

Safeguarding the health of humanity

A conversation with Mengfeng Li, President, Southern Medical University (SMU)

Established in 1951, Southern Medical University is one of the best known medical universities in China. After 70 years of development, it is now highly ranked both at home and abroad. Professor Mengfeng Li, SMU's president, and an oncologist and virologist, outlines his long-term vision for the university.

What drives SMU's rapid growth?

Steeped in history, SMU has huge strength and potential for great progress. First, its clinical medicine discipline ranks among the top 1‰ of its kind, and nine other disciplines in the top 1% in the world, in the Essential Science Indicators (ESI). It also owns a series of top research platforms designated by the Chinese government, including a National Key Laboratory, a National Clinical Research Center, an International Scientific Research Cooperation Base, the Guangdong-Hong

Kong-Macao Greater Bay Area Brain Science and Brain-inspired Intelligence Research Center, and the International Nephrology Medical Center.

The university continues to devote itself to safeguarding human health, and its comprehensive strength and international academic influence continue to grow. According to The Times Higher Education World University Rankings 2022, SMU has performed strongly by ranking among the top 500 universities in the world and the 18th among all Chinese universities.

What significant contribution does SMU make in promoting progress in medical science?

SMU has reached a series of

landmark achievements in the field of human health. The results of SMU's brain science research were published in *Science*. The findings of its renal disease research, published in the *New England Journal of Medicine (NEJM)*, have been adopted into the *International Guidelines for the Prevention and Treatment of Chronic Kidney Disease* and the American Nephrology Course. Findings in hepatic fibrosis were published in *Cell*, and our achievements in the prevention and control of hepatitis B virus infection were highly praised by WHO on their official website. Our findings on the novel coronavirus and on intestinal microflora research were published in *Nature Medicine*. SMU's studies on gastric cancer treatment via laparoscopic surgery, which were published

in the *Journal of the American Medical Association (JAMA)* and the *Journal of Clinical Oncology (JCO)*, were adopted into the National Comprehensive Cancer Network Guidelines in the United States and the Japanese Guidelines for the Treatment of Gastric Cancer. SMU has won 33 top national awards including the National Natural Science Award, the National Science and Technology Progress Award, and the National Technological Invention Award, ranking among the top medical universities in China in terms of number of awards.

What advantages does SMU have in talent cultivation?

SMU has a comprehensive talent cultivation system and recruits students globally. It now has 21 teaching institutions and 8 post-doctoral training stations. It is qualified to award doctoral

and master degrees in all medical science fields. Twenty of its undergraduate programmes rank first-class by the Ministry of Education of China. Its research laboratories, built on a total area of 100,000 m², boast instruments and equipment valued at more than one billion dollars. SMU has 2,078 full-time faculty members, among whom 239 hold national titles including members of the Chinese Academy of Sciences and the Chinese Academy of Engineering and scholars with state honours. In the past 70 years, SMU has trained more than 100,000 healthcare professionals, many of whom have become leading experts in their fields.

How is Southern Medical University strengthening its global ties?

SMU places great importance on international exchange programmes in medical education and research. We have partnered with 63 institutions from 21 countries and regions. We have established international cooperation bases with overseas institutions such as Harvard University, the University of North Carolina-Chapel Hill, and the University of Pavia in Italy, developed a joint doctoral programme in public health with ISCTE - University Institute of Lisbon (Portugal), and implemented 17 cooperation agreements with a spectrum

of institutions including the University of Dundee (UK), the University Hospital of Siena (Italy), and the Queensland Department of Health (Australia).

Currently, SMU is home to more than 1,020 international students from 90 countries and regions in a number of degree-awarding programmes, and has trained 3,160 medical education managers, healthcare officials and professionals from 121 countries.

How would you sum up SMU's long-term vision?

The global spread of COVID-19 pandemic calls for developments and breakthroughs in medical education and health sciences. With serious health challenges faced around the world, independent medical universities in China are welcoming a new era in which they can make a huge contribution, develop rapidly, shape history and achieve extraordinary breakthrough. There is a push for a new 'national team' for medical education and medical science.

In the next 5 years, 10 years, 20 years, or 70 years, the world will witness the brilliance of SMU, benefit from its scientific and technological innovations and meet its outstanding medical talent of the next generation and all those following. With open arms, SMU looks forward to embracing the new frontiers of global medicine. ■



New heights for safe space travel

Experts in aviation medicine and biomechanics at SMU have advanced China's spaceflight programmes by studying innovative ways to keep astronauts safe.

Understanding the health risks of extended periods in space on the human body, and taking measures to mitigate them is essential for the success of future crewed spaceflight missions.

For the past 20 years, the SMU team led by a member of the Chinese Academy of Engineering, Shizhen Zhong, has conducted various experiments on the effects of long-term orbital spaceflight, and of radiation exposure on the human body, as well as life-support systems for astronauts.

In 2005, SMU was awarded as the best collaborative unit for the Shenzhou VI mission by the China Astronaut Research and Training Center. In 2018, SMU was lauded by the Center for its role in modernizing national defence strategies and space programmes. ■