
Sarah P. Otto

2008 WISET Exchange Report

I had a very productive visit to Japan under the auspices of the Women in Science, Engineering, and Technology (WISET) exchange lectureship program (arrived in Tokyo Sunday February 17 and left Monday February 25, 2008). While in Japan, I attended a variety of meetings and gave six seminars (detailed below). As mentioned in the attached articles, there are many fewer women in science in Japan than in most other nations with comparable research universities. Among University science professors in Japan (of all levels), only ~12% are women, which is roughly half that in Canada. (A 2002/2003 survey reported 28% women faculty in biology, 15% in math/physics, and 12% in computer science/engineering in Canada.) While in Japan, I served as a role model as a successful woman scientist through interactions with high schools students, discussions with graduate students, and interviews with the media.

I also had the opportunity to interact with several research groups in my area of research (evolutionary biology). This opportunity was especially meaningful to me, because I had not previously met several Japanese colleagues, perhaps because funding for international travel is difficult to obtain. Having met them, I feel much more in a position to seek out these colleagues for future collaborations and seminar trips.

Overall, I think that the WISET program is an excellent opportunity to increase the prominence of women scientists in Canada and Japan, which is a very important objective. It also serves to forge links between Canadian and Japanese scientists, which will help foster further international collaborations and interchanges.

ITINERARY

Monday February 18: Seminar and discussion at Prof. Tajima's Lab (Tokyo University)

Tuesday February 19: Embassy of Canada

Tuesday February 19: Science Council of Japan (SCJ), with President Kanazawa and Vice President Doi

Tuesday February 19: Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Wednesday February 20: National Women's Education Center (NWEC)

Thursday February 21: Seminar and discussion at Prof. Hattta's Lab (Ochanomizu Univ)

Thursday February 21: Seminar and discussion at Ochanomizu Univ. Attached High School

Friday February 22: Seminar and discussion at Dr. Sakai's Lab (Tohoku University)

Saturday February 23: Seminar and discussion at Prof. Takahata's Lab (Graduate University for Advanced Studies; Sakendai)

Monday February 25: Media Program at YWCA

IMPRESSIONS

The following view of obstacles facing women scientists in Japan is based on my impressions after only a very short visit. Any statements should be checked for factual accuracy before being used publicly.

I was struck by the difficulties that women scientists face in Japan if they bear a child. Not only is it difficult to obtain childcare at or near universities, but there is also a strong social expectation that women stay home until their children reach school age. In addition, maternity leave is often not paid. Paid maternity leave helps to bring women back into the workforce, as it builds an expectation to return to work after a certain amount of time (typically one year, in Canada). Another factor was the greater imbalance in roles that mothers and fathers play with respect to childcare. Many Japanese women who I had met were very surprised to learn that my husband had taken paternity leave. I was told that paternity leave was unheard of in Japan. Of course, there is also a gender imbalance in the time spent childrearing in Canada, but it is not as extreme. Because of the equitable roles that my husband and I serve in raising our child, I am able to work late and on weekends when necessary, and I am able to take work-related trips. My career would not be as successful if I performed 100% of the childrearing. Building social programs aimed at encouraging fathers to take a greater role in childrearing would, in the long run, help to raise the stature of many women in science in Japan.

Another issue that reduces opportunities for women scientists in Japan is that Universities typically do not hire spouses. Indeed, I was told that some institutions had a formal policy against spousal hires. Many women scientists are married to other scientists, and I suspect that, if only one person can obtain a job in a particular institution, it will typically be the man that does so (because women are often the younger in a couple and because social expectations give greater priority to the man's career). By actively hiring couples, UBC has been able to recruit a larger fraction of women (myself included). At UBC, we have found that hiring couples has many benefits. Typically, couples hired together are much less likely to leave an institution, and they tend to have a greater allegiance to their institution, because the institution arranged for two positions. In expensive cities like Vancouver, hiring couples can also make life much more affordable for young faculty, increasing their retention. I was asked how to counter the objection that hiring a spouse means hiring somebody of lower quality. My response is that spousal hires should only be done in cases where both candidates meet the standards of hires typical for that University. That is, the minimum bar should not be lowered to accommodate a couple. What I have seen happen is that a couple will go to a University where they can both obtain jobs, rather than a more prestigious University where only one partner can be hired. Consequently, the average quality of academics hired together as a couple can even be greater than for individuals hired singly.

Finally, one of the most insidious problems facing women in academia is the unstated view that if you are a woman, you can't possibly be as good at engineering, math, scientific reasoning, etc. (see http://www.tomdispatch.com/post/174918/rebecca_solnit_the_archipelago_of_arrogance for an interesting personal account of biases against perceiving women as intellectually capable). Of course, this insidious problem faces women worldwide, including Canada and Japan. Just this week, an older

gentleman came into my office looking for Dr. Otto. When I said that I was the person he sought, he said “but I was looking for Professor Otto.” Well, I am sorry, but that is still me. Although these biases are slowly decreasing in intensity, progress is slow.

In my meeting at the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Mr. Yamaguchi and Mr. Saito discussed various programs that Japan is implementing in an attempt to increase the number of women scientists, with a target to increase the ratio of female researchers to 20% by 2010 in science. I applaud their efforts, although I suspect that such dramatic changes in numbers will take a large investment in joint federal and University programs to hire women (such as the University Faculty Award of NSERC). I have subsequently been in correspondence with Mr. Yamaguchi and Mr. Saito about such programs.

COMMENTS FOR FUTURE WISET EXCHANGES

I would recommend that WISET scholars from Canada be given the following advice before going to Japan in preparation:

- Consider printing business cards translated on the reverse into Japanese. Exchanging business cards is very common (less so within research labs). It is also a very handy way of keeping track of a large group of new faces. Business cards are generally taken with both hands and with a slight bow.
- Be prepared to speak slowly and to cover less material than you might cover to a native English speaking audience. My talks at the National Women’s Education Centre and to the Ochanamizu High School were translated (slide-by-slide); it’s hard to maintain pace and energy with so many interruptions, so be mentally prepared. (As far as I could tell, the translators did a superb job.) In the Universities, many graduate students have a difficult time with English and can be very hesitant to speak. Consider sending or bringing handouts of the overheads and to have more visual aids in your talks.
- Consider bringing small gifts from Canada. A formal exchange of gifts occurred following the meeting with the President of the Science Council of Japan. It was also nice to present gifts to hosts and to the translator at the high school. Don’t expect to be able to buy wrapping paper in Tokyo (it is not available in most shops).
- In general, Japanese are quite kind to foreigners and will offer to help if you look lost. It is extremely safe in Tokyo, and the subway system is superb and easy to use (stops are numbered, in case the kanji is uninterpretable).

I would also recommend that WISET scholars be given the first two attached articles to prepare them for discussions of women in science in the two countries. WISET scholars are also welcome to my PowerPoint slides on women in science in Canada, so that they can have an idea of the sorts of material that has been discussed previously (at NVEC).

Upon arrival, the Canadian Embassy provided two very helpful documents, a Welcome to Tokyo and a summary of the Canadian Science policy. It would be great if these documents could be sent ahead of time, because the information was very useful.

THANKS

Most importantly, I would like to thank my main Japanese hosts: Tomiko Mori and Professor Murofushi (Ochanomizu Univ). They showed me many kindnesses, escorting me from location to location, discussing Japanese science and customs, and treating me to wonderful meals. Mr. Hiroaki Hirata (Science Council of Japan) was very kind to pick me up from the airport and to arrange my visit to the Science Council. Ms. Sanae Yonemichi helped tutor me on Japanese customs and arranged for my visit to the Canadian Embassy and for my media interviews (see attached articles). I greatly appreciate the support of the Science Council of Japan, MEXT, the Royal Society of Canada, and NSERC in making my trip both possible and successful.

MEDIA COVERAGE

An article about my visit and the WISET program appeared in Tokyo Shimbun, March 11, 2008. This profile was the first in a new column "Bibun-Sekibun". Tokyo Shimbun is the regional newspaper in Tokyo (~600,000 circulation daily), with a general readership. A similar article was reprinted in Chunichi Shimbun, a giant regional newspaper in Nagoya (~2.8 million circulation daily).

A second article appeared in Nikkan Kogyo Shimbun, the "Business and Technology" newspaper of Japan, on March 28, 2008.

事務局注： 本文には下記の著作物が添付されておりましたが、事務局において削除の上、掲載していません。

- ・ "One woman is still not enough", *Nature*, Nature Publishing Group, Vol.451 Issue No. 7181 February 21, 2008, pp. 865
- ・ "Women in Science", *Science*, AAAS, Vol.311, March 3, 2006, pp. 1235-1236
- ・ "Look Abroad", Business and Technology, *Nikkan Kogyo Shimbun*, March 28, 2008
- ・ "Japan is unfriendly for female researchers", *Nikkan Kogyo Shimbun*, March 21, 2008