## Scholarly Exchanges with the People's Republic of China

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A specific program of scholarly exchanges has been negotiated recently by a group representing U.S. academic institutions and a counterpart group in the People's Republic of China. The American group is the Committee on Scholarly Communication with the People's Republic of China, which was formed in 1966 jointly by the National Academy of Sciences, the Social Science Research Council, and the American Council of Learned Societies. The Chinese group is the National Scientific and Technical Association of the People's Republic of China, which was formed shortly after the founding of the People's Republic by the All China Federation of Scientific Societies and the All China Association for the Dissemination of Scientific Knowledge.

Following visits to the United States in the fall of 1972 by two Chinese technical delegations, one composed of physicians and the other of scientists, the committee was invited to send a delegation to the People's Republic as guests of the Scientific and Technical Association. The delegation, which spent the period from 15 May to 15 June in China, was headed by the present chairman of the committee, Emil L. Smith, professor of biochemistry at the University of California, Los Angeles. Harrison Brown, foreign secretary of the National Academy of Sciences, Frederick Burkhardt, president of the American Council of Learned Societies, and Eleanor Sheldon, president of the Social Science Research Council, represented their respective organizations. Other members of the delegation were Albert Feuerwerker, director, Center for Chinese Studies, University of Michigan; George Harrar, president emeritus, Rockefeller Foundation; Max Loehr, Fogg Art Museum, Harvard University; Bruce Old, foreign secretary, National Academy of Engineering; Robert Sachs, director, Argonne National Laboratory; Glenn Seaborg, professor of chemistry, University of California; Ezra Vogel, director, East Asian Research Center, Harvard University; Victor Weisskopf, professor of physics, Massachusetts Institute of Technology; and Anne Keatley, staff director of the committee.

Individuals who played a prominent role in hosting the American group included Chou P'ei-yuan, vice-chairman of the Scientific and Technical Association, and currently its acting chairman, and Kuo Mo-jo, president of the Chinese Academy of Sciences. The hosts arranged an itinerary that included a number of cities and permitted individual members of the delegation to visit numerous research institutes, universities, schools, libraries, hospitals, museums, factories, farms, and social units such as communes.

In Peking, representatives of the delegation discussed a proposal with officials of the association. This proposal suggested that, over a period of 1 to 2 years, 12 delegations visit China to study specific fields of Chinese activity which are of particular interest to the American scholarly community. The list was carefully constructed to take into account the interests of the participating organizations and stressed particular areas in which Americans potentially have a great deal to learn from the Chinese. Naturally, the U.S. representatives stressed that the committee would be happy to be host to an approximately equal number of Chinese groups visiting the United States, the areas of specialization to be of their choosing. Both sides stressed the importance of the development of scientific exchanges between the two countries according to the principles of equality and mutual benefit.

After studying the U.S. proposals, the Chinese agreed to receive 9 of the 12 suggested groups. All of the proposed groups in the natural sciences were accepted. The three groups that were judged not to be acceptable at the present time were in social-political areas. The U.S. delegation was informed by Premier Chou En-lai, in the course of a 2-hour discussion, that the social sciences are still going through "a period of self-criticism." He expressed hope, however, that such subjects might be taken up at a later time.

The following groups have been accepted:

1) A group of plant scientists to discuss plant studies currently under way in China and to arrange for exchanges of gene pool materials for important food, feed, and fiber plants.

2) A group of seismologists, geophysicists, and other scientists engaged in research on prediction of earthquakes and the reduction of earthquake hazards to exchange information and ideas with Chinese colleagues.

3) A group of appropriate scientists to discuss Chinese research in pharmacology, with particular reference to herbs for therapeutic use, identification of medically effective elements from herbs, and development of synthetic drugs from those elements.

4) A group of malacologists, parasitologists, aquatic ecologists, and biomedical scientists to discuss eradication of and chemotherapy for schistosomiasis and other parasitic infections.

5) A group of appropriate scientists to discuss research on the physiology of acupuncture anesthesia.

6) A group of scholars to discuss with Chinese colleagues the current state of archeological studies in China and to compare methods of conservation and preservation of new discoveries.

7) A group of anthropologists to discuss and review material relating to early man in China, including recent discoveries.

8) A group of educational specialists and child psychologists to discuss early childhood education and cognitive development, including education in primary schools, day-care centers, and nursery schools, and to discuss research on childhood learning of Chinese and foreign languages.

9) A group of linguists to discuss Chinese linguistical studies as well as changes in the Chinese language, including character simplification.

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During the discussions with Premier Chou En-lai it became clear that the Chinese would be receptive to an exchange of research experience in the area of population studies, including contraceptive technology. Accordingly, a proposal has been forwarded to the Scientific and Technical Association proposing that a tenth delegation, composed of experts in the population field, visit China in the near future.

In addition to these groups, which have been accepted by Chinese colleagues and which will be sponsored by the Committee on Scholarly Communication, a 12-person delegation headed by John Hogness, president, Institute of Medicine, National Academy of Sciences, visited the People's Republic of China from 15 June to 15 July. This was a visit reciprocating that of the Chinese medical group to the United States in the fall of 1972.

With respect to visits of Chinese scientific delegations to the United States, the committee earlier had received three groups.

A 10-member delegation of hydrotechnical specialists, headed by Yen K'ai, president of the East China College of Hydraulic Engineering, spent 8 weeks (20 April to 14 June) in the United States studying the construction, operation, and maintenance of locks and dams, problems of sedimentation and silting, and the closure of coffer dams, as well as other aspects of water conservation. The group visited engineering sites and research facilities in Tennessee, Alabama, Mississippi, Arkansas, Arizona, California, Oregon, Washington, Colorado, and Ohio.

The second Chinese group was a delegation of high energy physicists led by Chang Wen-yu, deputy director of the Institute of Atomic Energy. During their 4-week trip, beginning 21 May, the 13-member group visited Brookhaven National Laboratory, the National Accelerator Laboratory, Argonne National Laboratory, the Stanford Linear Accelerator Center, and the Meson Physics Facility in Los Alamos, New Mexico.

The third group, headed by Ch'en Te-ming of the Institute of Zoology, Chinese Academy of Sciences, arrived on 25 June for a 6-week tour to study the control of insects through the use of juvenile hormones, an alternative to the use of conventional insecticides. The six-member delegation visited Department of Agriculture research facilities in Beltsville, Maryland, and

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Gainesville, Florida; Columbia University, Harvard University, Cornell University, State University of New York (Syracuse), University of Wisconsin, Texas A & M, and the University of California at Riverside; together with several industrial organizations in California, including Varian Associates, Hewlett-Packard, Beckman Instruments, Finnegan Corporation, Stauffer Chemical, and Zoecon.

Following the acceptance of the nine U.S. delegations by the Chinese, representatives of the Scientific and Technical Association and the Committee on Scholarly Communication held a second meeting at which Chou P'eiyuan proposed that seven additional delegations be sent to the United States:

1) A group of 14 computer specialists to visit industrial and university centers for a period of 5 to 6 weeks.

2) A group of ten English language specialists to meet with linguists, teachers, and foreign language specialists to discuss the best and most modern methods of teaching English to native Chinese speakers.

3) A group of ten library science specialists to study libraries of various institutions, including their operations, the education of library personnel, and training in library science.

4) A medical group of six to ten doctors for 4 weeks to study the physiology of pain and biomedical engineering.

5) A group of specialists in seismology and earthquake prediction, which, incidentally, is the only field outside of medicine in which similar groups of specialists will journey in both directions.

6) A group of specialists in laser research to study laser generating equipment and laser applications.

7) A group of specialists in photosynthesis in plants to study U.S. work in this area.

The Committee on Scholarly Communication readily agreed to accept these additional delegations.

The Committee on Scholarly Communication has established a series of guidelines for determining the composition of each delegation that will visit China under this program. The National Academy of Sciences has accepted responsibility for the five delegations in the natural sciences; the Social Science Research Council has accepted responsibility for the delegations on early childhood development and early man; the American Council of Learned Societies has accepted responsibility for the delegations on archeology and linguistical studies. Final selection of delegates, however, will be subject to the approval of the executive committee of the Committee on Scholarly Communication.

The selection of individuals will be based on scholarly merit, representation in the field, maturity and good judgment, and diplomacy. Groups should include younger scholars as well as those with established reputations. Preference should be given scholars who have not visited China in recent years. There should be representation from a wide range of universities, research institutes, government and industrial laboratories, and foundations. There should be broad geographic representation. Each group should include one or two scholars who know China and the Chinese language well. There should be about ten scholars in each group. Because of logistical problems in China, spouses cannot be included. even at their own expense.

With respect to mechanism, the first step in the establishment of a delegation will be the selection by the committee of a chairman plus two advisors. This group will recommend a slate of candidates, which will be submitted to the committee for approval, and will arrange the names in order of first choices and alternates for each slot to be filled. The chairman is expected to consult with appropriate individuals and organizations for suggestions for candidates. It must be kept in mind, however, that no delegation will contain a "representative" of a society or organization. Individual scholarly merit will be the prime determining factor.

With a total of only some 90 slots to accommodate a scholarly community which numbers in the hundreds of thousands, there is bound to be a certain amount of unhappiness, for a substantial proportion of scholars would dearly love to visit China. To this one can only answer that this is but the beginning of a program that it is hoped will expand rapidly. The primary limiting factor at the moment is that the Chinese are hard pressed to accommodate large numbers of delegations comfortably and efficiently.

The Scientific and Technical Association and the Committee on Scholarly Communication share expenses of exchanges as follows: The committee pays for the travel expenses of all delegations to China, where, upon their arrival, the association provides hospitality as well as internal travel. The committee further provides hospitality and internal travel for the Chinese delegations visiting the United States. A competent staff is required to make the necessary arrangements and to help guide the delegations.

For several years the committee was financed by funds provided jointly by the Hazen Foundation and the Carnegie Corporation. The visit of the Chinese physicians was made possible by grants from several foundations, including the Rockefeller Foundation, the Commonwealth Foundation, and the Charles F. Kettering Foundation. Later, the Bureau of Education and Cultural Affairs of the Department of State and the National Science Foundation provided funds which permitted an expansion of the program. During the early stages, a substantial proportion of these funds was used to provide travel grants for scholars who had received bona fide invitations from appropriate Chinese organizations to visit China as their guests. Now the funds provided by the Department of State, the National Science Foundation, and private foundations are used exclusively to support programs that have been agreed upon by the Committee on Scholarly Communication.

During the past 2 years, the Committee on Scholarly Communication and the National Committee on U.S.-China Relations have become the primary nongovernmental American organizations responsible for exchange programs with China. The two groups work closely together, and for the most part the division of effort and responsibility is clear. To a first approximation, the Committee on Scholarly Communication handles scholarly and technical exchanges involving individuals or small groups. The National Committee is concerned with educational and cultural exchanges that contribute to public understanding of China—performing arts, sporting events, and professional groups such as teachers, journalists, and civic leaders. Naturally, as in any effort of this kind, there are some gray areas where discussion is necessary in order to determine responsibility.

It must be emphasized that the two organizations do not, and could not, play an exclusive role in exchanges with the People's Republic of China. Individuals or groups able to arrange visits to China or to receive visiting Chinese are encouraged to do so. In fact, the majority of American travel to China has been arranged directly with the Chinese. Although the staffs of both organizations are available for consultation, there are obvious limitations on what the Committee on Scholarly Communication can do on behalf of individuals and professional organizations. It clearly cannot expedite exchanges in every field. It must give priorities to fields which offer the greatest opportunities for the U.S. scholarly community and which at the same time are acceptable to the Chinese. The committee is willing, upon request by the Chinese, to vouch for the scholarly merits of individuals and organizations, but it is not in a position to urge that the Chinese invite any one individual or group in preference to the other. Nor is it in a position to provide funds for exchanges outside those arranged directly between the committee and the Scientific and Technical Association.

The committee attempts to be useful to the scholarly community in addi-

tional ways. Two workshops, "Education in China" and "Science in China," were convened this spring jointly with the National Committee on U.S.-China Relations at the Johnson Foundation's Wingspread Center in Wisconsin. A third workshop, "Health Care in China," was held on 29 and 30 November at Wingspread. In addition, the committee publishes the China Exchange Newsletter, which is available without charge from the committee's office in Washington.

All scholars interested in U.S.-China scholarly relations will quickly note that, thus far, exchanges are taking the form of exchanges of delegations, as distinct from exchanges of individuals. This conforms to Chinese desires, but during the bilateral discussions the U.S. group emphasized repeatedly that we look forward to the time when individual Chinese scholars can engage in research in the United States and individual American scholars can work in China. Our Chinese colleagues appear to understand our concern but replied that such exchanges are premature from their point of view.

With respect to the future, the Committee on Scholarly Communication is inviting the Scientific and Technical Association to send a delegation to Washington in the spring of 1974 for the purpose of discussing the next phase of the bilateral program. Undoubtedly, additional delegations will be proposed. Hopefully, a few exchanges of individual scholars can be initiated.

## Note

1. For additional information concerning the U.S.-China program of scholarly exchanges, contact Mrs. Anne Keatley, staff director, Committee on Scholarly Communication with the People's Republic of China, Office of the Foreign Secretary, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418.