

# ***The Protégé to Peer Transition***

by Susan M. Fitzpatrick

When I received word that I had been nominated to serve as a Councilor to the AWIS Board and needed to write a statement on the basis of which my colleagues would decide whether to elect me, I had to confront some very serious questions. Why would I want this position? What did I hope to accomplish? What could I contribute to an organization dedicated to advancing the careers of women in science? How could I articulate what I find increasingly disturbing about the lives and careers of women in science? Discussing these queries with friends and colleagues helped crystallize my thinking, and I agreed to expand my "election statement" into a column for *AWIS Magazine*.

For some time, I have been mulling over an idea that one hurdle facing women in science is what I call "the protg to peer transition." In a nutshell, I think one of the problems facing women is that men (and to a larger extent, society) are comfortable with women in subordinate roles, but less accepting of women as peers—or superiors. So while women no longer confront overt difficulties entering even the most competitive graduate schools or securing prestigious postdoctoral positions (both of which may provide opportunities for significant recognition and support), there are still relatively few women scientists in tenured faculty positions or in more senior positions like chairs and deanships. Yet I was bothered by the fact that my ideas largely were based on anecdote and personal observation. I worried whether I would be able to write something more substantive, and whether I could support my theories with data. Remarkably, just as the deadline was looming--and I still hadn't found quite the right hook to hang my protg/peer story on - *Study on the Status of Women Faculty in Science at MIT* hit the news.

The MIT report can be found on the Internet at <http://web.mit.edu/fnl/women/women.html>. The senior women scientists at MIT deserve recognition for facing this issue in such an honest and forthright way - and the MIT administration deserves credit for actively working to redress the wrongs. Every major research institution in the country should follow their lead. I will not discuss the report in detail here; I encourage you to read it for yourself. However, the study does report two findings central to the issue I am addressing. The first is that a majority of the tenured women faculty at MIT feel marginalized and excluded - and this marginalization increases rather than decreases as women advance in their careers at MIT. This marginalization is manifested in a number of demonstrable, quantifiable ways, including discrepancies of salary, space, and resources.

The second finding is that junior women faculty feel well-supported within their departments and do not believe gender discrimination will effect their careers. To me, the difference in the perspectives of junior and senior women makes perfect sense. As a graduate student in biochemistry and neurology at Cornell University Medical College in the first half of the 1980s and as a postdoctoral fellow in molecular biophysics and biochemistry at Yale University during the second half, I can honestly say that I did not experience overt gender discrimination. This is how young women think - there is no gender discrimination, my being here is the very proof! We ascribed to this mantra: if you are good and work hard, you will succeed. In those days, many of us were very leery of joining "women in science" organizations. We weren't women scientists, we were scientists, and that's how we would be judged. Perhaps I would have seen things differently if I had discussed career issues with more senior women scientists and faculty, but . . . I really didn't know any. I didn't routinely come across any. When I look back, there probably weren't many. What were we thinking, my young friends and I? And so it goes. A decade later we find out that things haven't changed very much.

My original, admittedly nave, goal in writing this essay was to describe the nature of the "protg to peer transition" problem (with background data) and then profile how some women successfully negotiate this transition. In preparation, I read much of the literature examining the career gap for women in science (wonderful procrastination technique). I was astounded, sobered, and a bit humbled by the vast amount of data that has been accumulated on this topic. No surprise to persons working in this area, the literature predicts the results of the MIT study. My interviews with a number of well-known, well-respected senior women scientists, intended to garner their tips for bridging the gap between protg and peer, indicated that many of their situations eerily reflected those of the women scientists at MIT. I also spoke with a number of women scientists, who like myself, now work with organizations supporting science. (We all now wonder if our decisions to pursue science administration jobs would have been so warmly supported if we had been men.) As I reviewed our discussions, several common observations emerged that individuals and institutions might do well to study more systematically. A few examples are provided below.

*Mentoring.* Do institutions provide junior faculty with appropriate mentoring? Neither male nor female junior scientists--although women may be more differentially impacted --seem cognizant of how critically important mentors are to career advancement. Mentors help optimize funding searches, develop publication strategies, maximize exposure by

facilitating invitations to key meetings, and advise on career moves. Like the airline's warning that the closest emergency exit might be behind you, finding a mentor may take some searching--the right mentor may not be the most obvious person. The strength--and the weakness--of mentoring is dependence upon forming close personal relationships. Institutions can formalize some aspects of mentoring. For instance, they can organize workshops on the tenure process or funding opportunities, or provide mid-tenure reviews that detail an individual's realistic chances of achieving tenure. Some of my male colleagues, when challenged, admitted that they provide more active mentoring to their male students and fellows--but contended that this discrepancy is not deliberate and that if women more often sought mentoring, they would provide it. I do not think their explanation is merely a case of blaming the victim. Mentors and trainees both must take an active part in mentoring.

*Letters of Recommendation.* Are there subtle differences between letters of recommendation written for women and for men? Letters of recommendation are crucially important at every career stage. Letters carry significant weight when individuals are being considered for prestigious positions, significant prizes, or major awards. Anecdotally, letters written for women commonly tend to emphasize personal characteristics that reinforce a sense of subordination, such as cheerfulness, collegiality, and dedication, rather than focusing on specific scientific contributions and leadership qualities. Women should carefully consider who they ask to write letters on their behalf. Provide the writer with a vitae and highlight pertinent information. Give the recommendation writer copies of relevant papers and detail issues that the letter should address. I would encourage senior scientists to review the letters they write for men and for women and see if there is any systematic bias in the usage of terms or descriptions of accomplishments and talents.

*Exposure.* Are women fairly represented in the makeup of major meetings, symposia, distinguished speaker series, "blue-ribbon" panels, and so forth? I am not advocating that organizers beat the bushes in an effort to put a token woman on the program. But as organizers of such events readily admit, you tend to call on the same old hands. I often see male protgs speaking at prestigious meetings--are women afforded the same opportunities for recognition? When women step forward to organize sessions, chair panels, or write reviews -- are they welcomed?

As Vice President for the James S. McDonnell Foundation, I attend numerous conferences, symposia, and workshops. The number of women I find attending these meetings always heartens me. (What price progress -- a decade ago I never had to wait on line to use the restroom!) But, I am dismayed by how few women appear on the program. I now make it a point to calculate the ratio of men to women on the program versus the gender ratio of attendees. Women, even in fields with a high female representation like psychology or the allied health professions, rarely account for more (and most often much less) than 20% of the speakers. For example, on April 12-13, 1999 the Society for Neuroscience Symposium, *Neuroscience: A New Era of Discovery*, was held at the National Academy of Sciences to celebrate the advances occurring in the "Decade of the Brain." Four of the thirty slots on the program were filled by women. Neuroscience essentially came of age after affirmative action and enjoys a high representation of women. Nonetheless, the low number of women presenters is pervasive and this issue must be confronted directly.

At the risk of appearing seriously under-employed, I will admit that for about six months I tallied the numbers of photographs of men and women that appeared in *The Scientist*. Photographs of men consistently outnumbered those of women by four or five to one. Women that were pictured often were subordinates, for example the students or fellows of a senior male scientist mentioned in the article. Drawing this curious finding to the attention of the editor, I was informed that women interviewed for articles frequently declined to provide a photograph when one was requested. If true, examining why might tell us something about why senior women in science report a sense of marginalization.

By admitting that tenured women scientists experience systematic discrimination, and by reporting the steps MIT is initiating to address the situation, the MIT study hopefully will give other institutions the courage to carefully evaluate the environment women scientists encounter. Organizations like AWIS must take an active role in compiling, analyzing, and disseminating the data needed to help institutions eliminate the many factors that negatively impact the careers of women in science.

## **Recommended Readings**

Cole, Jonathan R. *Fair Science: Women in the scientific community* (The Free Press, New York, 1979). Although a bit dated, this is one of the most comprehensive and systematic studies of the many factors impacting the careers of women in science.

McGrayne, Sharon Bertsch. *Nobel Prize Women in Science: Their lives, struggles and momentous discoveries* (Citadel Press, Secaucus, New Jersey, 1998). This volume, now in its second edition in paperback, describes these women's "passion for discovery," and offers compelling biographies of the sixteen female Nobel Laureates.

Rossiter, Margaret W. *Women Scientists in America: Before affirmative action 1940-1972* (The Johns Hopkins University Press, Baltimore, 1995). One of a series of books Rossiter has written studying the careers of women in science, this volume is particularly interesting for the wealth of information it describes about this period of rapid expansion in American science, the time in which many of the leading figures in science today began their careers.

Wasserman, Elga R. *The Door in the Dream: Conversations with eminent women in science* (Joseph Henry Press, Washington, D.C., 1999). This recent release is a compilation of conversations with female members of the National Academy of Sciences.

Zuckerman, Harriet, Jonathan R. Cole, and John T. Bruer (Eds.). *The Outer Circle: Women in the scientific community* (W.W. Norton and Co., New York, 1991). This volume contains essays from a conference series (1983-1986) organized by the authors with the support of the Macy Foundation. In addition to the research papers, the volume contains three interviews with senior women scientists that remain relevant after more than a decade.

**This article appeared in AWIS Magazine, Volume 28, Number 3**