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Profile

Wang Yu: protecting China's health



China CDC

See [Editorial](#) page 777

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Wang Yu is not a man to turn away from a challenge. As Director of the Chinese Center for Disease Control and Prevention (CDC) in Beijing, Wang has the daunting task of protecting and promoting the health of the most populous nation on earth. A task made trickier by the fact that health and social development in China have often trailed in the wake of the country's legendary economic growth. That, though, is changing. "We have a whole society: the government, the people, the media, who pay more and more attention to health issues", says Wang. Translating this into concrete improvements in health measures won't be easy but then easy doesn't seem to be a word in Wang's vocabulary.

In 1974, as the Cultural Revolution was drawing to a close, Wang was just graduating from high school. "At that time there were no university entrance exams", he says. Instead, students were selected for higher education on the basis of their political and family backgrounds. With his education cut short, Wang became a worker in a printing factory. 3 years passed, until the opportunity he had been waiting for arrived: "the first university entrance exams since the Cultural Revolution". At school, Wang recalls, "the teachers would tell us how to study hard for the future because we had to do something for the country and for the people, so I had quite strong discipline". But more than that, he explains, "I had a dream. If I can become a medical doctor I can treat the patients, to help them to overcome disease, disaster; this is my fundamental philosophy." Dream or no dream, "for a young worker in the general factory to become a medical doctor is not easy", explains Wang. For a start, the competition was fierce. Almost 6 million people sat the entrance exam in 1977, chasing under 300 000 places. Wang was one of the fortunate few who got through to the Peking Medical University in Beijing. This, he says, "was the start".

After specialising in hepatology, Wang received his MD in 1989, and was immediately offered the rare opportunity to study abroad for his PhD in Japan at the Jichi Medical School, just north of Tokyo. Working on the hepatitis B and C viruses, Wang was in the lab "from the beginning of the year to the end of the year, every day from the morning to the middle of the night. So no weekends, no vacations, also over the new year, the holidays", he explains. It was, says Wang, "a very busy, very hard time in Japan, but I made very good friends with my Japanese colleagues, and I learned a lot about how to do scientific research; how carefully and very critically to do everything; follow the protocols, follow the scientific regulations, to do everything. So that gave me a base for the future for when I went back to China."

For Wang, the experience was to prove invaluable almost as soon as he returned to Beijing, and the Peking Medical University in 1993. "Lots of people, after they go

back to China, they take some responsibility to do some management", notes Wang, and his university wasted no time making overtures, telling him that he could "do more things not only for yourself and your research, but maybe you can do some management to take care of your colleagues, and the people in our university". Gradually, he says, "I spent more and more of my time on management until I became the Vice-President with responsibility for scientific research and development at the university".

By the end of the 1990s, Wang had almost entirely given up research in the lab to focus on working to expand the university's research funding and strengthen its research base. All of which caught the eye of China's Ministry of Science and Technology (MOST), and in 2000 Wang was appointed Deputy Director General of the Chinese National Center for Biotechnology Development, working under the aegis of MOST to improve the funding and administration for biotechnology research and development. Wang had moved to another post as Deputy Director General of the Department of Rural and Social Development when the outbreak of severe acute respiratory syndrome (SARS) occurred in 2003. SARS was a wake-up call, says Wang: "it told us that we neglected social development only to focus on economic development at that time".

According to Wang, the SARS outbreak was a catalyst for the implementation of many ideas in the country's scientific development concept, which aims to use scientific methods to plot a course of harmonious development in China. And for Wang, too, it was a time of change. Because of his background and experience in biotechnology, he was first made responsible for the research and development response to the outbreak, and then later, after an accidental lab-induced outbreak in 2004, appointed to investigate what had gone wrong. It was during this investigation that Wang was appointed as Director of the Chinese CDC.

Wang quickly turned around a demoralised institution, established laboratory biosafety management systems, and improved infectious disease surveillance and reporting systems. These systems have now proved successful in the outbreak of H5N1 avian influenza in humans, and later the influenza A H1N1 pandemic in 2009. Now, he says, the focus is on getting people to change their behaviour to live more healthily, and to "harness more and more the priority given by the government and the public to human development, along with economic development". The country has "more resources than ever before for improving health care", says Wang. "Now to make them do this in a scientific, an evidence-based way. This is our biggest challenge."

David Holmes