

PKU

THE MINUTES

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Spotlights

Happy 122nd Anniversary Peking University



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Zhan Qimin listed as Elsevier's 2019 Chinese Most Cited Researchers

Zhan Qimin, executive vice president of Peking University, president of PKU Health Science Center, member of the Chinese Academy of Engineering, was listed 2019 Chinese Most Cited Researchers by Elsevier, on May 24, one of the world's largest academic publishers. This time, the list encompasses 2,163 scholars from 242 universities/institutions/enterprises, which covers 38 disciplines. In the medical field, 122 scholars were selected as the most cited.



Peking University Chair Professor Zhou Xiaohua elected as IMS Fellow

Zhou Xiaohua, Boya Chair Professor of Peking University, was elected as Fellow of the Institute of Mathematical Statistics (IMS) on May 23. The IMS is one of the two most prominent Statistical societies, the other being the American Statistical Association (ASA). IMS was founded in 1935 and currently has about 3,500 members worldwide, 12% of whom have been elected as fellows.



Two PKU projects included in Top 10 New Archaeological Discoveries in China 2019

On May 5, top 10 archaeological discoveries in 2019 was announced. The discoveries of Pingliangtai site in Henan province and Zaoshulin nobles' tomb in Hubei province were among them, standing out from more than 1000 projects. The two projects are carried out by the PKU School of Archaeology and Museology (SAM) in cooperation with Henan Provincial Institute of Cultural Heritage and Archaeology (HPICHA) and Hubei Provincial Institute of Cultural Relics and Archaeology (HPICRA). Since 1990, faculty and students from Peking University have been involved in over 34 major archaeological discoveries, ranking the first among universities in China.

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Peking University

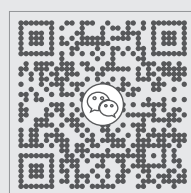
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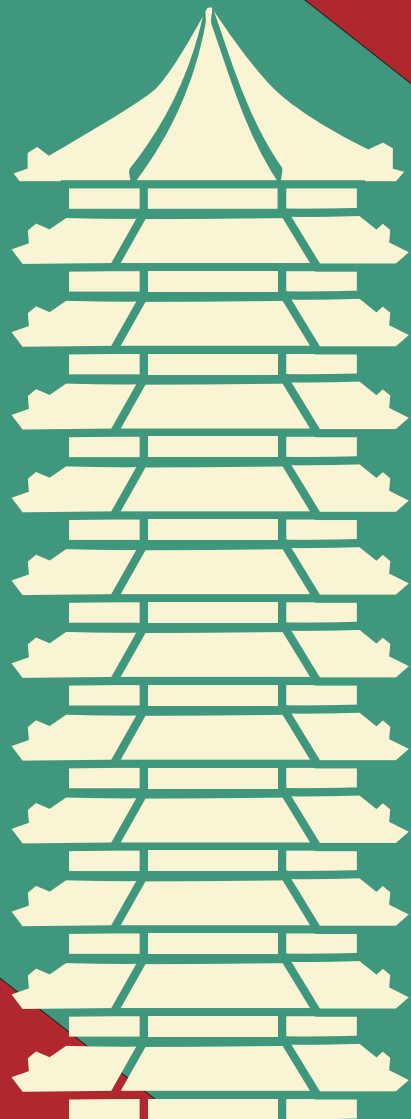
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Run for Youth

and Run for the
122nd Anniversary of
Peking University



The day of May 4 marks the 122nd anniversary of Peking University, the 101st anniversary of the May Fourth Movement, and the 2020 National Youth Day of China. To celebrate this big day, Peking University held the second May Fourth Marathon!

 a total of **9,336**

 **62874.29** km



Due to the outbreak of COVID-19, it was not possible for many PKUers to gather on campus and run shoulder to shoulder like what has been done last year. Instead, people can run outside the campus and share their efforts online this year! Participants finished a 5.4-kilometer run and then uploaded their routes to a specified event page. As of 6 p.m. on May 4, a total of 9,336 PKUers submitted their running records, with the accumulated distance reaching 62874.29km.

Being apart could not sap the passion of our students, staff and alumni. With numerous creative and uniquely designed routes, PKUers accomplished their May Fourth Marathon and sent their best wishes to the 122-year-old Peking University.



Greetings from Home: Happy Birthday Peking University!

This May 4 is a special birthday for Peking University because of the current stay-at-home policy implemented to better control COVID-19. Because there are few students at school, most Pekingers can only send their best wishes to their alma mater from home. Various happy birthday blessings from PKU students around the world have been sent by words and images, sharing the best wishes and the hope of meeting again on the beautiful PKU campus!

May 4th
Peking University

Turns



Hungary

“ Happy 122nd Birthday Peking University!

I have met amazing teachers and many intelligent, hardworking students. I have not just gained knowledge from classes, but learned from other culture while get to know International and Chinese students as well. I'm so glad that I could be a part of this community. In just two years, Peking University became my second home. I miss so much the food from the canteens, the beautiful campus with the cats, my friends and the spirit of PKU.”



Regina
PKU School of International Studies

Singapore

“ Dearest Peking University, happy 122nd birthday!

Over the past two years living in China, Peking University has become my second home. Students and teachers have made me feel so welcome to be a part of this large family, enabling myself to immerse comfortably in this new culture and environment. I am so proud to be a part of this family, and will cherish all the bits and pieces of memories created here!”



June Tan Rui Min
PKU School of Journalism and Communication

Nepal 

“ Studying at PKU has been an amazing experience, with full of opportunities to enrich one's career and also understand and explore China. I have also been privileged to interact with the Chinese and International community during the process and got to learn and exchange cultures.



Peking University is my second home and I wish the entire PKU family a happy 122nd anniversary!”

Aneka
PKU School of Government

Malaysia 

“ Happy Birthday Peking University!

You have educated and shaped the lives of countless students for the past 122 years. My time at PKU has been nothing short of amazing, fruitful and joyful. From eating meals at Nongyuan to attending lectures at Teaching Building No. 3, and to ice skating at Weiming Lake, the experiences I've had at PKU will stay with me for the rest of my life. I believe I speak for all students, faculty members and administrative staff when I say that PKU has welcomed us with open arms, so thank you, Peking University!”



Shannon
PKU School of International Studies

South Korea 

“ My dearest of all, Peking University, HAPPY BIRTHDAY!

Enrolling in PKU has been one of the best choices that I have made in my life. So far, I am filled with super amazing memories, opportunities, and experiences which I am so thankful for. I met a countless number of brilliant teachers and friends, and PKU truly has become my second home. The School has helped me adapt to a completely new culture with warmth, and I learned so much from all the intelligent people! Also, thanks to all the faculty members, administrative staff, and professors that worked tirelessly for PKU, for helping the school grow, motivating students, and making us feel comfortable. Again, Happy Birthday PKU, and I miss you!”



Yoori
PKU School of Journalism & Communication

Singapore 

“ Happy 122nd Birthday Peking University!

Coming to PKU has allowed me to experience and learn more about China's culture and customs. I am thankful for the many friends that I have made here, both international friends from other parts of the world and also local Chinese friends. I look forward to the many adventures ahead. Hope you have a wonderful birthday celebration!”



Zhang Qiming
PKU Guanghua School of Management

Also, Students from mainland China sent their pictures of the PKU campus card along with landmarks from their hometowns as a unique birthday gift for the 122-year-old Peking University. 🎁

I AM HERE AT BEIJING/SHANGHAI/
SHANDONG/ANHUI... , AND I WISH PKU A

VERY HAPPY BIRTHDAY!



One World, One Fight: Peking University Strengthens Global Cooperation amid COVID-19

Since the COVID-19 outbreak, Peking University has been at the forefront of the battle against the novel coronavirus. While the pandemic is gradually brought under control in China, countries across the world are still in a struggle to contain it.

In light of this, during May, the School of Foreign Languages (SFL) at Peking University translated China's official documents on the prevention and control of COVID-19 into Arabic, and released Counter COVID-19 Documents (Arabic Version) on May 6 during a video conference with 11 Arab ambassadors to China, director of the Representative Office of the League of Arab States to China, and 8 Arab envoys to China.

Since March, in the hope of sharing China's anti-pandemic experience with the Arab world, faculty and students from the Department of Arabic Language have dedicated themselves to the translation of guidelines formulated by China's National Health Commission. The Arabic materials will be distributed to Arab embassies to China, Chinese embassies and state-owned enterprises in Arab states, so that these valuable resources can be accessible to the

wider Arab community and help 400 million people living in 22 Arab states and regions learn more about the coronavirus and eventually conquer it.

The Arabic compilation includes the Protocol on Prevention and Control of COVID-19 (Editions 1-6) and the Diagnosis and Treatment Protocol for Novel Coronavirus Pneumonia (Trial Version 7). To ensure accuracy, foreign experts were also invited to proofread the translations. Additionally, a number of the key guidance documents have also been rendered into English, with proofreading from experts at the PKU Health Science Center.

Furthermore, as part of the efforts to help foreigners better understand medical terms that they might come across in notices and news written in Chinese, faculty and students from SFL have put together a multilingual COVID-19 terminology handbook in 21 different languages.

Ph.D. candidate Chen Binbin from the Department

2,800
Teachers

4,437
Online Courses

40,000
Students

60
PKU international
teachers

31
Countries and
Regions

5
Continents

of Chinese at Peking University went to great lengths to set up a translation group, known as "China-Iran Epidemic Prevention Mutual Assistance Team", bringing together over 200 volunteers from China, Iran and Afghanistan to translate China's anti-pandemic knowledge and experience into Persian and sharing them with Iranians via social media platforms.

Following the COVID-19 outbreak, Peking University has adopted a slew of measures in its response. Medical teams of 454 healthcare professionals from PKU-affiliated hospitals

were immediately dispatched to Wuhan, China's worst-hit city.

This semester, over 2,800 taught

4,437 online courses to more than

40,000 students on a

variety of online

platforms.

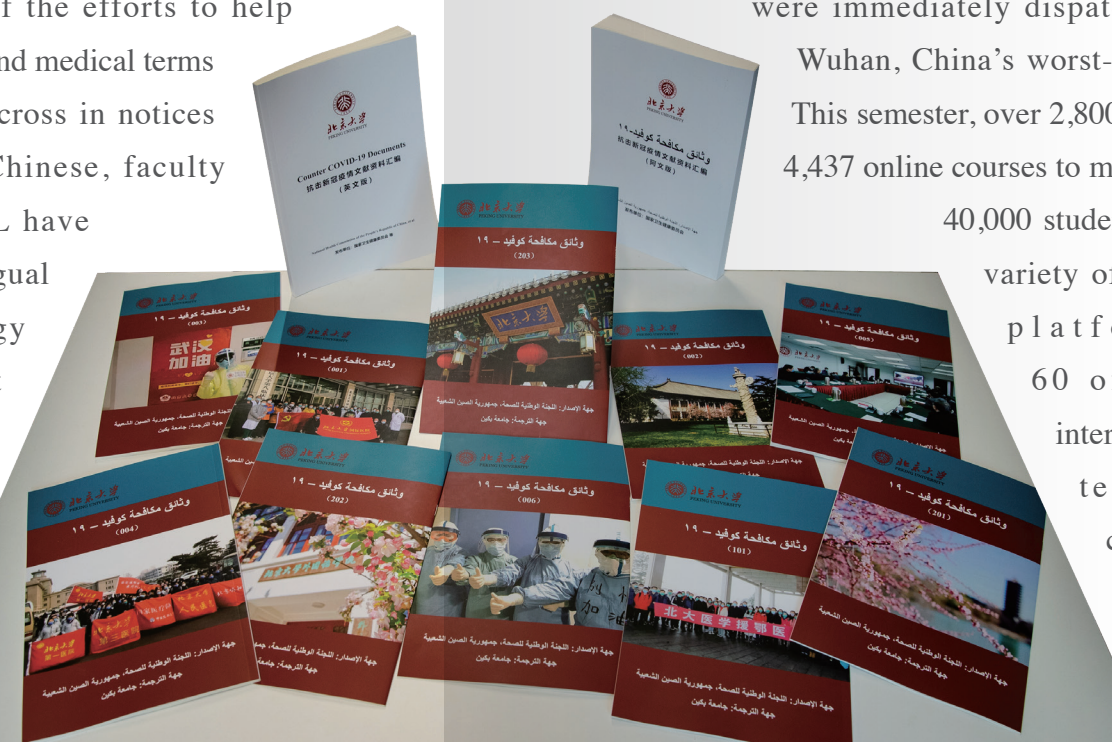
60 of PKU

international
teachers
coming
from

31 different countries and regions across 5 continents overcame the challenges posed by being in different time zones and continued to teach their classes.

Moreover, Peking University has been proactive in sharing its anti-pandemic experience with universities around the world over the past few months. The university-wide dialogues have been conducted through participating in the World Economic Forum's Global University Leaders Forum, and convening video conferences with partner universities including the University of Tokyo, University College London, Cairo University, University of Michigan and Qatar University.

International cooperation plays a crucial role in the fight against this pandemic. As the COVID-19 outbreak remains rampant in many parts of the world, Peking University will continue to maintain online communication with higher education institutions across the globe, and all members of the PKU community will spare no efforts to support the global fight. 📌



PKU alumni in international organizations take actions globally against COVID-19

The year of 2020 witnesses the COVID-19 pandemic, named as “the most serious global crisis since World War II” by UN Secretary General Guterres, which has become a painful memory of all peoples on our planet. Facing the crisis, Peking University alumni in

international organizations were among the first to lend a hand to Hubei immediately the epidemic broke out in the province. And now they are defending the entire world and human race from the coronavirus with every effort they can contribute.

PKU ALUMNI TAKING ACTIONS GLOBALLY

FOR ONE WORLD
Against

COVID-19



Ⓜ Wang Wenhao (second from right) and his friends recorded a video to cheer for China when there was no case reported in Chile

Wang Wenhao, alumnus of the School of Electronics Engineering and Computer Science, is a senior manager in the Central and South American office of the Global Energy Interconnection Development and Cooperation Organization. Even as far away as Chile, he was also concerned about his motherland, especially after learning about the lack of medical supplies in Wuhan at the initial stage of the epidemic.

He mobilized his colleagues to collect information of medical suppliers and large-scale distributors in South America, shared with the Chinese Embassy to Chile, China Council for the Promotion of International Trade and Chinese Enterprises Association, and assisted Chinese institutions to contact with local enterprises in Chile. In early February, medical supplies purchased in Chile were sent to hospitals in Wuhan for the first time.



① Wang Wenhao (first from right) at work

Wu Kaiyue, an alumna of the School of Life Sciences who recently finished the internship in the World Health Organization and was supposed to join the WHO Regional Office for the Eastern Mediterranean (Egypt) in April, has been stranded in the United States due to the suspension of flights. Although trapped in Seattle, she joined two Wuhan material docking groups in early February and became the night administrator of the 24-hour WeChat groups.

In these groups, a large number of donors and front-line medical workers were gathered and connected directly. Considering the critical situation, every second counted. “These groups worked around the clock. But people in China had to sleep at night, so overseas administrators were required to take their place. The moment I saw the recruitment information, I signed up,” said Wu, “The excitement and sense of achievement were beyond description when we successfully transferred materials to Chinese hospitals. However, failures were inevitable,

inflicting colossal anxiety to me.”

One World, One Battle

A \$12 billion fund was passed on March 4 by the World Bank Group in an effort to aid and assist countries in the fight against COVID-19. Mei Ling, who graduated from the Department of Sociology in 2017, was part of the preparation team responsible for project review and approval for South Asia, which was also the last step before the project is submitted to the board of directors. It usually takes three months for such projects to be fully implemented. Due to the critical situation, the preparation period was shortened to seven days, bringing a soaring workload to its staff.

As a result, Mei Ling has been working tirelessly every day for better coordination and communication through online meetings. An intangible yet real sense of mission motivated her, “It is my greatest consolation to make some contributions through hard work during

the crisis.”

Right after sending materials to China, Wang Wenhao and his colleagues turned to epidemic prevention and control in Latin America almost instantly. Despite being far away from the epicenter of the outbreak, South American countries have witnessed outbreak since March.

The Chinese embassy issued the Spanish and Portuguese version of the anti-coronavirus manual based on Chinese experience, which Wang Wenhao and his colleagues immediately shared with the United Nations agencies in Latin America, relevant government departments and local partners. Besides, they also introduced to them the global information sharing platform on fighting COVID-19 launched by China. In recognition of their efforts, the Ministry of Energy of Chile sent them a special thank-you email.

Regarding the misunderstandings of China during the pandemic caused by distance, cultural differences and lack of information in Latin America, Wang Wenhao responded positively and rationally. He also shared the latest research and experience in epidemic prevention and control in China with CNN and other international media and organizations and local government departments, where he received

② Wu Kaiyue's work permit during her internship in WHO

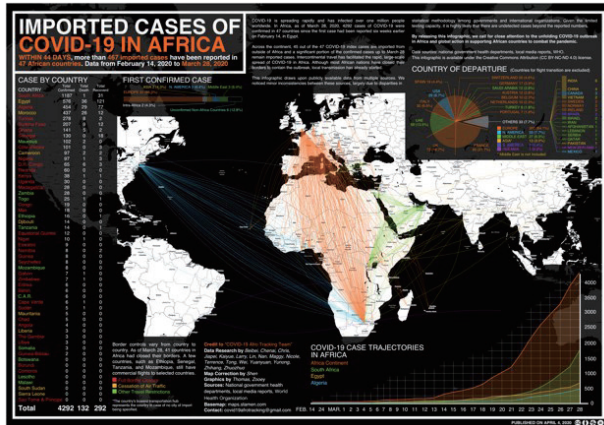


praise and positive response. “It’s significant to let the world know what China has done and how China controlled the epidemic within two months with professional and scientific methods,” Wang said.

Fang Xinyi, a master student from the PKU Department of History, is from Wuhan. Due to the lockdown of the city, she couldn’t go home for the Chinese New Year. In February, she went to the CP AOR team under the Geneva Office of the UNICEF Emergency Programme as an intern. The team was responsible for collecting, collating and translating professional advice and report documents to improve children’s safety and physical and mental health during the outbreak before sharing with countries and regions in need.

Recently, UNICEF and other international organizations jointly released the fairy tale book *You Are the Hero in My Heart* to popularize the knowledge of COVID-19 for children aged 6-11 around the world. Fang Xinyi was part of the team responsible for the translation and audio production of this book. In addition, she, along with other team members, assessed the current situation of child protection in different parts of the world, and sent the research results to local governments and NGOs for reference in political decisions.

Together at Home with Unremitting Efforts



Map of epidemic situation in Africa made by Wu Kaiyue and her partners

The epidemic is under control in China, with hundreds of cities, including Wuhan, recovering and reviving in economy and industry. But epidemic prevention and control is still necessary. That's why the BRICS New Development Bank issued a three-year bond to provide financial support for better public health system in Hubei, Guangdong and Henan provinces, which are most seriously affected by the epidemic.

However, the pandemic is still torturing the rest of the world, especially Europe and America. With Chile and other South American countries formally asking for help from China, the Global Energy Interconnection Development and Cooperation Organization officially joins the battle, donating medical materials through regional offices to partners that suffered most. Wang Wenhao is currently in charge of material collection and donation of Bolivia, Chile and

Brazil agencies, working day and night for a better future for human being.

What's worse, the outbreak of COVID-19 poses severe challenges to the fragile public health systems in Africa. Concerned about the children who are in urgent need of help in areas affected by isolation, economic stagnation and social panic, Fang Xinyi and her team are eager to do something to ease their pain.

Wu Kaiyue, who is going to work in Africa, also cares about Africa. After "retiring" from the night administrator of the docking group, she has devoted herself to the voluntary work of drawing epidemic maps in Africa, which she believes will be beneficial to epidemic prevention and control in the continent. "We are not bragging



Fang Xinyi and colleagues are working online during the pandemic

when we say we want to fight for the entire humankind." Wu said with determination.

Fortunately, Europe has seen fewer infections in the past few weeks. Fang Xinyi, who has been working from home in Geneva, goes out for a walk from time to time. "In Geneva, spring has come and the weather is perfect recently," she said. "I hope that everyone's life can return to normal as quickly as possible, and the whole world will conquer the difficulties with concerted efforts."

In response to PKU students' rising enthusiasm to global peace and development, Peking University Student Career Center set up the International Organization Talent Office, which is the first such among Chinese universities. From 2017 to 2019, Peking University has 42, 84 and 89 students (including graduate students) employed in international organizations as full-time staff or intern, ranking the first for three consecutive years nationwide.

By now, PKU has established the career service and guidance system for students who are keen to international organizations, supported by the framework of "a special office, an international organization employment information net, a textbook, a credit course and an expert database". In addition, the International Organization Talent Office has held a series of PKUIO Career activities all year round. More than 50 events have been held so far, offering access to thousands of college students across the country.



Mei Ling in her undergraduate period

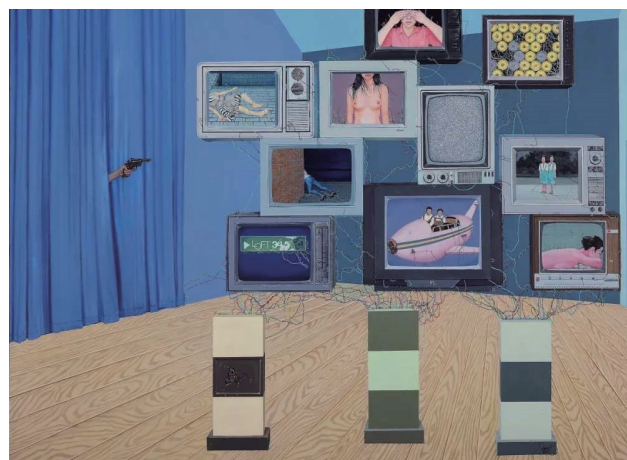


PKU School of Arts Graduation Exhibition “2020 Framing” held online

Peking University, May 11, 2020: From April 19 to 22, “2020 Framing”, the Graduation Exhibition of the School of Arts at Peking University, was held online through the official website and Weibo account of the School of Arts as well as the WeChat public accounts "2020 SOA Framing" and "北大艺术人".

The curatorial team mainly consists of the 2020 graduates from the School of Arts. Dozens of domestic young artists are also invited to use keen observation and unique creativity to weave a colorful art world for the exhibition.

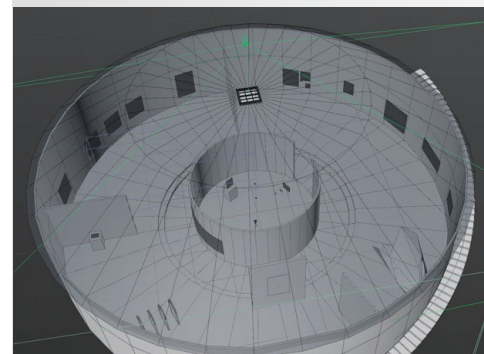
The exhibition focuses on FRAME, aiming at



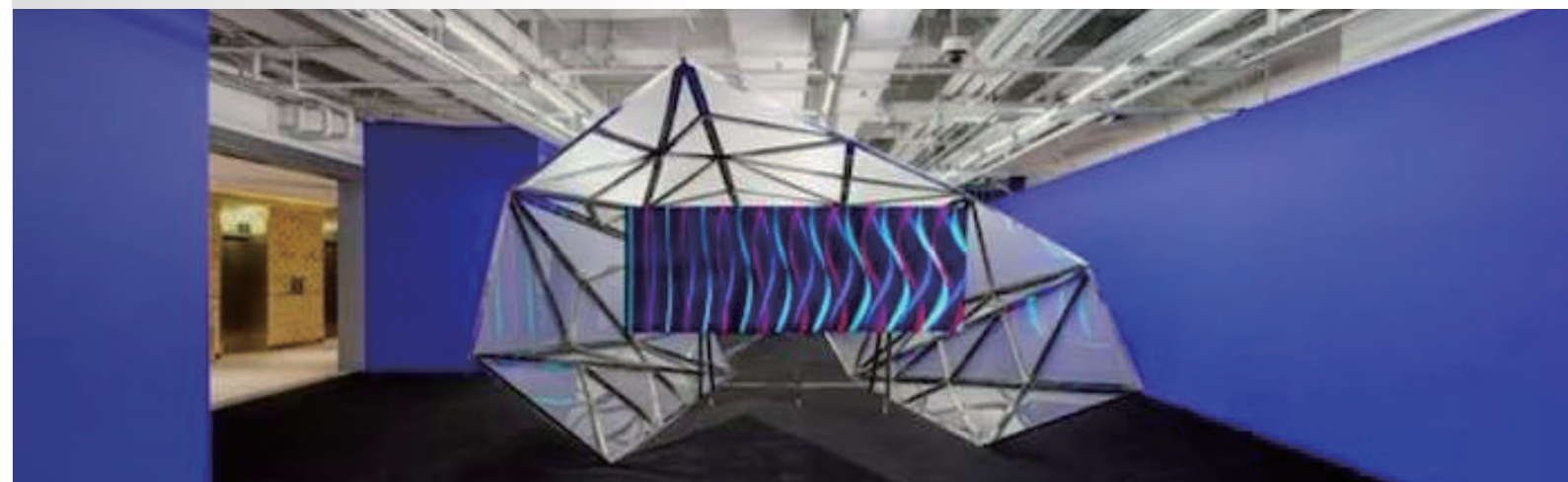
exploring the form and viewing methods of art. The whole exhibition is divided into four sections: FRAME (comprehensive exhibition hall), frame (first exhibition hall), Window (second exhibition hall), Screen (third exhibition

hall). Due to the COVID-19 epidemic, the exhibition was changed to an online form to better present its theme from the perspective of visitors.

From December 2019 to April 2020, the preparation work for the exhibition lasted more than 4 months. As of April 25, 2020, the WeChat public account of the exhibition had 160 subscribers, and the number of visits exceeded 3,000. The graduation exhibition of the School of Arts has been held annually since 2014. This exhibition not only showcases students' professional knowledge and skills, but also strengthens their teamwork spirit. Moreover, it has become an important platform to display the achievements of undergraduate training of the School of Arts. 📌



the WeChat public account of the exhibition had **160** subscribers and the number of visits exceeded **3,000**



Xinhua News: Peking University developed a low-cost 3D volume rendering tool to visualize CT scans



Chinese researchers have developed an artificial intelligence (AI) system to speed up the diagnosis of COVID-19 and get a clear picture of its effect on the lungs. Currently, experienced radiologists need up to 15 minutes to diagnose COVID-19 from about 300 CT images.

Researchers from Visual Perception Center under the Institute of Artificial Intelligence, Peking University have developed a low-cost 3D volume rendering tool to visualize CT scans, Xinhua News reported on May 13. It is expected to aid COVID-19 diagnosis and facilitate communication between patients and doctors.

Computer scientists have been trying to visualize

modern CT/MR images, making them more intuitive and realistic. The 3D volume rendering tool visualizes large volumes of data generated by CT/MR scanners in three-dimensional space and different aspects of the data set can be interactively explored.

After the outbreak of COVID-19, several Chinese companies such as SenseTime rolled out AI-assisted systems to improve the efficiency and accuracy of the diagnosis.

Ma Lei, of Peking University, said high-fidelity volume rendering focuses on interactive visual realism. The colored 3D images deliver more information than black and white scans, acting as an "amplifier" of organ lesions and giving a

vivid demonstration of a patient's lungs.

According to Ma, they optimized the algorithm to adapt to the physiological structure of the lungs and were able to achieve real-time rendering. Patients can have their colored 3D lung images minutes after the scan with no extra equipment. The system is able to clearly show the lung lesions and ground-glass opacity with realistic 3D movies.

Qiu Jianxing, a chief physician at the imaging and radiology department at Peking University First Hospital, said the 3D volume rendering tool would help primary care hospitals that have few experienced radiologists.

Ma noted that Chinese hospitals have relied on foreign rendering tools that are often bundled with CT machines. The rendering tool developed by Peking University is based on a self-developed ray-tracing engine which is expected to reduce the cost as well as dependence on technology imports.

With more data feedback, the system is getting more accurate and sensitive. It is expected to demonstrate the condition of the skeleton and airway, distinguish arteries and veins, and provide more precise analysis on the lesions.

Beyond COVID-19, the tool could be used to locate lung tumors and aid surgery. 📌

Zhu Ruizhi: Bringing China's experience to Africa for the fight against COVID-19

Rwanda, also known as “the land of a thousand hills”, is a landlocked country in East Africa. Its name is derived from its mountain dominated topography. Since the global outbreak of COVID-19, the African nation, which has a population of 12 million and occupies less than 30,000 kilometers of land, has been inundated with a slew of new pressure. As of May 13, the Rwandan Ministry of Health has confirmed 287 cases of COVID-19 in Rwanda.

In the midst of the global fight against COVID-19, Zhu Ruizhi, a Ph.D. candidate from the PKU National School of Development, began to be involved in a refugee protection program in Rwanda as a UN Junior Officer (JPO). With years of experience in refugee protection and a background in interdisciplinary research, Zhu is determined to bring China's experience in battling COVID-19 to Africa.

At undergraduate level, Zhu majored in PPE (Philosophy, Politics, and Economics) at Yuanpei College of Peking University. She has shown



how a multi-disciplined background can teach one to empathetically and also pragmatically think about societal issues. Zhu's research in pedagogy and economics during her masters and now in her doctorate has provided her with the tools needed to investigate the expansion of human capital and the development of a nation from a perspective of educational equity. Last

April, she made the decision to head to Rwanda and engage in refugee protection, which was a memorable opportunity offered by the United Nations High Commissioner for Refugees (UNHCR).

Zhu, who was supposed to be on holidays in China earlier this year, was called back to help. Despite the obvious danger, Zhu accepted the call without hesitation. She made the decision to return to Rwanda and lend her hands in refugee support work and the fight against the novel coronavirus.

On her trip to Rwanda, Zhu was faced with an entirely new set of challenges. On top of her usual work, for example maintaining refugee protection services, she was also involved in disease prevention. “Refugee communities are like huge families, and all of the demands of its residents, no matter how big or small, need to be given our full attention,” Zhu said.

Zhu and her team worked day and night



📍 Zhu Ruizhi and her colleagues

to provide the best support possible to the refugees residing in the community. Their duties spanned from the provision of food, nutritional supplements, and utilities such as electricity and water, to helping with newborn baby registrations, the elderly's access to medical treatment, to name but a few. Sometimes Zhu would jokingly declare her job title to be a farmer or an urban management officer. In the face of the pandemic, maintaining a steady supply of clean drinking water, distributing necessities while avoiding large gatherings, and ensuring the safety of residents and volunteers in the face of supply shortages all presented great hurdles for Zhu and her team.

After going through the COVID-19 outbreak in China, Zhu realized the importance of frequent hand washing. To begin with, the team couldn't figure out why hand washing hadn't been taken up as a habit by many members of the refugee community. Was it due to a lack of access to running water? Broken taps? Residents didn't

believe the water to be clean enough?

Effective improvements couldn't be made without first carrying out a proper field investigation. Zhu and her team went door to door to learn more about water usage among local residents and to promote the importance of hand washing. Eventually, their hard work paid off as their early action bore encouraging results. They managed to renovate public washrooms, bathrooms, and the community's water supply system before the local cases of COVID-19 were reported.

Keeping public washrooms clean posed a particular challenge to the team, especially when COVID-19 is raging across the world. With



fear of lack of sanitation in public washrooms, residents were opting to build makeshift latrines inside their own houses. However, this was strongly discouraged as the sanitation of private latrines was hard to control and presented a potential risk to disease control. While carrying out their duties, Zhu and her team surprisingly found that one of the communities always managed to keep their public washrooms clean. Afterwards, they found out that the community had assigned only three households per cubicle who had full responsibility for their assigned toilets, rather than having 10 households all share the entire toilet block. Inspired by the positive results, Zhu and her team began to adopt this approach in surrounding communities, which in turn all saw similar positive changes.

Before returning to Rwanda, Zhu was worried that China's efforts in fighting against the pandemic would be overlooked. On the contrary, when Zhu returned to Rwanda from China and started her 14-day quarantine, many colleagues sent her emails and text messages with positive responses to China's handling of the outbreak. Among these messages were also regards and wishes addressed to Zhu and her family in China and also to all Chinese citizens. She was deeply moved by the messages. "Despite a cacophony of opinions, China's efforts in controlling the disease did not go unseen in the international community," Zhu said. Her colleagues in Rwanda all made efforts to debunk any groundless rumors about China. They also

worked hard to understand China's current situation and the preventive measures China had taken in its attempt to control COVID-19. Zhu expressed her gratification towards the scientific and pragmatic approach that had been adopted by China in its response to the viral outbreak.



As soon as Rwanda saw its first case of COVID-19, the government imposed a series of measures to control its spread. Due to restrictions on transportation, going out to purchase supplies and entering the refugee community became even more difficult. In order to ensure residents' access to resources, the team had to carefully plan out their purchases and ration their supplies. The team also had to develop an effective communication system so as to ensure the residents' access to the latest information regarding the status of the potential outbreak. With China's experience in implementing such measures, Zhu and the team gathered all 127 community workers, volunteers, and local autonomous organizations to establish an online platform, on which they could constantly distribute updated information to the community including the latest news from the government, especially from the Ministry of Health. The members were also instructed to promote hygiene and cleanliness among

① Zhu Ruizhi and her colleagues

the refugee communities. Although the team's chances for face-to-face contact had greatly been diminished, they maintained frequent online communication, keeping all members of the team involved and unified.

During her time in Rwanda, Zhu worked day and night. But she never felt burnt out. The smiling faces of the residents never failed to keep her going; the encouragement she received from her colleagues, and the support from her home country thousands of miles away, coupled with warm Rwandan nights, kept motivating her to dedicate herself in Rwanda. As the only Chinese team member, Zhu realized that there were many opportunities for young Chinese people to get involved in international organizations, especially on the frontlines of developing countries.

"I grew up in a generation shaped by

China's rapid growth. We witnessed China's transformation from an impoverished country it once was to the prosperous one it is today," Zhu said. During this shift, China never stopped striving for new ways of doing things, so Zhu believed there is a lot to learn from this transition. During her time working in Rwanda, Zhu touched upon a unique experience. In the past, people in Rwanda believed that the development of agricultural technologies was crucial, because only then will countries send them the most advanced tractors. But, what if no one knows how to fix the tractor when it breaks down? The answer is simple. It could only sit there and rust. When China's agricultural poverty alleviation team arrived in Rwanda, they quickly discovered that the hoes being used were too short, so they lengthened the hoes by 10 centimeters. Over time, this minor change successfully boosted Rwanda's local farming yields. To Zhu, China always showed great empathy through its international initiatives. This in large part was related to China's history, having emerged as a once poor nation itself, it had built up a vast system of knowledge over the course of its development. From an economic perspective, it might seem like much of the improvements were marginal, but it was these marginal improvements that had ultimately

allowed China to flourish. Zhu hopes that she can continue to put this empathy and knowledge into practice on current and future refugee support programs.

In the face of this global pandemic, no man or country is an island. Zhu believes that every country has their own ways to combat the



This sense of social responsibility will always course through the veins of every PKUer. We will always uphold these values no matter where we end up

pandemic and she sincerely hopes that the world is able to stand united and continue to selflessly share new scientific knowledge in the fight against

COVID-19. Zhu is also gratified to know that many students from Peking University are now serving in their own communities.

The virus knows no borders. The world is in a community with a shared future. The sooner countries around the world come to realize this fact, the sooner they can find strength through unity. The students of PKU have embodied this unity as they reach out across the globe. Through helping a refugee community in Rwanda amid the pandemic, Zhu Ruizhi, who was recently bestowed with "Peking University May Fourth Medal", the highest honor for PKU students, has shown us first hand that China is willing and ready to contribute to the global battle against COVID-19 in the face of adversity. 📌

PKU-led team found effective SARS-CoV-2 neutralizing antibodies

There has been an urgent need for highly effective drugs to cure COVID-19. Repurposed small-molecule drugs lack in specificity thus efficacy is compromised. Although plasma therapy has exhibited certain efficacy, it's limited by convalescent plasma supply. The active component of plasma therapy is the target-specific neutralizing antibody. Antibody drugs as a kind of biologics have been successfully applied to treat viruses like AIDS, Ebola, and MERS. However, it is often time-consuming to develop neutralizing antibodies suitable for clinical use, taking months or even years.

By using their expertise in single-cell genomics, Sunney Xie's team at ICG, PKU in collaboration with researchers of Beijing YouAn Hospital collected blood samples from over 60 convalescent patients, among which

14 highly potent neutralizing antibodies were selected from 8,558 antigen-binding IgG1+ clonotypes. Their most potent antibody, BD-368-2, exhibited an IC50 of 8pM and 100pM against pseudotyped and authentic SARS-CoV-2. Experiments on the authentic virus were completed in the P3 laboratory of the Academy of Military Medical Sciences.

Neutralization potency of BD-368-2 antibody against pseudovirus and authentic virus, IC50 reached 8pM and 100pM respectively

The in vivo antiviral experiment of neutralizing antibodies has recently been completed, using hACE2 transgenic mice model developed by Dr. Chuan Qin's lab at ILAS. The results showed that BD-368-2 antibody could provide strong therapeutic efficacy and prophylactic protection against SARS-CoV-2: When the BD-368-2

antibody was injected into infected mice, virus load was decreased by ~ 2400 times; when uninfected mice were injected with BD-368-2, they were protected from the virus infection.

Testing on the therapeutic and prophylactic efficacy of neutralizing antibodies on mice models (A)Therapeutic group (green), injected with BD-368-2 two hours after infection (n=3); prophylactic group (red), injected

with BD-368-2 one day before infection (n=3); control group (blue) injected with nonrelevant antibody two hours after infection.(B)The rate of weight loss of therapeutic and prophylactic groups was significantly lower than that of the control

group.(C)After 5 days, the viral load of therapeutic group decreased by ~ 2400 times; no viral load was detected in the prophylactic group.

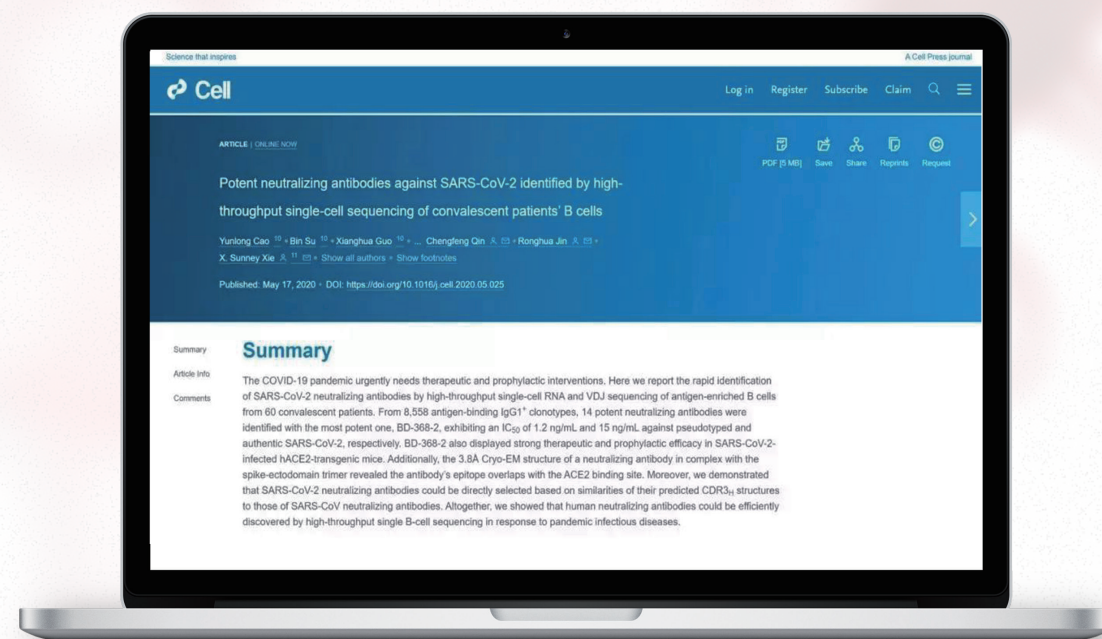
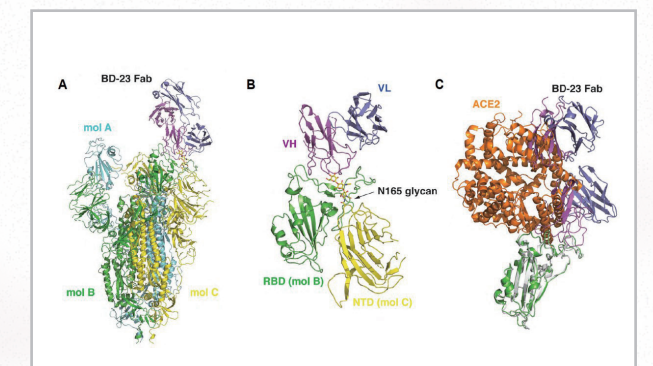
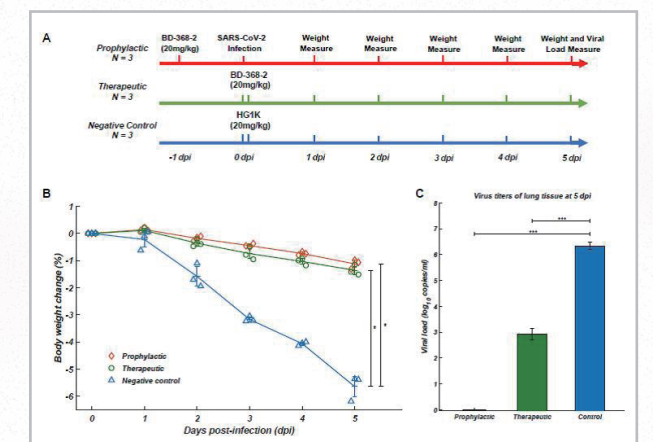
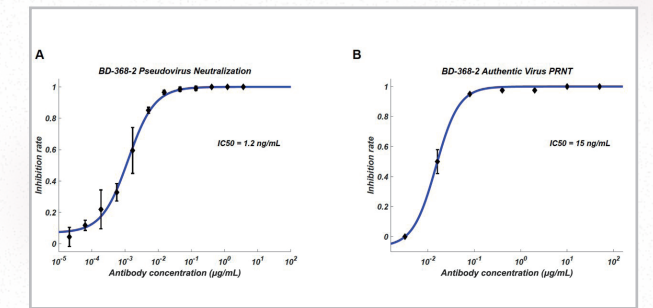
“If the COVID-19 epidemic reappears in the winter,” remarked Sunney Xie, “Our neutralizing antibody might be available by that time

In addition, the structural biologists Xiaodong Su and Junyu Xiao and their group members in the PKU team also obtained the 3.8Å Cryo-EM structure of a neutralizing antibody in complex with the Spike-ectodomain trimer. It revealed the antibody’s epitope overlaps with the ACE2

binding-site, which provides the structural basis of neutralization. Moreover, they showed that SARS-CoV-2 neutralizing antibodies could be selected with high efficiency based on similarities of their predicted structures to those of SARS-CoV neutralizing antibodies, hence greatly expediting the screening process.

(A&B) Cryo-EM structure of BD-23 Fab in complex with the Spike-ectodomain trimer (C) RBD/ACE2 complex structure overlays with RBD/ BD-23 Fab structure, which demonstrates BD-23 Fab can block S protein binding with ACE2.

The potent neutralizing antibody could be used to develop drugs for both therapeutic intervention and prophylactic protection against SARS-CoV-2. Clinical trials are underway, and the research team have strong confidence in finding a cure. 📌





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