

## Mainstreaming the issue

# Gender equality in science

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As the Biochemical Society launches a new grant scheme for Gender Equality in Science this year, we look at the recent history and current thought on this long-standing and important issue.

Whisper it, but things are starting to look a little more positive. July 2011 saw Professor Dame Sally Davies (Chief Medical Officer) announce her intention that all medical schools wishing to apply for NIHR Biomedical Research Centres and Units funding need to have achieved a Silver Award in the Athena SWAN Charter for women in science. Four months later at the HUBS Winter Meeting, Professor Doug Kell (CEO of the BBSRC) hinted that the BBSRC are considering matching Professor Davies (almost) and making a Bronze Award at institution level a pre-requisite for receiving funding. Leaving aside issues around the current capacity of the Equality Challenge Unit – who are part-funded by the Biochemical Society to run Athena SWAN – to handle the associated increased demands, these are exciting indications that the ‘mainstreaming’ of gender issues in UK biosciences is becoming more widespread. Factor in that at the same meeting the Chair of the Biological Sciences REF 2014 Sub-panel, Cardiff University’s Professor Ole Petersen, explained that involvement with Athena SWAN could be included in the environment section of the REF, and we could be forgiven for thinking the next few years could see some real breakthroughs for gender equality in science.

‘Mainstreaming’ is one of the hot buzzwords in discussions on gender equality. It describes how, in order to break down the invisible barriers which differentially affect men and women, the implications for different genders of any policy or action should be considered. By extension, this means that management of universities, institutions and industry must be engaged with the gender dimension, and consider how their policies may disadvantage women (or, in some circumstances, men). As the United Nations defined it in 1997, “it is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.”<sup>1</sup> Secondly, it may also be defined as the ownership of this agenda by mainstream institutions.

### What the Society is doing

Recognizing that equality is an important issue for our membership and the sector at large, the Biochemical Society recently launched a pilot grant scheme<sup>2</sup> and position statement<sup>3</sup> on Gender Equality in Science. The intentions of the scheme are fairly broadly defined and non-prescriptive, but we hope to fund work with a broad focus on discriminatory practices. I have various ideas about how I would like to see the grant money used, including supporting the mainstreaming of gender in science issues, identifying and promoting best practice, generating data which compares the success of existing schemes, and supporting mentoring or training in a sustainable way. As such, it is quite experimental at this stage, and we are not sure how the scheme will pan out, which is why we are starting small. Three grants of £500 are available to apply for now and details are at the end of this article.

The Society is also strengthening its working ties with other organizations for which gender equality in science is a priority. In December I met with Valerie Vaz, the MP for Walsall South. Ms Vaz, who is also one of the minority of ‘scientist MPs’<sup>4</sup> with a degree in Biochemistry (University of London), has spoken of the issue as being important and expressing support for the current efforts of the Society. We discussed how the issue could be prioritized in government, a structure which has seen some concerted effort to address its own gender balance problems in recent times. The Labour Party has sought to partially address this issue with its use of all-women shortlists (AWSs) and quotas for the number of women in the current shadow cabinet. However, the latter policy has now been abolished and these progressive ideas failed to cascade through Westminster; since 2003, the proportion of women in parliament has tended to increase, but still languishes at 22%. In the cabinet, the proportion peaked in 2006<sup>5</sup>. Discussions now centre on whether positive-discrimination methods such as AWSs and quotas remain a credible (and in the case of the Liberal Democrats, ‘liberal enough’) way forward. Watch this space for news of our MP collaborations this year and in the future.



Being the only man in the room at the Women in Leadership conference © Frank Dumbleton/Oxford Brookes University

## Quotas and debate

In science, as in politics, quotas are a bone of contention and parallel arguments exist in both spheres. Speaking at the European Gender Summit (EGS) in November, Professor Curt Rice, Vice President for Research and Development at the University of Tromsø, Norway, said, “these are the two most common objections people come up with: quotas are unfair, and they force us to compromise quality.”<sup>6</sup>

It is true that a natural response to quotas is that they are anti-meritocratic. Interestingly, however, recent research has suggested that aiming for a meritocratic culture actually increases the impact of subconscious biases against women<sup>7</sup>. The authors of the study call this the ‘paradox of meritocracy’. Professor Rice argues that using targets is a more progressive and successful strategy and the University of Tromsø now has ‘search committees’ whose role is to identify women who would be strong applicants for advertised positions at professor level. If no women apply, the university considers extending the application deadline. The outcomes of this recently developed policy should make very interesting reading. As Professor Simone Buitendijk, Vice-rector at the University of Leiden in The Netherlands, noted at the same conference session that women often hesitate when going for promotion because they don’t trust the system and tend to underestimate their abilities

and achievements. She believes that such gender differences are manifest in universities because they are a fundamental part of society; a society which believes in hard-wired gender differences.

## What needs to change?

I have previously blogged about this topic from a non-science (although not entirely non-scientific) perspective, writing following September’s Women in Leadership conference at Oxford Brookes University: “With the conference ostensibly aimed at women (with no male speakers on the roster and only three on the delegate list), it was interesting that the key message that came out was that to achieve equality, we need to change organizational cultures, and ‘change the men.’ This is a phrase I heard several times, referring to the need for the ideology of the individuals at the top – almost exclusively male – to be altered.”<sup>8</sup>

What I consistently hear is that companies and groups that are successful in tackling equality and lack of diversity have achieved buy-in to the issue at the very top of the organization. If it is regarded as a ‘business issue’ with benefits for collective intelligence, it is more likely to be ingrained in the strategy throughout the organization (which is why colleagues have noted the perversity that I was in fact ‘the only man in the room’ at the Women in Leadership conference, at least on day one). This allows

the gender aspect to be embedded in policy, education and training and crucially encourages the sharing of best practice. We need to continue working with organizations, providing a convincing evidence base and keeping the issue at the forefront of everyone's minds. The time has come to 'do it', rather than keep lamenting, said Dr Ángeles Rodríguez-Peña, President of the COST (European Cooperation in Science in Technology) Committee of Senior Officials at the EGS. Perhaps even more convincing was Professor Geoffrey Boulton, FRS, speaking from the audience: we need to be "bloody, bold, resolute" and active to achieve equality, he exclaimed.

## Where are we going?

Life sciences do not have the problems that, for example, physics has in recruiting female students, and there is recognition that women must be motivated to study such subjects if we are to have enough leaders in a future 'knowledge-based economy'. But equally, our poor rates of female *retention* in the biosciences matter for diversity reasons (enriching scientific enquiry, promoting excellence, opening up new markets and ensuring the agenda of science reflects the interests of the population), for equality reasons (gender inequality in scientific careers undermines the principles of fairness, equality of opportunity, and social justice to which liberal democracies such as the UK subscribe), and for the economic reasons alluded to above (female attrition has the potential to compromise the ability of the UK to successfully compete in the future). In the bioscience community, this retention is what we need to seek to address.

Although the UKRC, an organization that provides expertise regarding the under-representation of women in science, has lost its funding from the Government Department of Business, Innovation and Skills, Interim Director Jane Butcher has said that ministerial interest is greater now than when it was fully funded. Taken

with the recent high-profile support for Athena SWAN (which was also praised at the EGS), and the continued existence of schemes such as the L'Oréal-UNESCO 'For Women in Science' Awards programme, among others, we could conclude that progress is being made and equality will win out. However, this would be a mistake. Statistics do not lie and in academic bioscience, a discipline with a critical mass of female students, researchers and lecturers, women still account for only 15% of professors<sup>9,10</sup>. Furthermore, data from across Europe does not support the hope that the changing demographic balance in higher education is leading us towards equality in this respect<sup>11</sup>.

## Get involved

There are lots of ways you can get involved. The Biochemical Society Gender Equality in Science grant scheme is open for applications until 31 March. Three grants of £500 each are available for projects which support and address issues relating to gender inequality in science. Some possible ideas for applications are given earlier in this article and the application form can be found on our website<sup>2</sup>. Projects funded under the scheme have a delivery deadline of February 2013.

Secondly, you might have an idea for an event we could run, or that we could support. If you do, please get in touch with me at James.Lush@biochemistry.org. Our existing science policy events programme can be found on our website<sup>12</sup>.

Thirdly, you could join or form a local network supporting women in science (such as the Cambridge AWiSE) or raise issues within groups of broader focus. Let us know what you are doing so that we can give this issue a higher profile via the Science Policy Talking Post blog<sup>13</sup>. Finally, don't shy away from discussing the issues which face you and your colleagues – to achieve mainstreaming, it will require everyone to raise their voice. ■

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