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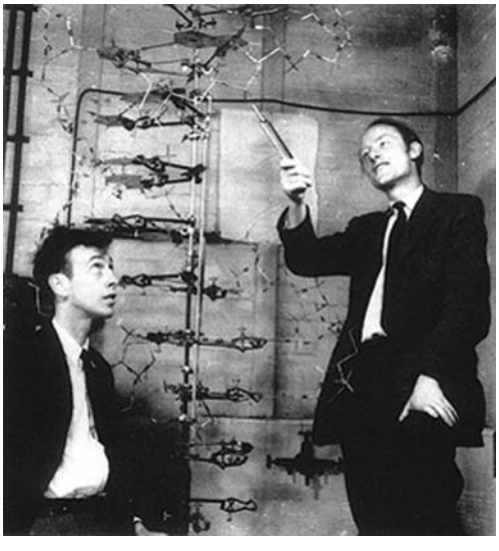
RECOLLECTION

James Watson's passion on life science in China

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James Watson is one of the few active giants in the current life science field. Together with Francis Crick, he opened the door to molecular genetics by presenting the double helix structure of DNA, and won the 1962 Nobel Prize in Physiology or Medicine. Since 1968, he devoted himself for nearly 40 years to developing Cold Spring Harbor Laboratory, which has become an unparalleled comprehensive research, education and conference center in the world. He initiated the Human Genome Project and was the second person to publish his fully sequenced genome. In addition to the numerous honors and titles, he also paid a lot of attention to the life science development in China. Here, I would like to tell about his lifetime friendship with China and his passion for life science in China.



Watson and Crick in front of a DNA model.

Jim's connection with China started in the 1950s, when he met a Chinese biochemist at University of Cambridge (It is hard to know the precise name of this biochemist due to the long time, but based on the description of Jim, he may be Mr. Yinglai Wang, a founder of Bovine Insulin Synthesis Project in China). During his first visit to China in the early 1980s, Jim traveled to several cities, including Beijing, Hefei, Shanghai, Guilin and Hong Kong; however, the most unforgettable stop for him was Shanghai, where he met his old friend from Cambridge again at Shanghai Institutes of Biochemistry, Chinese Academy of Sciences. Although the home of his friend was very tiny and simple, they were both so happy about their reunion that they spent the whole evening drawing molecular structures on a small table. Every time Jim mentioned this visit to me, he was so full of pleasure that his unconsealable excitement kept lightening up his eyes.

From this trip, Jim gained firsthand knowledge of the

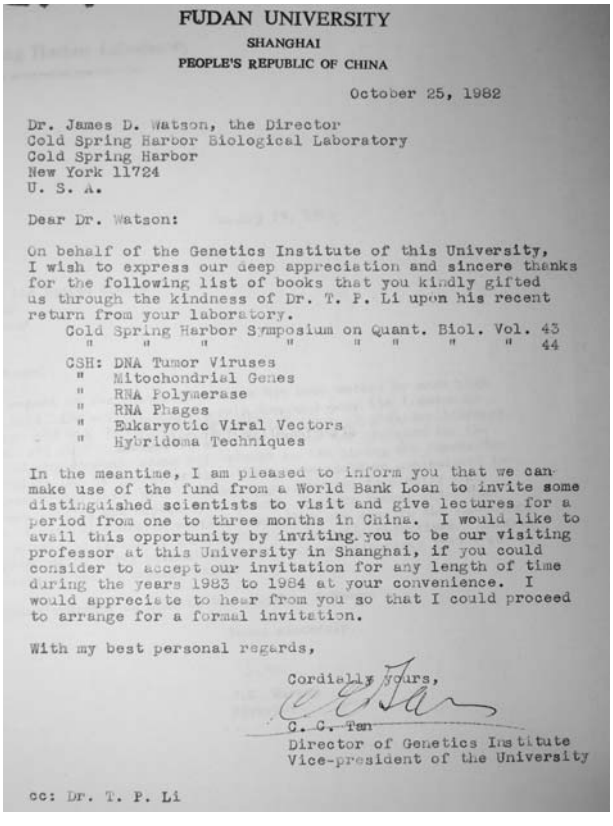


Watson with Mr. Yinglai Wang. (photo from Cold Spring Harbor Laboratory, Watson Archive)

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Watson and Mr. Jiazhen Tan in Shanghai in 2006. (photo from Maoyen Chi, private collection)



FUDAN UNIVERSITY
SHANGHAI
PEOPLE'S REPUBLIC OF CHINA

October 25, 1982

Dr. James D. Watson, the Director
Cold Spring Harbor Biological Laboratory
Cold Spring Harbor
New York 11724
U. S. A.

Dear Dr. Watson:

On behalf of the Genetics Institute of this University, I wish to express our deep appreciation and sincere thanks for the following list of books that you kindly gifted us through the kindness of Dr. T. P. Li upon his recent return from your laboratory.

Cold Spring Harbor Symposium on Quant. Biol. Vol. 43
" " " " " " " " 44

CSH: DNA Tumor Viruses
" Mitochondrial Genes
" RNA Polymerase
" RNA Phages
" Eukaryotic Viral Vectors
" Hybridoma Techniques

In the meantime, I am pleased to inform you that we can make use of the fund from a World Bank Loan to invite some distinguished scientists to visit and give lectures for a period from one to three months in China. I would like to avail this opportunity by inviting you to be our visiting professor at this University in Shanghai, if you could consider to accept our invitation for any length of time during the years 1983 to 1984 at your convenience. I would appreciate to hear from you so that I could proceed to arrange for a formal invitation.

With my best personal regards,

Cordially yours,

C. C. Tan
Director of Genetics Institute
Vice-president of the University

cc: Dr. T. P. Li

A letter sent by Mr. Jiazhen Tan in thank Watson for the books he sent from Cold Springer Harbor Laboratory. (photo from Cold Springer Harbor Laboratory, Watson Archive)



Watson receives a DNA model from anonymous Chinese scientist. (photo from Cold Spring Harbor Laboratory, Watson Archive)

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Watson family with Chinese scientists in 1981. (photo from Liz Watson, private collection)

scientific research situation in China. He believed that the best and quickest way to improve the quality of research in China is to invite Chinese scholars to developed countries and provide formal training opportunities. Soon after returning to the U.S., Jim planned to invite Chinese scholars to Cold Spring Harbor Laboratory for education, training and/or conferences, and tried to look for related financial supports. On January 29, 1982, Jim wrote to the U.S. Ambassador of China, Arthur Hummel, and informed him that he would be inviting 45 scholars from Shanghai to the U.S.. Soon after, more Chinese scholars began to appear at the Cold Spring Harbor campus and some were directly supervised by Jim. One of them is Mr. Zaiping Li, current Academician of the Chinese Academy of Engineering.

To promote their communication, Jim contacted Chinese scholars directly if Cold Spring Harbor had a vacancy (refer to the letter on January 31, 1983), and searched out appropriate positions in Cold Spring Harbor if he found a distinguished Chinese scholar (refer to the letter on September 16, 1983). In addition, Jim often mailed newly published books from Cold Spring Harbor Press to Fudan University and Shanghai Institutes of Biochemistry, Chinese Academy of Sciences (refer to the letters on March 26, 1982 to Mr. Heng Wang, and on November 12, 1982 to Mr. Jiazhen Tan).

On 2006, upon the invitation of Mr. Yuanming Yang, President of Beijing Institute of Genomics, Jim took another long visit to China. This tour included a number of research institutes in Beijing, Shanghai, Hangzhou and Xi'an. Jim was very sad that his first Chinese friend from Cambridge had passed away and he was no longer able to find the tiny and simple room where they reunited decades ago. However, Jim was astonished by the rapid development of science and technology in China, especially the neurodegenerative disease research led by Mr. Lin He at Shanghai Jiao Tong University, and the genomics research led by Mr. Huanming Yang at Beijing Institute of Genomics.

Like many other outstanding scientists, Jim pays close attention to the life science research worldwide. He was deeply impressed by a recent breakthrough in the field of anti-cancer therapy made by Mr. Yongzhang Luo of Tsinghua University, and Jim sent a personal invitation to Mr. Luo to attend the Cold Spring Harbor Laboratory's Banbury Conference. Jim also wrote a letter directly to the U.S. Ambassador of China to facilitate the visa application. After the meeting in Cold Spring Harbor, Jim insisted on visiting the Luo Laboratory by himself in the following October.

On June 26, 2006, when Jim heard that President Bill Clinton acknowledged the six-nation (including China) scientists for their contribution to the Human Genome Project, he was so excited that he immediate wrote congratulation letters to the several Chinese leaders in political and scientific fields. Jim believes that with the current rapid economic development, China will soon find a matched position in scientific research. In a talk to Ms. Zhili Chen, ex-State Councilor of China, Jim said, 'China is a nation that created glorious civilization. In the past 30 years, I witnessed the

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Watsons with Chinese leadership in Zhong Nan Hai during his trip to China in 2007. (photo from Maoyen Chi, private collection)

shocking renaissance of China. Looking to the past and future, I believe China will play more significant roles in scientific world.'

In the past century, the conferences and training courses at Cold Spring Harbor have played significant promoting and leading roles in life science research. After the establishment of collaboration with Cambridge in the UK, Cold Spring Harbor sought out an Asian partner. Among the several countries in Asian-Pacific, Jim strongly recommended China; in 2006, Jim investigated the conditions of Suzhou by himself and gave the only official presentation. Actually, Jim seldom uses a notebook or cell phone; while he did prepare his presentation slides at Suzhou that outlined his academic experience, the development of biological sciences and biotechnology, and the history and culture of Cold Spring Harbor. He also accepted the invitation to be the Chief Scientific Consultant for Suzhou Industrial Campus.

One month after his visit to Suzhou, when the delegation from Suzhou Industrial Park (SIP) visited the United States, Jim invited all the members to his home at Bullybung. He treated everyone like old friends: he welcomed the delegation at the front door by himself; he prepared a big dinner and reception party; he invited the guests to visit his whole house, including his bedroom; he also showed his private collection of photographs, books and medals, etc. As far as I know, this is the biggest foreign group at Jim's house. After the party, he drove to the other campus of Cold Spring harbor to accompany the delegation for the rest of the trip. Everyone was deeply touched by Jim' kindness and hospitality.

With everyone's effort, Cold Spring Harbor decided to establish the first and only Asian branch at Suzhou: Cold Spring Harbor—Asia. This is an adventure in the history of Cold Spring Harbor, and it is Jim who made it happen. Furthermore, Jim cares about every detail in this project. In the United States, he often talked to me about Cold Spring Harbor—Asia, everything, from the scientific committee member nominee to the future directions of this Asian branch, the balance of different areas in life science, the approach to bring public attention, the design of architecture, the style of decoration, etc. Jim was excited upon every version of architectural draft. When designers visited the United States, Jim always invited them to his office to discuss the progress and provide his opinions.

On April 6, 2010, the 82nd birthday of Jim, Cold Spring Harbor—Asia will launch with two conferences: the James Watson Cancer Symposium and the following Francis Crick Neuroscience Symposium. During the short Christmas vacation of 2009, Jim invited me twice to his house to discuss the details about these conferences, including whom to select for the speakers of the opening ceremony, which topic to set up for each session, how to invite artists to make sketches for a permanent collection, whether to invite Asian musicians to make an active environment, etc. Every word showed the close attention that Jim paid to the development of life science in Asia, to the communication of worldwide scientists and to the establishment of beneficial academic culture. In spite of being 82 years old, Jim will bring his wife to China and host the opening ceremony for the James Watson Cancer Symposium. This will witness the connection of Jim and Cold Spring Harbor with life science in China.

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Watson survey the possible site for Cold Springer Harbor–Asia in Suzhou in 2006. (photo from Maoyen Chi, private collection)



Watson receives the Delegation from Suzhou at his Cold Springer Harbor home. (photo from Maoyen Chi, private collection)

Finally, I would like to tell some stories about Jim's distinct personality. Jim has a nickname 'Honest Jim', which precisely reflects his straightforwardness, diligence and genuineness. When I went to his office, I always directly hit the points and quickly left. Phone calls are the same direct and short. Some people felt he is boring or even arrogant, but actually, he is highly efficient but not perfunctory. Recently, he wrote a book called 'How to avoid boring people', which just tells how to be focused, without wasting time and energy on meaningless matters.

This sometimes brings trouble to Jim. Once in an important international conference, Jim ruthlessly criticized an officer because his department rejected a grant application from a renowned principle investigator in Cold Spring Harbor. Later, Jim was quite regretful and invited me to have a drink with the officer. He worried that if this cut the financial support of Cold Spring Harbor, he would have to put more efforts to collect private donations to fill the deficit. At that moment, his affection to Cold Spring Harbor was just written on his face. It is this affection that makes Cold Spring Harbor Laboratory an Eden for current life science research.

Jim is highly enthusiastic about science. He said his biggest joy is to walk down Bungtown Street (the main street in Cold Spring Harbor) and ask around about the updated

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Watson talks with Mr. Minglong Ma of SIP in his home at Cold Springer Harbor Laboratory. (photo from Maoyen Chi, private collection)



Christmas dinner with a Chinese scientist working in Cold Springer Harbor Laboratory at Watson's Cold Springer Harbor home. (The lady in picture has returned to the Institute of Neuroscience in China to become a PI.)

progress of each laboratory. In spite of his old age, Jim still often goes to seminars and always sits in front, while he would leave or even sleep through the boring ones. He is always curious, like a child, and the curiosity never fades, however old as he is. The most impressive memory in my experience with Jim is a moment where he rubbed his legs with both hands, with eyes flaring and staring at me, proclaming 'Science is so FUN!' That is just like the moment when a boy gets his dream toy and is ready to give it a try.

Jim loves science so much that he often rushes to questions when hearing anything interesting. If the audiences have a positive response, he will turn around and show a proud smile on his face and the signature flare in his eyes. Once, during a seminar given by Mr. Ann-Shyn Chiang from Taiwan, Jim kept interrupting the presentation and asking questions. Mr. Jiang had to say, 'Jim, please be a little patient, just wait for a few seconds and you will get all the answers.' Jim definitely did not get all the answers during the seminar, and he finally invited Mr. Chiang to his house for champagne to keep discussing.

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The Watsons in a party. (photo from Dr. Hongtao Qin, Cold Spring Harbor Laboratory)

Jim is also a very easygoing scientist. There is a very wide spread story about Jim. In 1970s, Mrs. Robertson passed away and left Banbury Manor that is worth millions of dollars to her husband (it is located at Lloyd Harbor, which is just beside Cold Spring Harbor). With low profile, Mr. Robertson was trying to find a good organization to take over this manor for better use. When Jim found out about this, he immediately took a flight back from California and drove to Lloyd Harbor. Just before meeting Mr. Roberson, Jim stopped; he messed up his hair, rolled up a leg of his pants, loosened a shoelace, and then entered. Jim tried to make himself look like a scientist in most people's minds—slovenly and strange. The manor ended up as the Banbury Conference Center for Cold Spring Harbor, and Mr. Roberson also donated another several million dollars for this project.

Jim is full of a sense of humor. He said that the best way to bring Chinese people's attention to genomics is to sequence Mr. Ming Yao's genome. Jim also jokes that he was not very attractive to girls at a young age. Later, he made the mockery, 'I discovered the structure of DNA but it did not help me much in passing down my DNA.' Someone suggested to have a sculpture of Jim made when designing the new campus for Cold Spring Harbor. Jim smiled, 'No. A sculpture is usually for dead persons, but I still have a few years left. At least, it cannot be of my current appearance; if there must be one, please use my young face.'

This is James Waston, a dedicated scientist and a best friend to China. His contribution to Cold Spring Harbor—Asia and his longtime connection to China will be a precious gift to the life sciences of China.

(The original article was written in Chinese and translated by Xiaoxue Zhang and Chris Vavricka)



Watson and Crick at Cambridge. (photo from Cold Spring Harbor Laboratory, Watson Archive)



A casual profile of Watson. (photo from Maoyen Chi, private collection)

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