

# China-Brazil Vaccine Cooperation, a World Model

## My China Story

By FENG Jie & BI Weizi

Dimas Covas, a health expert and director of the Butantan Institute, Brazil, was bestowed with the 2021 Chinese Government Friendship Award by the Chinese government, making him the first Brazilian expert in the health field to receive this honor.

The team led by Covas worked collectively with Sinovac Biotech to promote the technology transfer of China's COVID-19 inactivated vaccine to Brazil, which demonstrated China's idea on promoting the COVID-19 vaccine as global public goods.

### Confidence in CoronaVac

As a leading expert in the field of biotechnology, Covas has full confidence in the inactivated vaccine developed by China. At the beginning of the clinical trials, the Brazilian public had low trust in Chinese vaccines, and some politicians even discredited it.

Covas argued strongly that the Chinese COVID-19 vaccine is what Brazil needed, refuting the doubts against its reliability and efficacy. He said, "We must know that the Apple phone we use is made in China, that countless other industrial products are made in China, and that many international pharmaceutical companies have large-scale laboratories in China. Today, China is a hub of highly advanced technologies, which can meet the needs of any country in the world. There is no reason to misjudge or ignore the vaccine simply because it was initially developed in China."

With the pandemic impacting the whole world, global research institutions are joining the fight against the virus. The Butantan Institute, a medical research institute with a history of over 120 years, is also at the forefront. Covas believed that cooperation between two parties would help with final success against COVID-19.

Since June 2020, the Butantan Institute and Sinovac conducted several clinical studies, the most significant one of which was the Phase III clinical trial of CoronaVac, which was developed in April 2020 and was an adaptation to a previous vaccine used against SARS. In order to confirm the security and efficacy of the vaccine, more than 10,000 volunteers were involved in the trial.

"What is important for vaccine performance during a pandemic is to precisely prevent deaths and severe illnesses, and reduce hospitalization rates. CoronaVac, developed in China, performed very well in Brazil because it significantly reduced hospitalizations, especially among the elderly and health professionals, which shows that it is an extremely good vaccine," said Covas.

### The power of international cooperation

Covas noted that the development of modern scientific and technological innovations cannot be achieved without the exchange and cooperation of different countries. "I have more than 30 years of experience in the research community. During that time, one of the hallmarks of my work was collaboration. We often need to work in teams and collaborate internationally. That is, in part, my responsibility as director of the Butantan Institute. And the reason I am where I am now is the result of the scientific and technical community seeking to collaborate, rather than compete. I think



Professor Dimas Covas. (COURTESY PHOTO)

we should all learn from this unprecedented pandemic and become more acutely aware of the importance of collaboration," he said.

The first shipment of ready vaccines from China arrived in Brazil back in November 2020. More importantly, 600 liters of raw materials arrived in the same batch. To date, the Butantan Institute and Sinovac have provided more than 100 million doses of COVID-19 vaccine to Brazil, ensuring that half of the Brazilian population is vaccinated.

The cooperation between China and Brazil in terms of equitable distribution of vaccines serves as a model for the international community in the ongoing battle against the global pandemic.

*This story is in cooperation with the International Talent Magazine published by Foreign Talent Research Center of MOST.*

## Letter to the Editor

# Toward Quality-Education in China

By Asad Khalil

The development taking place around the world has led to changes of all concepts about classic teaching. The current era requires us to develop the teaching process in dynamic forms and methods. The concept of education has been renovated from a mere transfer of knowledge through indoctrination, into more advanced and complex tasks and operations aimed at achieving the comprehensive and integrated growth of the learners.

I have taught in five countries on three continents. Yet, teaching in China and working with Chinese colleagues is a unique experience for me. One can touch the thousands of years of Chinese civilization shortly after getting involved with Chinese society.

Chinese as groups or individuals, have unique characteristics that distinguish them from others in terms of the way they value education and educators. The relationship between teachers and students is based on the full appreciation of the role that teachers play in the development of society.

After working and teaching in China for more than a decade, I found that the Chinese recipe for learning is an inquisitive tongue, and a comprehending mind, which means through questioning and reasoning learners can acquire more knowledge. So Chinese learners take every opportunity to learn from their educators. As Confucius once said, "If I am walking with two people, there must be a teacher of mine amid them. I will pick out the good points of the one and imitate them, and the bad points of the other and correct them in myself."

I can think of many people over the long years I lived and worked in China, who impressed me with their talent and commitment in different ways.



Professor Asad Khalil. (COURTESY PHOTO)

## Traditional Eastern Wisdom

# Chime of Ancient Bells

By Staff Reporters

Music has always been a critical part of traditional Chinese culture, and

when the Zenghouyi chime bells, which date back more than 2,400 years, were discovered in 1978 in Hubei province, they were recognized as one

of the world's earliest and most extensive groups of ancient musical instruments.

The Zenghouyi chime bells reflect the highest achievements of Chinese pre-Qin ritual and music civilization, as well as bronze casting technology. It has had a significant impact on a variety of fields, including archaeology, history, musicology, and the history of science and technology.

The complete set of chime bells consists of sixty-five pieces, suspended in three layers and eight groups from a curved foot-shaped, copper and wood clock frame.

Science and technology play a significant role in the creation of such an ancient cultural marvel. The creation of the bells requires knowledge of materials science, metallurgy, physics, mechanics, and acoustics, as well as core technologies such as lost wax casting and

"double tone" characteristics.

With their exquisite decoration and precise temperament, the bells predate the European twelve equal temperament pianos by more than two thousand years and rewrite the history of world music.

What distinguishes the Zenghouyi chime bells is their enticing double tone characteristics. According to studies, the device's unique structure enabled it to produce distinct music. Controlling the exact tone of a bell before it has even been cast is extremely difficult. Precise ratios of copper, tin and any other additives to the bronze have to be regulated, and the dimensions of the mold have to be exact. It is an amazing feat.

Zenghouyi chime bells are not only tangible instruments for academic study, but they also still produce authentic sounds that are identical to those heard thousands of years ago.

tence between humanity and nature, Xi said.

Xi also urged more efforts to promote voluntary tree-planting activities, raise public awareness, and carry out such activities in a scientific, thrifty and pragmatic manner.

Source: XINHUA



Zenghouyi chime bells displayed at Hubei Provincial Museum. (PHOTO: VCG)

# Xi Plants Trees for 10th Year as Top Leader

From page 1

Forests and grasslands play a fundamental and strategic role in ecological security, Xi said, adding that thriving forests and grasslands are essential for a sound ecosystem.

At present, the ecological civilization in China has entered a critical period for eco-environment improvement,

Xi said, calling for unwavering implementation of the new development philosophy and following the path of prioritizing ecological conservation and boosting green development.

The president called for efforts to coordinate the protection and systematic management of mountains, rivers, forests, farmlands, lakes, grasslands and

sandy lands, advance scientific afforestation, increase the quantity and quality of forest and grass resources, and consolidate and enhance the carbon sink capacity of ecosystems.

In doing so, we will make greater contribution to global environmental and climate governance and to the modernization featuring harmonious coexis-

# ICV's Testing Speeds up

From page 1

Within the 60 square kilometers of BDA, 332 digital intelligent intersections have been built. A city-level engineering test platform for high-level autonomous driving vehicles has also been constructed. The Internet-connected and cloud-control system has been primarily estab-

lished to offer external services. The number of all kinds of autonomous driving vehicles for normal tests has reached around 300.

Changsha, the capital city of Hunan province, was also selected to conduct pilot projects in the first batch. The city designed China's first customized in-

telligent bus line, reducing the traveling time by 13.3 percent on average. In addition, the bus line's optimization rate of being on schedule during rush hours reached 80 percent.

"Such achievements fully proved that the pilot projects are valuable and on the right track," said Yang Hongyi, an

official from MOHURD. Apart from making further use of the pilot projects platforms, he said the development of the pilot projects should also be guided by the need of cities and their residents.

Yang hopes to use the experience gained from the pilot projects and set standards for all over the country.

## Service Info

# Expats Solve Income Tax Queries in Contactless Way

By LONG Yuemei & QIN Ruixuan

On March 30, Russian Anastasia Antropova, who works in Hengqin Chimelong, Zhuhai city, as a dancer, made a video call with the staff of the Hengqin Tax Department through the V-Tax platform, completed her identity confirmation, and obtained her registration code on the Individual Income Tax APP.

Due to the impact of COVID-19, Antropova lived in China for more than 183 days in 2021 and is required to complete her individual income tax settlement in accordance with Chinese tax law. Like her, about three hundred foreign employees in Hengqin Chimelong hold foreign passports and need real name authentication before registering and logging in to the Tax APP.

The tax department of Hengqin took the initiative to contact relevant

companies to enquire about the situation of foreign employees. Four centralized processing periods were then specially arranged to solve any problems they may have. Through online processing, hundreds of foreign employees completed the real-name authentication without leaving home, conducive to more efficient completion of subsequent processing procedures.

"As the construction of the Guangdong-Macao In-depth Cooperation Zone in Hengqin progresses, an increasing number of people from outside of Chinese Mainland are moving to Hengqin, a small island of Zhuhai city. Through research, we gain a better understanding of the management requirements of key industries, enterprises, and groups. We have developed appropriate plans for foreign nationals with special needs and established a 'non-contact'

fast track for them to resolve individual income tax issues," said an official from the Cooperation Zone Tax Bureau.

To adapt to the measures taken for pandemic prevention and containment, the Hengqin tax department has taken the lead in realizing the "contactless" service for all businesses in the province, and all tax matters can be handled online with higher efficiency.



Anastasia Antropova solves income tax queries in contactless way. (PHOTO: QIN RUIXUAN)