

# A chair of one's own

The upper reaches of academe remain stubbornly inaccessible to women.

**Christine Wennerås and Agnes Wold**

If a woman is to write fiction, said Virginia Woolf, she will need money and a room of her own. Likewise, if a woman is to do science she will need grants and a laboratory of her own. The female scientist will also strive for a chair of her own, but she will find it elusive. Although women hold over half of the bachelor's degrees in Europe, they hold just one-tenth of full professorships. Despite decades of debate and measures directed towards making the top levels of academe accessible to women, they remain stubbornly chairless.

Wherever they are, female academics tread a harsher pathway than their male colleagues. US female medical-school graduates are more likely than their male classmates to pursue academic careers, but they are less than half as likely to be promoted to professors. In Italy, it is twice as hard for female senior researchers supported by the National Research Council to become research directors compared with their male counterparts.

In countries where the proportion of women among the professorate is even lower than in the United States and Italy, the hurdles facing women academics are even higher. In Germany, 25% of professors would have been female, instead of the 4%

seen today, if female university graduates had been able to follow male career paths. If Prometheus had lived today, he would probably have been a female scientist.

Family and children are often blamed for women's poor academic success, but studies refute this explanation. In the United States, Finland and Norway, female researchers with children are actually more productive than their childless female colleagues. The true reason for women scientists' sluggish careers must be sought within academia itself.

During the millennium of their existence, universities have devised more or less ingenious strategies to exclude womankind. The coarsest schemes prohibited women from entering the university and attending lectures, often with the backing of legislation. A more refined line of conduct was to allow women to study, but with severe limitations. For example, only certain disciplines were open to them. Women were also frequently denied the right to take degrees, and — as Woolf bitterly experienced — access to university libraries was carefully circumscribed for women scholars. Today, women academics don't face such formidable opposition, yet still they lag behind. Why?

Talent alone does not determine a scientist's career. Time, space and money must be added to the brew. But nowhere in the world

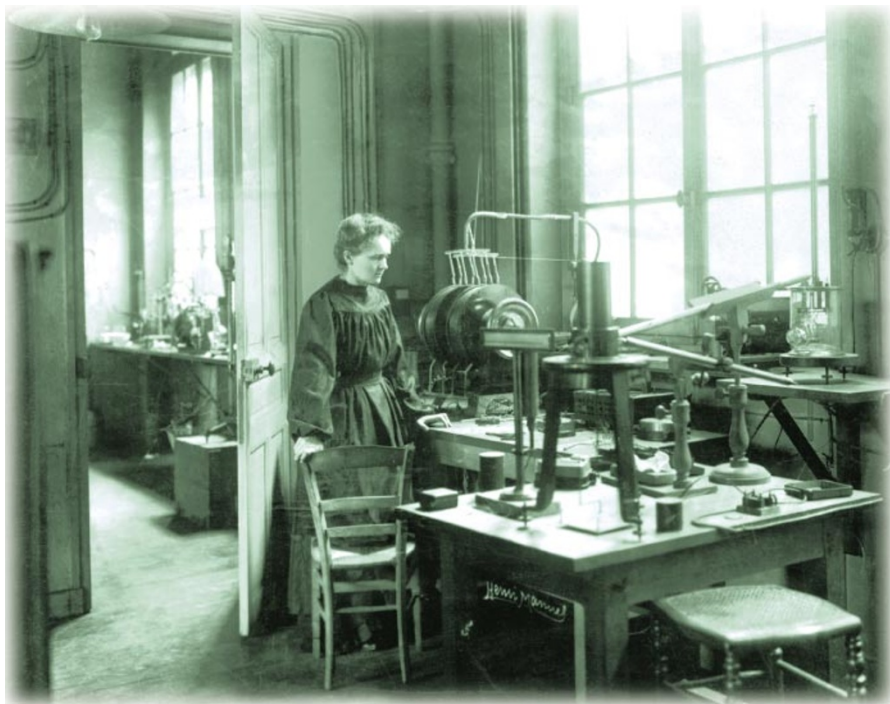
are these shared equally between the sexes. In the United Kingdom, only 20% of Medical Research Council or Wellcome Trust grants end up in the pockets of female researchers, who make up 44% of the biomedical academic staff. At the US National Cancer Institute, women researchers on average receive less than two-thirds of the budget and 63% of the research staff compared with male peers of equal seniority. This fact alone can account for the apparent lower scientific productivity of these female scientists.

Identical pieces of work, for example paintings or essays, are often judged more severely if they are assumed to be made by a woman. Scientists are not exempt from the prejudices against women that prevail to this day in all societies. Three years ago, we examined the peer-review process at the Swedish Medical Research Council and found that women had to produce twice as many scientific papers of equivalent quality to those written by men to be considered equally competent. The systematic underestimation of female performance is particularly deleterious in fields such as science, where individuals are constantly evaluated. Repeated small injustices accumulate to produce visible differences in career paths between the sexes. Only if she has excellent contacts can a woman compete on equal terms with a man.

Women's slower pace of rank advancement in itself hampers their scientific productivity. High academic rank makes it more likely that people will include you on their author lists. A junior scientist can produce one good paper per year, a leader of a small research group three to five, whereas the principal investigator of a large team can easily churn out 20. This creates a vicious circle, in which low rank feeds feeble productivity, succeeded by poor career advancement. To those who have, more will be given.

Junior scientists' frustration at the pace of their scientific productivity is normal at the beginning of their careers, when they do most of the benchwork by themselves. But female scientists tend to remain at this level their entire working lives. One should thus not underestimate the importance of having a chair of one's own. To return to Virginia Woolf: "Nobody in their senses could fail to detect the dominance of the professor. His was the power and the money and the influence." It is high time for female scientists to become women of influence. ■

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Personal space: Marie Curie was a rarity among women scientists in having a lab at her disposal.

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