



The University of California “10 + 10 Alliance”

A new model for strengthening Sino-U.S. research and educational collaborations

Overview

The 10+10 Alliance is a newly launched partnership between the ten campuses of the University of California system and ten of China’s premier public research universities. The 10+10 puts forward a bold new collaborative research and educational agenda, focused on developing solutions to the most pressing common practical challenges facing the health, vitality and economic development of both China and California. Examples of common pressing challenges include: air and water quality; emerging infectious diseases, energy, transportation, and agricultural biotechnologies. The 10+10 model will promote cross-national collaboration through the creation of bi-national teams of students and faculty, and through the integration of collaborative research into the curriculum, at both undergraduate and graduate levels. The 10+10 will also encourage the involvement of industry, government and non-profit sectors throughout China and the United States. By stimulating greatly enhanced student and faculty exchange, the 10+10 will help build a technical workforce capable of working effectively across national borders.

Strategic Context: China and UC

China and California share a striking number of common features as well as numerous common pressing challenges, in addition to our deep and multi-faceted historical and cultural linkages. Both societies are marked by enormous dynamism, creativity and drive. Indeed, California is well known as the epicenter of innovation and entrepreneurship within US society. China, in turn, has emerged as a major driving force in world economy and culture in the 21st century. The University of California is uniquely positioned to lead a binational effort to strategically marshal the latent potential for cooperation in China and California’s academic, industrial, governmental, and entrepreneurial sectors, to develop solutions to the pressing practical challenges that face both China and California.

The 10+10 Alliance builds on the unique scope and scale of the University of California system. With over 200,000 students, ten campuses, three Department of Energy National Laboratories, and five academic medical centers, UC is unrivalled by other universities in the quality and scope of its research and education programs. The University’s academic quality is built on the foundation of distinguished faculty, outstanding students, a world-class education, and internationally acclaimed research breakthroughs. UC’s 49 Nobel Prizes, 56 National Medals of Science, and 358 members of the National Academy of Sciences are unmatched by any other institution, public or private.

As a system, the University of California has enjoyed an unparalleled array of interactions with Chinese academic institutions, including research collaborations in a wide variety of fields, from science and engineering, to agriculture, medicine, business and the humanities. Thousands of Chinese scholars have earned degrees and served as visiting scientists at UC campuses, and UC alumni have gone on to make important contributions to Chinese society. Chinese students and scholars have, in turn, contributed very significantly to the quality of UC research and education, and hence to economic development in the state of California.

In October 2005, UC President Robert C. Dynes led a delegation of senior UC leaders on a visit to Chinese partner institutions to explore new approaches to target research and education to address the above common challenges. The 10+10 concept was met with enthusiasm by Chinese governmental agencies, industrial partners, our alumni and students, and by the 10 Chinese partner universities. The 10+10 Alliance was officially launched at a workshop hosted by the Chinese Ministry of Education in Beijing on October 10, 2005.

Design of the 10+10 Alliance

While the interactions between UC and partner institutions in China have historically been very rich and continue to be extraordinarily vibrant, our goal in the creation of the 10+10 Alliance is to work together with Chinese partners to take UC-China partnerships to a qualitatively richer and more powerful level. Specifically, UC will work with Chinese partner institutions to:

- Design mechanisms to more strategically focus the array of existing research collaborations;
- Create a model which integrates focused research on common challenges facing China and California, with curriculum development and faculty and student exchange;
- Move beyond existing bilateral partnerships in which UC campuses work with individual Chinese universities, to a model in which an alliance of Chinese partners work with the UC system in a strategically coordinated fashion on common research and educational goals;
- Create pathways through which greater numbers of students can engage in the research enterprise, working together in bi-national teams at undergraduate and graduate levels;
- Launch an effort to explore new mechanisms for universities to work more effectively with other sectors of society, including industry, governments, and community organizations;
- Assist each other in more effectively targeting our joint research to delivering results to communities in California and China.

Research Themes for the 10+10 Alliance

The following is a list of research themes under development by the 10+10: transportation, energy, agricultural biotechnologies, planning for sustainability in wilderness areas, systems biology, earth systems sciences, emerging infectious diseases, health care systems, environment and health, disaster prevention and mitigation, digital media and the arts, atmospheric pollution and climate change, nanotechnology, marine affairs and oceanography, information and communications systems, and business and trade. For each of these themes, UC already has active collaborations in place in China. The 10+10 platform will allow us to greatly strengthen our research collaborations, and to provide far greater opportunities for UC students, through an integrated research and educational approach, as described below.

Educational Program

The 10+10 Alliance provides a platform for exploring new collaborative models of international education, both at undergraduate and graduate levels. Our commitment is to develop educational pathways for our students that center on participation in binational and interdisciplinary research teams. We term this approach a “grand challenges” curriculum. In addition to their research, students who participate in the 10+10 will undertake language and cultural studies and participate in

reciprocal research-based exchanges. The goal is to greatly increase the numbers of UC students who spend substantial periods of time (6 – 12 months) working on projects in China, in partnership with Chinese students and faculty. In turn, UC will be accepting Chinese students from the 10 partner universities to our campuses. The China Scholarship Council, which provides financial support for Chinese students studying abroad, is working with UC on the design and implementation of these new models. The goal is to create more focused and sustained communities of collaboration that can really make a difference in addressing the research challenges listed above.

Chinese Partner Institutions

UC is partnering with the Chinese Ministry of Education and the China Scholarship Council in the design and implementation of the 10+10 Alliance. Chinese universities included are:

- Tsinghua University
- Peking University
- China Agricultural University
- Fudan University
- Shanghai Jiao Tong University
- Tongji University
- Nanjing University
- Sichuan University
- Zhejiang University
- University of Ocean Sciences

Conclusions

The University of California has taken the lead in putting forward a powerful new model for international collaborations in research and education. Working with 10 of the top universities in China, we will explore the pragmatics of integrating collaborative research into undergraduate and doctoral level programs in a wide variety of disciplines. This alliance bears the prospect of making the UC the most effective and creative U.S. university in terms of its programs in China. Our approach will offer a dramatically expanded set of research and educational opportunities for UC faculty and students. As the basic strategy of the 10+10 is to work on challenges that face both China and California, it also bears the prospects of yielding important research and economic development dividends for Californian society.