against superbugs.

"Cockroaches live in the filthiest places known to humans. It makes sense that they have potent defence mechanisms against superbugs," he said.

Khan has found a cockroach's central nervous system produces antibiotics with strong properties that kill bacteria deadly to humans, such as the Methicillin-resistant *Staphylococcus aureus* (MRSA) and neuropathogenic *E.coli*, without harming human cells.

"At present, more than 17 million people are dying annually worldwide and worryingly, we have approached a pre-antibiotic era. There is an urgent need to find novel ways to prevent and/or treat infections," he said.

Khan will next look into research on other animals living in polluted environments.

His research caught worldwide media attention and several documentaries were aired on leading news channels and websites, such as BBC, CNN, *The New York Times*, CNBC and *Los Angeles Times*, as well as peer-reviewed journals in France, Sweden, Poland, New Zealand, Norway, Ireland and the United Kingdom.

For his high research productivity, Khan has received the prestigious Schwentker Award from the Johns Hopkins University and Tufts University Fellowship in Boston, both in the United States.

In the UK, he received the Hull Royal Infirmary Fellowship Award, KUT Foundation Award and Individual Specialty Award for best research by the Medical Research Society, Royal College of Physicians.

In 2014, he was awarded the AR Shakoori Gold Medal Award by the Zoological Society of Pakistan for best contributions in biological sciences.

With six months under his tenure at Sunway University, Khan brings with him 16 years of research and teaching experience.

Khan says he teaches because he wants to learn, and finds this approach to be one of the best forms of learning.

A strong believer in the concept of learning in a horizontal enabling environment, his vision is to help transform an academic institution into an intellectual prospect that is creative and facilitates quality education.

His mission is to excel in scholarly activities in biological sciences and positively contribute to a research-led learning environment aimed at making an impact on society.

Khan says critical thinking is needed to look for solutions within the country instead of abroad.

Khan said Sunway University was changing its curriculum to address the research needs of

biological sciences in today's world.

"Students need to understand basic research and spending a summer in the lab or even two months during the academic year is not sufficient," he said.

However, this should not deter them from entering the lab as these elective experiences are not meant to be a "one-off thing".

"We at Sunway University aim to produce at least 50 per cent of graduates with the ability to think creatively in research and to question critically."

Sunway University places enormous emphasis on the development of its research profile.

The academic team is made up of many with strong research profiles and proven track records, such as publication in leading journals.

Facilities on-campus include state-of-the-art laboratories to support research work.

**For more information, please call 03-7491 8622 or email: [info@sunway.edu.my](mailto:info@sunway.edu.my) or log on to <http://university.sunway.edu.my/Bachelor-Hons-Medical-Biotechnology>**

**Professor  
Naveed  
Khan**



**This material may be protected by the Malaysia Copyright Act. It may only be used for private study or research. Downloading or reproduction in excess of “fair dealing” may constitute copyright infringement.**