

PB4 - Encouraging the recruitment and promotion of female researchers: How to innovate?

March 2017

For those countries identified as having national level measures and above EU average levels of implementation.¹

This policy brief provides evidence-based, concrete recommendations for national level policymakers on how to improve efforts to recruit and advance more women in the research workforce.

Why is this important?

Despite various national and EU level gender equality policies in science, the research sector in Europe continues to waste and under-utilise highly skilled and talented women. Whilst in 2012 47% of all PhD graduates in the EU 28 were women - they only made up a third of researchers in all sectors.²

Europe needs to find a way to ensure the full participation of women in science and technology if it is to maximise its capacity and ability to respond to the challenges facing Europe as well as guarantee its competitive edge in the global arena.³ It must also make sure that the applications and innovations developed – reflect the needs of all citizens.⁴

Factoring in the different roles that gender plays in science and innovation systems and taking advantage of these new opportunities is essential to improving the effectiveness of research and innovation outcomes for women and men whilst fostering socio-economic progress for all.⁵

National bodies that want to maximise the full innovation potential of their human capital resources must take into account the barriers hindering the participation of women in science and innovation and develop innovative solutions.⁶

What is the extent of the problem?

This policy brief addresses specifically those countries that have national measures for recruiting female researchers. In addition more than 59% (EU average)⁷ of their research performing organisations self-report implementing recruitment and promotion measures for female researchers. In concrete terms, this “How to Innovate”- brief targets specifically Germany, the Netherlands, Norway, Austria, Sweden and the UK.

In 2013 women represented 47% of grade D academic staff, 45% of grade C academic staff, 37% of grade B academic staff and just 21% of grade A (the highest academic level, full professor level) academic staff in the EU 28.⁸The

average proportion of female academic staff in this country group is average for grade D (47%) and lower than the EU-27 average for grade C (43%), grade B (32%), and average for grade A (21%). There is, however, considerable variation between these countries, ranging from the Netherlands where 16% of grade A academic staff are women to Norway where 25% of grade A academic staff are women.⁹

Whilst it is generally recognised that a gap is widening between those countries proactive in gender equality and mainstreaming in science and those less active countries –within pro-active countries the under-representation of female researchers persists.

What are the options?

The 2012 ERA Communication invites Member States to “create a legal and policy environment and provide incentives to remove legal and other barriers to the recruitment, retention and career progression of female researchers”.¹⁰ This can take the form of:

- enacting legislation requiring provisions for ensuring compliance with existing and new legislation,
- developing ‘soft strategies’, i.e. targets as well as supporting and promoting Concordats that establish principles for organisations to comply with
- Ministries can also initiate specific guidelines and various practices.

This group of countries generally have well developed equality legislation in place and gender mainstreaming in policy. For example, Austria has set up specific laws and actions to implement gender equality in research. Since 2009 objectives to attain gender balance in leadership positions in public research organisations and higher education institutions were put in place by the University Act.¹¹ It has also been committed to gender mainstreaming since 2010.¹² In the Swedish legal framework of the higher education sector –gender balance is addressed and gender equality plans are based on legislative provisions.¹³ Gender mainstreaming is also the *de facto* binding policy approach and the main strategy used to achieve the national gender equality policy objectives.¹⁴

Other initiatives include:

The Talents Programme of the Austrian Ministry of Transport, Innovation and Technology, - administered by the Austrian Research Promotion Agency (FFG) is a comprehensive programme which encourages networking (FEMtech Network), enhances visibility of women experts (FemTech Female Expert Database), and offers career support for women researchers (FEMtech Career Initiative)

amongst other activities.¹⁵

The Norwegian Research Council (RCN) has developed the BALANSE initiative (Gender Balance in Senior Positions and Research Management) which supports cultural and structural changes to improve the gender balance at senior level in the research sector through new knowledge, mutual learning and innovative measures.¹⁶

The Laura Bassi Centres of Expertise are funded by the Austrian Federal Ministry of Science, Research and Economy by the programme “w-fORTE – economic impulses by women in research and innovation” in the scope of the Austrian Research Promotion Agency (FFG). The eight Laura Bassi Centres of Expertise have a term of up to seven years, with a total funding budget of 15 million euros. Headed by highly qualified female experts, it is their task to do innovative research in the natural sciences and technology. A mid-term evaluation according to the programme document was carried out by external experts. The evaluation confirmed the success of centres as a unique impetus programme and all centres were recommended for a second funding period. The eight Laura Bassi Centres conduct research in the areas of medicine, life sciences and IT.¹⁷

Moreover, the Austrian Science Fund’s programmes targeted at female researchers - Elise Richter for senior positions and Herta Firnberg for earlier stage careers, no longer include an age limit for applicants which alleviates some of the pressures that women with childcare duties face in the qualification processes.

In the US the National Science Foundation’s ADVANCE program aims to increase the participation and success of women in academic science and engineering careers. It consists in support academic initiatives to ensure that policies and procedures regarding hiring, family accommodations, and leadership development are not gender biased.

There are also specific initiatives such as the University of Maryland-Baltimore County (UMBC) plan. In this university all departments have to submit a written plan detailing how each search process will create a diverse and inclusive pool of candidates for a new faculty search. Chairs of departments and search committees attend workshops on conducting an inclusive search process.

Recommendations

- Promote a gender inclusive culture in research institutions. This implies examining and working to challenge the forms of experience and practices, behaviors and styles of ‘doing’ academic cultures which in many places can still be seen to reflect the historically dominant construction of the academic as male, middle- or upper-class, and in many cases white.

One example of this is the consideration of the impact of care responsibilities on researchers in the definition of excellence by the selection committees. It is also relevant to take into account how socio-economic class, ethnicity and other inequalities intersect with gender as when detecting the 'unconscious bias' in selection and recruitment processes.

- Implement work life balance measures, promote co-responsibility between women and men in care work and provide care services for children and dependents to break the glass ceiling in female academic careers and to prevent women withdrawing from academia.
- Develop a multi-faceted approach to improving the recruitment and promotion of female scientists- combining different strategies like networking, providing career support and a database of female experts.
- Earmark funding for outstanding research centres carrying out innovative research in science and technology -led by women.
- Write evaluations and monitoring into programme design in order to promote evidence-based policy making.
- Provide competence development for recruitment staff at research performing organisations. Hiring committees need gender expertise to avoid gender bias in the recruitment of academic staff.¹⁸
- Encourage and enable policy sharing and learning between initiatives developed by the countries in this group.
- Develop new transnational indicators and criteria for the evaluation of scientific merit in order to counteract the attrition of women from science and unconscious negative bias in the assessment of excellence of women.¹⁹

Further Reading

Further, in-depth reading concerning the recruitment and promotion of female researchers is available through the report *Structural Change in Research Institutions* (see footnote 3) published by the European Commission and *She Figures 2015* (see footnote 8), also published by the EC.

Resources shared in the GenPORT e-discussion on Recruitment and Promotion of Women Researchers:

[Carrots or Sticks? A Study on Incentives to Attract and Retain Women in Science, Engineering and Technology in South Africa](#) by Elaine R. Salo, Felix Liersch, Lieketseng Mohlakoana-Motopi, Marinda Maree

[Women's Networks in Academia: Practical Advice for Positive Impact](#) by Women@TUoS

[GenPORT Research Syntheses on Gender and Science](#) by Rachel Palmen and the

GenPORT Consortium.

[ADVANCE at a Glance](#) by National Science Foundation's (NSF)

[Strategies for Effecting Gender Equity and Institutional Change \(StratEGIC Toolkit\)](#) by ADVANCE programme.

[COACHE's Special Reports on Academic Careers in Higher Education](#) by Harvard University.

[Tools For Change Project](#) by AWIS.

[Recruitment Bias in Research Institutes](#) by CERCA

[Constructing excellence: the gap between formal and actual selection criteria for early career academics](#) by GARCIA Project

[Gender Issues in Recruitment, Appointment and Promotion Processes](#) by FESTA Project

[Evidence That Gendered Wording in Job Advertisements Exists and Sustains Gender Inequality](#) by Danielle Gaucher and Justin Friesen & Aaron C. Kay

[Searching for Excellence & Diversity: Recruiting Resources for Search Committees](#) by University of Wisconsin & Madison.

[Mapping organisational work-life policies and practices](#) by GARCIA Project.

[Academic duets: On the professional and private life in science](#) by Marta Vohlídalová (ed.)

[PLOTINA : Promoting Gender Balance and Inclusion in Research, Innovation and Training](#) Project

[Gender Bias Learning Project by Center](#) of WorkLife Law, with support from a NSF ADVANCE

- [1] Please see 'Gender and Science Policy Briefs: From "Where to start" to "How to innovate": An Introduction', for a description of the methodology used. Available at:
http://www.genderportal.eu/sites/default/files/resource_pool/pb_introduction_.pdf
- [2] On average the number of women PhD graduates in the EU has been growing by 4.4 percentage points each year between 2003 and 2012, whereas men PhD graduates have grown by 2.3 percentage points annually. European Commission, (2015c). Preliminary Results of She figures, Luxembourg, Publications Office of the European Union.
- [3] European Commission, (2012b). Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, Luxembourg, Publications Office of the European Union, p13.
- [4] Ibid.
- [5] Pollitzer, E. & Schraudner, M. (2015). Integrating Gender Dynamics into Innovation Ecosystems, *Sociology and Anthropology*, Vol. 3, No. 11, p624.
- [6] Ibid.
- [7] It should be noted that these figures concern RPOs which answered the ERA survey in 2014, which employ 515 000 researchers (around 20% of total EU researchers).
- [8] European Commission, (2016). She Figures, 2015: Gender in Research and Innovation, Luxembourg, Publications Office of the European Union, p129.
- [9] European Commission, (2016). She Figures, 2015: Gender in Research and Innovation, Luxembourg, Publications Office of the European Union, p129.
- [10] European Commission, (2012a). A Reinforced European Research Area: Partnership for Excellence and Growth, COM (2012) 392, p12.
- [11] European Commission, (2015a). ERA Facts and Figures 2014, Luxembourg, Publications Office of the European Union, p14. Lipinsky, A., Ahlzweig, G., Steinweg, N., & Getz, L. (2015). GenPORT (D4.1) Analysis of Policy Environments Report, p39.
- [12] EIGE(2014) Effectiveness of institutional mechanisms for the advancement of gender equality, cited in Lipinsky, A., Ahlzweig, G., Steinweg, N., & Getz, L. (2015). GenPORT (D4.1) Analysis of Policy Environments Report, p40.
- [13] Lipinsky, A., Ahlzweig, G., Steinweg, N., & Getz, L. (2015). GenPORT (D4.1) Analysis of Policy Environments Report, p132.
- [14] <http://www.government.se/sb/d/4096/a/125215>, Ibid p. 132.
- [15] Deloitte, (2012). Researchers' Report, 2012, Country Profile: Austria.
- [16] See http://www.forskningsradet.no/prognost-balanse/Programme_description/1253964606599
- [17] <http://www.wfforte.at/at/laura-bassi-centres/laura-bassi-centres/laura-bassi-centres-of-expertise.html>
- [18] European Commission, (2012b). Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, Luxembourg, Publications Office of the European Union, p34.
- [19] Gender Summit 7 Europe, (2015). Mastering Gender in Research Performance, Contexts and Outcomes Conference Report, p3.