Advancing women’s careers in STEMM academia

The Athena SWAN Charter

The Athena SWAN Charter makes awards to institutions that show a commitment to the advancement and promotion of the careers of women in STEMM higher education and research. The Biochemical Society recently joined the steering committee of the Charter, as well as co-funding it.

The missing workforce

It is well known that women are under-represented in the science, technology, engineering, maths and medicine (STEMM) sectors. This is also true within higher education (HE) and university researchers, especially in the senior ranks; only approximately 12% of professors in STEMM fields are female. We also know that for female academics career progression is a 'leaky pipeline' – at specific points women are leaving their careers in STEMM academia rather than progressing further. In biological sciences, 61.8% of undergraduates are female but only 15.5% of professors are female.

Many of these women simply leave the STEMM field and this loss is estimated to cost the UK economy £2 billion. A recent European Commission report notes that “the low numbers of women in decision-making positions throughout the science and technology system is a waste of talent that European economies cannot afford.”

Commitment to equality issues in STEMM also goes hand in hand with good and sustainable science. In HE, for example, evidence suggests that academic departments rated highly for research (in the most recent Research Assessment Exercise) tended to be proponents of inclusive employment practice.

Women in STEMM academia

The Athena SWAN Charter recognizes commitment to and excellence in advancing women’s careers in STEMM academia. Founded in 2005, the Charter was developed to help rebalance the underrepresentation of women in these subject areas.

Any university that is committed to the advancement and promotion of the careers of women in STEMM in HE and research can apply for membership. In 2005, there were ten founder members of the Charter, now there are 84 HE institutions that are members of the Charter across the UK.

Member universities and individual departments within member institutions identify areas where there are problems with gender equality, and then implement initiatives to address these. They can then submit for awards at bronze, silver and gold levels depending on how far they have developed their practices to support women's careers.

There are currently 124 award-holding institutions and departments, with two Gold department awards held by the Department of Chemistry at the University of York and the School of Chemistry at the University of Edinburgh.

The Charter is funded by Equality Challenge Unit (ECU), the Royal Society, the Biochemical Society and the Department of Health. It is managed by ECU, a charity that works to further and support equality and diversity for staff and students in HE across all four nations of the UK, and with colleges in Scotland. The Charter Patron is Professor Dame Julia Higgins FRS.

Making an impact

Research into the impact of the Athena SWAN awards has identified benefits including impact on organizational structure and culture change, with increases in the proportion of women working in STEMM departments, better representation of women on committees, improvements in the transition from postdoctoral researcher to first academic
post, improved working practices to support career progression, and growth in women’s networking across institutions. In addition to this, many report that the good practice they are implementing generally benefits all staff and contributes to improving the working environment and culture within their institutions.

Joining the Charter can add to a university’s reputation, raise the profile of a university or department as a good place to work, and inclusive working practices increase the retention of valued staff of both sexes, but especially women.

The way Athena SWAN allows universities and departments to measure themselves against the best has turned out to be an inspired way of motivating communities. The business case for obtaining Athena SWAN awards becomes clearer every year and the success of the scheme is evidenced by the growing numbers of Charter members.

**Taking gender equality further**

Numbers of female academics have grown significantly since Athena SWAN was set up, and senior women are now much more visible and vocal than previously. However, the numbers are still too small and practices still vary hugely across and within universities.

In 2011, Athena SWAN received a major boost when the Chief Medical Officer for England, Dame Sally Davies, announced that medical schools in England who wish to apply for specific NHS research funding need to have achieved an Athena SWAN Silver Award before they will be considered.

There has also been increasing interest from Scottish universities following the publication by the Royal Society of Edinburgh of *Tapping All Our Talent – Women in Science, Technology, Engineering and Mathematics: a Strategy for Scotland*. The report made six key recommendations to take forward Scotland’s STEMM sector, three of which specifically mention Athena SWAN. The report calls on all Scottish universities to bring their STEMM departments up to Athena SWAN Silver award level in the next 2 years.

Athena SWAN has also been approached by several research institutes not affiliated with a university. We are currently running a pilot scheme and hope that all research institutes will be able to join Athena SWAN by summer 2013.

**HE: committed to change**

The Athena SWAN awards are held twice a year. The April 2012 round produced 22 new awards and seven successful renewals for a wide range of departments.

Professor Dame Julia Higgins FRS at the awards ceremony in Belfast, September 2012. (Paul McErlane Photography)
with employment practices that support the careers of female researchers and academics. The Department of Biosciences at Sheffield Hallam University achieved a departmental Silver award and the second ever Gold award was achieved by the University of Edinburgh’s School of Chemistry, recognizing a significant and sustained progression and achievement in promoting gender equality. The awards are assessed by panels of volunteers whose decision is a judgement based on a threshold. Each panel receives around seven submissions. Panellists are selected from three pools of individuals (academic, equality and diversity practitioners with experience of HE and subject specialists, e.g. industry representatives, members/employees of learned/professional societies) who have an interest in and experience of Athena SWAN and gender equality in STEMM. The panels consist of a mix of new panellists, experienced panellists and men and women. This is done to achieve a range of opinions and experience with the process. The panels are also grouped by subject area.

The November 2012 round has been our biggest yet with almost 100 applications received for a number of different institutions and departments. Of these, we have two biosciences panels and one chemistry-related panel. This level of interest highlights the continued and increasing commitment from the academic community to improve the recruitment and retention of its female scientists.

**Supporting the HE sector**

Athena SWAN provides support for the HE sector to help them to work towards achieving the different awards. In 2012, eight regional networks were set up to bring together institutions that are in a similar geographical location to talk about their experiences of the process, share good practice and ask each other for advice on a regular basis. The institutions in the networks are all at different stages of the awards process, which has been very valuable for informative discussions.

Free workshops are also provided for member institutions. The focus of these workshops varies, some are to help institutions achieve a bronze award, others are to help departments work towards gold, but they generally offer support around data collection and presentation and advice on the sorts of policies and initiatives that might be suitable. The location also varies and we will be holding one in Scotland in April 2013.

Materials that highlight good practice and case studies are available from Athena SWAN and there is an Athena SWAN JISCmail athenaswan@jiscmail.ac.uk so that institutions and departments across the UK can ask each other questions and share information. In addition, every Athena SWAN award submission, whether successful or not, receives detailed written feedback on what the panel highlighted as being good working practice and some areas where consideration might be given for improvement.

**Find out more**

The Athena SWAN Charter recently updated its website. The new site has been developed to provide easy-to-navigate support for members, those thinking of submitting for awards and for departments and institutions interested in joining. The focus is on engagement, sharing best practice and discussion. We'll be building our bank of case studies, expanding the members-only areas and developing our forum section over the coming months.

www.athenaswan.org.uk
You can also follow us on Twitter: @Athena_SWAN

**References**

1. 2010/11 HESA data
2. Structural change in research institutions: enhancing excellence, equality and efficiency in research and innovation
   European Commission, 2011