



Women and Science

– bridging the GAP

By Olive Heffernan

AS A SIXTH FRAMEWORK Programme initiative, MarBEF will implement a Gender Action Plan (GAP) to redress the gender imbalance in marine research in Europe. This first in a series of articles on 'Women in Science' takes a look at some of the challenges, opportunities and initiatives in this area.

In researching the topic of women in science, I was interested and appalled at how few 'Famous Women Scientists' have existed in this century. Let's face it, for all my admiration, it's about time we took the load off Marie Curie, who has been waving the 'women scientists' banner posthumously for over a decade. Hope may be in sight, however, that this is changing...

The fact remains that women are disproportionately represented in the scientific realm, particularly in the higher echelons such as on grant committees and decision-making bodies concerned with scientific issues. All ethics aside, the economic case for gender diversity is obvious. Diversity forms the basis for creativity and innovation, key ingredients of successful research. This issue has long been recognised, but up until now there has been little agreement or concerted effort on how to restore the balance.

Gender inequality in the sciences may appear to stem from lack of interest and participation in the sciences from girls in the formative years. Statistics suggest, however, that the gender gap is closing with regard to subject choice and performance in the sciences at secondary level (Xie and Shauman, 2003; OECD, 2003), and in most European countries the numbers of female science graduates is now proportionally higher than male science graduates (EC, 2004). However, the traditional perception of maths and science as male subjects remains a concern, as does the evidence that women embark on careers in science but fall by the wayside. So the challenge of promoting the contribution of women to science is twofold. Firstly, to increase or maintain interest in the early years, so that women get the necessary training, and secondly, to enable women with the competency to participate at higher levels of scientific research, and in positions of power, to do so.

Both of these are goals of the MarBEF Gender Action Plan (GAP). As part of the Sixth Framework Programme (FP6), the European Commission is undertaking measures to ensure gender mainstreaming and to contribute to the promotion of women in scientific research. This initiative will push for greater representation of women in academia in Europe, but as a report in *Nature* pointed out (Goodman, 2003), for this to succeed, "individual nations, universities and companies will need to rethink their own practices." As an FP6 Network of Excellence, MarBEF has made a commitment to promoting gender equality.

Firstly, the MarBEF NoE will implement an internal gender-watch system, which will involve the collection and reporting of gender statistics and will encourage women's participation in the network. Our aim in this regard is to increase the level of participation among women in MarBEF to 40% throughout the duration of the network. Secondly, MarBEF will develop a wide range of outreach initiatives to raise awareness of the need for gender mainstreaming in marine science and to promote interest among young women in marine science as a career option. The proposed activities include a special section in the MarBEF Roadshows that will highlight female role models in the marine sciences, in addition to this newsletter column, which will address issues of gender equality within marine science.

In terms of outreach and education, our role will be to raise awareness, but actions are needed to change the *status quo*. First and foremost, we need to recognise this problem and take on board the fact that we have agreed to address it within our own community. This is a contentious issue that MarBEF has agreed to tackle. Gender inequality remains an awkward topic that is rarely discussed openly in academic circles. Furthermore, opinions differ greatly on the causes of gender bias, the extent to which it exists (if at all), often based on personal experience, and how it should be treated.

Over the duration of the MarBEF network, there will be plenty of opportunities (none of which will involve brandishing placards) for individuals (both male and female), research groups and institutes to become involved in this initiative. To encourage young women's interest in marine science, we welcome feedback, suggestions and contributions for our newsletter and roadshows. To encourage

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scientific participation among female colleagues, we urge members to continue activities such as provision of adequate childcare facilities at workshops and conferences and collection of gender statistics at similar events. Almost half a century after the death of Rosalind Franklin, women are still vying for recognition in research. Let's hope that, within our corner, small as it might be, we can make a significant contribution. Watch this space, but in the meantime here is some interesting food for thought:

Links to information on women in science

Scottish Association for Marine Science
– Women in Science
<http://www.sams.ac.uk/schools/women.htm>

Women Exploring the Oceans
<http://www.womenoceanographers.org/>

Helsinki Group
<http://www.cordis.lu/improving/women/helsinki.htm>

Women and science: the gender dimension as a leverage for reforming science
<http://www.cordis.lu/improving/women/documents.htm>

4,000 years of women in science
<http://www.astr.ua.edu/4000WS/4000WS.html>

Links to women's associations and resources for women in science and technology
<http://www.southern.com/natasha/women/gateway/national.htm#UK>

References

- Xie, Y. and Shauman, A. (2003). *Women in Science: Career Processes and Outcomes*. Harvard University Press. 336pp.
Goodman, S. (2003). *Nature Jobs Report*. *Nature*, Vol 426, 210-211.
OECD (2003). *Education at a glance*. *OECD Report*, 2003.
Website: http://europa.eu.int/comm/research/science-society/women-science/women-science_en.html.

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