

## LEAVING HOME

# Many Japanese Say West Is Still to Their Liking

In the decades following the end of World War II, European and U.S. laboratories offered promising Japanese scientists intellectual excitement and first-class facilities that were not available at home. Not anymore. Lab facilities at the top universities are becoming as good as, or better than, those found in many Western institutions, and there are growing numbers of internationally renowned Japanese scientists available as possible mentors. So why do so many Japanese researchers still cross the ocean to launch their careers?

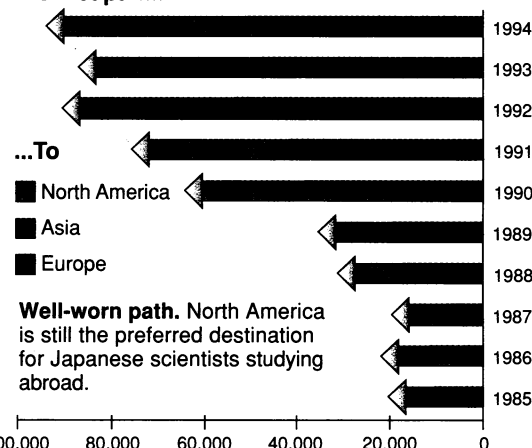
One attraction is the highly competitive research environment. Another is the opportunity to polish English-language skills—an essential element for success in the international arena. But perhaps just as important is the chance for a postdoc to escape, at least temporarily, from the often oppressive hierarchy within Japan and get a broader view of the discipline. “There are many good jobs in research laboratories in Japanese companies, but they are permanent jobs,” notes Mitsuaki Shimizu, a researcher at the Electrotechnical Laboratory in Tsukuba. “So it is natural to want to go overseas and get experiences before getting a permanent job in Japan. If you do not know other laboratories, you cannot guess what is good or what is wrong in your job environment.”

On top of all these factors, however, is the attraction of the science itself: Japanese postdocs in fields ranging from biological signal transduction to optical semiconductor physics say the hottest action is in the West. “In my field, neuroscience, the United States is the major leagues,” says Nobuki Nakanishi, a neurobiologist who worked as a postdoc at Columbia University and is now an assistant professor at Harvard Medical School. “This is a highly multidisciplinary field, so you really need a large number of people to have a critical mass,” he says.

The fact that the critical mass communicates in English is another reason to study abroad. “In Japan, you need linguistic skills to be successful as a scientist,” says Nakanishi, who speaks fluent, idiomatic English after a dozen years in the United States. The desire to improve her English was one reason Noriko Suzuki decided to join Johns Hopkins University biochemist Yuan Chuan Lee this April after earning a Ph.D. in molecular immunology from the University of Tokyo. “It’s been frustrating not to be able to express what’s on my mind,” Suzuki says in Japanese.

While mastery of English is essential,

## From Japan...



Suzuki says that an even more important goal is to learn “American approaches to solving problems.” That is the same reason Kenji Irie, age 31, a research associate in Kunihiro Matsumoto’s lab at Nagoya University, hopes to secure a postdoctoral post with Ira Herskowitz, chair of the biochemistry department at the University of California, San Francisco. “Herskowitz keeps generating new concepts. I want to study his way of thinking,” he says.

Irie is also attracted by the independence of his U.S. peers. “In the Japanese system, younger scientists can’t have their own lab,” he explains. Assistant professors and research associates belong to a full professor’s lab and typically do not have the psychological or financial independence to pursue their own ideas. “It’s just like being a technician,” says

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## Search for Truth Points to America

Naomi Fukai is a research associate in the department of cell biology at Harvard Medical School. He grew up in Tokyo and received medical and doctoral degrees from Tokyo Medical and Dental University. He has lived in the United States for 4 years and is supported by a grant from the National Institutes of Health. His e-mail address is: fukai@tiac.net.

As a neurosurgeon at a geriatric hospital in Tokyo, I had been interested in cerebrovascular diseases and wanted to learn more about vascular biology. But it was increasingly difficult to be both a clinician and a researcher at the same time. Coming to the United States as a postdoctoral fellow has given me a chance to concentrate on laboratory research in a way that was not possible in Japan.

In addition, the United States has one of the best environments for doing science. Although public funding of re-

search is increasing in Japan, there is much more money available for research in the United States. I have also been impressed by the quality of the management of information needed to carry out scientific research.

A third reason for my decision to come to the United States was my feeling that I could overcome the language problem and become integrated into American society and culture. Not all Japanese scientists hold this attitude, of course, and a similarly open attitude toward Japan is even less common among U.S. scientists. For example, one university in Tokyo recently wanted to hire a U.S. scientist as a postdoctoral fellow but could not because it received no applications. Still, I think that it is easier for Japanese scientists to adapt to the United States than the other way around because U.S. society has fewer social rules that must be followed.

I hope to continue working here after my current project is completed, although my future is dependent on funding. In the meantime, I have appreciated the opportunity to learn more about vascular biology and to meet researchers from many other countries. That interaction will continue as long as the U.S. keeps its door open to scientists seeking truth.

—Naomi Fukai

