

## Similarities between Science at MIT and Economics in the UK?

In academic economics in the UK 30 percent of those studying at post-graduate level, 15 percent of lecturers, 10 percent of senior lecturers and 5 percent of professors are female. Given these figures, a recent report on the prestigious science faculties at MIT makes interesting – and salutary – reading.

Massachusetts Institute of Technology acknowledged that female professors suffer from pervasive, if unintentional, discrimination. Robert J. Birgeneau, Dean of the School of Science, noted in his written comments: "I believe that in no case was this discrimination conscious or deliberate. Indeed, it was usually totally unconscious and unknowing. Nevertheless, the effects were and are real."

The report, documenting a 5 year period from 1994, reveals a pattern of subtle but substantive discrimination in areas from hiring, awards, promotions and inclusion on important committees to the allocation of resources, such as laboratory space and research funding.

Three tenured female professors in the School of Science started to compare notes in the summer of 1994 and discovered similarities in their experiences. Other female colleagues were approached and from this beginning, a Committee was established in 1995 to analyse the status of women faculty in the six departments in the School of Science. Reports of its findings were submitted in August 1996 and amended reports in 1997 and 1998. The findings of the Committee were based on data, collected from the Dean's office and MIT's Planning Office, and interviews with department heads and women faculty.

The original request to establish the committee by senior women faculty to the Dean voiced the following suspicions, "We believe that unequal treatment of women who come to MIT makes it more difficult for them to succeed, causes them to be accorded less recognition when they do, and contributes so substantially to a poor quality of life that these women can actually become negative role models for younger women..." The report backed up these initial views, noting that, "While there was variation between departments, a common finding for most senior women faculty was that the women were "invisible", excluded from a voice in their departments and from positions of any real power. This "marginalization" had occurred as the women progressed through their careers at MIT, making their jobs increasingly difficult and less satisfying."

An apparently positive discovery was that junior women faculty feel well supported and at ease within their departments. Most do not believe that gender bias will affect their careers, however, closer inspection revealed there were negative aspects to this belief. It became clear that this was exactly how the current senior women faculty members had felt too at the beginning of their careers. As the report puts it, "the difference in the perception of junior and senior women faculty about the impact of gender on their careers is a difference that repeats itself over generations. Each generation of young women, including those who are currently senior faculty, began by believing that gender discrimination was "solved" in the previous generation and would not touch them. Gradually however, their eyes were opened to the realisation that the playing field is not level after all." The report sees this of huge importance, as the earlier in their careers that women become aware of existing inequalities, the more time they have to endeavour to redress the balance.

It was found that the number of senior women in the School of Science had remained static at around 8% for at least a decade and that there was no reason to expect a significant change in the future. Figures showed that although in some of the departments at undergraduate level women

outnumbered men, in every department each subsequent step to graduate student, post-doctorate and faculty member saw a significant reduction in the number of women. These findings are in line with other studies carried out at academic institutions which show that when it comes to retaining women in academia “the pipeline leaks at every stage of career”.

An interim report in 1995 prompted steps to redress the inequalities. The following strategies were adopted:

- To establish a continuing review of primary data to ensure that inequities do not occur
- To establish close communication between the senior women faculty and department Heads, Deans, and the higher administration both to prevent marginalisation of women faculty and so that senior women faculty's unique knowledge of gender issues becomes integrated at the level where academic power resides.

Individual issues of space, resources, equipment, previous underpayment of pensions, and responses to outside offers were also addressed. The inclusion of women in significant departmental activities was increased and efforts were made to identify and recruit exceptional women at all faculty ranks.

Responses were positive. One senior woman faculty member believed this resulted in "more progress for women faculty at MIT in one year than was accomplished in the previous decade." Another woman, describing the change in her professional life, noted, "I was unhappy at MIT for more than a decade. I thought it was the price you paid if you wanted to be a scientist at an elite academic institution. After the Committee formed and the Dean responded, my life began to change. My research blossomed, my funding tripled. Now I love every aspect of my job. It is hard to understand how I survived those years – or why."

As a result of these efforts the percentage of women faculty in Science now exceeds 10%, a first for MIT. This year alone there will be a remarkable 40% increase in the percentage of tenured women faculty in the School of Science. The report concludes that “To remain at the top academically we must seek out and nurture the best talent available, and half of that is female, much of it in underrepresented minorities. We have a great opportunity now to take advantage of the tiny number of women and minorities that we have finally accumulated in the past 25 years, and to use their knowledge of these problems to help ensure MIT's excellence and competitiveness into the future.”

The Royal Economics Society in the UK has established a committee whose aims and objectives are close to those strategies adopted at MIT. These aims are printed in this Newsletter. It is intended that the outcome will be as positive for economics as MIT views its actions have been for MIT.

The full report from MIT can be accessed at <http://web.mit.edu/fnl/women/women.html>  
Written for the RES Womens Committee by Elinor Bell and Carol Propper