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BULLETIN

THE UNIVERSITY OF HONG KONG

IMMORTALITY— Hope Springs Eternal?



Leading Astronomer Returns Home

One of the world's leading astronomers has returned to his native Hong Kong to take up the position of the first appointed Dean of Science.

Professor Sun Kwok, former Director and Distinguished Research Fellow of the Institute of Astronomy and Astrophysics at the Academia Sinica, Taiwan and Faculty Professor in the Department of Physics and Astronomy at the University of Calgary, Canada, is a world-class researcher in the field of stellar evolution and astrochemistry.

Born and brought up in Hong Kong, he left 38 years ago to pursue further education and a career in North America. In the first months of his new job he has been learning the ropes and planning for the future of the Faculty.

"Both in terms of research and teaching we would like to engage more broadly with China, the Asia Pacific region and with the world," he explained.

"Our staff members have already been actively trying to increase the number of international students because we want to have a wider exchange programme with foreign universities.

"And we have just undertaken a new initiative that will introduce an undergraduate research programme that will allow our students to spend time overseas while allowing foreign students to spend time doing laboratory work in our Faculty.

"This is part of the effort to increase the participation of undergraduates in research. The Science Faculty has quite a few research programmes active in many areas and this has been ongoing. We want to emphasise this as part of the education process – not just have students attending lectures or participating in teaching laboratory work but, to make their education more hands on."

This, he said, relates to his own experience of teaching for more than 20 years at Canadian universities.

"We always had a very strong component of research participation and when we go on to the four-year programme here the amount of time that students spend in the experiential part of the curriculum will increase.

"Through this method we try to introduce them as early as possible to the real world. It's very easy to read books and take exams and confine oneself to a theoretical basis of knowledge but when the students graduate and go into industry, for example, they face a very different environment.

"So by taking advantage of the summer months and of the upper years – the third and the fourth years – they can engage in lab or field-work research. This exposes them to a way of solving

real problems, which serves as a good bridge between academic study and work in real life."

The approach will also help better identify students more suited towards an academic research career.

The programme ties in with the Faculty's other goals for the undergraduate curriculum as it moves from a three to four-year degree programme. It will help broaden students' exposure to new areas of science with the introduction in 2007 of three new blocks: quantitative reasoning; the physical world; and life and living, which will promote interdisciplinary learning and research.

"I very much believe that many of our world problems today are of a multi-disciplinary nature. As an astronomer I have a background mainly in physics and mathematics but in recent years I have expanded into areas relating to chemistry, biology, earth sciences and geology.

"So we are constantly learning and this is what the new frontier of sciences is like. Most of our problems, like the environment or global warming, are multi-disciplinary problems and cannot be solved by someone with training in one narrow area."

In terms of research he sees the world growing increasingly competitive, not just in terms of big players like the United States and Europe, but also in terms of increased competition from emerging countries, like Korea, Japan, Taiwan and China.

"It's never-ending. The world is extremely competitive. Everyone is trying to improve and science is, by definition, an international endeavour. I mean there are no boundaries, if we all study nature there is only one nature.

"At HKU we have to compete with the best, we hope increasingly to be a world player. But research is getting expensive. Fifty years ago you could do a lot of work in your lab with a test tube or a microscope. Today, many major problems require so large a facility that even a very rich country has to collaborate. So internationalization of research is a world trend and we hope to be part of this process.

"Obviously I am happy to be here and I welcome this opportunity to be part of the growth of this university. I hope I can say that in five years' time we will have made The University of Hong Kong a better place for our students, a place that the community can be proud of and that our name is increasingly recognized as a significant player in the world community.

"I should add that I am very grateful to have very competent and dedicated staff. It would be impossible to function without them."

