

# China's Leader Commits to Global Science and Scientific Exchange

6 OCT 2000 • BY [ELLIS RUBINSTEIN](#)

*In an exclusive interview with Science Editor Ellis Rubinstein, China's President, Jiang Zemin, offers a glimpse of a new China that is encouraging young scientists to study abroad and to use the Internet for their work. As part of our special feature on scientific exchange with China, Next Wave is reposting the parts of the interview that focus specifically on questions of international cooperation and scientific exchange. You can find the full text of this interview at [Science, 16 June 2000, p. 1950](#).*

## International Cooperation

**Science:** Now China appears to be opening up rapidly, particularly in science. What are some of the promises and perils of opening up?

**Jiang:** Fifteen years ago I was mayor of Shanghai, and recently I visited Shanghai again. I was surprised to see so many achievements in housing construction, public transport, commodities supply, and information infrastructure. And all this has come as a result of reform and opening up. Therefore, I've always believed that we need to cast aside ... bad legacies [such as closing our borders. And yet] we still need to ... promote all the fine traditions of the Chinese civilization.

Recently, I paid a visit to Greece. I had begun to develop a strong interest in Greek civilization back in middle school days. Therefore, during the visit I discussed with people the comparative studies of the Eastern and Western cultures and the theories and principles advanced by Socrates, Plato, Aristotle, Archimedes, and others. My point is that, on the one hand, the Chinese people have every reason to be proud of their ancient tradition of civilization, but, on the other hand, we should not stop learning--not even for a single day--from all the fine traditions of the world.

**Science:** What are the practical consequences of this philosophy?

**Jiang:** China has signed agreements on scientific cooperation with the governments of 95 countries and established scientific links with more than 150 countries and regions. Chinese scientists have participated in 800 scientific collaboration projects launched by international organizations. As long as we follow the principles of equality, mutual benefit, sharing achievements, and respecting intellectual property rights, there should be no risks involved. On the contrary, international collaborations, exchanges of scientists, and the sharing of resources and information and research instruments will help advance science, promote economic and trade cooperation, and propel economic globalization.

Confucius once said that whenever there are three people walking together, one of them is bound to be able to teach you something. And Confucius also said that to say what you know and what you don't know is knowledge. Through international cooperation, the Chinese scientific community has learned modern theory and management expertise, upgraded research and development capabilities, improved engineering and product quality, and produced good economic and social results. At the same time, Chinese scientists have made great contributions to modern scientific progress.

**Science:** What new initiatives best show China's commitment to international scientific collaboration?

**Jiang:** The Chinese government will, for example, fully support the development of worldwide and cross-region cooperation networks of scientific research and high-tech industries, such as setting up Sino-Israeli, Sino-Australian, and China-APEC [Asia-Pacific Economic Cooperation] scientific collaboration funds. Moreover, we encourage Chinese scientists to participate in the Fifth Research Framework of the European Union and in other major international collaborations on a selective basis. Meanwhile, some state-level scientific programs and research centers are open to foreign research institutions and scientists who are welcome to participate in our basic research and high-tech programs.

**Science:** Of all the changes taking place in China, none may be more future-oriented than the new efforts by your administration to bring young people back from the United States and from Europe and to provide them with important positions. Are you personally supporting China's new policies?

**Jiang:** It is our policy to ensure [scientists and engineers] the freedom to come and go--to travel abroad and to come back to work here in the motherland. Despite all the different views, we still believe that they should have the freedom to come and go. And we need to further develop the Chinese economy and create better conditions to attract more people back.

**Science:** Many in the West think that China's young people are unable to freely engage in Internet discussions with their peers outside China and are limited in their ability to travel freely. Is that true?

**Jiang:** I'm sorry that [people would have such a] presumption, [because it is] not reality. In recent years, China's young people are not only free to discuss on the Internet but also have many opportunities to go abroad for study or work. Between 1978 and 1999, nearly 320,000 Chinese students and scholars went abroad to study. The number more than doubled that from 1872 to 1978 (about 130,000). Over the past 20 years of reform and opening up, China has received more than 340,000 students and scholars from 160 countries and regions.

Moreover, the Chinese government has since 1993 implemented the policy of supporting scholars to study abroad, encouraging them to return, and ensuring them the freedom to come and go. Last year, we issued a regulation on the management of intermediate agencies for self-funded students who intend to study abroad. All this has facilitated both government-funded and self-supported students to study abroad now.

As to the Internet, its development has nowadays afforded us easier access to a whole wealth of information throughout the world. According to a survey released by the China National Network Information Center, by the end of last year there were 8.9 million netizens in China, most of whom were people aged between 24 and 35. I'd like to point out that the added value of information is reflected by the fact that it is open to all and shared by all. So I hope all young people, both Chinese and foreign, and all scientists and scholars around the world will make the best use of the Internet and other means of communication.

**Science:** Are you satisfied with current efforts by the Chinese Academy of Sciences and the government to lure back Chinese scientists working abroad? If not, what more can the government do?

**Jiang:** Generally speaking, I'm satisfied. But a great deal of work remains to be done. Competition in scientific research is competition for talent. Many developing countries, China included, have seen brain drain to varying degrees. Since 1978, about 110,000 of the 320,000 Chinese who have gone abroad to study have come back and made contributions to the country. Of course, for various reasons, quite a number of them have decided not to--at least for the moment--come back, which is understandable. The Chinese government is taking measures to attract them back, including introducing more favorable policies and more flexible mechanisms and creating better working and living conditions for them. Meanwhile, all sorts of technology- or business-development parks set up by local governments at all levels have served as incubators for scientific and technological development and for turning research results into products. I believe more and more people will come back as our economy develops and research conditions improve.