A Long and Steep Ladder to the Top

Yukiko Sasaki

Young researchers sometimes ask me about the personal motivation behind my career decisions. The strongest motivation is my interest in natural science. Other minor motivations, such as my wish to improve the status of women scientists and my dream to become a distinguished scientist just as researchers do in the United States and Europe, prompted me to continue research in an academic position.

After World War II, the educational system in Japan was suffering, and appropriate textbooks were unavailable. Poverty makes people hungry not only for meals but also for knowledge. An invitation to the natural sciences was offered to me in a chemistry class during high school. A glance at the periodic table of the elements very deeply impressed me, and I thought that the table was a great and wonderful achievement and that human beings had solved natural mystery. Even today, the most fascinating aspect of natural science to me is that only one answer can be found to a natural mystery, whereas in social sciences many answers always appear to exist. My feeling that it would be most exciting to understand natural mysteries through chemistry gradually became my conviction, and I decided to study at top research universities to find new discoveries and new explanations for natural mysteries.

Phenomenal progress in biochemistry and molecular biology in the past three decades has led to a number of new concepts as well as a variety of novel scientific techniques. Inevitably, we scientists were busy reading excellent publications. However, reading these articles often led me down the paths that many researchers had already traveled. Our understanding of life is far from complete, and there are many unanswered questions. Everyone has a chance to find an unexpected answer that may tremendously contribute to the further understanding of life, and I was afraid that my ongoing research would turn into imitation. Therefore, I endeavored to come up with my own ideas. The proverb “Better to walk before a heron than behind an ox” always encouraged me to continue my research.

I graduated from the School of Agricultural Sciences of Kyoto University. When I received my PhD in 1966, Kyoto University offered me a research associate position. This made me feel lucky and proud, because at the time it was difficult even for male students to find such an academic position in a top research university. However, no one could imagine that I would work in the same position for 28 years.

In those days most, if not all, senior academic positions were occupied by male colleagues who often were deeply involved in politics. They formed alliances based on friendship and sometimes without regard to competitive scientific activity. But because of Japan’s economic growth from 1980 to 1990, more money gradually became available for research. In 1996, the total amount of research funds available in Japan was comparable to that of advanced countries. The increased availability of research money facilitated competitive hiring and grant distribution practices. Therefore, I finally got an opportunity for a promotion. Nagoya University offered me a professorship in 1995, just seven years before I would reach the retirement age. Now I am the first female professor in an agricultural school among the six leading national universities. Such a situation is typical for most female scientists of my generation, especially in the experimental sciences. But economic growth and retirement of the former generation of professors have also opened doors for highly qualified women in science.

After World War II, equal rights were granted to both sexes in Japan. Thereafter, national universities, such as the University of Tokyo and Kyoto University, were opened to all students. But by the time I received my PhD, I realized that female scientists were at a disadvantage and faced substantial barriers to career advancement, not only in academic institutions but also in companies. Although I felt that it was important to fight against the mind-set that created such barriers, I did not have the right personality to become a talented activist. Rather, I preferred to investigate new ideas and work within the system without being confrontational. To accomplish my goals of becoming a distinguished, highly original researcher, I had to compromise with faculty members who were very conservative in their ways of thinking. Sometimes I enjoyed the compromise, because senior members had to assume administrative roles, including student management and lectures, which are very important but painstaking tasks. I was mostly free from such activities and happily devoted myself to studying and research. As a mother, I was also busy with housekeeping and taking care of two children. Although there were some benefits to my situation, not having my own laboratory was a serious drawback. When I met disappointments in my research, I was encouraged to continue because of my belief. Having been given the opportunity to continue my research in a top academic institution under difficult circumstances, I should
stand up against discrimination in the world of Japanese science.

Seven years of professorship may be too short to accomplish everything I wanted to do, but I have worked hard to change the course of science in Japan. I am grateful for the opportunity to enjoy the natural sciences and to be able to continue research to this age. Now I am convinced that in a modern Japanese society our new generation of young researchers will shape the future of scientific discovery.

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