No evidence of sexism in peer review

Sir — A recent study of peer-review scores for postdoctoral fellowships at the Swedish Medical Research Council demonstrated that women had to be 2.5-times more productive than their male colleagues to get the same peer-review rating in competitions for personal fellowships.

Using the same approach, we have audited recent applications to the Wellcome Trust and the UK Medical Research Council to examine whether there is discrimination in awarding practices.

The table presents the outcomes of grant applications for fellowship awards and project grants in the Wellcome Trust and MRC. There is no prima facie evidence that women are discriminated against in the awarding process — the award rates for both sexes are approximately the same.

Neither is there any evidence that women need a more impressive publication record than men to be successful in either organization’s competitions. Bibliometric analysis demonstrated that there was no statistically significant (that is, $P > 0.05$) difference in the number of papers published by successful men and women.

For example, female candidates awarded project grants by the trust published, on average, 11.2 papers in the five years preceding the application, compared to 13.8 papers for men.

As an indirect indicator of quality, the final column in the table shows the average journal impact factor for the journals in which the papers were published. For the Wellcome Trust’s project grants and the MRC’s Career Development Awards there was no significant difference between men and women. However, in the Senior Research Fellowships in Basic Biomedical Science men reaching the interview stage published in higher impact journals than women ($P < 0.05$).

Another finding is that women do not apply for research funding in the numbers that might be expected from the numbers of women employed in academic positions in medical and biosciences departments in UK universities. For example, for project grants, where the sex of the applicant was known, only 19.6% (268/[1,097+268]) of applicants to the trust and 21.3% (167/[761+167]) of applicants to the MRC were women. Yet across all UK universities, 44% of academic staff (whether research orientated or otherwise) in medicine and biosciences are women.

In conclusion, this study has shown no evidence of discrimination against women in the assessment of applications for Wellcome Trust and MRC personal fellowships or grants. Nevertheless, it is notable that so few female academic staff are applying for research funding, and it is important that the reasons for this are examined further.

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Further, he suggested the possibility of inserting gas or fine powder into the stratosphere from aircraft, rockets and balloons and made the notable prediction that a catalytic “deozoniser” would be needed.

No doubt he would have taken great interest in the recent letter from M. N. Ross et al. (Nature 390, 62; 1997), “Observation of stratospheric ozone depletion in rocket exhaust plumes”, and recommended that ultraviolet astronomers should set up camp near a major rocket launching site.

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