



PARTNERING WITH CHINA,
SOARING TO NEW HEIGHTS

UC DAVIS
UNIVERSITY OF CALIFORNIA

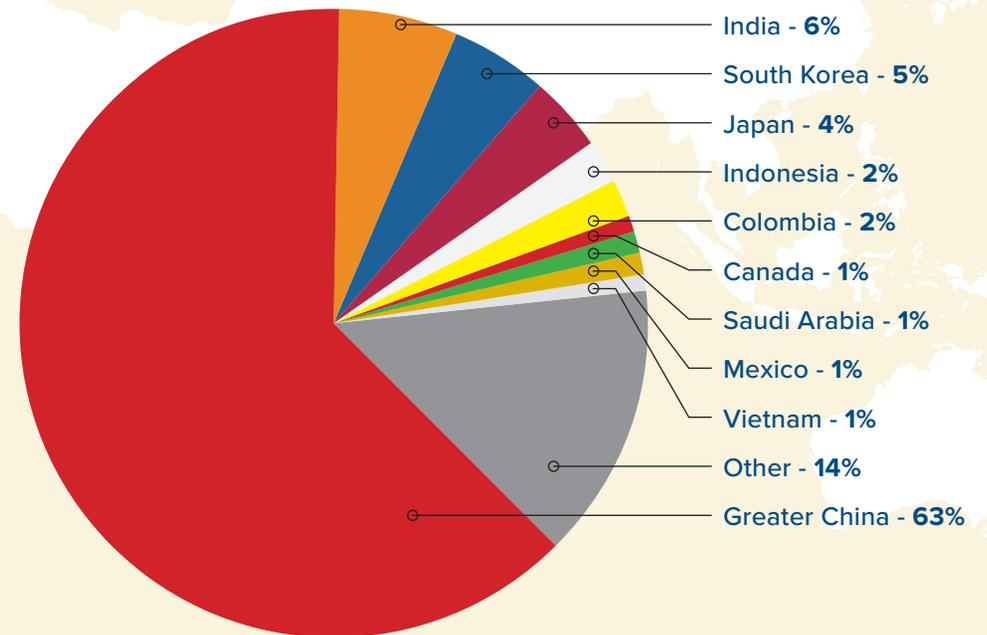
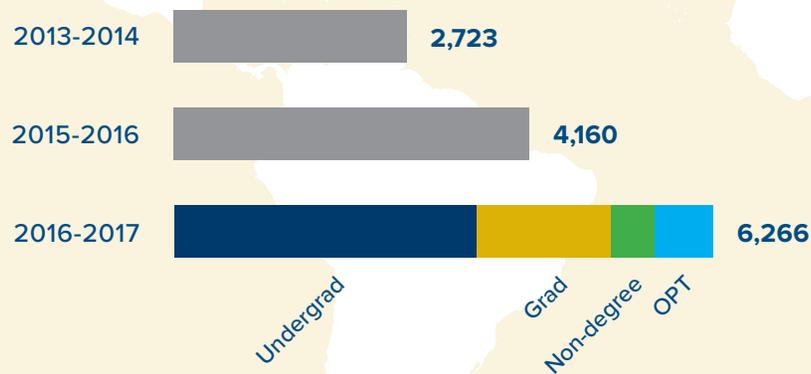
UC DAVIS AND CHINA

UC Davis has a proud history of partnering with universities, government organizations, and companies in China. In fact, our university has more cooperation agreements with universities in China than in any other country, reflecting the breadth of our engagement. UC Davis faculty and students

collaborate with Chinese partners every day. Together, we have made new scientific breakthroughs, benefited from rich cultural and intellectual exchanges, and prepared the next generation of leaders with world-class teaching and training.

UC Davis is committed to strengthening our dynamic and fruitful partnerships in China and across Asia. As our university expands its presence in China, we look forward to continuing our work with colleagues who will help us to advance knowledge, exchange ideas, and positively impact society worldwide.

UC DAVIS INTERNATIONAL STUDENTS



REDUCING VEHICLE EMISSIONS

The China-U.S. ZEV Policy Lab is a groundbreaking international collaboration between UC Davis and the China Automotive Technology and Research Center. Supported by China's National Development and Reform Commission and the California Air Resources Board, the lab aims to accelerate zero-emission vehicle (ZEV) development and promote best practices and policy initiatives in both China and the United States.

The ZEV Policy Lab offers research exchanges between American and Chinese experts and training to support the development of the ZEV market in China.

The lab's projects include:

- Organizing high-level policy workshops with government agencies, NGOs, and manufacturers from California, China, and the EU
- Working with think tanks and the state to set more ambitious ZEV targets for China's next five-year plan and to maximize renewable sources of electricity
- Hosting Distinguished Visiting Scholars to provide training to government officials
- Conducting consumer surveys in six Chinese cities to provide policy-related research findings



加州零排放汽车计划与中国新能源汽车推广交流会

Seminar on California's ZEV Action Plan and Promotion of China's New Energy Vehicles



A CLEANER ENVIRONMENT

UC Davis works closely with local Chinese government to help restore the country's natural environment. For example, our scientists are collaborating with Chinese researchers to monitor water quality and mitigate pollution in the inland port of Wenzhou.



Prof. Minghua Zhang

“The river water in Wenzhou is not suitable for human contact,” says UC Davis Professor Minghua Zhang, a hydrologist who

is a native of China. “The water has huge concentrations of nitrates, ammonia, heavy metals, and phosphorus. It has garbage floating in it. The Chinese government and the people who live in Wenzhou are very concerned about cleaning it up.”

Zhang is part of a large team of researchers from UC Davis, Wenzhou Medical College, and her alma mater, Zhejiang University, who are collaborating to improve the water quality in Wenzhou. The Chinese government funded a three-year research project to clean up the river.

In 2018, two UC Davis research centers partnered with the Shaanxi Provincial Land Engineering Construction Group Co., Ltd. to create the China-U.S. Land Ecology Center, which focuses on rehabilitating industrial and agricultural land through applied ecological engineering. As the first project of its kind since China launched the Belt and Road Initiative, the Land Ecology Center aims to share research and policy analysis, and to support the development of the first college of land engineering at China's Chang'an University.





ONE HEALTH

The One Health in China program is a collaborative effort by experts across disciplines and institutions to support optimal health for people, animals, plants, and the environment.

As part of the program, UC Davis and Nanjing Agricultural University (NAU) worked together to establish a One Health Center for Food Safety and Animal Health in China's Jiangsu province. The center addresses complex global issues like the control of new and re-emerging zoonotic diseases and the provision of healthy food for the world's population. It pairs NAU and UC Davis faculty and students to foster education, training, and collaborative research in the areas of food and water safety, animal health, environmental health, and public health.

Through its comprehensive education programs, the One Health center is helping to build a workforce that will meet expanding needs in the field of global food safety.



FOOD SAFETY

Food processing has become one of the largest industries in China, making food safety practices in the country more critical than ever. In response, officials from China's Northwest Agricultural and Forestry University in Shaanxi province signed an agreement with UC Davis in 2014 to establish

the Sino-U.S. Joint Research Center for Food Safety. The center promotes collaborative research on global food safety, with the goals of managing risk and developing models for the implementation of international standards.

The joint research center has expanded the already extensive collaborations on food safety between UC Davis faculty members

and several Chinese universities. These efforts include studies of the genomics of food-borne diseases, dairy safety, waterborne diseases in livestock, and environmental chemicals. Undergraduates in China and at UC Davis benefit from the center's work through opportunities to study and train in each other's countries.



SAFE USE OF ANTIBIOTICS

Ensuring a safe meat supply for domestic and international markets has been a chief focus for experts at Nanjing Agricultural University (NAU) and their counterparts at UC Davis. In particular, the development of antibiotic-resistant bacteria has led to heightened concern about the use of antibiotics in animal agriculture.

Through the One Health Center for Food Safety and Animal Health at NAU, UC Davis is championing an integrative approach to ensuring food safety. The center is facilitating the growth of partnerships between university researchers, veterinarians, industry leaders, and government agencies. The institute is launching a program through NAU to educate veterinarians as well as livestock and poultry producers in China on the safe use of antibiotics.

Critical areas to address include:

- The use and misuse of antibiotics in meat production
- Methods to prevent antibiotic residue from accumulating in human food
- Animal and plant pathogens
- Preparing students for careers in clinical veterinary medicine



Participants at the 2015 Annual Symposium on One Health and Food Safety

IMPROVING DAIRY SAFETY AND QUALITY

The world-leading UC Davis School of Veterinary Medicine works extensively throughout China. Since 1999, we have trained more than 5,000 dairy workers at 300 farms in Harbin, Xi'an, Inner Mongolia and Beijing. Training topics have included reproduction, milking parlor maintenance, waste management, and animal welfare.

The Dairy Dynamic Management program, developed at UC Davis and sponsored by the International Veterinary Collaboration for China, is a practical way to empower managers and employees with the tools to establish a successful, productive dairy. The program assists farmers with identifying existing and future dairy management challenges and establishes support teams that can design, implement, and sustain food safety improvements.





MODERNIZING THE WORLD'S FOOD SUPPLY

The People's Government of Weifang City and UC Davis jointly established the Sino-U.S. Food and Agriculture Innovation Center in June 2016. Through cooperation with a wide variety of UC Davis departments, the center is focused on several international, interrelated

imperatives: food safety systems, technological upgrades to the food industry, healthy food research and development, sustainable agriculture, international education and training, technology transfer, and talent development.

With help from UC Davis faculty, the center is promoting sustainable agriculture and food safety in China. Research areas include seeds and vaccines, low-toxicity and bio-pesticides, and comprehensive prevention of crop diseases and pests.



PREVENTING PANDEMICS

The U.S. Agency for International Development's PREDICT project aims to prevent, detect, and rapidly respond to infectious pathogens that spread from wildlife to humans, such as SARS and bird flu. PREDICT-China is a collaborative effort led by UC Davis. Partners include East China Normal University, Wuhan Institute of Virology, and the Guangdong Provincial Center for Disease Control and Prevention.

PREDICT-China has focused on discovering new potential pathogens and monitoring wildlife species as well as live animal markets and farms. Past project research has identified viruses with the potential to jump from wildlife to people, and has highlighted key areas where humans and wildlife come into contact. Partnerships with provincial centers for disease control in China have ensured that information gained from animal monitoring has been communicated to the necessary public health officials.

Achievements include:

- First-ever isolation of a SARS-like virus in bats with the potential to directly infect humans
- Optimized surveillance protocols via field and lab trainings for collaborating institutions and individuals
- A study in Guangdong of people with encephalitis and hemorrhagic fevers of unknown origin
- Enhanced laboratory analysis for H7N9: tested for the avian influenza virus in 2,249 samples from people with influenza-like illness; 3,651 environmental samples; and 330 bird samples

PRIVATE SUPPORT

Your support will help the partnership between UC Davis and China soar to new heights. We invite you to join us in expanding our projects in China and beyond.

For more information on private support, please contact Marina Tan Harper at mtharper@ucdavis.edu or +1 (530) 754-2021.

