SUMMARY OF YALE UNIVERSITY'S COLLABORATIONS AND HISTORY WITH CHINA

Yale University has had a longer and deeper relationship with China than any other university in the West. Its ties to China date to 1835 when Yale graduate Peter Parker opened China's first Western-style hospital in Guangzhou. His papers and medical illustrations sparked the interest of Yale's students and faculty in China. Recruited by Parker, Yung Wing (sometimes known as Rong Hong), became the first person from China to earn a degree from an American university when he graduated from Yale in 1854. In turn, he helped pave the way to Yale for other Chinese students who subsequently played major roles in China.

This unique relationship has grown dramatically stronger over the years through joint educational and research projects, student and faculty exchange programs, and an everincreasing number of Chinese students and scholars at Yale. These student exchanges have developed cross-cultural understanding, and joint research has led to groundbreaking discoveries.

Collaborations and programs such as those listed here stand as examples of how global universities like Yale and many of our partner institutions in China are educating leaders and advancing the frontiers of knowledge, not simply for their own countries, but also for the entire world.

The Salvey

Peter Salovey President Chris Argyris Professor of Psychology Yale University

Yale and China: At a Glance

Landmark Events in the Yale-China History

- In 1835, Peter Parker opened China's first Western style hospital, the Ophthalmic Infirmary, in Guangzhou and was one of the first Yale graduates to chronicle daily life in China.
- Yung Wing graduates from Yale College in 1854 and becomes the first person from China to earn a degree from an American university.
- In 1901, a group of Yale faculty and alumni launched the Yale-China Association, a private, non-profit organization based on the Yale campus, dedicated to education in and about China.
- In 1936, a formal program of Chinese language study was established; during the 1940s, Yale pioneered innovative Chinese textbooks that were used throughout the United States.
- In the 1990s, the Yale University Press, in collaboration with China International Publishing Group, launched a publication series called "The Culture and Civilization of China."
- In 2006, as one of only three stops during his historic trip to the United States, President Hu Jintao visited Yale, and gave the first speech by a Chinese head-of-state ever to be broadcasted live in China.

(More on pages 42-46)

Yale Faculty Research

There are over 150 Yale faculty members involved in research and activities related to China. Research projects involve partnerships between the Yale faculty and their colleagues in Chinese universities, governmental agencies, and independent research institutions. These projects include the Yale-Shandong University Archaeological Studies, Urban Design Studio Project in Hong Kong and Shanghai, Hengduan Mountain Biodiversity Project, Consortium for Globalization of Chinese Medicine, Industrial Ecology and the Circular Economy in Tianjin, and environmental health studies in Lanzhou. (See <u>http://world.yale.edu</u> for a full listing). (More on pages 55-83)

Joint Research Centers and Major Collaborative Efforts

Yale operates joint research centers at Peking University, Fudan University, and the University of Science and Technology of China where work is conducted in the fields of nanotechnology, software engineering, plant genetics, and developmental biology. The newest collaboration between Yale and China is the Yale-Shanghai Jiao Tong University Joint Center for Biostatistics, which conducts translational medicine research and trains future leaders in the field. (More on pages 53-54)

Chinese Students and Scholars at Yale

Since China initiated its "open door policy" in the late 1970s, academic exchanges and collaborations between Yale and China have expanded rapidly in many fields. Today, there are over 1,000 Chinese students and scholars at Yale. During the 2013-14 academic year, more than

500 Chinese students were enrolled in Yale College and Yale's graduate and professional schools, and nearly 600 Chinese scholars (e.g., visiting faculty, fellows, postdoctoral researchers) were in residence at Yale. Chinese students and scholars represent, by far, the largest group from any foreign country at Yale and have created a number of student groups, which host cultural and educational events.

(More on pages 47-49)

Programs for Chinese Students at Yale

Yale provides a range of opportunities for students from China to take classes with Yale students including summer courses and formal exchange programs. During the summer, Yale offers special programs on campus for students from five Chinese universities. In addition, selected undergraduates from Hong Kong University can attend Yale during the academic year through the Yale Visiting International Student Program (Y-VISP), an honors program designed for undergraduate students from partner institutions.

(More on pages 47-49)

Programs for Yale Students in China

Hundreds of Yale students travel to China each year to participate in study abroad programs or conduct independent research. There are a number of programs for Yale students in China including: the Richard U. Light Fellowship, which funds Yale students for intensive language study in China; the Yale International Internship Program, which provides undergraduates with summer internship placements in China and other countries; the Fox International Fellowship program, which is a direct two-way student exchange partnership with Fudan University; and the Council on East Asian Studies Field Research Grants, which provide funding for Yale graduate students in the Arts and Sciences to conduct research in China. (More on pages 47-49)

Yale Senior Leadership Programs

Schools at Yale have developed and led a wide range of programs for Chinese leaders, in both New Haven and China. The range and frequency of Yale programs has been growing: The China-Yale Advanced Leadership Program for University Presidents has been held since 2004; many members of the Yale faculty have participated since 2005 in the annual China-Yale Senior Government Leadership Program; the School of Forestry & Environmental Studies has conducted executive education programs for provincial and municipal environmental officials since 2004; the Law School's China Center has since 1999 sponsored programs for advancing the rule of law in China, and has recently initiated programs to study and advance U.S.-China relations more generally, including a major Track II Dialogue with Chinese counterparts; the School of Management has a number of programs for senior Chinese business leaders and has expanded its CEO Summit to China; the School of Public Health has trained over 500 managers for health care leadership; and the School of Nursing has led intensive workshops for an equal number of nursing educators and leaders. The schools of the arts have also been active in China, from the School of Music's long association with China's premier music conservatories to the School of Architecture's annual studio with Tsinghua, and the School of Drama's programs with the Shanghai Theatre Academy.

(More on pages 50-52)

Yale and China: Early 1800s to Today

EARLIEST CONTACTS. New England's rise as a center of global commerce, especially in the shipping industry, helped to expand the range of Yale's vision. By 1901, when the University celebrated its bicentennial, over 200 Yale graduates had served as overseas educators and missionaries, with several working in China. One of the best known of those, Peter Parker (1804–1888), graduated from Yale College in 1831 and from the Yale School of Medicine in 1834. Parker worked in and around the city of Guangzhou as a doctor from the 1830s to the 1840s. His "medical mission" represented the first intense, long-term contact between a Yale graduate and Chinese culture and served to inspire a generation of American missionaries. In addition to his work as a doctor, Parker was also one of the first Yale graduates to chronicle daily life in China. His journals, correspondence, and paintings provided information about China never before available in New England and are now housed in the Yale Medical Library. Parker's work helped to spur considerable interest in China among students and faculty at Yale.

FIRST GRADUATE. Just as Yale went to China in the first half of the nineteenth century, the second half of the century brought China back to Yale. This remarkable chapter in the University's history began in 1850 with the arrival of Yung Wing (1828–1912) in New Haven. A native of Guangdong Province, Yung had received some of his primary schooling at an institution run by another Yale-educated missionary Samuel Robbins Brown. Impressed with Yung's abilities, Brown sent him to the United States for preparatory school, after which Yung enrolled as a student in Yale College. Yung Wing graduated from Yale in 1854, becoming the first person from China to earn a degree from a western college or university. After returning to China, he advocated the adoption of technology and technical education as a means of strengthening China.

PROMINENT EARLY CHINESE STUDENTS AT YALE. In 1872, having won approval from the Qing Court to organize the Chinese Educational Mission, Yung Wing sent 120 young Chinese students to secondary schools in the Connecticut valley and, from there, to prestigious New England colleges for higher education in engineering and other subjects. The premier destination was Yale; in fact, twenty-two Chinese students enrolled at Yale. At the time, since few Yale students came from beyond New England, Chinese students were a unique presence on campus. Conservative forces in the Qing Court vigorously lobbied to bring the students back to China in 1881. Although only two students had graduated from Yale by then, many of these young men went on to make important contributions to China's development in the late nineteenth and early twentieth centuries. Among them was Zhan Tianyou (Class of 1881), who arrived in the United States when he was only twelve years old and went on to graduate from Yale University's Sheffield Scientific School. After his return to China, he became renowned for his role as the engineering consultant for China's railroad networks during the later years of the Qing dynasty and is known as the "father of China's railroads."

As for Yung Wing, he went on to fulfill his calling as a teacher and businessman who worked to improve relations between China and the United States. In his business work, he proposed the

joint stock financing of a domestic Chinese steamship transportation company to the governor of Jiangsu Province in 1867. His vision became the basis for China's first domestically owned modern corporation, the China Merchant's Steamship Navigation Company, and the beginnings of a stock market in China. In 1876, he received an honorary degree from Yale Law School.

GIFT FROM CHINA ESTABLISHES YALE'S CHINESE LIBRARY COLLECTION. In 1878, Yung Wing, in appreciation of his Yale education, donated 1,280 volumes of his Chinese book collection to Yale. This gift formed the nucleus of Yale University's East Asia Library. Later, in 1912, he made another donation. The Chinese collection has now grown to over 480,000 volumes and is one of the major Chinese book collections in the United States today. The collection is particularly strong in Chinese archaeology, economics, modern history, and literature since 1919. A current initiative brings librarians from around the world to work in the Yale Library for six to twelve months. Since 2006, Yale has hosted six Kwok Library Fellows from Zhongshan University in Guangzhou, Fudan University in Shanghai, and the Chinese Academy of Sciences in Beijing.

CHINA ENTERS THE YALE CURRICULUM. The study of China at Yale began in 1878 with the appointment to the faculty of Samuel Wells Williams, a former American missionary and diplomat in China. A formal program of Chinese language study was established in 1936, and during the 1940s, Yale pioneered new intensive methods of language instruction and developed a series of innovative Chinese textbooks that were widely used throughout the United States for decades.

EDUCATING CHINA'S ACADEMIC LEADERS. In addition to the long history of formal academic programs concentrating on China at Yale, the University has a history of cultivating Chinese educators, with the following notable examples:

Cai Shaoji was the representative of the Qing government in Korea, and later adviser to Yuan Shikai, the first president of the Republic of China. He went on to become president of Tianjin University (Peiyang University).

Tang Guo'an, Zhang Yuquan, Zhou Yichun, and Cao Yunxiang, four of the first six presidents of President Hu Jintao's alma mater, Tsinghua University, studied at Yale.

Ma Yinchu (Class of 1910) served as the president of Peking University from 1951 to 1960.

Li Denghui (Class of 1899) served as the first president of Fudan University.

Yan Fuqing (Class of 1909) served as the president of Fudan Shanghai Medical School.

Yan Yangchu (Class of 1918) founded the Mass Education Movement to promote literacy among the Chinese population.

PUBLICATION SERIES. Since 1990, Yale University Press and China International Publishing Group have been collaborating on the landmark series *The Culture and Civilization of China*. These beautifully produced books, written by top Chinese and Western scholars, make the cultural riches of China available to general readers as well as scholars. The books are published both in English by Yale University Press and in Chinese by the China International Publishing Group.

President Jiang Zemin of the People's Republic of China presented the inaugural volume, *Three Thousand Years of Chinese Painting* (1997), to President Bill Clinton as his State Gift. To date, eight additional volumes have been published: *Chinese Architecture* (2002), *Key Concepts in Chinese Philosophy* (2002), *Balanced Discourses* (2003), *The Formation of Chinese Civilization* (2005), *Chinese Sculpture* (2006), *Chinese Calligraphy* (2008), *Chinese Ceramics* (2010), and *Chinese Silks* (2012). The books have had excellent reviews, and several have received prestigious accolades, including the Chinese National Book Award, for the Chinese edition of *Chinese Architecture. Three Thousand Years of Chinese Painting* received the Hawkins Award given by the Association of American Publishers.

Yale and China International Publishing Group have also collaborated since 2007 on the production, publication, and promotion of the *Encounters* English language teaching series. *Encounters* is a truly monumental collaborative effort. Its presentation of teaching materials in innovative and interactive ways marks a milestone in the advancement of learning foreign languages and about foreign cultures. The official public launch of the series occurred in June 2013.

Encounters achieves unparalleled language and cultural immersion by combining audio-visual and traditional text-based media. Through video episodes that directly correspond to units in the combination textbook-workbook and by combining a compelling story line with a wealth of educational materials, *Encounters* weaves a tapestry of Chinese language and culture rich in teaching and learning opportunities. Teachers and students of the Chinese language and culture access *Encounters* through printed text and offline and online electronic platforms, thereby greatly increasing the program's versatility.

In addition, Yale University and Fudan University have been partners in the publication of the Chinese language edition of YaleGlobal, one of the premier online magazines covering contemporary global affairs. The 2009 launch of YaleGlobal Fudan Edition (YGFE) marked the world's first international online magazine on globalization in Chinese. In addition to regularly carrying content from YaleGlobal, YGFE publishes original Chinese essays on globalization, as well as reviews of Chinese-language books on globalization.

Special Events

CHINESE PRESIDENT HU JINTAO'S HISTORIC VISIT TO YALE. On April 21, 2006, President Hu Jintao addressed an audience of students, faculty, and administrators on the topic of China's economic and social development. It was the first speech by a Chinese head of state ever broadcast live in China. President Hu's stop at Yale was one of only three stops during his visit to the United States; the others were at Boeing's headquarters and at the White House. Before addressing the University, President Hu met privately with President Levin for a gift exchange ceremony. In a significant contribution to the University's East Asia Library collection, President Hu endowed Yale with 1,346 volumes in both Chinese and English, spanning a range of disciplines in the humanities and social sciences. Representing the University's deep and long-standing ties with China, Yale presented President Hu with a portrait of and book from the collection of Yale alumnus Yung Wing, the first person from China to earn a degree from an American college or university.

YALE CHINA 100 TRIP. During his visit to Yale in April 2006, President Hu extended a personal invitation for a select group of 100 Yale students, faculty, and administrators to visit China. The Yale delegation was treated to a ten-day official tour of China in May 2007. After being personally greeted upon their arrival in Beijing by President Hu, the Yale delegation attended an official banquet in the Great Hall of the People. Other highlights of the trip included visits to Peking University and Tsinghua University in Beijing, Fudan University in Shanghai, and Xi'an Jiaotong University in Xi'an. In addition to interacting with Chinese students and scholars, the delegation met with government leaders and toured major cultural and historic sites in Beijing, Shanghai, and the ancient city of Xi'an.

YALE CHINA 50 TRIP. During her visit in April 2009, Chinese State Councilor Madam Liu Yandong invited fifty Yale graduate students to visit China. Fourteen students from the Graduate School and thirty-four students from the professional schools immersed themselves in Chinese culture and language for ten days. Their itinerary included visits to three Chinese universities – Beijing Foreign Studies University, Fudan University, and Eastern China Normal University – as well as trips to Tiananmen Square, the Great Wall, the Forbidden City, the Shanghai Museum, and the Pearl TV Tower. In addition to daily lessons in Mandarin, the students had special sessions on calligraphy and how to make dumplings. To gain a personal understanding of the nation's culture, the Yale students met with Chinese students at each of the universities they visited and spent an evening having dinner with local families.

MUSICATHLON, A CULTURAL PRELUDE TO THE OLYMPICS. The Yale School of Music and Beijing's Central Conservatory of Music hosted students from ten of the world's most elite schools of music. The concert halls of Beijing were filled with concerts, lectures, and master classes for two weeks prior to the start of the Olympic Games in July 2008.

YALE SCHOOL OF MANAGEMENT (SOM) EXECUTIVE PROGRAM IN BEIJING DURING THE 2008 OLYMPICS. Titled the "Yale Global Business Leadership Program at the Olympic Games," the series of discussions and lectures brought together more than 100 CEOs, journalists, and government leaders from around the world and some of SOM's top faculty to

discuss the state of global business and the rapidly growing role of China as an economic power. SOM was the only American business school to hold an executive educational program at the Olympics. Speakers included Stephen Schwartzman, CEO and co-founder of the Blackstone Group; Andrew Liveris, CEO of Dow Chemical Company; Martin Sorrell, CEO of WPP; Maurice Greenberg of C.V. Starr and Company; Peter Ueberroth, chairman of the United States Olympic Committee; Ji Xiao-An, chairman and CEO of the Beijing Hualian Group, China's largest retail chain; Dong Qian, anchor for China Central Television; Yale University President Richard Levin; and William Donaldson, former chairman of the Securities and Exchange Commission and founding SOM dean. They were joined by senior SOM faculty James Baron, Zhiwu Chen, Ravi Dhar, Jonathan Koppell, Barry Nalebuff, Jeffrey Sonnenfeld, and Victor Vroom.

Student Exchange, Fellowship, and Internship Opportunities

CHINESE STUDENTS AT YALE. Almost 500 Chinese students are currently in residence at Yale. In addition to courses in Yale's undergraduate, graduate, and professional degree programs, special opportunities have been developed for Chinese students to experience Yale. Among these programs are:

China Scholarship Council–Yale World Scholars in Biomedicine

In 2006, Yale University and the China Scholarship Council created the China Scholarship Council–Yale World Scholars Program in Biomedicine, which allows the best Chinese graduate students in the biomedical sciences to study in Yale's renowned Biological and Biomedical Sciences Program. The China Scholarship Council provides funds to support the students from eight of China's leading institutions – Sun Yat-Sen University, Nanjing University, Shanghai Jiaotong University, Fudan University, Huazhong University of Science and Technology, Peking University, Tsinghua University, and Zhejiang University.

Summer School Programs for Chinese Undergraduate Students

Each summer, undergraduate students from Fudan, Tsinghua, Peking, Shanghai Jiaotong, and Renmin universities attend Yale Summer Session and the English Language Institute. These programs enable the students to experience student life at Yale and take classes with Yale students.

Peking University and Yale University History Graduate Student Exchange Program

This is a formal exchange program for Ph.D. students and postdoctoral fellows between the Peking University and the Yale University history departments. The chosen participants are normally in non-Asian fields if they are from Peking University and in the China field if they are from Yale. In the spring term, they go to their partner university to attend graduate courses related to their studies and to work on their dissertation topics with teachers in their discipline. Every year, typically two graduate students/post-doctoral scholars are selected from each school on the basis of academic excellence and research priorities. Peking University and Yale provide housing and health coverage for the exchange students and exempt them from tuition fees.

Yale Visiting International Student Program

The Yale Visiting International Student Program is an honors program at Yale designed for undergraduate students from a select few partner institutions, which include the University of Hong Kong. After applying to Y-VISP, the top students are selected to join the Yale undergraduate community for a full academic year. Students granted admission to Y-VISP become fully integrated member of the Yale community. They live with Yale students in one of twelve residential college communities, enroll in Yale undergraduate courses, participate in extracurricular activities available to all Yale undergraduates, and receive support and assistance from residential college deans, faculty advisers, peer advisers, and Y-VISP program staff.

YALE STUDENTS IN CHINA. Each year, hundreds of Yale undergraduate and graduate students undertake Chinese language study. Many more study China's culture, economics, history, literature, politics, religions, and other aspects through dozens of courses offered in the

Yale curriculum. The formal academic study of China is complemented by opportunities for Yale students to study, work, and conduct research in China through such programs as:

Joseph Fox International Fellowship Program

The Fox International Fellowship Program, established in 1989, is a direct two-way student exchange partnership between Yale University and twelve of the world's leading universities in China, Russia, Brazil, England, Germany, Japan, France, India, Turkey, Israel, South Africa, Ghana, and Mexico. It was established by Joseph C. Fox '38 to identify and support talented individuals who will be future leaders in their respective fields. Fox Fellows pursue academic research, immerse themselves in local languages and culture, and develop lasting friendships with peers from other countries, with the goal of better understanding the people and institutions, thereby building a solid foundation from which to contribute to peaceful coexistence worldwide. Yale's partner for the Fox International Fellowship in China is Fudan University in Shanghai. Each year, one or two Yale students are selected to conduct independent research at Fudan, and one or two students from Fudan do the same at Yale.

Chinese Cultural Yung Wing Scholarship

Created in memory of Yung Wing, the first Chinese student to earn a degree at Yale University, the Chinese Cultural Yung Wing Scholarship supports one year of Chinese study for a Yale student. The scholarship covers tuition, instructional materials, housing, and medical care in addition to a monthly stipend for living expenses in China. Undergraduates, graduating seniors, and graduate students who have completed at least one year of formal Chinese language study are eligible. In 2014, five Yale students will receive the Yung Wing Scholarship.

Richard U. Light Fellowships

The Light Fellowship, inaugurated in 1996, currently enables over 70 Yale students to engage in Chinese language study each year. The Richard U. Light Foundation and the Greenberg–Yale China Initiative join to provide full funding for Yale students of exceptional promise to study Chinese at specifically approved sites. The Fellowship provides not only intensive language study, but also the opportunity for students to immerse themselves in cultures other than their own.

Approved programs of study in China include the Associated Colleges in China, CET Beijing, CET Hangzhou, CET Harbin, Duke Study in China, the Harvard-Beijing Academy, the Hopkins-Nanjing Center for Chinese and American Studies, the Inter-University Program for Chinese Language Studies, and Princeton-in-Beijing.

Yale International Internship Programs - China

The International Internships Program is a Yale Undergraduate Career Services (UCS) sponsored program offering Yale students the opportunity to work internationally for nine weeks over the summer. Each location offers internships in a variety of career fields including the arts, politics, global health, technology, community advocacy, "think tanks," finance, journalism, and law. As part of the program, UCS coordinates optional housing for students in Beijing, Shanghai, and Hong Kong, and works with local alumni who serve as mentors and in-country support to the students throughout their internship. In previous years, students have been placed at a variety of

organizations, ranging from major corporations, such as IBM China, to nonprofit organizations, such as the Palace Museum in the Forbidden City. In 2013, 37 Yale students interned in China. Since the program's inception, 317 students have worked in China.

Council on East Asian Studies Field Research Grants

The Council on East Asian Studies Field Research Grants at the MacMillan Center provides funding for Yale University graduate students in the Arts & Sciences who expect to be engaged in research on their doctoral dissertations during the summer and/or next academic year. Grants are for research generally outside the United States and are available to registered Yale graduate students who have completed, or will complete, all pre-dissertation work before the next academic year. The approved dissertation research must focus primarily on China, Japan, or Korea.

Yale Senior Leadership Programs

Many of Yale's professional schools are involved in training programs for leaders and key practitioners, including nursing and hospital leaders as well as provincial environmental administrators and educators.

China-Yale Advanced University Leadership Program

The China-Yale Advanced University Leadership Program (CYAULP) was initiated in 2004 for presidents and vice presidents from China's leading universities. In collaboration with China's Ministry of Education, the CYAULP was developed in response to the aspiration expressed in 1998 by China's President Jiang Zemin to transform a small number of Chinese universities into "world-class universities." In November 2003, Vice President of the People's Congress Chen Zhili, who had previously served as the Minister of Education and State Councilor, asked Yale President Richard C. Levin to develop a program at Yale for university leaders. The Program utilizes a combination of lectures, case studies, and simulations to illustrate the goals and operations of key administrative functions at leading U.S. research universities. Over the years, Yale faculty and administrators and Chinese university leaders have discussed a number of issues that are key to the American research university, such as liberal arts education, peer review, and competitive faculty appointment processes, as well as administrative practices, ranging from fund-raising techniques to strategic planning. The objective has been to review models and best practices that Chinese universities might profitably adapt to their own needs. The first and second sessions of CYAULP took place in New Haven, sessions have also been held in Xiamnen, Xi'an, and Shanghai.

China-Yale Senior Government Leadership Program

Inaugurated in 2005, this program accommodates the most senior cohort of Chinese government officials to participate in an executive education program outside China. The Program focuses on issues related to administration according to law, and in its first three years was a collaboration of Yale University—through its China Law Center—and the China National School of Administration. The Central Party School became Yale's partner in 2009. Yale alumni and other experts who have participated include U.S. President George W. Bush, two U.S. Supreme Court justices, current and former U.S. Cabinet secretaries, the Governor of New York, and the United Nations Secretary-General. They joined leading Yale scholars from the schools of Law, Management, Forestry & Environmental Studies, and the Arts and Sciences. The participants and presenters examined the experience of governance and regulation and expanded the Chinese participants' understanding of the best thinking on important issues of law and public policy. After completing the Program, fifteen participants moved on to positions of higher responsibility.

Yale-Tsinghua Environment and Sustainable Development Leadership Program

The Yale School of Forestry & Environmental Studies (F&ES) and the Department of Environmental Sciences and Engineering of Tsinghua University, in collaboration with the China Association of Mayors, have established an executive education program that seeks to help Chinese municipal leaders understand and meet the challenges of sustainable development. The Environment and Sustainable Development Leadership Program (ESDLP) is intended primarily to provide training for Chinese city officials but may also include national or provincial

government leaders and others who are responsible for urban planning and development. The program consists of a three-day seminar at Tsinghua University, a three-day seminar at Yale, and a ten-day field-based training experience in the United States. Through lectures, case studies, and field experiences, the ESDLP program focuses on three broad topics:

- Challenges and opportunities in environment and sustainable development;
- Concepts in land-use planning, social ecology, and industrial ecology, and their implications for urban planning and policies; and
- Applications of the concepts of sustainable development to specific urban concerns, such as water supply and quality, energy, pollution reduction, waste management, and other important urban environmental issues.

The initial Program entailed three annual sessions from 2004 through 2006. Its success led to the renewal of the Program for another three years.

Women's Advanced Leadership Development Program

In collaboration with the All-China Women's Federation, Yale inaugurated the first Women's Advanced Leadership Development Program in 2010. The goals of the Program are: to improve the leadership skills of Chinese female leaders with high potential, increase cooperation between Yale University and China, and establish the University as a leader in female leadership training. Participants include twenty-five women from party and government positions at the provincial or ministerial level and from state-controlled enterprises and financial institutions. Considering China's growing need for skilled leaders and the particular needs and challenges of female leadership as well as Yale's academic strengths, the Program focuses on female leadership in public policy and administration. The Women's Advanced Leadership Development Program begins with a one-week training session in China and continues at Yale, where the participants have the opportunity to learn from top Yale faculty about government administration, public policy, social development, negotiation, and leadership. The in-classroom training is augmented by site visits to New York and Washington, D.C., for meetings with leaders from the U.S. government and business sector.

10,000 Women: Yale-Tsinghua Certificate Program in International Healthcare Management

The 10,000 Women: Yale-Tsinghua Certificate Program in International Healthcare Management is part of a global program funded by Goldman Sachs to provide business and management training to underserved women in emerging markets around the world. The Yale Global Health Leadership Institute (GHLI) has partnered with Tsinghua School of Economics and Management in China to train 500 women in international healthcare management and leadership. The Program empowers middle and senior-level managers from across the health delivery system, with a focus on rural and underserved urban hospitals. The Program has a particular emphasis on women who would not otherwise be able to access management training. Combining didactic training and applied fieldwork, the Program equips the scholars with the necessary tools to assist China in its healthcare system reform efforts.

China-Yale Youth Leaders Dialogue

The China-Yale Youth Leaders Dialogue is a ten-day program organized with the All-China Youth Federation that brings 15 Chinese youth leaders to the United States to help them to gain a deeper appreciation of American government, society, and culture through formal and informal

activities. The participants range in age from 35 to 45; they are accomplished young leaders and fast rising stars in their respective fields. The first session was held April 1-11, 2013. The first week of the programming in New Haven included lectures by renowned Yale faculty as well as dialogues with young professionals and Yale students. Yale also arranged for participants to visit key think tanks and to share insights with former senior U.S. government officials in Washington D.C.

Yale Leadership Center in Beijing

Yale University is creating a new Yale Leadership Center in Beijing that will host conferences, workshops, and other events developed by all of the university's schools and programs. The 16,500 square-foot center, located in the Chaoyang district of Beijing, will provide offices and meeting spaces for individual Yale faculty members who visit Beijing for their research or other scholarly pursuits, as well as facilities for conferences. It will also be used for other Yale activities in Beijing from admissions informational sessions to alumni events. It will be Yale's only center in China hosting programming from the entire university community. The center will open in the fall of 2014.

Research Centers and Major Collaborative Efforts

A collection of unique research centers and initiatives have defined Yale's relationship with China. Joint research centers with Peking University, Fudan University, and the University of Science and Technology of China work at the forefront of scientific research in the fields of nanotechnology, software engineering, plant genetics, and biomedicine. In addition, collaborations in health, management, law, and architecture also provide exchange opportunities for students and faculty. Short descriptions of these collaborations are highlighted below (full descriptions can be found in a later section).

Fudan-Yale Biomedical Research Center

Faculty from Yale and Fudan University conduct research involving large genetic screens in mice and fruit flies to elucidate the basic mechanisms of disease development at the Center, which was established in 2003. Led by Professor Tian Xu, the groundbreaking research from the Center has generated published articles in *Cell, Cell Research*, and *Developmental Biology*.

Joint Peking-Yale Center for Microelectronics and Nanotechnology

Established in 2005, the Center is led by Professor Tso-Ping Ma. This world-class research and educational center in Microelectronics and Nanotechnology (M&N) was created through a collaboration between faculty at the Center for Microelectronic Materials and Structures ("uELM") at Yale and at the Institute of Microelectronics at Peking and supports a multidisciplinary research program in M&N in which independent research groups work within a common facility, sharing resources and expertise.

Peking-Yale Joint Center for Plant Molecular Genetics and Agro-biotechnology

Established in 2001, Peking University and Yale faculty conduct cutting-edge research on model plant systems and in the application of this basic research to crop improvement – an area of great interest and importance both to China and to the United States. The Center is a major organizer of the Plant Biology annual course and workshops in Beijing, a leading conference held in China every other year.

USTC-Yale Joint Research Center on High-Confidence Software

Established in 2008 by Yale and University of Science and Technology of China, the Center pursues research in all areas of High Confidence Software (HCS) and formal methods such as formal verification of system software. The Center brings together faculty members from both universities and supports a multidisciplinary research program in HCS in which independent research groups work within a common facility, sharing resources and expertise.

SJTU-Yale Joint Center for Biostatistics

Faculty from Yale and Shanghai Jaio Tong University (SJTU) will conduct cutting-edge biostatistical and translational medicine research at the SJTU-Yale Joint Center. Researchers at the Center will focus on cancer as well as cardiovascular and metabolic diseases with special emphasis placed on translating "bench" research into "bedside" practice. Yale's Ira V. Hiscock Professor of Biostatistics, Hongyu Zhao, in collaboration with researchers from SJTU and the Shanghai National Center for Translational Medicine, will lead the new joint center.

Global Network for Advanced Management

Convened by Yale SOM in 2012, the Global Network consists of 25 leading international business schools, including Fudan University School of Management, Renmin University of China School of Business, and Hong Kong University of Science and Technology Business School, that work together to improve teaching and understanding of the challenges posed by increasingly interconnected and complex global markets. Students at the partner schools have access to the Master of Advanced Management (MAM) program at Yale SOM and participate in Global Network Weeks, which enable students to study with leading faculty and students for a week at partner schools. Yale, Renmin and Fudan have hosted a Network Week.

The China Center at Yale Law School

The China Center is the primary home for activities related to China at the Law School. The cornerstone of these activities is The China Law Center, established in 1999. In recent years, The China Center has expanded its work to issues of U.S.-China relations more generally.

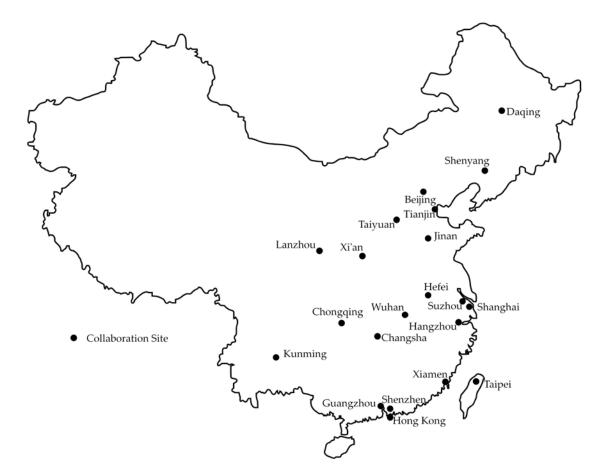
Yale China Studio

A joint venture between Yale School of Architecture and Tsinghua University, the Yale China Studio has been involved in several exciting urban development projects in Beijing. The current joint studio includes travel by Yale students to Beijing in September, and participation by the Tsinghua students and faculty in final reviews at Yale in December.

Faculty Collaborations with China

Yale faculty are pursuing a broad array of research, educational, and training activities in and related to China. Currently, hundreds of Yale faculty members have research collaborations with China, and University faculty and researchers work in sites spread across all parts of China.

The faculty includes the many China specialists associated with the Council on East Asian Studies in the Whitney and Betty MacMillan Center for International and Area Studies at Yale, as well as faculty from the graduate and professional schools, including the schools of Law, Medicine, Forestry & Environmental Studies, Management, and Architecture. A fuller review of current projects is available on the Yale and the World website: world.yale.edu. The following is a sampling of the range of initiatives now under way.



Current Faculty Collaborations with China

(In Alphabetical Order by School/Department)

Architecture, School of Arts and Sciences, Faculty of Anthropology, Department of Computer Science, Department of East Asian Languages and Literatures, Department of Ecology and Evolutionary Biology (Program) History, Department of Molecular, Cellular, and Developmental Biology, Department of Philosophy, Department of Physics, Department of Political Science, Department of Religious Studies, Department of Sociology, Department of **Divinity School** Drama, School of Engineering and Applied Science, School of Forestry & Environmental Studies, School of International and Area Studies, The Whitney and Betty MacMillan Center for Jackson Institute for Global Affairs Law School Management, School of Medicine, School of Music, School of Nursing, School of Public Health, School of Yale-China Association

Architecture, School of

Yale China Studio

As of 2011, the Yale China Studio sponsors collaborations between faculty and graduate students at Yale and Tsinghua University in Beijing. The Studio worked on a series of significant sites all located along the historic north-south axis of the city of Beijing. In 2011, collaborators worked with a sensitive traditional neighborhood immediately adjacent to the walls and moat of the Forbidden City. In 2012, just north of historic neighborhood, the Studio developed a large undeveloped site left over from the Asian Games and the 2008 Olympics. In 2013, the Studio considered a site to the south of the city as part of the development project for the new Beijing airport. As with the Hong Kong-Shanghai-Yale studio from 2000-2010, the current joint studio includes travel by Yale students to Beijing in September, and participation by the Tsinghua students and faculty in final reviews at Yale in December.

Arts and Sciences, Faculty of

ANTHROPOLOGY, DEPARTMENT OF

Chinese Culture, History and Society

Yale's Program on the study of culture, history and society is led by Professor Helen F. Siu of the Department of Anthropology, an authority on South China. Since the 1970s, she has conducted historical and ethnographic fieldwork in the Pearl River delta, examining rural and urban transformations in revolutionary South China, the revival of market towns in the reform era, and, lately, the middle class in Guangzhou, Hong Kong, and other mega-cities in Asia. Professor Siu is also deeply involved with the development of tertiary education and research funding in Asia and the United States. She has served as an overseas member of the University Grants Committee (1992–2001) and the Research Grants Council (1996–2001) in Hong Kong. For her public service, she was awarded the Bronze Bauhenia Star by the Government of the Hong Kong Special Administrative Region. In the United States, Professor Siu has served on the Committee for Advanced Study in China and the National Screening Committee for Fulbright awards. In 2001, she set up the Hong Kong Institute for the Humanities and Social Sciences (HKIHSS). Hosted by the University of Hong Kong, the Institute promotes creative, interdisciplinary research to bring together scholars in major universities in North America, Europe, China, and Hong Kong. Initiatives include "Inter-Asian Connections," "Humanities, Science and Medicine," "Asian urbanity," "Charities, Cultures, and Civil Society," and "China-Africa Encounters. "Professor Siu actively introduces Yale to the professional, government, and business circles in East Asia.

Inter-Asia Initiative

Professor Helen F. Siu heads Yale's Inter-Asia Initiative. Supported by the MacMillan Center, she uses workshops, lectureships and research trips to connect faculty and students in the area councils on East Asian Studies, South Asian Studies, and Southeast Asian Studies. She has brought Yale faculty and students into an emerging network focusing on inter-regional and inter-disciplinary research. In 2012, the MacMillan Center (with Siu and Kalyanakrishnan

Sivaramakrishnan as co-PIs) received a grant of half a million dollars from the Carnegie Foundation to join a consortium comprising SSRC, NUS, and HKIHSS to promote Inter-Asian activities.

Yale-Shandong University Archaeological Studies

Professor Anne Underhill (Department of Anthropology, and Curator) has a long-term (since 1995) collaborative research project in archaeology with Shandong University in Jinan, Shandong province, China. The team conducted a multi-year regional survey in the Rizhao area of southeastern Shandong and excavated the regional center at Liangchengzhen. The team is continuing analysis of remains and plans further fieldwork. In May 2012 an MOU involving Yale's Archaeological Studies Program and the archaeology program at Shandong University was signed by individuals from both institutions at Yale, with the aim of facilitating more collaboration involving students and faculty.

COMPUTER SCIENCE, DEPARTMENT OF

USTC-Yale Joint Research Center on High-Confidence Software

In 2008, President Hou Jianguo of the University of Science and Technology (USTC) and President Richard Levin of Yale University established the USTC-Yale Joint Research Center for High-Confidence Software (HCS). The Center pursues research in all areas of HCS and formal methods, such as formal verification of system software, certifying compilers, concurrent and multi-core software, and automatic theorem proving systems. The Center brings together faculty members from both universities with the facilities and human resources of USTC. The goal of the Center is to support a multidisciplinary research program in HCS in which independent research groups work within a common facility, sharing resources and expertise. The Center facilitates collaborations between research groups in HCS based at each university. It also enables the exchange of students and researchers between research groups at the two institutions. In 2009, USTC and Yale signed an agreement to support the exchange of graduate students and collaboration in computer science research. Professor Zhong Shao is the main contact for this center.

EAST ASIAN LANGUAGES AND LITERATURES, DEPARTMENT OF

Chinese Literature

The Council on East Asian Studies hosts a steady stream of Chinese scholars and conducts a number of lectures and workshops each year. In addition, Professor Kang-I Sun Chang collaborates with the Academy of International China Studies at Peking University, the most prestigious sinological center in China, to organize many scholarly activities--including promoting their library collection of China-related books, and giving lectures there.

Global Chinese Literature

Jing Tsu, Professor of Chinese Literature & Comparative Literature and Chair of the Council on East Asian Studies, specializes in modern Chinese literature and culture from the 19th century to the present. Her research areas include nationalism, race, diaspora, Sinophone literature, transnational labor, history of science, and different approaches to large-scale literary and cultural studies. In 2011, Professor Tsu was the keynote speaker at the conference co-hosted by the National Taiwan University and the National Museum of Taiwan Literature in Taipei on "Li Yongping and Taiwan/Malaysian-Chinese Literature." She also gave the keynote address at Nanyang Technological University's "International Conference on New Horizons of Diasporic Chinese Studies" in 2014. Professor Tsu and Harvard Professor David Der-Wei Wang coedited *Global Chinese Literature: Critical Essays* in 2010.

Library International Project, National Library of China

The Yale East Asia Library is participating in a project initiated by the National Library of China and the International Union Catalogue of Chinese Rare Books. The goal of this project is to create a comprehensive database of bibliographic and visual information on Chinese books held in China and in collections around the world.

ECOLOGY AND EVOLUTIONARY BIOLOGY (PROGRAM)

Plant and Fungal Diversity

Professor Michael Donoghue (Department of Ecology and Evolutionary Biology and Curator of the Division of Botany) has recently established a botanical research collaboration with Kunming Botanical Institute in Yunnan Province and with Shenzhen Fairy Lake Botanical Garden in Guangdong. This collaboration focuses on studying the biogeography, evolution, and systematics of Viburnum, a flowering plant group of 170 woody species distributed primarily in temperate and subtropical forests around the Northern Hemisphere and with a center of diversity in China. During the spring of 2013 a team of scientists led by Dr. Patrick Sweeney, Collections Manager of the Peabody Museum's Division of Botany, participated in a five-week field expedition which was conducted in southern China; they collected material from across the region from the Nanling Mountains in the east to the Galigongshan Mountains in the west.

HISTORY, DEPARTMENT OF

History of the Ming and Qing (1368–1912) Archives of China

Professor Emeritus Beatrice Bartlett is writing a book on the history of the Qing dynasty (1644–1912) central government archives, focusing particularly on the Ming and Qing documents in the Taipei Palace Museum, the Beijing Number One Historical Archives, the Liaoning (Shenyang) Province Archives, various local archives, and the holdings at the Institute of History and Linguistics at the Academia Sinica in Taipei. Her history will include discussion on the twentieth-century fate of the materials after the fall of the Qing dynasty. Several conference papers and publications have already resulted from this project.

Modern Chinese History

Professor Emeritus Jonathan Spence of the Yale History Department, a leading scholar of modern Chinese history, has taught on Chinese history from 1600 to the present and on Western images of China since the Middle Ages. His research often takes him to Chinese universities. His books include *The Death of Woman Wang* (1978), *The Memory Palace of Matteo Ricci* (1984),

The Question of Hu (1987), God's Chinese Son (1994), and The Search for Modern China (2001).

MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY, DEPARTMENT OF

Peking-Yale Joint Center for Plant Molecular Genetics and Agro-biotechnology

Inaugurated in 2001, with funding from the Monsanto Company, the Rockefeller Foundation, Chinese grant agencies, and Peking and Yale universities, the Peking-Yale Joint Center is one of the most successful models of Yale's collaboration with China. Led by Professor Xing Wang Deng, the Center sponsors research on model plant systems and in the application of this basic research to crop improvement - an area of great interest and importance both to China and to the United States. The Center facilitates student and faculty exchanges between Peking University and Yale. So far, all Yale faculty members involved in plant biology and genomics research have visited Beijing at least once to exchange ideas and deliver lectures. Likewise, eight of Peking's faculty members have visited Yale to give lectures and to have discussions with Yale's faculty and students. Five Yale Ph.D. students and six post-doctoral scholars visited Peking to conduct short-term research collaboration projects. So far, fifteen Peking Ph.D. students have already visited Yale, and three are currently at the University. Generally two students visit each year. The Center is a major organizer of the Plant Biology annual course and workshops in Beijing, a leading conference held in China every other year. The Peking-Yale Joint Center for Plant Molecular Genetics and Agro-biotechnology moved into new laboratory facilities on the campus of Peking University in 2003.

One-Child Policy

Although China's One-Child policy is perhaps the world's most massive case of social engineering and perhaps the largest demographic event since the global Black Death, there are few first-person reports of Chinese attitudes toward the policy. Professor Robert Wyman is working to change this by leading a team to conduct individual surveys and family interviews. These examples will illustrate individual Chinese experiences of the policy. In addition, working with collaborator Prof. Guigui Yao of Jianghan University, Wuhan, they are studying the centrality of the One-Child Policy to efforts of the US Christian Right to influence US foreign policy towards China.

PHILOSOPHY, DEPARTMENT OF

Philosophy Summer School

The Philosophy Summer School in China brings many distinguished professors of philosophy to teach the methods and contents of Western philosophy to Chinese students. Since its first session in 1988, the Summer School has effectively raised the standards for philosophical education in China. The school focuses on a different area of philosophy each summer during an intensive three-week period. Top graduate students and academics are selected from all over China to attend three lectures and one seminar per day. Alumni of the Summer Session now serve as the major force behind Chinese research and teaching on Western philosophy. In 2008, Yale became the American sponsoring body, and Professor Thomas Pogge was named the American Chair of

the Philosophy Summer School. The 2010 session featured Applied Philosophy and was held in Harbin; the 2011 session on Philosophy of Biology was held in Chongqing; the 2012 session on German Idealism was held in Changchun; and the 2013 session on Philosophy and Psychology was held in Qinhuangdao. The locations of the 2014 session on Pragmatism, the 2015 session on Philosophy of Science, and the 2016 session on Philosophy of Action are still being discussed.

PHYSICS, DEPARTMENT OF

Alpha Magnetic Spectrometer (AMS) Experiment

Professor Jack Sandweiss collaborates with scientists in various countries, including China, and focuses on the use of an alpha magnetic spectrometer (AMS) to look for strange quark matter in cosmic radiation. The first AMS device was mounted on the International Space Station in 1998. The final version was launched on the last shuttle flight, which took place in May 2011.

STAR Collaboration

Professor Sandweiss, along with Professor John Harris, collaborates with a group of Chinese physicists on the STAR project at the new high-energy heavy ion collider (RHIC–Relativistic Heavy Ion Collider) at Brookhaven National Laboratory. Recently, a large contingent of Chinese scientists joined STAR and spent the summer of 2011 constructing one of the important new detectors to be used in STAR. The major collaborating institutions in China are Peking University and the University of Science and Technology.

POLITICAL SCIENCE, DEPARTMENT OF

Nationalism in China

Assistant Professor Jessica Chen Weiss investigates the role of domestic politics in China's foreign relations, particularly the management of public opinion and popular nationalism. She is finishing a book manuscript on nationalist protest that suggests that Chinese and other authoritarian leaders have diplomatic incentives to allow or repress anti-foreign protests to demonstrate resolve or reassurance. To evaluate the theory and its implications, Professor Weiss draws upon data gathered over fourteen months of field research in China, Hong Kong, Tokyo, Washington, D.C., Cairo, and Paris, including more than 150 interviews with government officials, nationalist activists, protest leaders and participants, and foreign policy experts. In other work, Professor Weiss investigates the role of anti-Chinese sentiment in China's foreign relations, including China campaign ads in US elections and Vietnamese protests against China's actions in the South China Sea.

RELIGIOUS STUDIES, DEPARTMENT OF

Ethics and Evolution

In 2009, Professor John Hare taught a course to faculty and graduate students at Peking University called Ethics and Evolution. The project was funded by the Templeton Foundation, and expenses were paid by Peking University. Two of Professor Hare's books, *The Moral Gap* and *Why Bother Being Good?*, are being translated into Chinese, the first by Peking University Press.

SOCIOLOGY, DEPARTMENT OF

Sociology Academic Development and Summer Sociology Research Seminars

Professor Deborah Davis focuses on Chinese urban society. She teaches courses on research methods and inequality and stratification. In her summer fieldwork seminar, Yale students work collaboratively with students from Hong Kong and China. In past summers, the seminar has investigated such topics as transformations of childhood consumption, changing concepts of privacy and property rights, the uses of public space in new and old residential communities, comparison of household and village resources to predict school attendance in rural Yunnan, rural voting behavior, divorce settlements in Hong Kong and Shanghai, migrant health, and volunteer counseling services. Professor Davis is the author of Long Lives: Chinese Elderly and The Communist Revolution (1983, 1991) and editor of Chinese Society on the Eve of Tiananmen (1990), Chinese Families in the Post-Mao Era (1993), Urban Spaces in Contemporary China (1995), The Consumer Revolution in Urban China (2000), Creating Wealth and Poverty in Postsocialist China (2009), Wives, Husbands and Lovers (forthcoming). She has held postdoctoral grants from the National Academy of Sciences, the Social Science Research Council, the National Institute on Aging, the American Council of Learned Societies, the Luce Foundation, and the Templeton Foundation. Professor Davis has served as chair of the Joint Committee of Chinese Studies of ACLS, consultant to the Ford Foundation, member of the Harvard College Board of Overseers Committee on East Asia, vice president of the Yale-China Association Board of Trustees, chair of Social Science Research Panel for the Hong Kong SAR Research Council, and associate editor of the Journal of Asian Studies.

Global Civic Society

Professor Jeffrey Alexander conducts research that challenges the idea that the world is moving rapidly to a global civic society. Through an examination of this issue in China, Israel, and India, preliminary data suggest that these nations are, to the contrary, much more interested in working on their own collective identities, particularly in relation to the trauma of post-authoritarianism and post-colonialism. In addition, Professor Alexander works closely with two members of the University of Shanghai Sociology Department, one of whom is an editor of the leading Journal of Sociology in China. The Journal will issue a special section on a research program called "The Strong Program in Cultural Sociology," of which some of the writings have been translated into English.

Divinity School

Christian Theology in China

Professor Starr is currently editing and translating a reader in Chinese Christian theology and working on a volume on Chinese intellectual Christianity, a project supported in 2011-12 by a Luce Fellowship in Theology. She spent 2008-09 as a research fellow at Renmin University and Tao Fong Shan. She is also an advisory board member of the Confucius China Study Plan (CCSP) at Renmin University.

Digitization Project with Shantou University

Shantou University's Center for Christian Studies and the Yale Divinity Library are currently collaborating on the gathering and digitization of research resources related to mission and church work in the Shantou area of China. Two collections of papers of missionaries who worked in this area have been digitized, the Abbie Sanderson Papers and the Ellison and Lottie Hildreth Papers. Yale Divinity School librarian Martha Smalley is the key contact for this project.

Digitization Project with Hong Kong Baptist University

Yale Divinity School Librarian Paul Stuehrenberg is working with Irene Wong and Haipeng Li from Hong Kong Baptist University in digitizing 13 denominational periodicals selected for digitization by five Christian Hong Kong institutions. Documents are scanned and micro-filmed for preservation.

Drama, School of

Theatre Academy Professorship

In 2013, Professor Elizabeth Diamond was a Visiting Professor of Directing at the Shanghai Theatre Academy in Shanghai, China.

Engineering and Applied Science, School of

Joint Peking-Yale Center for Microelectronics and Nanotechnology

Electrical Engineering Professor Tso-Ping Ma collaborated with the Institute of Microelectronics at Peking University to form the Joint Peking-Yale Center for Microelectronics and Nanotechnology. This world-class research and educational center in Microelectronics and Nanotechnology (M&N) combines the expertise of faculty members from both universities with the facilities and human resources of Peking. The long-term goal of the Center is to support a multidisciplinary research program in M&N in which independent research groups work within a common facility, sharing resources and expertise. The Center is most directly associated with the Center for Microelectronic Materials and Structures ("uELM") at Yale and the Institute of Microelectronics at Peking.

Forestry & Environmental Studies (F&ES), School of

Influences on Chinese Ecosystems

Collaborating with the Chinese National Academy of Science and Nanjing University of Information Science and Technology, Professor Xuhui Lee and his colleagues are conducting research to quantify energy, carbon, and water fluxes in various ecosystems (forest, cropland, lake) in China. One of the goals is to quantify the fluxes of greenhouse gases of these ecosystems and to understand how weather, climate, and pollution loading influence these fluxes in the atmosphere.

Environmental Performance Measurement in China

Professor Daniel C. Esty and Dr. Angel Hsu, through the Yale Center for Environmental Law and Policy, have worked collaboratively with Columbia University, The Chinese Academy for Environmental Planning, and the City University of Hong Kong in an effort to produce a datadriven assessment of environmental performance for each of China's provinces. China is facing well-documented and well-publicized environmental challenges as well as rapid population change and economic growth. In this context it is critical for China to have the policy tools necessary to guide and prioritize action.

Yale's Environmental Performance Index (EPI) is a respected international metric for assessing the state of national environments and developing environmental policy. The purpose of the Center's work with China is to fashion a parallel provincial-level metric for China. The first phase of this project was a series of workshops in China exploring the availability of environmental data and policy targets. This phase concluded with a report documenting those elements necessary for a China EPI that are not yet in place, including a lack of data or policy targets for important categories such as fisheries and water quality.

Since the conclusion of this first phase China has made substantial progress towards more datadriven and transparent environmental policymaking. The Chinese Ministry of Environmental Protection reviewed the China EPI report and is now moving towards a China Environmental Performance Assessment System for implementation in the 12th Five-Year-Plan. The Government is likewise cooperating with the United Nations Environment Program to develop a China Pollution Reduction Performance Assessment program for Chinese cities. These projects evidence a dramatic reformation of environmental policymaking in China and bode well for a future China EPI. The Chinese Academy for Environmental Planning has asked the Center and Dr. Hsu to remain engaged, as she is one of the leading expert's in Chinese Environmental Policy, and although the first phase resulted only in an assessment of shortcomings, efforts are underway to produce a complete and effective Chinese environmental assessment.

Environmental Attitudes and Behaviors in Urban China

Dr. Leiserowitz served as the primary advisor to the first nationally representative survey in China on public climate change awareness, risk perceptions, policy support, and behavior and understanding in 2012. The results have been disseminated widely in China and at international fora like COP 18 in Doha, Qatar. He also helped create a national Center for Climate Change Communication with the Research Center for Journalism and Social Development at Renmin University and Oxfam-Hong Kong, in partnership with the Chinese government, called China4C.

Dr. Leiserowitz and his team at the Yale Project on Climate Change Communication (YPCCC), along with China4C, are co-organizing an international conference entitled "Climate Change Communication: Research and Practice." Held in October 2013 in Beijing, the gathering is the first of its kind. It aimed to convene and help catalyze the international community of climate change communication scholars and practitioners. The field is new and it is rapidly growing around the world, as scientists, governments, the media, companies, and NGOs recognize the vital importance of effective communication about climate change. Globally, the field has achieved a critical mass and YPCCC and China4C are gathering many of the world's leading

climate change communication experts together to share their insights, make connections, and help establish a global network. The conference is conceived as a recurring event, to be alternately hosted by the YPCCC at Yale and by China4C in Beijing.

Collaborative Urban Environmental Crisis Management (UECM) Research Project

The Collaborative Urban Environmental Crisis Management (UECM) Research Project in China is a collaboration with Chinese urban communities, universities, corporations, and governments. It has received one million U.S. dollars in grants, primarily from its Chinese partners. The research focuses on the Yellow River, Weifang Coast Industrial Park, Suzhou and Fujian provinces, and the Dapeng Peninsula. The UECM Research Project seeks to mobilize governmental leaders, professionals, and urban residents with ecosystem expertise for effective management of environmental disasters in the ecologically critical urban regions of China.

Industrial Ecology and the Circular Economy in Tianjin, China

Professor Marian Chertow has been involved in a multiyear study of the Tianjin Economic Development Area (TEDA) – a large and progressive industrial development with over 70 Fortune 500 companies and hundreds of others situated in the Binhai New Area, a region greater than 2,000 square kilometers set to become the next large-scale industrial development area in China. She chaired the 9th Annual Industrial Symbiosis Research Symposium at TEDA in October 2012 examining TEDA's success with creating links across the companies based on resource exchange, and assessing how additional connectivity would aid economic and environmental goals. Prof. Chertow is also a Visiting Professor at Nankai University in Tianjin in the National Center for Innovation Research on Circular Economy.

Developing Low-Carbon Cities in the US, China, and India Through Integration Across Engineering, Environmental Sciences, Social Sciences, and Public Health

Funded by the US National Science Foundation in November 2012, this Partnership for International Research and Education (PIRE) award supports a five-year, \$4.5 million project that brings researchers and students from six U.S. institutions together with five partner institutions in India and three in China to conduct transformative research that will contribute to the development of low-carbon, sustainable cities in the U.S., India, and China. This research effort is two-pronged, focusing on reducing greenhouse gas emissions in selected cities and also addressing broader sustainability goals such as economic development, water scarcity, environmental pollution, climate change, and public health. Prof. Marian Chertow and her research team at Yale F&ES is working with Professor Anu Ramaswami from the University of Minnesota on comparative footprinting of the selected Chinese cities and also on investigating how clusters of companies can share materials, water, and energy symbiotically and thus avoid costs for both resources and infrastructure, thus making local Chinese industries more viable economically and environmentally.

Pollution, Sandstorms, & Hospital Admission

Professor Michelle Bell is examining the relationship between air pollution, sandstorms, and hospital admissions in Taiwan. Professor J.K. Levy from Western Washington University and Professor Z. Lin from the Chinese Academy of Sciences are contributing collaborators.

International and Area Studies, The Whitney and Betty MacMillan Center for

The Council on East Asian Studies

For over fifty years, the Council on East Asian Studies (CEAS) has promoted education about East Asia both in the college curriculum and through lectures, workshops, conferences, film series', cultural events, and educational activities open to faculty, students, and the general public. CEAS is a designated National Resource Center for the study of East Asian languages and cultures by the United States Department of Education (2006-2014).

With more than thirty core faculty and twenty language instructors spanning twelve departments on campus, East Asian Studies is one of Yale's most extensive area studies programs. Its interdisciplinary emphasis encourages collaborative linkages across fields and departments and contributes to diversity across the curricula and in the classroom. Over a dozen academic departments offer approximately 100 courses annually on Chinese language, history, literature, society, politics, art, economics, and other subjects. These academic offerings are supported by renowned library, art, and scientific collections that are among the finest in the world outside of China.

CEAS administers Bachelor of Arts (B.A.) and Master of Arts (M.A.) Programs in East Asian Studies. Graduate students in departments and programs of the Graduate School of Arts and Sciences and in Yale's professional schools can also pursue degrees with a focus on China. CEAS supports Yale graduate student conferences, student organization programming, and over forty student research projects per year.

The CEAS Postdoctoral Associates Program brings talented young scholars to Yale to conduct research and teach advanced undergraduate seminars. CEAS also welcomes domestic and international scholars to campus each year as guest lecturers, visiting fellows, research scholars, and professors. In addition, many CEAS faculty provide guest lectures and attend workshops and conferences at universities and research institutions across China.

CEAS supports Yale faculty research and collaborative projects with peer institutions throughout China. Some examples include:

• Professor Kang-i Sun Chang (East Asian Languages & Literatures, Yale University) has collaborated with the Academy of International China Studies at Peking University, the most prestigious sinological center in China, to organize many scholarly activities -- including promoting their library collection of China related books, and delivering guest lecture series on campus.

• Professor Helen Siu (Anthropology, Yale University) has conducted collaborative research with colleagues at Sun Yat-sen University on urban village enclaves in Guangzhou; has worked with historians at Sun Yat-sen University and Tsinghua University on developing historical anthropology as a field of study; and has coordinated a China-Africa Diaspora Project that draws upon the research synergies of colleagues in Yale's Anthropology Department, Yale's Inter-Asia Initiative, the Hong Kong Institute for the Humanities and Social Sciences at the

University of Hong Kong, Sun Yat-sen University, and Fudan University. Professor Siu is also involved with research pursuits related to China's global engagements and the analysis of both historical and contemporary Asian connections.

• Professor Anne Underhill (Anthropology, Yale University) has worked with several archaeologists at Shandong University since 1995, doing fieldwork in the Rizhao area of southeastern Shandong to locate and excavate settlements from the prehistoric and early Bronze Age periods. With her signing of a memorandum of understanding in May 2012, plans are underway to further develop fieldwork and analysis opportunities for archaeology students and scholars.

CEAS programming often includes international workshops and conferences that are a direct result of collaborative endeavors with Chinese institutions. Some examples from the past decade include:

• As a result of the September 2003 conference at Yale and the July 2004 workshop in Hong Kong on Globalization's Newest Challenge: SARS, Professors Deborah Davis (Sociology, Yale University) and Helen Siu (Anthropology, Yale University) edited a volume entitled *SARS: Reception and Interpretation in Three Chinese Cities* (2006).

• CEAS co-sponsored a conference in Hong Kong in March 2008 on The Olympics in East Asia: Nationalism, Regionalism, and Globalism on the Center Stage of World Sports with the University of Hong Kong, Hong Kong Institute for the Humanities and Social Sciences. Professors William Kelly (Anthropology, Yale University) and Susan Brownell (Anthropology, University of Missouri–St. Louis) organized the conference, which was followed by a workshop at Yale in October 2008 after the Beijing Olympics. The papers produced as a part of these collaborative activities were published in 2011 as part of the CEAS Occasional Publication Series.

• Perspectives on Classical Chinese Texts and Culture, an interdisciplinary conference conducted in Beijing, China (March 2010), was sponsored by CEAS and the Center of Rare Book Studies at Peking University. The conference marked the continued collaboration amongst Professors Kang-i Sun Chang (East Asian Languages and Literatures, Yale University), An Pingqiu, and Chen Pingyuan (Peking University). Other Yale participants included Annping Chin (History, Yale University) and David Sensabaugh (Yale University Art Gallery).

• From September 30 –October 2, 2010, CEAS co-sponsored a workshop with Bard Graduate Center under the direction of Professor Valerie Hansen (History, Yale University) that brought together scholars from Australia, China, Germany, Israel, Japan, Russia, the United Kingdom, and the U.S. to present new findings about the Liao elite, their Kitan language and script, Buddhist patronage, funerary culture, and international relations. Key participants included Dong Xinlin (Chinese Academy of Social Sciences), Li Qingquan (Guangzhou Academy of Fine Arts), and Lin Hu (Qinghua University).

• CEAS conducted the May 2012 workshop, under the direction of Annping Chin (History, Yale University), on Peking University's collection of Han bamboo texts (Beida Xihanjian) that focused on presentations by Professors Han Wei, He Jin, and Zhu Fenghan (Peking University).

• In August 2013, Professor Li Xiaocong, a world-famous expert on historical maps of China from the History Department at Peking University, visited Yale to conduct a workshop for faculty and graduate students hosted by Professor Valerie Hansen (History, Yale University).

Professor Li will return to Yale in 2014 to work on the maps of China in the Map Collection of Sterling Memorial Library.

• CEAS also supports Chinese University of Hong Kong (CUHK)-Yale University Summer Workshops that are conducted jointly by Yale faculty and Chinese colleagues. Most recently, these workshops have been designed to provide a supervised fieldwork experience where students from the United States, Hong Kong and Mainland China are systematically trained in collection and analysis of survey and interview data. Professor Deborah Davis (Sociology, Yale University) has collaborated with colleagues from Beijing Normal University, CUHK, Fudan University, and the Shanghai Academy of Social Sciences to conduct workshops on topics such as Uses of Public and Private Space in Hong Kong and Shanghai (2002); Determinants of Educational Achievement in Rural and Urban Yunnan (2004); Educational Reform in Rural China (2006); Who Gets the House? Comparison of Legal Guidelines and Practices for Dividing Conjugal Property in Hong Kong and Shanghai (2009); Assessing the Penalties of Rural Birth (2012); and Meaning of ⁷/₄ (Fu) in an Age of Anxiety: Contrasting the Moral and Ethical Languages of Buddhism, Christianity, and Confucianism in Contemporary Urban China (2013).

Jackson Institute for Global Affairs

Established in 2009 with a transformational gift from John W. '67 and Susan G. Jackson, the Jackson Institute is a principal driver of Yale's efforts to internationalize its teaching curriculum, to attract the most talented students and scholars to Yale from around the world, and to deepen the University's engagement abroad. The Institute's mission is to institutionalize the teaching of global affairs throughout the University and to inspire and prepare Yale students for global citizenship and leadership. In line with this vision, the Jackson Institute hosts a distinguished group of international affairs practitioners who serve as Senior Fellows. Stephen Roach, former Chairman of Morgan Stanley Asia and one of Wall Street's most influential economists, is currently serving his second three-year term as a Senior Fellow. Roach's research covers a broad range of topics, with recent emphasis on the emergence of China. His latest book, *The Next Asia: Opportunities and Challenges for a New Globalization*, was recently named book of the year by CBN – China's equivalent of the Wall Street Journal. Roach teaches a course at Yale called The Next China.

Law School

The China Center

The China Center is the primary home for activities related to China at the Law School. The cornerstone of these activities is the China Law Center, established in 1999. The China Law Center is a unique institution dedicated to helping promote China's legal reforms and increasing understanding of China in the United States. Through research and teaching, the core of the center's work is designing and carrying out sustained, in-depth cooperative projects between U.S. and Chinese experts on key issues in Chinese law and policy reform, with the goal of having a positive impact on China's reform process. Cooperative projects have focused particularly on issues of judicial reform, criminal justice reform, administrative and regulatory

reform, constitutional law, and public interest law. Projects involve a range of activities, including workshops and seminars in the United States and China, research visits to Yale and to China, and books or articles by Chinese or U.S. scholars.

In recent years, the China Center has expanded its work to issues of U.S.-China relations more generally. The focal point of this activity is a Track II Dialogue on U.S.-China Relations that is chaired on the U.S. side by center director Paul Gewirtz. The center also undertakes research related to U.S.-China relations, invites fellows and speakers on this subject, and collaborates with others within Yale University undertaking work on U.S.-China relations.

The center involves Yale Law School students in all aspects of its work. Students have conducted research and prepared reports, worked with Chinese visiting scholars and lawyers in residence at Yale, organized and attended workshops in China and at Yale, and worked during the summer in a variety of Chinese institutions, including academic centers and nongovernmental organizations.

In at least one semester each year, the center hosts a weekly Workshop on Chinese Legal Reform. The workshop provides students and faculty an opportunity to learn about the Chinese legal and political system through discussions of papers presented by center staff, visiting Chinese scholars, and distinguished guest speakers (both Chinese and American). The workshop has become an intellectual center for convergence within Yale Law School—and increasingly within Yale University as a whole—for faculty and students with an interest in China and issues related to legal and policy reforms in China.

Professor Paul Gewirtz is the director of the China Center. Senior Research Scholar and Lecturer in Law. Jamie Horsley is the executive director of the China Law Center. More information about the center is available on its Web site: www.yale.edu/chinalaw.

Clinical Legal Education

This project, led by Professor J. L. Pottenger, Jr., is a collaboration among the Yale-China Association, the Committee of Chinese Clinical Legal Educators (CCCLE), the Ford Foundation, U.S. AID, and Yale's China Law Center. During the past ten years, over 100 Chinese law schools have begun to offer their students curricular opportunities to combine for-credit coursework with providing legal services to actual clients. These experiential learning opportunities cover a wide range of legal specialties, including labor and civil rights, environmental issues, and criminal justice. Professor Pottenger has been promoting these innovations by visiting and consulting at universities throughout China, in such places as Beijing, Shanghai, Wuhan, Guangzhou, Changsha, and Kunmin. He lectures to faculty and students, conducts training workshops, and helps the law schools develop curricula and pedagogy specifically designed for clinical legal education. Professor Pottenger has also sponsored and hosted numerous faculty visitors and delegations, coming to Yale for educational purposes.

Management, School of

China Enterprise Initiative

Yale SOM has deep connections with enterprise in China, through ongoing research and initiatives, its accomplished alumni body, the growing Global Network for Advanced Management, International Experiences courses in China, and through the Greater China Board of Advisors. These activities are conducted under the auspices of the school's China Enterprise Initiative.

Academic Programs

Global Network for Advanced Management

The school engages with Chinese students, scholars, and enterprises through the Global Network for Advanced Management. Convened by Yale SOM in 2012, the Global Network consists of 25 leading international business schools, including Fudan University School of Management, Renmin University of China School of Business, and Hong Kong University of Science and Technology Business School, that work together to improve teaching and understanding of the challenges posed by increasingly interconnected and complex global markets. The Global Network helps connect students and faculty in China and at Yale.

Global Network Courses

The Yale SOM is piloting innovative global courses that involve students and faculty from multiple Global Network for Advanced Management schools, including those in China. Network courses seek to engage multicultural teams that span geographies in project-based learning designed to advance understanding of complex global business issues in a new and distinct manner. Student project teams work with faculty advisors to address a real world business issue that requires companies to navigate multiple markets. The initial pilot courses are Analysis of Competition and Law Enforcement across Countries and Mobile Banking.

Global Network Week

In a five-way exchange, students from Global Network schools visit the campuses of other participating schools for a week of intensive academic study and introduction to the business environment of the host school's country. Yale and Renmin University of China School of Business participated in the initial Global Network Week in March 2013. The second Global Network Week, held in October 2013, included Renmin once again, as well as the Fudan University School of Management.

The Master of Advanced Management (MAM)

The Master of Advanced Management (MAM) program assembles a cohort of exceptional students who are graduates of business schools that are members of the Global Network for Advanced Management for a one-year program of study at Yale University. By bringing together the most promising management students from all parts of the globe to exchange ideas and points of view while leveraging the resources of Yale University, the program provides a unique opportunity for future leaders to expand their understanding of the complexities that have developed in the contemporary global market economy. The MAM Class of 2014 includes

graduates of the Fudan University School of Management, Hong Kong University of Science and Technology Business School, and Renmin University of China School of Business.

School of Management International Experience – China

As part of the Yale integrated MBA curriculum, each first-year student travels to one of several destinations around the world to study the local business environment. The destinations are the focus of pre-trip sessions in the fall semester and are closely tied to the State and Society and Global Macroeconomy courses in the spring. The trip is also linked to the Leadership Development Program, a year-long process of identifying and developing personal and professional goals and aspirations. In 2013, Professors Zhiwu Chen and Hongjun Yan led SOM students to Beijing and Xiamen to attend lectures on the history and evolution of the Chinese financial market and meetings with managers and officials at financial institutions and regulatory agencies.

Executive Education

The Yale SOM Executive Education team works closely with diverse organizations in China to develop leadership development programs. A few examples include:

• A highly selective executive development program for senior Chinese finance officials from government-owned enterprises. Each year, 4-5 fellows are designated by the Chinese government and sent to Yale for six weeks to work with faculty and students on a focused research topic.

• A three-week course for senior provincial officials—ranging from directors general of sizable government operating entities to mayors and party secretaries from second-tier cities. Participants spend most of their time on the Yale campus and visit Washington, DC, West Point, New York City, and Boston.

• A customized course for high-potential next generation leaders of a major Chinese technology conglomerate. The first two-weeks of the program are hosted on the Yale campus and the final week is held on the campus of Peking University.

• A two-week program focused on personal finance developed for top executives of one of the "Big Four" banks in China.

Yale Global CEO Summit

The Yale Global CEO Summit took place in Beijing in October 2013. The summit facilitated discussion among Chinese government officials, entrepreneurs, and business leaders, and top leaders from U.S enterprises, academia, and government.

Selected Research

China India Insights Program

The Yale China India Insights Program seeks to be the world's leading research based program delivering insights on business issues relating to China and India and emerging markets. The program is led by the Center for Customer Insights.

Shanghai Stock Exchange Project

The Shanghai Stock Exchange History Research Project is an on-going research effort by the International Center for Finance to collect price and dividend information on stocks that were listed in the Shanghai Stock Exchange (SSE) during the nineteenth and beginning of the twentieth centuries.

Capital Market Development

Professor Zhiwu Chen studies the issues and questions arising from China's market development process, and the impact of financial development on culture and society in China. He has a number of ongoing research projects related to this work. The Finance and Society Survey Project conducts surveys across 11 Chinese provinces on the impact of financial development on economic, social, and cultural values of society. The Historical Interest Rate and Women Transaction Price Database: 1700 – 1950 Project is a joint effort with researchers at the University of Science and Technology (Beijing) and the Economics Institute of the Chinese Academy of Social Sciences to collect the most comprehensive database from historical family business books and government archives of the Qing Dynasty and the Republic of China. Three Hundred Years of Interest Rate History of China is a project with economic historians at the Chinese Academy of Social Sciences and the University of Henan to collect a comprehensive database of interest rates in private lending and bank/financial institution lending across Chinese provinces to answer questions concerning financial development, regional economic integration, and institutional and political development in modern Chinese history.

Mobile Banking in China

In collaboration with China Merchant's Bank (CMB), Professor Sudhir Karunakaran is investigating the role of various influences, particularly peers in the decision to adopt and use mobile banking. Using rich customer data across time and various bank services, Professor Karunakaran investigates how individuals decide to adopt mobile banking and how this affects their subsequent mobile and branch banking patterns and intensity.

E-commerce and Payment in China

The lack of trust by Chinese customers poses a major barrier to usage of advanced payment technologies, especially in the online context. Motivated by this, Professor Sudhir Karunakaran has designed a survey to understand online and offline payment modes by Chinese consumers. The data gathered includes types of transaction, categories shopped, amount spent and also views on convenience, security, and accessibility.

Medicine, School of

Bioinformatics Collaboration with China

The rapid advances in biotechnologies have a global impact on healthcare and life sciences research. The massive amounts of data generated by such biotechnologies have increased the need for bioinformatics research and education at the international level. Professor Kei-hoi Cheung of Yale's Center for Medical Informatics (YCMI) has been collaborating with different bioinformatics groups in China in the past five years. As part of this Yale-China collaboration,

he initiated a Bioinformatics Summer Student Exchange Program with the University of Hong Kong (HKU) in 2005. HKU sponsored two undergraduate students majoring in bioinformatics to come to Yale in the summers of 2005 and 2007. Professor Cheung hosted these students at YCMI, providing them with opportunities to work on research projects as well as to interact with researchers in various laboratories and students enrolled in the Computational Biology and Bioinformatics Program at Yale. In addition to Hong Kong, Professor Cheung extended the collaboration to other parts of China. In 2006, a visiting scholar from Zhejiang University came to YCMI to collaborate on a bioinformatics project in the neuroscience domain, leading to several joint publications. In the summer of 2010, Professor Cheung was invited to visit Zhejiang University to discuss plans to expand the bioinformatics research collaboration. In early 2012, a student was sponsored by Zhejiang University to visit YCMI to do a six-month bioinformatics internship under Prof Cheung's supervision.

Cancer Immunization

Professor Richard Edelson is working with colleagues at the Department of Dermatology and the Department of Clinical Immunology of Rui Jin Hospital in Shanghai and with a group of therapeutic immunologists in Beijing to develop selective immunization against immunogenic cancers. Professor Edelson has established a formal collaboration in which the hospital will clinically test an anticancer immunotherapy that his group at Yale has developed. The Beijing group will send a fellow to work in the Yale Dermatology Department to research techniques that will permit novel therapeutic approaches to be developed in China.

Consortium for Globalization of Chinese Medicine

Henry Bronson Professor of Pharmacology Yung-chi Cheng of the Yale School of Medicine and of the Developmental Therapeutics Program at the Yale Comprehensive Cancer Center collaborated with the University of Hong Kong, Peking University, Tsinghua University, the Chinese Academy of Medical Science, the Chinese Academy of Chinese Medical Science, the Chinese Academy of Sciences, the Academia Sinica in Taiwan, the U.S. National Health Research Institutes, and a number of other prominent Chinese and U.S. institutions to form the Consortium for the Globalization of Chinese Medicine in December 2003. In collaboration with the company PhytoCeutica, the Consortium comprises a network of academic, industrial, and regulatory agencies from thirteen countries to advance the field of Chinese medicine. The Consortium focuses on five main goals:

1) Develop platform technologies required for advancing Chinese herbal medicine through joint efforts.

2) Facilitate interaction and collaboration among different institutes to advance Chinese herbal medicine by sharing information.

3) Promote high-quality research and development of Chinese herbal medicine internationally.

4) Assist industries and regulatory agencies interested in developing Chinese herbal medicine products.

5) Incorporate Chinese herbal medicine into Western medical therapies.

Members of the Consortium take part in joint research activities on Chinese medicine, participate in short-term exchange programs for learning and training, and organize joint symposia, seminars, and academic meetings and conferences. The Consortium currently has 126 Academic Institutes Members and ten Industrial Affiliate Members, including Pfizer, Johnson & Johnson, and Coca-Cola. Professor Cheng is the founding and current chairman.

Fudan-Yale Biomedical Research Center

The Fudan-Yale Biomedical Research Center is a joint initiative of Yale University and Fudan University in Shanghai under the auspices of Professor Tian Xu of the Genetics Department at the Yale School of Medicine. Officially opened in November 2003, the Center builds on the work previously undertaken by Professor Xu's Institute of Developmental Biology and Molecular Medicine. The research conducted at the Fudan-Yale Center uses model organisms to study developmental biology and human diseases. The research work of the Center involves large genetic screens in mice and fruit flies to elucidate the basic mechanisms of disease development. Recently, Fudan constructed 10,000 square meters of complementary laboratory space, including compatible animal facilities for the work of the Fudan-Yale Biomedical Research Center. Fudan also provides an auditorium and facilities for the conduct of video conferences and televisual seminars. Research at the Fudan-Yale Biomedical Research Center is having a global impact in terms of understanding the function of human genes and in discovering therapeutics for cancer and metabolic disorders.

Fudan-Yale Center for Education Cooperation

The Fudan-Yale Center for Education Cooperation was inaugurated in November 2003. Professor Tian Xu is the director of the Center. It sponsors lectures broadcast to Yale, video conferences, and exchanges.

Gene Therapy

Collaborating with his Chinese colleagues at the Second Affiliated Hospital of Shanghai Medical College, Professor Bauer Sumpio, Section Chief of Vascular Surgery at Yale School of Medicine, is working on gene therapy options for ischemic legs. Professor Sumpio has also been collaborating with Tianjin Medical University on endothelial cell signaling with hemodynamic forces. Wei Li, an Assistant Professor of Surgery at the institution, has been working at Yale for the past four years. His supervisor, Xishan Hao (President of the University and Director of Tianjin Cancer Hospital), visited Yale in 1999. Professor Li is also collaborating with Professor Stephen Cheng, Chief of Vascular Surgery at the University of Hong Kong, Queen Mary Hospital, on educational paradigms for Asian countries.

Genetics of Alcohol Dependence

In northern Hunan Province, China, Professor Joel Gelernter and his collaborators from Hunan Normal University, Tulane University, and the University of Pennsylvania have performed careful clinical assessments, collected DNA, and performed a genome-wide association analysis on members of families that have high rates of alcohol dependence with the goal of identifying genes that affect the risk for alcohol dependence.

Postgraduate Clinical Education and Training at Xiangya School of Medicine

In association with colleagues at the Yale-China Association and Professor Barry Wu in the Department of Internal Medicine, Professor Robert Rohrbaugh has been working on developing a model for postgraduate clinical education and training for medical school graduates at Xiangya

School of Medicine. Xiangya is the medical school that was established in Changsha, China, by the Yale-China Association over 100 years ago. The central government of China permitted six sites to develop residency programs, and Professors Rohrbaugh and Wu and their Yale China Association colleagues have consulted with Xiangya faculty to develop educational goals, curricula, evaluation methods, and policies that support residency education. This process has been facilitated through a series of medical student, resident, and faculty exchanges between Xiangya and Yale. Now in its sixth year, this collaboration has resulted in a systematic implementation of more than 80 residency programs within the Xiangya hospital system. A systematic evaluation of the residency programs to determine their fidelity to the model and to evaluate resident outcomes is underway with the ultimate goal of contributing to a national model of residency training for all of China.

Odor Stimuli in Olfactory Bulb

Professor Fahmeed Hyder participates in collaborative research with Professor Fuqiang Xu of the Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, China. Their collaboration focuses on the assessment and discrimination of odor stimuli by dynamic brain imaging.

Substance Abuse Treatment Study in China

Professor Marek Chawarski is conducting study entitled "Behavioral Drug and HIV Risk Reduction Counseling with MMT in China." This study will provide critical data regarding the efficacy for reducing drug-and sex-related HIV transmission risk behaviors, as well as improving methadone maintenance (MMT) outcomes and patient functioning of two transportable counseling models, behavioral drug and HIV risk reduction counseling (BDRC) and educational counseling (EC) as compared with the current standard of care model in MMT in China.

Health Insurance in mainland China and Taiwan

Professor Shuangge Steven Ma conducts survey studies in mainland China and Taiwan that will provide an updated, comprehensive description of health insurance coverage and utilization and their impacts on health and economic outcomes. Special attention has been paid to the less-advantaged groups.

Infection Control Policies and Practices in China

Professor Louise-Marie Dembry conducts policy analysis to understand how guidelines for infection control differ in China. The research also includes empirical studies that assess current infection control practices in the hospital setting. The project will also develop a set of recommendations for enhancing existing infection control policies and practices in these areas.

Opioid Dependence in China

Professor Richard Schottenfeld and his collaborators have developed a program of clinical research aimed at evaluating, improving and disseminating cost-effective treatments for heroin or other opioid dependence in China. His research in China is especially aimed at interventions for and treatment of cocaine dependent women identified in prenatal clinics and his current studies of buprenorphine maintenance treatments.

Applications of Functional Connectivity to the Study of Schizophrenia

Yale Psychiatry Professors John Krystal and Alan Anticevic, in collaboration with Dr. Gong Qiyong of Sichuan University, are conducting research focusing on using functional connectivity and other neuroimaging modalities to better understand the neurobiology of schizophrenia.

Music, School of

Chinese Conservatory Exchanges

In 2004, the Yale School of Music (YSM) signed a formal exchange agreement with the Central Conservatory of Music in Beijing, and signed another one with the Shanghai Conservatory of Music in 2006 as part of the Conservatory's eightieth anniversary celebration.

Faculty Activities

YSM faculty have presented recitals, concerts, and master classes throughout China:

Honorary Professor of Piano and School of Music Dean, Robert Blocker served as a juror in the first Chinese Presidents' Piano Competition in 2007 and at the Shanghai International Piano Competition in 2009. He presented the keynote anniversary addresses at the Beijing and Shanghai conservatories. Dean Blocker regularly performs with both the Beijing and Shanghai symphony orchestras.

Professor Boris Berman was a featured pianist and teacher at the Shanghai International Piano Festival in 2006 and 2008. He was a juror at the Fourth International Shanghai Piano Competition in 2007. Professor Berman was named an Honorary Professor of the Shanghai Conservatory in 2007, and he gave recitals and master classes at the Central Conservatory in Beijing. His new edition of *Complete Piano Sonatas by Prokofiev* was published by Shanghai Music Publishing House (SMPH) in October 2010. At the same time, SMPH is releasing the new translation of Berman's book *Notes from the Pianist's Bench*.

Michael Friedmann played Schoenberg's piano music and performed the vocal part of that composer's *Ode to Napoleon* in 2007. In spring 2008, he taught in the PKU-Yale Joint Undergraduate Program and offered classes at both Beijing University and the Central Conservatory of Music. In the summer of 2010, Professor Friedmann played a recital with violinist Yeon-su Kim in Hong Kong's Academy of Performing Arts and offered lectures at the Chinese University of Hong Kong and at St. Paul's Coed School.

Nursing, School of

Chia Family Public Health Fellowships

The Chia Family Public Health Fellowships for Chinese female public health professionals is a Yale-China Association program that promotes the development of public health work in Hunan province and Yunnan province by giving four young Chinese women (two from each site) each year the opportunity to study at Yale University for a semester and to devise a public health project under the guidance of Yale faculty. In the past, mentors for the Chia Family Public

Health Fellowship Program have included Yale faculty members from the School of Nursing, the School of Medicine, the School of Public Health, and also many community health experts.

Nursing Leadership Program

Under the Yale-China Association's Academic Nursing Leadership Program, YSN faculty Kris Fennie, Nancy Reynolds, and Angelo Alonzo carry out an intensive quantitative and qualitative research methods training course at Central South University School of Nursing and Xiangya School of Medicine in Changsha, Hunan.

Pediatric Nursing

Professor Patricia Jackson Allen is an internationally recognized expert in advanced pediatric nursing practice. Her expertise has led her to be sought for consultation, including recent work at Aomori University of Health and Welfare, Japan; work for the private nursing review company Center for Excellent Review Strategies, Philippines; and consulting with Hong Kong Polytechnic University on advanced practice nursing and the Doctorate of Nursing Practice degree. She is an international advisor to the Hong Kong Academy of Pediatric Nursing and recently spoke to the Hong Kong Paediatric Nurses Association on "From Hospital to Community in Paediatric Care." For the past five years, during the academic spring break, she has led a group of Yale School of Nursing students to Hong Kong Polytechnic University for a didactic and clinical course on Traditional Chinese Medicine (TCM) and the integration of TCM with Western medicine.

Program and Research Development at Hong Kong Polytechnic University

Dean Margaret Grey of the Yale School of Nursing is assisting with Ph.D. program and faculty research development at the Hong Kong Polytechnic University. Professor Grey will sit on the external review committee until 2015.

Public Health, School of

Case-Control Study of Pancreas Cancer in Shanghai, China

Funded by the U.S. National Institutes of Health (NIH), Principal Investigator Harvey Risch is working with Yu-tang Gao at the Shanghai Cancer Institute and Herbert Yu at the University of Hawaii on a large, population-based epidemiological study of genetic and environment factors in the etiology of pancreatic cancer in Shanghai, China.

Daqing Cohort Study

This prospective follow-up study started field recruitment in 2010. The goal is to recruit about 300,000 Chinese people in Daqing City. The study will investigate environmental, lifestyle, genetic, and epigenetic factors and risk of human diseases, including both cancers and other major chronic diseases. The working group includes scientists from China's National Cancer Center, Daqing City, Yale School of Public Health, and the International Prevention Research Institute as well as Yale scientists Yawei Zhang, Brian Leaderer, and Theodore Holford.

A Case-Control Study of Liver Cancer in Xiamen and Taiyuan, China

Half of the world's liver cancer cases are in China. This study is designed to investigate environmental factors and virus and gene polymorphisms as risk factors for liver cancer in

China. Tongzhang Zheng leads the study, working with Yale scientists Yawei Zhang, Brian Leaderer, and Theodore Holford.

A Birth Cohort Study of Environmental Factors, Genes, Adverse Birth Outcomes, and Children's Puberty Development

Disturbance of fetal development and early childhood development not only affects the mortality and morbidity in early life but also impairs health in adulthood. Adverse birth outcomes and early puberty have been associated with the risk of adult diseases, including cardiovascular diseases, diabetes, and cancer. This study is designed to investigate the risk factors for adverse birth outcomes and early age at puberty in China. Yawei Zhang leads the study, working with Yale scientists Tongzhang Zheng, Brian Leaderer, Theodore Holford, and Herbert Yu.

Indoor Air Pollution, Gene Polymorphisms, and Risk of Lung Cancer in Xuanwei

Xuanwei County has the highest lung cancer mortality rate in China. It reaches 150 cases per 100,000 people in some of the high-mortality areas of the county. This study is designed to look for the role of gene-environment interaction in the risk of lung cancer in this area. Qing Lan from the U.S. National Cancer Institute leads the study. Tongzhang Zheng is a co-investigator of the study.

Fogarty Training of Environmental Health Scientists in China

Rapid economic development has led to severe environmental deterioration in China. China faces tremendous challenges in confronting crucial environmental health issues. One of the major challenges is the severe lack of trained personnel in all major areas of environmental health sciences. The primary goal of this grant is to train scientists urgently needed in China to develop appropriate strategies to better understand and more effectively respond to the emerging threat from the vast environmental pollution and deterioration China faces today. Tongzhang Zheng is the principal investigator. Other Yale scientists include Theodore Holford, Yawei Zhang, Brian Leaderer, Michelle Bell, Michael Bracken, and Jonathan Borak.

Environmental Exposure and Adverse Birth Outcomes

This prospective follow-up study has been collecting study subjects since 2009 to examine prenatal exposures to environmental, lifestyle, genetic, and epigenetic factors and risk of adverse pregnancy outcomes. It is hypothesized that many human diseases start in utero. Yale scientists Tongzhang Zheng, Yawei Zhang, Brian Leaderer, and Theodore Holford collaborate with China's National Institute of Environmental Health Science, Lanzhou Maternal and Children's Hospital, and Xiamen Center for Disease Control.

Fogarty Training of Cancer Epidemiologists and Biostatisticians in China

Cancer incidence and mortality are rising rapidly in China, possibly due to severe environmental deterioration and lifestyle changes. China faces tremendous challenges in confronting the significant cancer burden. At the same time, the country lacks a comprehensive cancer center and quality cancer registries. Of high concern is the lack of trained personnel in all major areas of cancer prevention and control. In collaboration with China's National Cancer Center, this grant will fund training for epidemiologists and biostatisticians who need to develop appropriate strategies to respond to the rapid increase in human cancer risk in modern China. Tongzhang

Zheng is the principal investigator. Theodore Holford is the co-principal investigator.

Childhood Asthma

Associate Professor Tongzhang Zheng and Professor Brian Leaderer conducted research on "A Population-Based Case-Control Study of Childhood Asthma" and the "Prevalence and Risk Factors for Childhood Asthma" in Shunyi County, Beijing.

SJTU-Yale Joint Center for Biostatistics

In March 2014, President Peter Salovey and Shanghai Jiaotong University (SJTU) President Zhang Jie signed an agreement establishing the SJTU-Yale Joint Center for Biostatistics. The SJTU-Yale Joint Center will conduct cutting-edge biostatistical and translational medicine research. Researchers at the Center will focus on cancer as well as cardiovascular and metabolic diseases with special emphasis placed on translating "bench" research into "bedside" practice. Yale's Ira V. Hiscock Professor of Biostatistics, Hongyu Zhao, in collaboration with researchers from SJTU and the Shanghai National Center for Translational Medicine, will lead the new Joint Center. The Center is the first realized project under the framework of a 2012 Memorandum of Understanding between the two universities, and will include faculty from each institution.

Yale and SJTU's strengths in the field of medicine are complementary. The Yale School of Medicine is a world-renowned basic medical research institute, and SJTU with its 14 affiliated hospitals that received more than 26 million outpatients and 680,000 inpatients in 2013 is well known for its clinical medicine.

Biostatistics Department

Professor Heping Zhang worked to establish the Department of Bioinformatics and Biostatistics in Shanghai Jiaotong University's School of Life Sciences. He also works with Sun Yat-sen University to establish their Biostatistics and Bioinformatics program. Professor Heping Zhang continues to serve as the deputy chair of the academic evaluation committee for the Statistical Science Center at the National Academy of Sciences. Professor Heping Zhang is also a shortterm 1000-plan scholar at Sun Yat-sen University advising a Biostatistics and Bioinformatics program.

Statistical Exchange

With the aim of promoting international exchanges among international statisticians through conferences, short courses, and other activities, Professor Heping Zhang is an Honorary Professor at the University of Hong Kong, promoting exchange in statistical research.

Birth Cohort Study in Lanzhou and Taiyuan

A birth cohort study in Lanzhou and Taiyuan, China is designed to investigate environmental factors, genetic susceptibility and risk of adverse birth outcomes and maternal complications, as well as potential mechanisms of fetal origin hypothesis for adult chronic diseases. Dr. Yawei Zhang is the Principal Investigator and Drs. Tongzhang Zheng, Brian Leaderer, and Theodore Holford are co-investigators. Dr. Qing Liu, from Gansu Provincial Maternity and Child Care Hospital in Lanzhou, China, is the PI for the Lanzhou site. Dr. Suping Wang, from Shanxi

Medical University is the co-PI for the Taiyuan site. The Lanzhou study site has successfully recruited 10,542 study subjects, while Taiyuan site recruited 3,000 study subjects.

Qidong HBV Vaccine Cohort

Dr. Yawei Zhang is collaborating with the investigators from Cancer Institute and Hospital, Chinese Academy of Medical Sciences (Drs. Chunfeng Qu, Qimin Zhan, and Min Dai) and Qidong Liver Cancer Research Institute (Drs. Taoyang Chen and Chunsun Fan) to investigate the efficacy of booster with HBV vaccine at infancy and adolescence on young adults with chronic carriage of hepatitis B surface antigen and effect on liver cancer.

Research Ethics Training and Curriculum Development Program with China

Awarded in 2011 by the Fogarty International Center, National Institutes of Health, this comprehensive multidisciplinary program is building on the success of our extensive collaborations with Central South University (CSU), Xiangya School of Medicine, a leading academic institution in China. The purpose of the program is to establish a comprehensive collaborative program for international research ethics education and curriculum development. The training program develops and disseminates graduate level curricula in research ethics; provides training to Chinese researchers and health professionals in multidisciplinary research methodologies, bioethics and ethical review of research; offers intensive short courses and workshops on research methods, grant and manuscript writing, and selected research ethics topics; and enhances human subjects projection and strengthens the capacity of Institutional Review Boards at Xiangya School of Medicine and Yale University to review international research ethics policy and practice throughout China in the years to come. This program is funded by the International Research Ethics Education and the Curriculum Development Award (Bioethics) from the Fogarty International Center, National Institutes of Health.

Multidisciplinary HIV and TB Implementation Sciences Training in China (China ICOHRTA2)

Conceived in 2003, and awarded by the Fogarty International Center at the National Institutes of Health, the goals of the training program are to further strengthen the capacity of the Chinese Center for Disease Control (China CDC) to conduct training in implementation science and to facilitate its establishment as a regional leader in research and training for HIV and TB prevention, care, and treatment in Asia and the Pacific Region. China has made significant progress in the scale-up and expansion of its national programs for HIV and TB. In the process, China faced increasingly complex implementation barriers in the areas of program management and accountability, integration of prevention and treatment strategies, and coordination among existing programs. The Chinese scholars trained through this program are forming a core group of experts trained in implementation science who can oversee the transition from clinical research trials to national-level programs as part of a comprehensive HIV and TB control strategy. The Research Training Unit administering the China ICOHRTA2 comprises the China CDC, The University of California, Los Angeles, and Yale University. This program is funded by the International Implementation, Clinical Operational and Health Services Research Training Award for AIDS and Tuberculosis (IICOHRTA-AIDS/TB) from the Fogarty International Center at the National Institutes of Health.

Genetics - Yale-Fudan Collaborative Program

The Yale-Fudan Collaborative Program is a co-training program between Yale and Fudan University. Within this program, pre- and postdoctoral students from the Genetics Department of Fudan University conduct research at Yale for a two-year period and return to China to receive their degrees from Fudan. Four students have received their doctoral degrees through this program and two post-doctoral fellows have completed training. Professor Serap Aksoy is the leading Yale collaborator on this project.

Public Health Training Program

Professor Robert Makuch led a team to create a training program for Chinese officials at the China State Food and Drug Administration (sFDA). The program, which began in 2008, provides guidance in the creation and implementation of future directions and initiatives of the sFDA.

Yale-China Association

Founded in 1901 by Yale graduates as the Yale Foreign Missionary Society and renamed in 1975, the Yale-China Association is a private, nonprofit organization with more than a century of experience, contributing to the development of education in and about China, and the promotion of mutual understanding and friendship between Chinese and Americans through programs in education, health, public service, and the arts. Annually, thousands of people in the U.S. and China are touched by the work of the Yale-China Association.

The education program has been sending some of the best and brightest Yale graduates to China for over 100 years to teach English. These graduates spend two years on teaching fellowships. Teaching Fellows teach Chinese students of all ages each year across China, including in Changsha, Xiuning, Guangzhou, and Hong Kong. Among its many programs, Yale-China's education work also includes a professional teacher exchange program between Yali Middle School and the Foote School in New Haven.

Yale-China's health program works closely with Yale medicine and nursing faculty. Its work in health can be categorized into two areas: the training of medical, nursing, and public health professionals, and health education and healthcare for the underserved. Yale-China's current health programs include the Chia Programs, which include the Chia Fellowship Program established in 1998 and expanded in 2007 to include a new program site in Kunming. Each year, this program trains two female health professionals in Changsha and two in Kunming. Chia Fellows spend a semester at Yale, during which they develop a public health project under the guidance of a Yale faculty mentor and Yale-China staff, and then implement the project upon their return to China. The program also includes an annual conference, alternately held in Changsha and Kunming, at which former and current Chia Fellows present the results of their projects to their colleagues and other members of the community. There are currently thirty-one program alumnae in Changsha and twelve program alumnae in Kunming a vibrant and mutually supportive professional community.

Another Chia Program is the Chia Community Health Service and Health Education Program. This program was developed in 2006 to address unmet health needs among vulnerable populations in Hunan by relying on Chia Fellowship alumnae and volunteers. This program aims to 1) provide health education to address public health needs and challenges; 2) promote health services to disadvantaged populations; 3) inspire volunteerism and community service in the local community; and 4) develop the capability of individuals involved in the program.

Additional Yale-China health programs include the Yale-China Hospital and Nursing Programs and the antiretroviral therapy adherence in southern China. Yale-China also publishes the *Yale-China Health Journal*—a publication developed in 2002 to highlight recent research related to health care and health education in China. Past topics have focused on HIV/AIDS, mental health, and migration and health.

Through its public service program, Yale-China hosts American lawyers in China. Since the program's inception in 2000, Law Fellows have taught at Sun Yat-sen University in Guangzhou, Wuhan University and South Central University of Politics and Law in Wuhan, Northwest University of Politics and Law in Xi'an, and Tsinghua University School of Law in Beijing. Yale-China Law Fellows served on the faculty of their host institutions as visiting scholars and taught topics on U.S. and international law. Also, with guidance from faculty of clinical law programs at Yale, Georgetown, and NYU law schools, Yale-China Law Fellows have played a special role in helping to establish and develop clinical education programs at their host universities.

Yale-China's development of community and public service programs mirrors the recent growth of a nascent nongovernmental sector in China. Yale-China supports this important trend by helping to develop legal aid clinics in Chinese cities through its legal education program, encouraging Chinese campus-based community service initiatives through undergraduate exchanges, and developing scholarship programs at Chinese universities that include community service components. Yale-China's summer service program also places up to eighteen Yale students as interns with Chinese nongovernmental organizations each year. Through this program, Yale students engage in a wide range of service activities, including teaching disabled children to swim, developing educational materials for environmental conservation projects in urban areas, and partnering with Chinese college students to teach English language skills in western China.

Yale-China organizes numerous cultural exchange programs, most notably the Yale University– New Asia Exchange, which annually brings together eight Yale students and eight Chinese University of Hong Kong (CUHK) students to examine topics relevant to Hong Kong and U.S. society in a cross-cultural context.

The Yale-China Association's work is characterized by close interaction among individuals and by long-term relationships with Chinese partner institutions and organizations designed to build Chinese institutional capacity. Therefore, the Association has also established and supported the development of numerous educational institutions in China, including Xiangya School of Medicine, Xiangya Hospital, Huazhong University, and Yali Middle School—all of which continue to educate tens of thousands of students in central China annually.