tainly can affect how we are judged. Teacher expectations are of special importance, since teachers are the guides—or the gatekeepers—to a career in science. From my experience, this is an important issue with real consequences. I grew up in the 1950s, long before Asian-American students were stereotyped as "model minorities." In my first geometry class in high school, I was doing "D" work, and my teacher told me I was performing as he had expected. "Chinese are good memorizers but they can't think logically, and that's what geometry is all about," he explained.

I dropped geometry and took it again the next year, with a different teacher. This time, my teacher admonished me to work harder because I was "only" doing "B" work—and "Chinese are born mathematicians." My modest abilities in geometry hadn't changed, but teacher expectations had.

At least I wasn't called an "overachiever," which I consider a particularly demeaning Asian stereotype. It somehow implies that Asian-Americans aren't playing fair in their drive to succeed, and that they do well because they work harder, not because they are creative or talented. Such stereotypes about how and why Asian-Americans succeed are not only demeaning, in the worst case they can be used to exclude Asians from jobs that require imagination and creativity.

Negative stereotypes about Asians may crop up at promotion time too. In 1974, when an Asian colleague of mine came up for tenure, she was temporarily denied, because as she heard later, administrators felt that she had a "devious nature."

Another aspect of Asian-American life that can prevent our being accepted and rising to the top is this cultural shyness I referred to earlier. Some first generation white Americans report childhood memories of coming home from school to be met with their parents query: "Did you ask any good questions in class today?" But good Asian kids don't question authority. And although not every Asian-American may feel this shyness, it is something that has been encouraged by our culture.

This cultural difference can have consequences later. Working to become an excellent but "invisible" scientist may earn you a Ph.D. and even an entry-level faculty or industry position. But further advancement often depends not only on scientific expertise, but on social skills, such as the ability to network among the people who make the hiring decisions.

Thus cultural shyness may contribute to the "glass ceilings" that hover between many Asian-American scientists and career advancement. We know that while Asian-Americans are proportionally "overrepresented" at the lab bench, they are underrepresented in the administration buildings of their universities and on the boards of scientific corporations. The cultural injunctions that permeate some Asian societies—those values that discourage assertiveness, outspokenness, and competitiveness in groups—work against Asian-Americans, especially in the culture of science. Thus, an Asian job candidate may be viewed, at best, by an Anglo-European department chair as being shy or indifferent or, at worst, as having nothing to say or being unable to act decisively.

Change will come about when, on the one side, Asian-Americans learn to exercise certain skills in presenting themselves in public life. On the other side, corporate and academic leaders must recognize that creative viewpoints can emerge from cultural diversity. Indeed, the collaborative research enterprises of today could no doubt benefit from a more cooperative approach.

In discussing these Asian-American issues, I do not mean to minimize the very real problems of recruiting more blacks, Hispanics, and American Indians into science, discussed elsewhere in this issue. My point concerns a common tendency to dismiss Asians as having no problems at all and to focus on the underrepresented minorites. While it is true that Asian-Americans are better off than some minorities in science, it is not true that everything is just fine in model-minority-land. The larger problem facing all minorities in science is the same: to live up to our potential and achieve in our careers, avoiding the pitfalls laid by cultural differences and prejudice. We should focus on what we have in common—our love of science—and what the diverse viewpoints of all minorities and women can contribute to the scientific enterprise.

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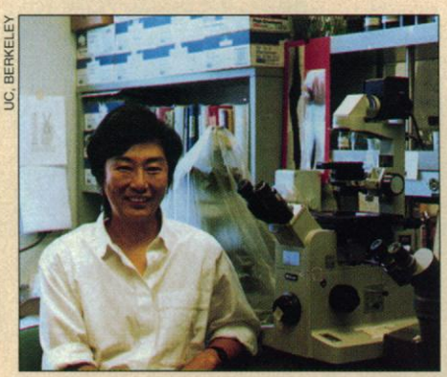
Asian or American?

In 1982, at a meeting on herpes viruses at Cold Spring Harbor, while 23-year-old graduate student Kuan-Teh Jeang was preparing two scientific talks, he learned that a prominent virologist had asked a co-worker whether Jeang spoke English. To Jeang—who was born in Taiwan but who has lived in the United States since he was 5 and speaks fluent English—that was just another example of a common assumption of many white Americans: "If they can't pronounce your name, then you probably can't pronounce theirs either."

For Asian-American scientists who immigrated to the United States, the perception of being "foreign" and cultural differences are even stronger than for those born here. They can add up to what Jeang considers an identity crisis.



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Brown-bagging it. Renee Sung has learned to network informally.

Yong Kim, a University of Virginia biomedical engineering researcher who left South Korea in 1970 for graduate school in the U.S., agrees: "You have two different species of Asian-Americans—those born here, who have little in the way of a cultural or language barrier, and those like myself who have a difficult challenge."

That challenge is to find common ground with American colleagues, and failure to do so can hinder career advancement. "Promotions rely on information not transmitted through 'normal' mechanisms," says Renee Sung, a biology professor at the University of California, Berkeley, who was born in China. Sung says she has in the past missed out on brown bag lunches and other golden networking opportunities—because she and her colleagues have so little in common.

Another major stumbling block is a non-confrontational personal style. Kim, for example, grew up with the teachings of Confucianism, which, he says, encouraged him to lead a "quiet life" that can keep him from forming bonds with colleagues outside of work. For an Asian immigrant, leaving the "quiet life" may be the hardest journey of all.

–Richard Stone