

Gender roles and not gender bias hold back women scientists

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PRESS CONTACT

Suzanne Beveridge Chief Communications Officer Phone + 49 6221 8891 108 communications@embo.org Traditional roles of women in the home and a negative bias in workplace support result in less career success for women versus men at the same stage of their research careers, determined researchers at the European Molecular Biology Organization (EMBO) in a study appearing in the November 2007 issue of *EMBO reports*.

Despite the fact that more than half the European student population is female, women hold less then 15% of full professorships in Europe, according to the *She Figures* 2006 from the European Commission. While the percentage of female university graduates and PhD holders has increased, the gender gap is not closing at the same rate as careers advance.

The study authors, Ledin, Bornmann, Gannon and Wallon, were prompted to investigate whether gender bias was at the root of the lower success rate of female applicants to the EMBO Long-Term Fellowship and Young Investigator Programmes. Gender blinding of application reviewers found that gender bias was not the cause. A thorough investigation of the publication data of all applicants revealed that the performance gap widens even further between men and women researchers at later stages of their careers. This widening gap results in a 50% lower fraction of females applying as young group leaders to the EMBO Young Investigator Programme as compared to the number of female postdoctoral scientists who apply for the EMBO Long-Term Fellowships.

The EMBO Long-Term Fellowship Programme attracts scientists who completed their PhD training within the previous three years before application and are seeking financial support for post-doctoral research. Scientists at a later stage of their careers who are within four years of establishing their first independent laboratories can apply for support through the EMBO Young Investigator Programme.

Surveys of applicants found that traditional gender roles combined with a pervasive negative work culture appeared to be at the root of the lower success rate of women researchers versus men researchers.

The traditional gender roles are manifested by the facts that women take substantially more parental leave and more often adjust their careers in preference to that of their male partners. As a result women publish less and are slower to advance in their careers because on average they spend less time at work and have a greater burden to carry outside of the lab than their male counterparts at the same stage of their careers.

In the workplace, women scientists had fewer opportunities for mentoring, less supervisor support once they began to have families and there was a general lack of gender policy and monitoring in institutions.

The study authors ask whether employers, policy makers, scientists and society can afford to lose such a large number of trained specialists from the workforce. They conclude that both a shift in thinking about the roles of men and women and positive action in the workplace are required to ensure that family decisions do not prevent men and women from career and societal aspirations.

Through its Women In Science Programme, EMBO assesses and acts on imbalances in the scientific career path. EMBO monitors the selection process in EMBO programmes, alerts EMBO committees towards gender imbalance, devises actions to counteract gender imbalance and creates awareness in the scientific community.

The study publication A Persistent Problem: Traditional gender roles hold back female scientists appears online until 30 November 2008 at http://www.nature.com/embor



About EMBO

The European Molecular Biology Organization (EMBO) promotes excellence in molecular life sciences in Europe. Since 1964, leading scientists are elected annually to become EMBO Members based on proven excellence in research. Members number more than 1300 today with a further 80 associate members worldwide. Forty-five scientists from the EMBO membership have received the Nobel Prize. EMBO Members have the opportunity to influence the direction of European life sciences and more than half are involved in guiding the execution of the many EMBO initiatives offered to life scientists.

Leading peer-reviewed journals – The EMBO Journal, EMBO reports and Molecular Systems Biology – span all aspects of molecular biology and reflect how science is shaping the world. EMBO-sponsored training and networking activities impact thousands of scientists every year, promoting collaboration in all areas of molecular biology – within Europe and worldwide.

EMBO is renowned for the quality and funding of these programmes and activities that include EMBO Courses & Workshops, EMBO Long-and Short-term Fellowships, the EMBO Young Investigator Programme, the EMBO Science & Society Programme, EMBO Installation Grants and EMBO Women in Science.

Annual awards, such as the EMBO Gold Medal, and the EMBO Award for Communication in the Life Sciences, recognise significant contributions of European researchers to the advancement of science.

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