Rabe: Passing on Legacy of Humanity Diligently

Dialogue

By XU Qingqun & LONG Yun

John Rabe (1882-1950), remembered as the "hero of Nanjing," a German whose courage and compassion in protecting civilians from the Japanese during World War II's Nanjing Massacre in 1937, left an indelible mark on the lives of many during one of the 20th century's darkest periods.

His efforts during this tumultuous time exemplified humanitarianism and laid the foundation for a legacy of selflessness that would be carried forward by future generations of the Rabe family. Through his actions, John Rabe instilled a commitment to preserving and nurturing life, a torch that would be later taken up by his grandson, Thomas Rabe, a 73-year-old professor emeritus of gynecology and obstetrics at Heidelberg University Hospital.

Thomas Rabe, who has built a distinguished career in the medical field, recently spoke to *Science and Technology Daily*, sharing his thoughts on humanitarian lessons learned from his grandfather's legacy.

Rejuvenating the Rabe spirit

John Rabe's efforts in the Nanjing Safety Zone during the war-ravaged period, became an example of moral courage in the face of overwhelming violence. As the chairman of the International Committee for the Nanjing Safety Zone, Rabe protected thousands of Chinese civilians from the brutalities of Japanese soldiers, often at great personal risk.

"From my grandfather, I learned the importance of morality and responsibility. One should not act from personal interest but with a spirit of responsibility towards others," Thomas Rabe said, adding that his legacy of leadership and humanitarianism becomes even more important today.

Thomas Rabe signs his book at the conference site. (PHOTO: Science and Technology Daily)

In 2005, Thomas Rabe and his wife founded the first John Rabe Communication Center in Heidelberg, Germany, dedicated to promoting international cooperation and exchanges.

According to Thomas Rabe, there are currently six Rabe Communication Centers around the world. These centers act as both memorials and platforms for ongoing global dialogues, hosting exhibitions, preserving historical archives, and nurturing continued collaboration across borders.

Rabe and China: a historical tribute

Earlier this year, Thomas Rabe published the book *Rabe and China*, which further cements the family's ongoing relationship with China. The book draws heavily on the diaries of John Rabe and other family documents, which are considered invaluable historical sources for understanding the Nanjing Massacre.

Thomas Rabe explained the significance of the book: The purpose of publishing *Rabe and China* is to pass on the international humanitarian spirit behind my grandfather's story.

"I would be delighted if many new readers would engage with the history of this book," he noted, adding that, "So that my grandfather's humanitarian spirit, his understanding of morality and leadership, and his desire for peace can be passed on." He believes in leading by example, demonstrating how to build relationships, foster understanding, and work together despite differences. "Theoretical knowledge is important, but the most important thing is to set an example," he said. "This is vital for promoting peace and understanding between nations."

Thomas Rabe's son, now learning Chinese, represents the fourth generation of the Rabe family to engage deeply with China.

Passing the torch

After learning about his grandfather's story, he found a renewed and deeper sense of purpose in life.

He continues to make significant contributions to the field of reproductive medicine. "Healing the body is important, but so is advocating for peace," Thomas Rabe said.

Over the past 30 years, he has worked in Germany's leading medical institutions, training doctors from all over the world in gynecological endocrinology and reproductive medicine. His work has helped advance the field internationally.

He has also played a crucial role in fostering cooperation between German and Chinese medical institutions. "In 2001, I visited China for the first time and began medical exchanges with hospitals in Nanjing, Wuhan, Shanghai and Beijing," he recalled.

His collaboration with institutions such as the Capital Medical University and the Beijing Obstetrics and Gynecology Hospital has led to groundbreaking projects like China's first ovarian tissue cryopreservation bank. Together, they have published four books on gynecological endocrinology in Chinese.

He believes that there is immense potential for cooperation between the two cultures in the field of medical science. "China has a long history of traditional medicine that is largely unknown in the West. I am deeply impressed by its strength and potential," he said.

Looking to the future, Thomas Rabe has big plans for enhancing the relationship between China and Germany in the medical field, which includes collaborating with global health organizations such as the WHO, and international medical societies to create consensus on how to address issues related to women's health.

My China Story

From Mentor to Friend: A Brazilian Researcher's Tale

By GONG Qian

"Friend! That is the first word!"

Luis Crusiol, a visiting researcher at Embrapa Soja (an institution developing technologies for soybean production in Brazil), told *Science and Technology Daily* about his close connection with his mentor Professor Sun Liang at the Chinese Academy of Agricultural Sciences (CAAS).

Crusiol began his almost three-year journey to China in 2019 when he got an opportunity to work in Sun's lab. He was able to enhance his professional skills based on technical knowledge, and gained much experience about how to cooperate with colleagues from other countries, navigating different approaches to managing research challenges.

Dealing with differences

Living and working in China is not easy for Crusiol due to cultural differences. He said the language was one of the most difficult aspects, especially when he could not read and write Chinese characters. But he believes exploring cultural differences is never a barrier and can enrich his life experiences. "The secret of dealing with the differences is learning how to respect the differences and enjoy them as much as you can!" Crusiol said.

He also noted that the academic environment in Brazil and China are both similar and different. Researchers from the two countries are committed to scientific development and seek scientific improvements that contribute to the social and economic development. At the same time, they have differences in personal interactions and behavior when under work stress.

However, Crusiol said that he was able to enjoy a welcoming and friendly environment that motivated him to work hard in his research activities. This was due to Sun and his Chinese colleagues, who were always concerned about his smooth adaptation at CAAS.

Mutual respect key to cooperation

While in China, Crusiol worked with his Chinese colleagues to exchange knowledge and skills for crop monitoring using field data and connecting this dataset with UAV (unmanned aerial vehicle) and satellite data.

Having accumulated extensive experience with a ground- based spectrometer, Crusiol was willing to share expertise and help his Chinese counterparts operate the device. "This was very helpful as our team members were not yet so skilled at using the spectrometer, " Sun said.

Meanwhile, Sun helped him analyze the collected satellite remote sensing data and build models to identify problems and solutions. "Sun always gave me space to contribute in the research from his laboratory and encouraged me to think out of the box," Crusiol said. "When you trust each other working on a project, you can reach better results and transform this professional network into a friendship," he said.

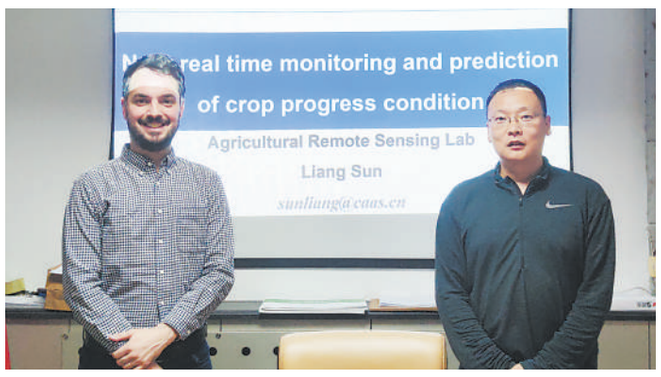
They co- authored to broaden the scope of their study so that their analysis results could be helpful for soybean yield estimation and drought resistance evaluation. The pair have published dozens of papers in leading international science journals.

Mutual respect and being considerate could be the secret to their strong bond. "We always communicate with each other when holding different opinions on research," said Sun, who had studied abroad and knows the significance of cross-cultural exchanges. "I offer suggestions, but most importantly, I respect his way of thinking and his way of tackling problems."

Sun emphasized that understanding the way others think and putting yourself in their shoes is the right way to avoid cultural misunderstandings.

"The professional achievements at CAAS deeply complemented the research we were doing in Brazil at that time," Crusiol said. "Returning to Brazil, I have the opportunity of applying the research skills I acquired in China in my daily research activities, and most importantly, we keep cooperating and learning from each other."

Crusiol said cooperation for scientific goals should be constructed among all nations that share equal values and similar goals. "The knowledge and technologies from this cooperation may help other nations reach their sustainable development goals," he added.



Luis Crusiol (left) and his mentor Professor Sun Liang at the Chinese Academy of Agricultural Sciences. (COURTESY PHOTO)

Traditional Eastern Wisdom

Enduring Beauty of Ancient Chinese Lacquerware

By BI Weizi

Dating back several thousand years in Chinese history, the art of lacquer is one of the oldest expressions of Asian culture. The traditional techniques of lacquer, originally used to protect wooden or woven bamboo utensils from moisture and insects, were naturally transmitted along many trade routes connecting China with its neighbors and quickly spread to other countries in Asia.

Inheritor of the intangible cultural heritage — the technique of lacquer, Hao Guanxiong, paints a tea saucer. (PHOTO: XINHUA)

Lacquer is not only a technique of protective covering but also serves the purpose of decorating. It is often applied to the surface of furniture, bowls, cups, sculptures, musical instruments and coffins, where it could be carved, incised and inlaid to show off scenes from nature, mythology and literature.

Lacquerware refers to objects usually made of wood, bamboo and metal that have been coated with a liquid consisting of shellac or melted resin flakes dissolved in alcohol or a synthetic substance. When the liquid dries up, a hard, protective, smooth coating that remains relatively light in weight will be formed on the surface. Ancient Chinese artists often used the sap of the "lacquer tree." The resin is drained from a cut in the living tree and becomes an opaque white liquid when exposed to air.

Lacquer can be transformed into many colors by adding certain chemicals to the resin. For example, black was made by adding carbon, yellow by adding ochre, and a brilliant red by mixing in cinnabar. The surface of the lacquer-coated body after repeated painting is not only durable, but also beautiful in color.

Since lacquer is very thin, it can be used to cover almost any type of surface. The previous coat must be completely dry and highly polished before the next coat is applied, with some objects having as many as 100 such layers, illustrating that the production of lacquerware was a time-consuming and expensive business.

These lacquer techniques evolved over time, becoming exponentially more complex and resulting in an enduring art form that combined vast experience with amazing practicality, exerting a positive influence on the development of lacquer art in other countries.

Artificial Upwelling for Marine Ranching

Science Outreach

By Staff Reporters

Mariculture can not only provide abundant high-quality protein resources, but also alleviate the pressure on natural resources from fishing. However, conventional aquaculture methods have led to excessive ecological loads and environmental pressures, resulting in eutrophication, hypoxia and acidification. Therefore, it is urgent to explore new paths for rational development, utilization and protection of the ocean.

Chinese scientists have proposed artificial upwelling initiatives based on the concept of internal ecosystem regulation. This involves using clean energy to drive artificial upwelling to bring nutrient- rich saline water from the bottom of mariculture areas to the surface, providing the nutrients required for photosynthesis of cultivated algae. It not only resolves the mismatch between the supply and demand of nutrients, inorganic carbon and dissolved oxygen, but also transforms pollution fields into carbon sequestration sites.

This method is applicable to the marine ranching developed in recent years. By utilizing technologies such as artificial upwelling, marine ranching can achieve effective negative carbon dioxide emissions.

Marine ranching refers to the planned release of marine resources such as fish, shrimp, shellfish and algae within a certain sea area, utilizing natural marine ecological environment, similar to grazing cattle and sheep on land.

In addition, marine ranching can further develop ecotourism and establish carbon neutrality science popularization bases, integrating economic production, sightseeing tourism, and science popularization education.

Advancing Global Reach of Chinese Culture

Expats Activity

By Staff Reporters

The 2024 Forum on International Communication of Chinese Culture was held at Beijing Language and Culture University on December 10. Representatives from more than 20 professional institutions, along with renowned Chinese and foreign experts attended the forum.

Du Zhanyuan, president of China International Communications Group, said that Chinese civilization has achieved development through continuous exchanges and integration with other civilizations in the world. Promoting Chinese culture to a larger audience and building a more effective international communication system is an important issue at present.

Alexandros Modiano, former deputy mayor of Athens, said that culture is rooted in a specific situation, background and time, and understanding Chinese culture cannot be framed by an "either/or" paradigm, which is the key to effective communication between the Western world and China.

During the forum, eight thematic workshops on theater, poetry, academic research, science fiction, science and technology explored the path of international dissemination of Chinese culture from various subfields.

More than 600 international student representatives from over 170 countries were in attendance during the forum.