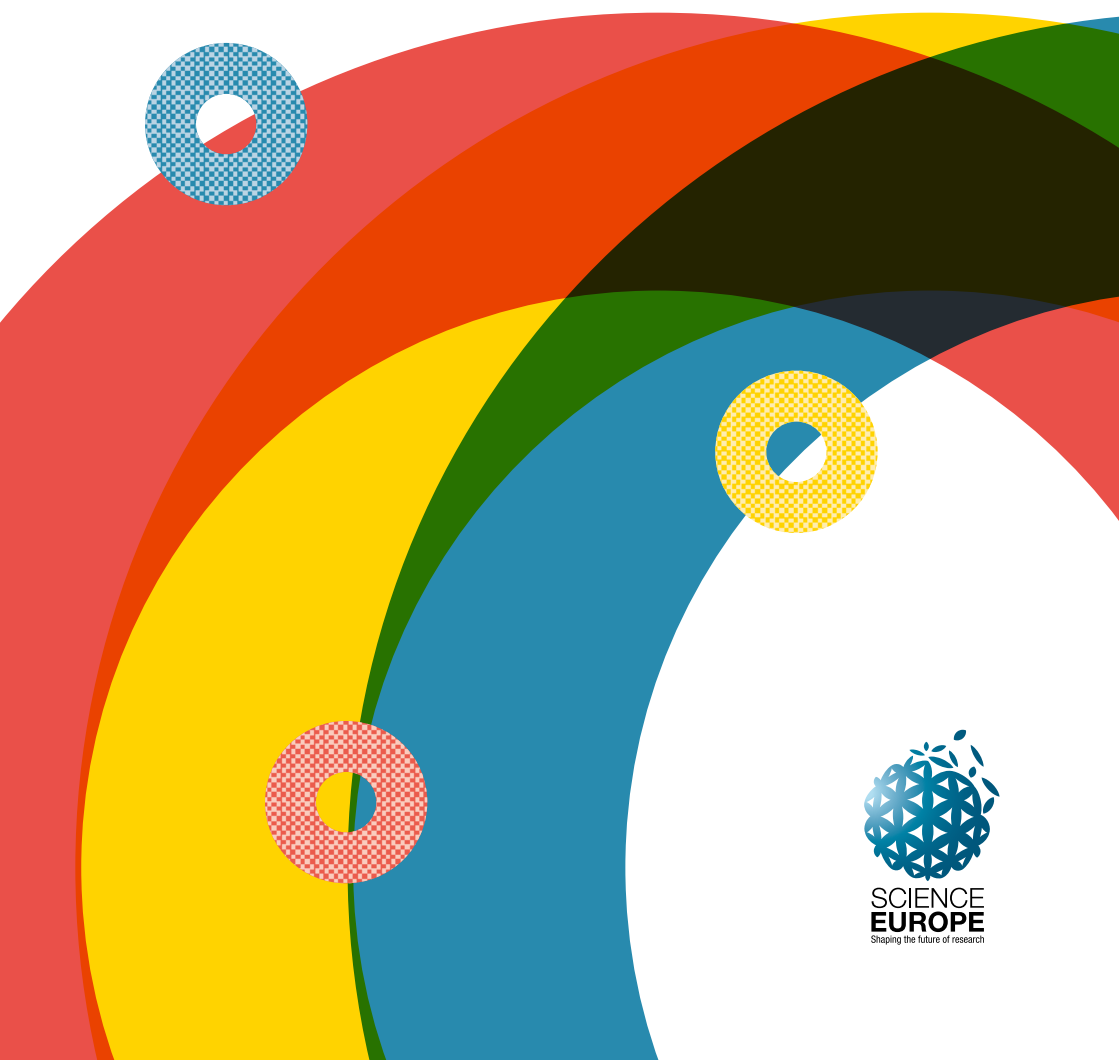


SCIENCE EUROPE

PRACTICAL GUIDE TO **IMPROVING GENDER EQUALITY IN RESEARCH ORGANISATIONS**



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January 2017

'Practical Guide to Improving Gender Equality in Research Organisations':
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Author: Science Europe

Co-ordination: Science Europe Working Group on Gender and Diversity

For further information please contact office@scienceeurope.org

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IMPORTANT DISCLAIMER: The authors of this practical guide recognise that the terms 'male' and 'female' are biological terms and differ from the terms that a person may use to describe their gender. The terms 'man' and 'woman' are commonly used for this purpose, but some people have a gender identity that is in between or beyond these terms, or that fluctuates between them; they may also consider themselves to have no gender at all. In this publication, the authors have chosen not to use the terms 'male' and 'female' and have opted to use 'men' and 'women', sometimes to the detriment of strict grammatical correctness.

Foreword by Dr Eucharía Meehan, Science Europe Champion for Gender and Diversity

Gender inequality in the European research ecosystem, and across wider society, must be addressed for both social and economic reasons. Furthermore, the benefit of equality and diversity is incontrovertible. Research funding and research performing organisations have a crucially important role to play in addressing gender inequality; not only for the benefit of their own ecosystem, but to contribute to progress in wider society. These organisations also have a key role in enabling all researchers – regardless of gender, career stage or field of research – to realise their optimum potential. Science Europe is dedicated to improving the research environment for all researchers in Europe and thus this topic is also reflected in the Science Europe Roadmap.

It is for these reasons that this practical guide is an important contribution in enabling mutual learning between Science Europe Member Organisations. As can be seen from it, many organisations have instigated elements of good practice; for example, the Irish Research Council has instigated gender blinding for assessments in its early-stage career researcher programmes. This publication provides a very welcome menu of approaches for consideration across the breadth of organisational activity. Furthermore, it will be invaluable to other stakeholders in the research ecosystem in terms of setting out the current landscape vis-à-vis good practice and guiding the further embedding of context-specific approaches. In other words, there are learnings for the whole research ecosystem in this guide.

Science Europe is committed to promoting these practical and operational guidelines and to supporting in particular its Member



Organisations in addressing gender inequality, which has persisted not due to lack of policy or legislation, but primarily due to organisational culture and unconscious bias. These guidelines set out a range of approaches to address some persistent issues in addition to very importantly making suggestions as to how we can monitor progress.

I would finally like to sincerely thank the Science Europe Working Group on Gender and Diversity and its Chair for their work, and for the time and expertise provided for the benefit of all Member Organisations and the broader research community.

Dr Eucharia Meehan

Director of the Irish Research Council

Member of the Science Europe Governing Board

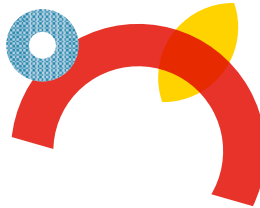


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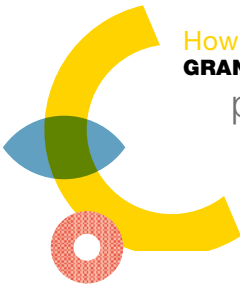
PRACTICAL GUIDE TO **IMPROVING GENDER EQUALITY IN RESEARCH ORGANISATIONS**



How to Avoid **UNCONSCIOUS BIAS
IN PEER REVIEW PROCESSES**
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How to Monitor
GENDER EQUALITY
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How to Improve
GRANT MANAGEMENT PRACTISES
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**SCIENCE
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Introduction

Science Europe (SE) is dedicated to the improvement of the scientific environment within the European research system, and thereby to ensuring that the research careers of women and men are equally facilitated, and in turn that research organisations are strengthened at the national level.

Equal opportunities in research are linked to participation and success rates within research funding and promotion systems. The success of researchers depends on the evaluation of researchers' grants, as well as upon their scientific or scholarly achievements as indicated in a researcher's CV and track record.

This guide provides the backbone for the implementation of gender equality in different research funding and performing organisations across Europe. It starts by listing recommendations for the implementation of appropriate indicators, as well as for measures to avoid bias. It follows by providing further recommendations on how to implement an efficient system to monitor gender equality. Finally, it provides an overview of relevant grant management systems.

The background material for this guide was collected in the autumn of 2015. Thirty out of 47 SE Member Organisations (MOs) responded to a survey concerning practises on indicators and measures to avoid unconscious bias against researchers of any discipline, gender, age, and so on. The results of this survey are described and analysed in the report 'Summary of Implemented Indicators and Measures' that can be found, along with the full data set, on the SE website: <http://scieur.org/gd-data>

Additional information concerning grant management practises was collected from the SE MOs represented in the SE Working Group on Gender and Diversity. The responses to these questions are presented

in the section 'Data on Grant Management Practises in Science Europe Member Organisations' of this guide (p. 48).

The SE Working Group on Gender and Diversity hopes that this guide will be helpful for all relevant organisations aiming to address diversity and equality, and that the inclusion of good practice examples from many SE MOs will better support organisations in their implementation of gender equality measures.

Dr Sabine Haubenwallner

*Head of Staff Unit for Gender Issues at the Austrian Science Fund
Chair of the Science Europe Working Group on Gender and
Diversity*

How to Avoid **UNCONSCIOUS BIAS** IN PEER REVIEW PROCESSES



Introduction to Bias

Science is stereotypically associated with senior white men. This stereotype evolves early on in childhood, in boys and girls alike, and is consistently found in different national contexts, stemming from exposure to pervasive cultural stereotypes (Devine, 1989). A recent meta-analysis into gender stereotypes in science in 66 countries shows that in many places science is associated more with men than with women (Miller et al., 2015). The number of women researchers present in a country correlates with explicit, but not unconscious, gender stereotypes about science. However, in countries with more women researchers, science is still implicitly associated more with men than with women.

Good practice example

Science Foundation Ireland (SFI): Counteracting the gender stereotype

In 2014 Science Foundation Ireland commissioned a study into the career choices of young people in Ireland.¹ The study revealed that information about a particular course or career will not even be sought by young people if they have no affinity with the associated stereotypes. Parents were found to have an important role in influencing a child's opinion on whether they 'fit in'. This reinforces the importance of breaking perceived stereotypes amongst this group. Informed by this finding, the SFI Gender Strategy 2016–2020² will implement specific measures to increase the participation and interest of girls in Science, Technology, Engineering and Mathematics (STEM)-related activities, thereby increasing their confidence in the relevance for girls of studying STEM subjects.

These implicit associations between science and white men also cause stereotypical characteristics to be more associated with success. This is known as unconscious, or implicit, gender bias: women are more negatively

assessed than men for the same job or achievement, because they are far less likely to be associated with the stereotypical men characteristics perceived as necessary for success. In a 1994 study (Eagly & Mladinic, 1994) that was recently updated, researchers were asked to evaluate the applications of candidates for the position of lab manager (Moss-Racusin et al., 2012). The candidates were 'John' and 'Jennifer'; the applications were, apart from name and sex, identical. Researchers assessed John as more competent than Jennifer, and were more prone to offering the job, including a greater salary and training possibilities, to John than to Jennifer. This proves that, under equal conditions, women are assessed as less able than men for scientific careers, and that therefore, women have to perform better and display more success than men to achieve the same position.

Reactions to the results of the aforementioned study show that these facts, and the conclusions drawn, are not always accepted (Moss-Racusin et al., 2015). Researchers strive to be objective in their assessments, basing them, in their conviction, on rational arguments relating to quality only. They can respond in a negative way when studies show that cognitive bias does affect peer review (Kaatz et al., 2014). Nevertheless, evidence also shows that all humans are susceptible to biases in decision making, and that subtle gender biases are often still held by even the most egalitarian individuals (Dovidio & Gaertner, 1994).

Both boys and girls, men and women, and men and women researchers exhibit the same implicit gender biases; it is by no means merely a characteristic of men. Considering that these stereotypes arise in early childhood, it is not surprising that everyone suffers from them. One way to tackle biases is by learning more about stereotypes, and by becoming aware of one's own biases using the Harvard implicit association test.³ Also, showcasing diverse role models can help shape new perspectives on science and researchers, and on our understanding of excellence and

scientific quality (Young et al., 2013). Furthermore, evidence suggests that gender awareness training has a positive effect on countering other biases (Kalinowski et al., 2012).

General Recommendations

Bias is an issue in the evaluation of science and researchers. The Science Europe Working Group on Gender and Diversity therefore recommends the following:

1. Check indicators for differences in the success rates of men and women researchers.
2. Discuss gender and other biases within your organisation.
3. Conduct awareness-raising activities in evaluation panels, decision-making bodies, and with staff on a regular basis.
4. Provide training to staff, evaluation panels, and decision-making bodies.
5. Monitor the success rates of men and women applicants in order to trace possible effects of awareness-raising activities. (see 'How to monitor gender equality' (p. 27))
6. Learn from (other) Science Europe Member Organisations on how to tackle (gender) bias (see good practice examples in this section).

French National Research Centre (CNRS): Awareness-raising activities

Since 2012, the French National Research Centre has developed various forms of awareness-raising activities, including training sessions, reviews of the related scientific literature, committees, and changes of procedures, led by the *Mission pour la Place des Femmes au CNRS* (Mission for the Place of Women at CNRS) and in collaboration with CNRS' National Committee, Institutes, HR department, and governance.

A specific committee was put into place in 2013, inspired by the 'Strategies and Tactics for Recruiting to Improve Diversity and Excellence Committee' (STRIDE),⁴ initially created at the University of Michigan (US) through the NSF-ADVANCE Programme.⁵ Its objectives are to review procedures and practices for the evaluation, recruitment and promotion of researchers at CNRS, with respect to gender equality, and to make concrete proposals to improve these when relevant. Its membership comprises the Chief CNRS Research Officer, all Chairs of the 46 CNRS standing peer-review evaluation panels, deputy scientific directors of CNRS Institutes, senior HR officers, senior women researchers and gender experts, and representatives from the *Mission pour la Place des Femmes au CNRS*. The committee meets one to three times a year and among its actions so far are: training on gender equality issues and unconscious bias (based on the latest social science expert researchers literature); production of multi-annual, sex-disaggregated statistical factsheets used by panels; introduction of family-related career breaks in evaluation consideration; changes in the procedures for awarding CNRS medals;⁶ and involvement of external observers during the 2015 interviews for the CNRS entry and promotion panels. The production of recommendations for panel members is also foreseen.

Austrian Science Fund (FWF): Diversity training in the context of research funding

Since 2009, the Austrian Science Fund has provided internal training to co-workers and board members concerning gender mainstreaming. In 2015, a further step was taken to improve important aspects of procedures. A training session on diversity in the context of research funding was conceived, allowing board members and FWF staff (such as heads of departments, scientific project officers, and administrative project officers) to learn more about the theoretical background thereof. Participants' feedback clearly confirmed an increased awareness of the importance of the topic after the workshop.

Swiss National Science Fund (SNSF): Advice by international gender experts

The Swiss National Science Fund has an international advisory board for gender equality. The members are internationally known gender experts and distinguished researchers. This committee meets twice a year at SNSF and makes sure that gender equality issues are addressed in the organisation on a regular basis. Committee members have given presentations on biases and stereotypes and their impact on the evaluation process to the SNSF Research Council members in 2015 and 2016.

Swedish Research Council (VR): Observations in evaluation panels

Since 2008, the Swedish Research Council has been conducting biannual gender equality observations in selected evaluation panels. Two out of three reports are available in English and contain conclusions and recommendations from the gender equality observations.⁷

A new series of observations is being conducted in 2016 by VR, with a report foreseen for publication in 2017. The objective of gender equality observations in evaluation panels is to examine and unveil any differences in the evaluation process for funding applications with regard to gender, since they are often subtle and difficult to identify. The purpose of the observations is not to reveal how particular panels or individual panel members behave and relate to gender issues, but rather to discern significant patterns. To date, the observations have led to the production of a series of recommendations on how the evaluation process can be developed and improved in order to attain a higher level of gender equality. Furthermore, the reports from the gender equality observations are used in the training for review panels, by decision-making bodies, and by research council staff.

German Research Foundation (DFG): Awareness-raising activities within head office and review boards

The German Research Foundation has carried out various awareness-raising activities at their head office. The internal DFG Working Group 'Equal opportunities in research and academia' has reviewed related scientific literature and has developed a training module for members of the head office. The first training included a scientific presentation by a renowned scientist on aspects of information processing, categorising, stereotypes and implicit bias. In a follow-up workshop, these aspects were further discussed in relation to practical aspects of the evaluation and decision processes at DFG. Concrete measures have been developed that could further avoid possible judgement and decision bias, and recommendations and guidelines for panels will serve as basis for further discussions with DFG review boards. Review boards evaluate proposals to fund research projects and also monitor the review process to ensure that uniform standards are observed. Therefore, they play a key role within the evaluation process. As a next step, these review boards will be asked to explicitly discuss aspects of implicit bias, paying particular attention to gender bias, in one of their forthcoming review meetings.

Science Foundation Ireland (SFI): Unconscious bias training

One of the objectives of the Science Foundation Ireland Gender Strategy 2016–2020⁸ is to ensure that the agency review process remains unbiased, as demonstrated by the annual gender-disaggregated analysis of the success rates of all funding programmes.

To that aim, in 2016, all SFI staff, including the Executive Committee and the Board of Management, received sector-specific, data-driven unconscious bias training by an external provider. Feedback and learnings from the session have been fed into process improvements within the organisation, such as expanded briefing to peer reviewers and a reconsideration of the information provided to review panels.



Selected References on (Gender) Bias

Test

Implicit Association Test (IAT).

Project implicit. Available at <https://implicit.harvard.edu/implicit/>
(Choose Social Attitudes, where there are IATs on, for example, gender and science, gender and career, age, disability, race)

Introductions and training materials

Royal Society (2015): *Understanding unconscious bias (short video and material on biases and diversity by Uta Frith)*.

<https://royalsociety.org/topics-policy/publications/2015/unconscious-bias/>

A Conversation with Claude Steele: Lecture at US National Academies organised by the CWSEM, and invited speakers (2015). Available at <http://sites.nationalacademies.org/pga/cwsem/index.htm> and on Vimeo directly: <https://vimeo.com/133078934>

Equality Challenge Unit (2013): *Unconscious bias and higher education: Literature review*. Retrieved from <http://www.ecu.ac.uk/publications/unconscious-bias-in-higher-education/>

Facebook (2015): *Managing unconscious bias. Video modules, slides and references*. Available at <http://managingbias.fb.com/>

Valian, V. (2006). *Tutorials for change. Gender schemas and science careers*. Hunter College of the City University of New York. Available at <http://www.hunter.cuny.edu/gendertutorial/>

STRIDE: Committee on strategies and tactics for recruiting to improve diversity and excellence. Advance program, University of Michigan. Available at <http://advance.umich.edu/stride.php>

Breaking the bias habit: A workshop to promote gender equity (2015). WISELI – Women in Science & Engineering Leadership Institute, University of Wisconsin. Retrieved from <https://charge.wisc.edu/wiseli/items.aspx#item76>

Reviewing Applicants: Research on Bias and Assumptions (2012). WISELI – Women in Science & Engineering Leadership Institute, University of Wisconsin. Retrieved from https://wiseli.engr.wisc.edu/docs/BiasBrochure_3rdEd.pdf

Studies on peer review carried out by/on RFOs/RPOs

Ahlqvist, V., Andersson, J., Söderqvist, L., Tumpane, J. (2015). *A gender neutral process? A qualitative study of the evaluation of research grant applications 2014*. Stockholm: Swedish Research Council. Retrieved from <https://publikationer.vr.se/en/product/a-gender-neutral-process/>

Ahlqvist, V., Andersson, J., Hahn Berg, C., Kolm, C., Söderqvist, L., Tumpane, J. (2013). *Observations on gender equality in a selection of the Swedish research council's evaluation-panels*. Stockholm: Swedish Research Council. Retrieved from <https://publikationer.vr.se/en/product/observations-on-gender-equality-in-a-selection-of-the-swedish-research-councils-evaluation-panels-2012/>

Bornmann, L., Mutz, R., Daniel, H.-D. (2007). 'Gender differences in grant peer review. A meta-analysis', in *Journal of Infometrics*, 1(3), 226-238. DOI: 10.1016/j.joi.2007.03.001

Boyle, P., Smith, L., Cooper, N., Williams, K., O'Connor, H. (2015). 'Gender Balance: Women are funded more fairly in social sciences', in *Nature*, 525, 181–183. DOI: 10.1038/525181a. Retrieved from <http://adsabs.harvard.edu/abs/2015Natur.525..181B>

Marsh, H. W., Bornmann, L., Mutz, R., Daniel, H.-D., O'Mara, A. (2009). 'Gender effects in the peer reviews of grant proposals. A comprehensive meta-analysis comparing traditional and multilevel approaches', in *Review of Educational Research*, 79(3), 1290-1326.

DOI: 10.3102/0034654309334143. [http://rer.sagepub.com
content/79/3/1290](http://rer.sagepub.com/content/79/3/1290)

Schiffbaenker, H., van den Besselaar, P. (2016): *Is it the elephant in the room? Gender in ERC grant selection*. [https://www.joanneum.at/en/policies/
reference-projects/project-genderc-gendered-dimensions-in-erc-grant-
selection.html](https://www.joanneum.at/en/policies/reference-projects/project-genderc-gendered-dimensions-in-erc-grant-selection.html)

Van der Lee, R., Ellemers, N. (2015). 'Gender contributes to personal research funding success in the Netherlands', in *PNAS*, (published ahead of print September 21, 2015). DOI:10.1073/pnas.1510159112. Retrieved from <http://www.pnas.org/content/early/2015/09/16/1510159112.abstract>

Vinkenburg, C.J. (2014): *Capturing career paths of ERC grantees and applicants: Promoting sustainable excellence in research careers*. Retrieved from [https://eth-wpf.ch/wp-content/uploads/2015/03/c_ERC_
CAREER_paths_study_by_clarrtje_vinkenburg_July-2014.pdf](https://eth-wpf.ch/wp-content/uploads/2015/03/c_ERC_CAREER_paths_study_by_clarrtje_vinkenburg_July-2014.pdf)

Way, S.F., Larrmore, D.B., Clauset, A. (2016): *Gender, productivity, and prestige in computer science faculty hiring networks*. Proc. 2016 World Wide Web Conference (WWW), 1169–1179. Retrieved from <http://arxiv.org/abs/1602.00795>

Further studies

Implicit bias

Kaatz, A., Gutierrez, B., Carnes, M. (2014). 'Threats to objectivity in peer review: the case of gender', in *Trends in Pharmacological Sciences 2014*, 35(8). <http://dx.doi.org/10.1016/j.tips.2014.06.005>

Nosek, B. A., Smyth, F. L., Sriram, N., Lindner, N., M., Devos, T., Ayala, A. et al. (2009). 'National differences in gender-science stereotypes predict national sex differences in science and math achievement', in *PNAS*, 106(26), 10593–10597. DOI: 10.1073/pnas.0809921106

Stereotype threat

Eagly, A.H., Mladinici, A. (1994). 'Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgements of competence', in *European Review of Social Psychology*, 5 (1). DOI: <http://dx.doi.org/10.1080/14792779543000002>

Heilman, M. E. (2012). 'Gender stereotypes and workplace bias', in *Research in Organizational Behavior*, 32, 113–135. DOI:10.1016/j.riob.2012.11.003

Huguet, P., Régner, I. (2007). 'Stereotype threat among schoolgirls in quasi-ordinary classroom circumstances', in *Journal of Educational Psychology*, 99(3), 545–560. DOI: 10.1037/0022-0663.99.3.545. Retrieved from <http://psycnet.apa.org/journals/edu/99/3/545/>

Miller, D. I., Eagly, A. H., Linn, M. C. (2015). 'Women's representation in science predicts national gender-science stereotypes: Evidence from 66 nations', in *Journal of Educational Psychology*, 107(3), 631–644. DOI: 10.1037/edu0000005

Shapiro, J. R., Williams, A. M. (2012). 'The role of stereotype threats in undermining girls' and women's performance and interest in STEM fields', in *Sex Roles*, 66, 175–183. DOI:10.1007/s11199-011-0051-0

Bias in CV assessment

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., Handelsman, J. (2012). 'Science faculty's subtle gender biases favour men students', in *PNAS*, 109(41), 16474–16479. DOI: 10.1073/pnas.1211286109. Retrieved from <http://www.pnas.org/content/109/41/16474>

Letters of recommendation

Trix, F., Psenka, C. (2003). 'Exploring the color of glass: Letters of recommendation for female and male medical faculty', in *Discourse and Society*, 14(2), 191–220. DOI: 10.1177/0957926503014002277

Madera, J.M., Hebl, M.R., Martin, R.C. (2009). 'Gender and letters of recommendation for academia: Agentic and communal differences', in *Journal of Applied Psychology*, vol. 94, no. 6, 1591–1599. DOI: 10.1037/a0016539.

The motherhood penalty and maternal wall

Correll, S. J., Benard, S., Paik, I. (2007). 'Getting a job: Is there a motherhood penalty?', in *American Journal of Sociology*, 112(5), 1297–1338. DOI: 10.1086/511799

Science productivity

Larivière, V., Ni, C., Gingras, Y., Cronin, B., Sugimoto, C. R. (2013). 'Global gender disparities in science', in *Nature*, 504(7479), 211–213. DOI: 10.1038/504211a

Other

Clauset A., Arbesman S., Larremore D.B. (2015): 'Systematic inequality and hierarchy in faculty hiring networks', in *Science Advances* 2015;1:e1400005. DOI: 10.1126/sciadv.1400005. Retrieved from <http://advances.sciencemag.org/content/1/1/e1400005.full.pdf+html>

Devine, P.G. (1989): 'Stereotypes and prejudice: their automatic and controlled components', in *Journal of Personal and Social Psychology*, 56(1), 5–18. doi.org/10.1037/0022-3514.56.1.5. Retrieved from <http://psycnet.apa.org/journals/psp/56/1/5/>

Dovidio, J.F., Gaertner, S.L. (1994): *Advances in Experimental Social Psychology* (Zanna ed.), Elsevier, New York, 1994, pp. 1–51.

Kalinoski, Z.T., Steele-Johnson, D., Peyton, E.J., Bowling, N. (2012): 'A meta-analytic evaluation of diversity training outcomes', in *Journal of Organizational Behavior* 34(8). DOI: 10.1002/job.1839.

Retrieved from <https://articles.extension.org/sites/default/files/A%20meta-analytic%20evaluation%20of%20diversity%20training%20outcomes.pdf>

Lamont, M. (2010): *How professors think. Inside the curious world of academic judgment*. Harvard University Press.

See: <http://www.hup.harvard.edu/catalog.php?isbn=9780674057333>

LERU (2012): *Women, research and universities: excellence without gender bias*. Retrieved from http://www.leru.org/files/general/LERU%20Paper_Women%20universities%20and%20research.pdf

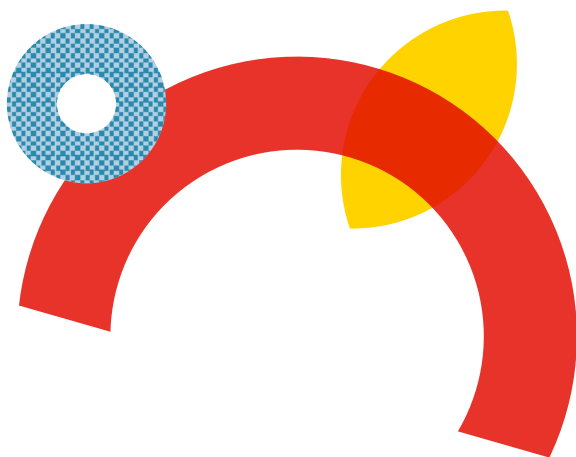
Leslie, S.-J., Cimpian, A., Meyer, M., Freeland, E. (2015). 'Expectations of brilliance underlie gender distributions across academic disciplines', in *Science*, 347(6219), 262–265. DOI: 10.1126/science.1261375.
<http://www.sciencemag.org/content/347/6219/262>

Moss-Racusin, C.A., Molenda A.K., Cramer, C.R. (2015). 'Can evidence impact attitudes? Public reactions to evidence of gender bias in STEM fields', in *Psychology of Women Quarterly* 39 (2), 194–209.
DOI: 10.1177/0361684314565777. Retrieved from <http://pwq.sagepub.com/content/39/2/194>

Reuben, E., Sapienza, P., Zingales, L. (2014). 'How stereotypes impair women's careers in science', in *PNAS*, 111(12), 4403–4408. DOI: 10.1073/pnas.1314788111. Retrieved from www.pnas.org/content/111/12/4403

Young et al. (2013). 'The Influence of Female Role Models on Women's Implicit Science Cognitions', in *Psychology of Women Quarterly* 37(3), 283–292.
DOI: 10.1177/0361684313482109

How to Monitor **GENDER EQUALITY**



**SCIENCE
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Introduction

The European Commission (EC) has communicated through the 'She Figures 2015' Report⁹ that the under-representation of women at senior levels across both the public and private research sector is an issue in all European Member States. More fine-tuned data needs to be collected concerning research organisations in order to be able to actively tackle gender inequalities by taking measures that will provide effective solutions to known problems.

The Science Europe Working Group on Gender and Diversity presents a number of recommendations on quantitative indicators for gender equality monitoring. These are divided into four groups:

- ▶ General recommendations about gender equality monitoring in Research Funding Organisations (RFOs) and Research Performing Organisations (RPOs).
- ▶ Indicators for the gender distribution in the national pool of researchers, where data should be collected from national statistics. This section is relevant for both RFOs and RPOs.
- ▶ Indicators specifically suitable for RFOs.
- ▶ Indicators specifically suitable for RPOs.

It is the hope of the Working Group that the recommended set of gender equality indicators can serve as an inspirational example for gender equality monitoring. Of course, the recommendations are not meant to exclude the use of complementary indicators, such as bibliometric indicators.

General Recommendations

▶ **Organisations should define explicit objectives for gender equality**

The general objectives can be linked to national objectives, or the organisation can choose to have more ambitious objectives. They should be explicit, measurable and monitored.

▶ **Mandatory actions should be undertaken to meet the objectives**

In order to make progress, there should be mandatory additional actions if an objective is not met.

▶ **Gender equality data should be collected and indicators calculated annually, and the results should be made public on a regular basis**

Yearly data collection makes it possible to observe changes, such as improvements in specific areas, thus helping an organisation to adapt its gender equality actions. If possible, success stories on actions taken to improve gender equality can be included in the progress reports.

Science Foundation Ireland (SFI): Targets for women award holders and positive action

One of the objectives of the Science Foundation Ireland Gender Strategy 2016–2020¹⁰ is to achieve a target of 30% women award holders by 2020, against a benchmark of 21% in 2015. Several measures are envisaged in the strategy; however, in 2015 the Starting Investigator Research Grant (SIRG) Award Programme incorporated a gender initiative, ensuring that half of eligible applicants are women. This gender initiative led to an increase in the number of women applicants from 27% in 2013 to 47% in 2015. As a result of the usual peer-review process, of the 20 proposals awarded in 2015, 55% of awardees were women, compared to only 27% in 2013. Additionally, SFI continues to allow extended eligibility timeframes for applicants who undertook career breaks, and also annually publishes gender-disaggregated data on funded award holders and research team members which inform redressing actions.

Indicators for the Gender Distribution in the National Pool of Researchers

In order to find out if women or men are under-represented among applicants to a RFO or RPO, or among researchers employed at a RPO, a comparison should be made with the national ‘pool of researchers’. This indicator is calculated by looking at national statistics.



Share of women and men, respectively, among researchers nationally

The indicator should be broken down by:

- scientific field
- age
- academic age, number of years since obtaining the PhD
(if available, the academic age is to replace the age)
- academic position
- sector, if relevant (for example, higher education, government, non-for-profit, or business)

Indicators for Research Funding Organisations

The indicators in this section are recommended for gender equality monitoring in RFOs. The first group of indicators below concerns the applications for funding received.

- ▶ Share of women and men among main applicants
- ▶ Share of women and men among successful main applicants
- ▶ Success rate for women and men main applicants
- ▶ Average size of grant for women and men

The success rate is the number of successful applications from women/men divided by the total number of applications from women/men.

These four indicators should be broken down by:

- scientific field
- funding scheme
- age
- academic age, number of years since obtaining the PhD
(if available, the academic age is to replace the age)




If relevant, these indicators can also be broken down by academic position and/or sector.

The three first indicators above can be used to find out if women or men are under-represented among successful applicants and comparisons can be made against the indicator of the gender distribution in the national pool of researchers explained in Part 2. The fourth indicator, the average size of grant for women and men, can be used to find out if women, on average, receive smaller or larger grants than men.

In the case of large grants aimed at groups of researchers, the indicators above can be complemented by indicators that take into account the gender distribution of the applying groups. However, the gender of the principal investigator (PI) is still of interest, since the PI usually has a decisive influence over the distribution of the grant.

In some cases, RFOs give prizes or awards for which there are no applications, but instead the candidates are nominated following a procedure, such as for the Austrian Wittgenstein Award¹¹ or the German Leibniz Prize.¹² In such cases, data on the number of women and men nominees could be used instead of data on the number of applications from women and men.

The last group of indicators for RFOs address the gender balance in funding decision-making bodies, which are usually peer-review panels.

-  Share of women and men among reviewers
-  Share of women and men among heads of review panels
-  Share of women and men in funding decision-making bodies

These three indicators should, if possible, be broken down by:

- scientific field
- funding scheme

These indicators can be used to find out if women or men are under-represented among reviewers, heads of review panels, or in decision-making bodies, respectively.

For reference, the ambition when setting review panels is often that the share of women and men should be between 40 and 60 percent. Exceptions are often accepted if there are very few women or men in the field nationally (or internationally, in the case of peer review panels with a high share of international members).

Indicators for Research Performing Organisations

The indicators in this section are recommended for gender equality monitoring at RPOs. The first group of indicators concerns the applications for external open research positions.¹³

- ▶ Share of women and men among applicants
- ▶ Share of women and men among persons recruited
- ▶ Success rate for women and men applicants


The success rate is the number of women/men recruited divided by the total number of women/men applying for a position.


These three indicators should be broken down by:


- scientific field
- academic position
- temporary or permanent position
- part-time or full-time position

These indicators can be used to find out if women or men are under-represented among the recruited researchers.

The next group of indicators address internal promotions for research positions in RPOs.

 Share of women and men among applicants for promotion

 Share of women and men among promoted researchers

 Success rate for women and men applicants

The success rate is the number of promoted women/men divided by the total number of women/men applying for promotion. Of course, this indicator can only be calculated if there is a formal application process for promotions.




These three indicators should be broken down by:

- scientific field
- academic position

These indicators can be used to find out if women or men are under-represented among the researchers applying for promotion and/or among the promoted researchers.

In some cases, RPOs give prizes for which there are no applications, but instead there can be a nomination procedure, as for the Gold, Silver and Bronze medals of CNRS.¹⁴ In such cases, data on the number of women and men nominees could be used instead of data on the number of applications from women and men.

The next group of indicators for RPOs address the gender balance in the recruitment or promotion boards and in the decision-making bodies.

-  **Share of women and men in recruitment or promotion boards**
-  **Share of women and men among heads of recruitment or promotion boards**
-  **Share of women and men in decision-making bodies**

These three indicators should, if possible, be broken down by scientific fields.

These indicators can be used to find out if women or men are under-represented in recruitment or promotion boards, among heads of recruitment or promotion boards, or in decision-making bodies.

For reference, the ambition when establishing decision-making bodies is often that the share of women and men should again be between 40 and 60 percent. Exceptions are often accepted if there are very few women, or men, in the field at a RPO, or in the field in general, in the case of recruitment or promotion boards with a high share of external members.

The last indicator addresses the gender balance among the researchers employed at an RPO.

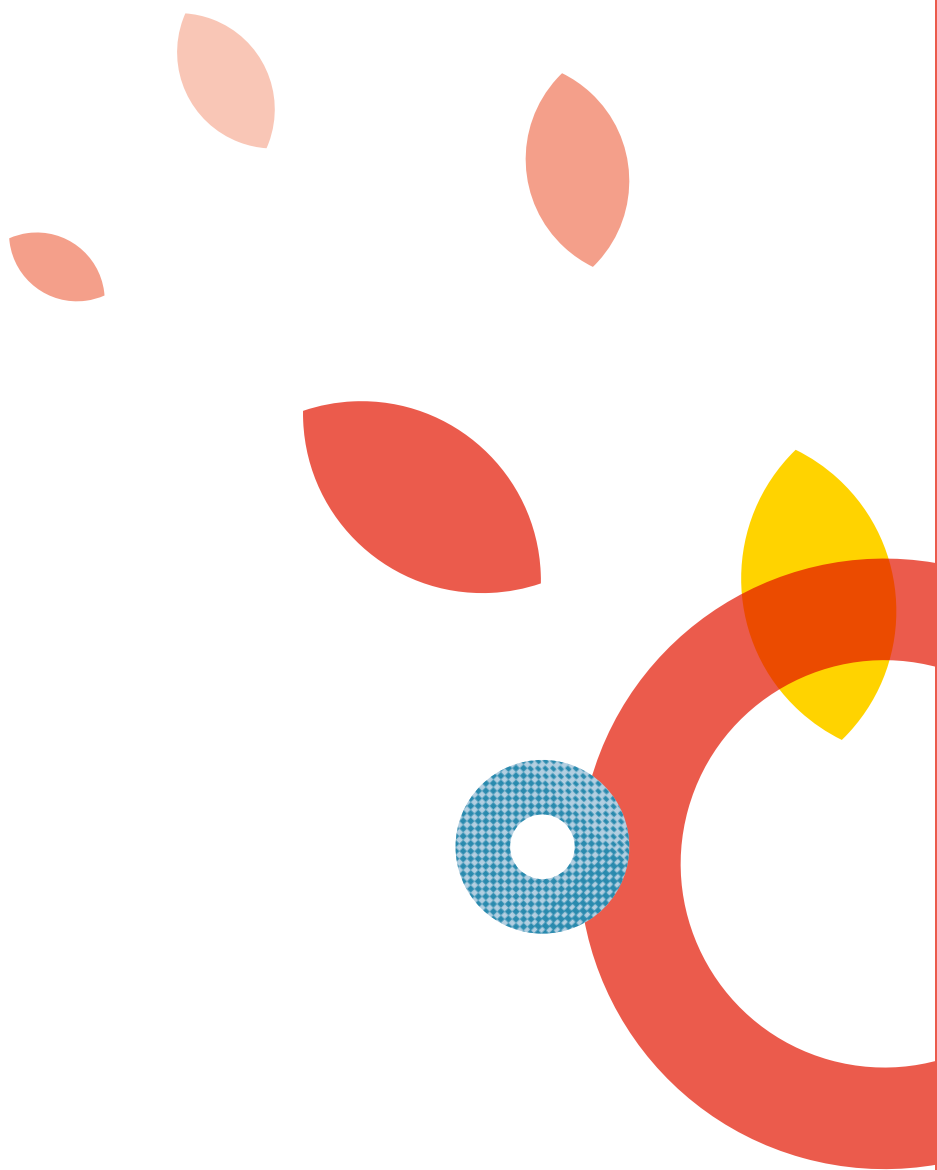
Share of women and men among employed researchers

This indicator should be broken down by:

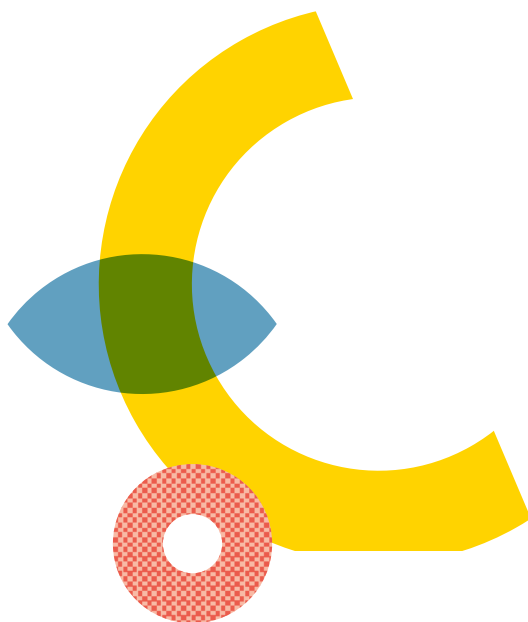
- scientific field
- academic position
- temporary or permanent position
- part-time or full-time position

This indicator can be used to find out if women or men are under-represented among the researchers employed at an RPO. Comparisons can be made with the indicator on the gender distribution in the national pool of researchers.

In addition, the average salary of women and men can be an interesting gender equality indicator, further broken down by academic position and scientific field. The average salary can also be broken down by age and number of years since completion of a PhD.



How to improve **GRANT MANAGEMENT PRACTICES**



Introduction

The underlying causes of the gender imbalance at decision-making levels across all sectors are numerous and complex. However, it may be beneficial to highlight the following:

1. Childbearing and caregiving are major determining factors for women leaving competitive research careers, but not the only factors; the lack of appropriate mentoring is also frequently cited and as such gender imbalance appears to be self-reinforcing.¹⁵
2. The working environment in Research Performing Organisations (RPOs) is often perceived as unsupportive of women candidates at all levels of seniority.¹⁶
3. One of the sharpest declines in the percentages of women in the traditional academic research career track occurs between the graduate and tenure track or permanent position career points. This is the so-called 'leaky pipeline'.¹⁷

Management policies related to research grants,¹⁸ as enforced by national and international research funding agencies, can have a direct and indirect effect on facilitating the flexibility and support required at critical career times for women researchers, such as, but not limited to, times associated with birth and caregiving. For example, beyond the direct measures to support researchers taking periods of maternity leave, the provision of support for paternity leave in couples where both partners are researchers is considered to be a significant indirect factor.¹⁹ Providing the possibility to switch from a full-time grant to part-time grant if a more flexible time commitment is required, or the possibility of extending the grants at no cost, there are also indirect measures that can increase the likelihood of researchers being able to take their grants to completion while ensuring a suitable work-life balance.

In order to review current practice in terms of grant management policies that are likely to affect the retention and progression of women in

research careers, a specific questionnaire was circulated among the Member Organisations represented in the Science Europe Working Group on Gender and Diversity.

The Working Group has collated and compared grant management policies from 17 national Research Funding Organisations (RFOs), and three RPOs across 15 European countries (see Table A, p. 48) to identify current practice in terms of the management of researchers' caregiving/family leave and any grant management initiatives which might promote the retention and progression of women in research careers.

The surveyed organisations were asked to provide data related to the following aspects of grant management: (1) policies related to fully paid statutory maternity leave, such as the provision of supplementary grants for researchers on leave, or the possibility to extend research awards following a period of maternity/adoption leave of the grant holder or a team member; (2) policies related to fully paid statutory paternity leave; and (3) the possibility of undertaking research projects on a part-time basis.

Summary of Findings

There is considerable variation in policies related to family leave across the surveyed organisations, which is mainly driven by differences among national welfare provisions. Notwithstanding these differences, a number of remarkable similarities across organisational policies, in relation to the general post-award management of research awards, could be identified. The data collected as part of this survey can be viewed in Table A (p. 48). The overarching observations stemming from the survey can be summarised as follows:

1. The duration of statutory maternity leave²⁰ ranges from 14 weeks (Germany, and lowest limit for Switzerland) to 43 weeks (Sweden).
2. The duration of statutory paternity leave (which includes shared parental leave in certain countries) ranges from 0 days (Austria) to 43 weeks (Sweden).

3. All new mothers employed by RPOs receive 100% of their salary while on maternity leave. Depending on the country and agency, there may be certain eligibility criteria which must be fulfilled in order to receive 100% of salary. The salary may be paid by the state, the employing RPO, the funding RFO, or a combination of all three.
4. Most organisations²¹ allow their award holders to apply for no-cost extensions which allow extra time to complete the proposed research without extra funding.
5. The possibility of undertaking research projects on a part time basis is available from most²² surveyed organisations.
6. A significant number²³ of the surveyed organisations have specific additional grant management initiatives to retain women within research careers.
7. With a few exceptions,²⁴ the policies described herewith are applicable to all funded research team members, including graduate students.

Support during Maternity Leave

The levels of statutory maternity leave available across the relevant countries of the surveyed organisations range in duration from 14 weeks (Germany, and lowest limit for Switzerland) and 43 weeks (Sweden). The question was asked as to what extent RPOs that employ researchers would pay the salary of researchers taking up a period of maternity leave. The percentage of current salary or cash amount provided by the state as statutory maternity pay varies considerably and ranges from a payment comparable to unemployment benefit in that country to 100% of the researcher's salary. In some countries, the state pays 100% of the researcher's salary as statutory maternity pay. In countries where the maternity pay is provided by the RPOs, it ranges from 75% to 100% of the researcher's salary. The RPOs then usually receive a partial or total refund by the state, in accordance to the different national statutory maternity pay amounts.

Science Foundation Ireland (SFI) and Research Councils UK (RCUK)

In the UK and Ireland, the state does not pay the full salary of employees on statutory maternity leave. However, most RPOs and universities have a policy to provide 100% of their salary to their employees on maternity leave, including researchers whose salary is funded through research grants, which can leave the RPOs and universities financially exposed in these circumstances. In order to remove any perceived barrier towards the hiring of women researchers, Research Councils UK and the Science Foundation Ireland provide additional funding to RPOs and universities to supplement the statutory maternity pay to 100% of the employee's salary when team members funded through research grants take a period of maternity or adoptive leave.

Swiss National Science Foundation (SNSF)

In the case of adoption, where the customary local rules provide for less than two months' adoption leave, the Swiss National Science Foundation will finance a full two-month leave and the continued payment of salary. Additionally, if it is necessary to employ a replacement to ensure the successful continuation of the research work during maternity or adoption leave, SNSF may approve such an arrangement and take responsibility for the corresponding additional costs.

Support during Paternity Leave

With the exception of a few countries – notably Norway and Sweden, where both parents have the right to share the parental leave after the birth of a child – statutory paternity leave in the countries of the surveyed organisations generally has a limited duration. In most surveyed organisations, no policies have been implemented to provide additional supplementary grants to fathers who might want to take a period of family leave.

Good practice example

Swiss National Science Foundation (SNSF)

Mobility grant holders (early and advanced postdocs) at the Swiss National Science Foundation who become fathers may be granted paid paternity leave of up to four months in the course of a fellowship, if applied and justified, beyond the provisions of the Swiss welfare system.

Flexibility on Time Commitment

No-cost Extensions

The majority of the surveyed organisations²⁵ allow grant holders to request no-cost extensions²⁶ of their research grants. While in most organisations the granting of an extension on the grounds of family leave is not subject to any separate policy, some organisations can grant automatic extensions to research grants when the holder takes a period of family leave.

German Research Foundation (DFG)

At the German Research Foundation), fellowships are extended by three months for new mothers, based on the three-month national statutory maternity leave. Men and women fellows with children can extend their fellowships for up to 12 months. Alternatively, unused months from this extension can be converted into funding for child-care costs.

Research Foundation Flanders (FWO)

At Research Foundation Flanders, PhDs and postdoctoral fellowships can be suspended during pregnancy/maternity or parental leave, in which case a no-cost extension is automatically granted. Additionally, beneficiaries of a pre- or postdoctoral fellowship at FWO, who may be required to perform a certain amount of additional tasks by their host institution – such as teaching, clinical tasks or administrative duties – are relieved from these obligations during periods of maternity/paternity leave.

Swiss National Science Foundation (SNSF)

The Swiss National Science Foundation may, at the grantees' request, extend the duration of the grant so that it covers the period of continued salary payments in the event of maternity, adoption or other periods of absence. The grant may be extended by one year at the most.

Part-time Work Options for Researchers

The majority of organisations²⁷ allow for research grants to be received on a part-time basis by grant holders. For selected career development grants, such as the Science Foundation Ireland Industry Fellowship,²⁸ flexible time commitment is built into the programme call and is approved at the evaluation stage. Such schemes were not included in the survey, which was limited to grant management provisions. Post-award requests to change from full- to part-time are generally dealt with by the RFOs on an ad hoc basis.

Good practice example

Swiss National Science Foundation (SNSF)

The Swiss National Science Foundation 120% Support Grant²⁹ is aimed at postdoctoral researchers who are at an important stage in their career, but also need to look after their children, so therefore need more flexibility. The grant helps researchers to find the right balance between their academic career and family commitments by enabling part-time employment. The grant allows researchers to reduce their work-time percentage and hire a support person for the same period.

Good practice example

German Research Foundation (DFG)

At the German Research Foundation, men and women grant holders can reduce working hours by as much as 50% due to family reasons, and by as much as eight hours per week when returning from family leave. Alternatively, research projects can also keep running despite the absence of a researcher due to family reasons; this can last for up to six months. In such a case, given sufficient justification and a management plan from the grant holder, the grant is extended correspondingly and the grant holder can apply for additional funding to support the management of the grant during their absence.



Table A

Data on Grant Management Practises in Science Europe Member Organisations represented in the Working Group on Gender and Diversity

|  Organisation | RPO or RFO | Country | Statutory Maternity Leave^A |
|--|-------------------|----------------|--|
| Science Foundation Ireland (SFI) | RFO | Ireland | 26 weeks |
| Research Councils UK (RCUK) | RFO ^C | UK | 39 weeks |
| Austrian Science Fund (FWF) | RFO | Austria | 16 weeks ^E |
| Research Foundation Flanders (FWO) | RFO | Belgium | 15 weeks |
| Danish Council for Independent Research (DFF) | RFO | Denmark | 26 weeks |
| Danish National Research Foundation (DG) | RFO | Denmark | 26 weeks |
| German Research Foundation (DFG) | RFO | Germany | 14 weeks |
| Netherlands Organisation for Scientific Research (NWO) | RFO | Netherlands | 16 weeks |
| Research Council of Norway (RCN) | RFO | Norway | 49 weeks |
| Spanish National Research Council (CSIC) | RFO | Spain | 16 weeks |
| Swedish Research Council (VR) | RFO | Sweden | 13 up to 43 weeks ^J |
| Swiss National Science Foundation (SNSF) | RFO | Switzerland | 14–20 weeks ^K |
| National Institute for Nuclear Physics (INFN) | RFO | Italy | 24 weeks |
| National Centre for Scientific Research (CNRS) | RPO | France | 16 weeks |
| French National Research Agency (ANR) | RFO | France | 16 weeks |
| Slovenian Research Agency (ARRS) | RFO | Slovenia | 52 weeks ^L |
| Estonian Research Council (ETAG) | RFO | Estonia | 82 up to 94 weeks ^M |

| Statutory Paternity Leave ^A | Statutory Maternity Pay ^B | Organisational Policy | | | |
|---|---|-----------------------------------|-----------------------------------|-----------------------|------------------------------|
| | | Supplementary Maternity Grants | Supplementary Paternity Grants | No-cost Extensions | Option for part-time work |
| 2 weeks | 100% | ✓ | ✗ | ✓ | ✓ |
| 10 days ^D | 100% | ✓ | ✗ | ✓ | ✓ |
| N/A ^F | N/A ^G | ✗ | ✗ | ✓ | ✓ |
| 10 days | 100% | ✓ | ✗ | ✓ | ✓ |
| 2 weeks | 100% | ✗ | ✗ | ✓ | ✓ |
| 2 weeks | 100% | ✗ | ✗ | ✓ | ✗ |
| N/A ^H | 100% | ✓ | ✗ | ✓ | ✓ |
| 3 days | 100% | ✗ | ✗ | ✓ | ✓ |
| 10 weeks ^I | 100% | ✗ | ✗ | ✓ | ✓ |
| 2 weeks | 100% | ✗ | ✗ | ✗ | ✗ |
| 2+13 up to 2+43 weeks | 100% | ✗ | ✗ | ✓ | ✓ |
| 3 days | 100% | ✓ | ✓ | ✓ | ✓ |
| 1 day | 100% | ✗ | ✗ | ✗ | ✓ |
| 2 weeks | 100% | ✗ | ✗ | N/A | N/A |
| 2 weeks | 100% | ✗ | ✗ | ✓ | ✓ |
| 20 days up to 33 weeks | 100% | ✗ | ✗ | ✗ | ✓ |
| 10 days | 100% | ✗ | ✗ | ✓ | ✗ |

References A–M See page 55



Organisation-specific Grant Management Initiatives

Austria

Austrian Science Fund (FWF)

Time Flexibility: All applications from independent researchers allow for time flexibility. This researcher is defined as a principal investigator whose salary is to be paid from the funding provided for the project; this disposition is available in a series of programmes.

Supplementary Funding: In the career development programmes for women, the FWF pays for kindergarten: project leaders who are have a full-time employment contract can receive a child allowance of €9,600 per child per year (gross, including all employer's and employee's contributions; to be paid in 12 payments per year) until the third birthday of the child.

Gender-disaggregated Data Collection: The breakdown of FWF-funded projects and programmes by gender is monitored through annual reports.

Further Information:

<https://www.fwf.ac.at/en/research-funding/applications-from-abroad/>

<https://www.help.gv.at/Portal.Node/hlpd/public/content/143/Seite.1430100.html>

Career development programmes for women:

<http://www.fwf.ac.at/en/research-funding/fwf-programmes/firnberg-programme/>

<http://www.fwf.ac.at/en/about-the-fwf/publications/>



Belgium

Research Foundation Flanders (FWO)

Time Flexibility: PhDs and postdoctoral fellowships can be suspended during pregnancy, family or parental leave. The grant period for research positions is extended with family and parental leave, in which case a no-cost extension is automatically granted.

Family/Parental Leave: PhD and postdoctoral fellows can benefit from the statutory 15 weeks of maternity leave or of paternity leave; additionally, unpaid parental leave is possible, either full-time or part-time. During periods of maternity leave and full-time parental leave, additional tasks, which host institutions may require from FWO-funded PhD or postdoctoral fellows, are suspended and the grant recipient's salary is covered by default.

Gender-disaggregated data collection: FWO keeps track of applications and success rates of men and women applicants throughout all calls for funding. Similarly, FWO monitors grant management as well as the research outcome for gender by collecting gender-disaggregated data, though mostly on principal investigator-level only.

The analysis of this monitoring is used internally for policy updates, and results are also published in the annual reports and policy reports, which may be downloaded freely at <http://www.fwo.be/en/publications/>. The annual report for 2012 was devoted entirely to the topic of gender and diversity (see <http://www.fwo.be/media/184812/FWO-annual-2012.pdf>).

Programme regulations and specificities are updated on a regular basis depending on specific needs or policy choices by FWO governance or in compliance with national and regional laws or stakeholder requirements.

Further information:

<http://www.fwo.be/en/the-fwo/organisation/hr-strategy/>

<http://www.fwo.be/media/184812/FWO-annual-2012.pdf>

<http://www.fwo.be/media/205292/Folder-2013.pdf>



Denmark

Danish Council for Independent Research (DFF)

Time Flexibility: DFF allows grant holders to apply for a no-cost extension to extend the project of a time equivalent to the statutory maternity leave taken by the grant holder and other members of the research team.

Gender-disaggregated Data Collection: DFF does collect and analyse gender-disaggregated data at the reporting stage.

Danish National Research Foundation (DG)

Time Flexibility: For employees paid by a DG grant, in the case of family leave that extends beyond the stated closing date, the host institution may apply for a grant to cover additional expenses.

Estonia



Estonian Research Council (ETAG)

Time Flexibility: No-cost extension of the grants due to parental leave can be requested.



Germany

German Research Foundation (DFG)

Time Flexibility, Family/Parental Leave and Supplementary Funding:

Researchers can apply for extra funding, for example for an assistant in the project to carry out routine work, while on maternity leave or when working part-time.

If a member of the staff has right to the extension of their working contract, the DFG will provide funding for temporary replacements during family leave.

If an expectant mother's research involves dealing with material with mutagenic and reproductive toxicity properties, a substitute researcher can usually be funded using the financing already granted by DFG.

If required, additional funding can be provided to support a grant holder during family leave or during part-time work due to family reasons.

Specific Schemes: In collaborative projects, extra funding (a lump sum payment) can be provided. This may be used for:

- ▶ Recruitment of additional women project leaders.
- ▶ Career development measures, for example mentoring programmes, coaching, or participation in networks.
- ▶ Family-friendly measures, for example to set-up a home office or a parent-child office, or to provide emergency childcare during meetings.

Further Information:

http://www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/index.html



Ireland

Science Foundation Ireland (SFI)

Time Flexibility: Research grants can be managed on a part-time basis by grant holders. For selected career development grants, such as the Science Foundation Ireland Industry Fellowship, flexible time commitment is built into the programme call and is approved at the evaluation stage. For these, and other research grants of larger scale, requests to change from full- to part-time are considered at grant management stage, and dealt with on an ad hoc basis.

Family/Parental Leave: No-cost grant extensions and reporting extensions during and after family-related leave can be granted. See ‘Supplementary Funding’ below.

Supplementary Funding: The SFI Maternity/Adoptive Allowance provides funding that can be used to hire additional staff to support the administration of the project, to hire a replacement team member or to extend the project so that the team member can complete their work after returning from family leave.

Gender-disaggregated Data Collection: The gender breakdown of SFI-funded researchers (including grant holders, postdoctoral and pre-doctoral researchers, technical and administrative/management staff) in all programmes is monitored through annual reports and progress reviews, and published annually in the SFI Annual Report.

Specific Schemes: In the SFI Gender Strategy 2016–2020, a target of at least 40% reviewers of each gender in all evaluation, remote and sitting evaluation panels/committees, including for on-site progress reviews, has been set.

Further Information: <http://www.sfi.ie/funding/sfi-women-in-science.html>



Italy

National Institute for Nuclear Physics (INFN)

Time Flexibility: Working time for all researchers is flexible.

Family/Parental Leave: Grant extensions during maternity or parental leave are guaranteed and it is financially supported by the national social system (80%) and INFN (20%).

Supplementary Funding: Limited support can be given to partially cover kindergarten.

Further information: <https://web.infn.it/CUG/>



The Netherlands

Netherlands Organisation for Scientific Research (NWO)

Time Flexibility: No-cost extensions are usually granted up to 16 weeks or longer if extra (not paid for by the government) parental leave is taken with a usual maximum of three months.


Further Information:

http://www.fom.nl/live/overfom/netwerken/FOMv_netwerk/fomv.pag

<http://www.nwo.nl/en/policies/gender+diversity/gender+balance+in+research+funding>

Spain

Spanish National Research Council (CSIC)



Family/Parental Leave: CSIC is a public RPO, therefore maternity (16 weeks) and paternity (2 weeks) leaves and measures are regulated and follow the government legislation. There is a 'breastfeeding leave' of one hour reduction per working day until the child is 12 months old. CSIC also has a kindergarten close to the headquarters for the children of CSIC employees.

Time Flexibility: Pre-doctoral and postdoctoral contracts can be extended for a period equal to the duration of family leave.

Gender-disaggregated Data Collection: Since 2002, the CSIC Committee for Women and Science advises the Presidency of CSIC to improve the status of women researchers. The Committee publishes annually disaggregated statistics of the status of scientific staff, including pre- and postdoctoral contracts.

Further information: <http://www.csic.es/web/guest/mujeres-y-ciencia>



Sweden

Swedish Research Council (VR)

Time Flexibility: Grant pauses with extended time for parental leave are guaranteed by VR.

Family/Parental Leave: The salary of the researcher on parental leave is provided by the national social system (about 80%). Often the hosting university complements the national social system up to 100%.

Supplementary Funding: None. Kindergarten for small children is available (and affordable) by the national social system, as well as medical care.

Gender-disaggregated data collection: VR has been collecting and analysing gender-disaggregated data regarding applicants since 2003. The gender equality analyses are published regularly. Moreover, gender-disaggregated data is published yearly in the Council's annual report. If the success rates are different for women and men, the respective scientific sub-council must explain the difference and present a plan to rectify the situation.

Also, every other year, the Council conducts gender equality observations of a selection of peer review groups and the results of the observations are published.

The analyses and the observations are used in gender equality education of decision-making bodies, of peer-review groups and of Council staff.

Further information: VR has had a gender-equality strategy since 2003. Also, since 2014, VR is commissioned by the government to gender mainstream all its activities.

See: <http://www.vr.se/inenglish/researchfunding/assessment/genderequalitystrategy.4.5636787314bdfb2e125be7a1.html>



United Kingdom

Research Councils UK (RCUK)

Family/Parental Leave: A specific briefing on RCUK Family and shared parental leave and pay can be found here: <http://www.rcuk.ac.uk/documents/skills/rcukmaternitybriefing-pdf/>

Time Flexibility: RCUK allows grant holders to apply for a no-cost extension to extend the project for up to 12 months following statutory maternity leave taken by a team member. The policy applies to funded team members including students, but not to grant holders or pooled staff. Training grants allow for studentships to be extended by 12 months.

For RCUK grants, host institutions are compensated at the end of the grant to cover any additional net costs that cannot be met within the cash limit of the grant for family and shared parental leave for staff employed on the grant.

Note: where students are not employees (most cases) they are not covered by statutory maternity leave and pay. However, RCUK-funded students are allowed six months full stipend and six months unpaid leave.

Gender-disaggregated Data Collection: RCUK collects and publishes gender-disaggregated data on the student populations it supports. The latest data can be found at <http://www.rcuk.ac.uk/documents/documents/research/councilsdiversitydataapril2016-pdf/>



Glossary of Grant Management Terms

Family leave: Family leave includes statutory maternity, paternity and adoption leave where statutory pay (generally up to full salary) is received by one or both new parents, who legally retain their employment post during their absence.

Gender-disaggregated data: Gender-disaggregated data refers to information on research team members that has been (1) collected from multiple and different research awards; (2) compiled into aggregate data – i.e. summaries of data – typically for the purposes of publishing, reporting or statistical analysis; and then (3) broken down by gender and other parameters, such as funding programme, year, and so on. For example, data on postdoctoral researchers funded by a research centres programme in a specific year are gender-disaggregated if the number of women and men researchers is broken down.

Grant Management: The post-award phase of the research funding process that begins when an applicant signs an agreement with a funder to accept a grant award, and becomes a grant holder.

Parental Leave: Parental leave in this document is intended as leave where a parent is legally allowed to be absent from work on the grounds of caregiving to their children, with a salary reduction or with no salary. These provisions have not been surveyed in this study. Note that in some countries the term 'parental leave' is used to define paid family leave.

Research Grant Holder: A grant holder is an independent researcher (or Principal Investigator (PI)) who holds an award ('grant') from a funding agency. The grant holder is responsible for the technical direction of a funded research programme and the submission of reports to the agency.

Research team member: This definition includes the grant holder and the postdoctoral researchers, PhD candidates and research assistants funded by the grant.

Researcher: A researcher in this document is the holder of a PhD or equivalent, who will be an employee of a Research Performing Organisation (RPO), either on a permanent or on a temporary basis. As such, the researcher may be a research grant holder or a research team member. In the former case, the researcher's salary will generally be paid by the employing RPO (except, for example, for the recipients of individual research fellowships). In the latter case, the researcher's salary will be paid through a research grant. For the purpose of this document, PhD candidates are also included in this definition, even though in most cases they will not be employees of RPOs and as such the same welfare conditions might not apply.

Statutory maternity leave: The amount of time that a woman is legally allowed to be absent from work in the weeks before and after she has a baby and during which she is entitled to receive statutory maternity pay.

Statutory maternity pay: Money that must by law be paid to a woman during the time she is allowed to be absent from work in the weeks before and after she has a baby.

Statutory paternity leave: The amount of time that a man is legally allowed to be absent from work in the weeks before and after his partner has a baby, and during which he is entitled to receive statutory paternity pay.

Statutory paternity pay: Money that must by law be paid to a man during the time he is allowed to be absent from work in the weeks before and after his baby is born.

Notes Table A (page 48)

- ^A Maximum duration, based on a full-time employment contract.
- ^B As covered by RPOs, state or funding agency.
- ^C Some UK Research Councils have a mixed function; for the purpose of this report, however, all are counted as RFOs.
- ^D Partners may be entitled to up to 50 weeks of shared parental leave; this may include paid and unpaid leave, depending on the individual circumstances.
- ^E For employees in Austria the amount of statutory maternity pay is based on the employee's net wage during the last three months of employment. Additionally, the employee will receive an extra amount for benefits such as vacation and Christmas bonuses. Expectant mothers are not allowed to work beyond the eighth week prior to the expected delivery date as they are then officially on maternity leave (*Mutterschutz*).
- ^F In Austria, a statutory paternity leave, called parental leave, is possible in combination with childcare allowance after the birth of the child. This allowance can be shared between women and men after the baby is born and until the child is 36 months old. There are two models parents can choose between: flat-rate childcare allowance, and income-related childcare allowance.
In the first model, the range is between 30+6 to 12+2 months shared between the mother and father under certain circumstances. The amount of money ranges from €436 to €1,000 per month. The second model allows a maximum of 12+2 months, shared between the parents and results in 80% of the income with a €2,000 upper limit.
- ^G For Austrian employees, maternity pay is intended as financial support for the expectant mother during this period and is paid as a substitute for missed income. The amount of statutory maternity pay is based on the employee's net wage during the last three months of employment. Additionally the employee will receive an extra amount for benefits such as vacation and Christmas bonuses. The money will be provided by the health insurance.
- ^H In Germany, additionally to statutory maternity and paternity leave, it is possible to take an additional period of paid parental leave of up to 48 weeks, which can be taken by either the mother or the father. In cases where both parents take at least two months of parental leave, this is extended to up to 56 weeks. DFG provides funding for both maternity and parental leave.
- ^I In Norway, new parents can take up to 49 weeks of 100% paid family leave (called 'parental leave') which includes: 3 weeks before birth, reserved for the mother; 10 weeks after birth, reserved for the mother; 10 weeks after birth, reserved for the father; and a remaining 26 weeks, to be shared by the parents as they wish. The weeks reserved for the father cannot be transferred to the mother. This means that if the father does not take his weeks of leave, the total duration of the parental leave is reduced accordingly. In addition to the statutory pay, there might be legal options of extra leave, with reduced or no pay.
- ^J In Sweden, parental leave is 56 weeks, with 13 weeks reserved for each parent. As such, the maximum statutory maternity leave is 43 weeks and the minimum is 13 weeks – in which case the father can take 43 weeks (maximum) of parental leave (on top of the 2 weeks allowed to the father in connection with the birth of the child). Additionally, there are an additional 13 weeks of unpaid, or very low-paid, parental leave that can be distributed between the parents as they wish.
- ^K Ranges across different cantons.
- ^L In Slovenia, according to the national law that regulates parental protection, each of the parents has a right to family leave (called 'parental leave') of up to 19 weeks, 14 weeks of which can be transferred by the mother to the father. The father also has the possibility to transfer the whole parental leave to the mother. Taking into account the 15 weeks of fixed maternity leave; mothers are entitled up to 52 weeks and fathers up to 33 weeks of paid leave for childcare. Statutory paternity pay only covers 90% of the father's salary.
- ^M In Estonia, family leave includes 20 weeks for the mother, of which she can take up to 10 weeks before birth, while 62 weeks (435 days) are paid parental leave that can be shared by parents as they wish. Parents are entitled to unpaid parental leave from there on until the child is 3 years old (up to 94 weeks of unpaid leave).

Notes and References

- ¹ <http://www.smartfutures.ie/sites/default/files/resources/basic/SFI%20Smart%20Futures%20STEM%20research%20Final%20Report%202014.pdf>
- ² <http://www.sfi.ie/assets/files/downloads/Publications/Organisation%20Publications/SFI%20Gender%20Strategy%202016-2020>
- ³ <https://implicit.harvard.edu/implicit/takeatest.html>
- ⁴ <http://advance.umich.edu/stride.php>
- ⁵ https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383
- ⁶ <http://www.cnrs.fr/en/research/awards.htm>
- ⁷ Observations 2015: <https://publikationer.vr.se/en/product/a-gender-neutral-process/>
- ⁸ <http://www.sfi.ie/assets/files/downloads/Publications/Organisation%20Publications/SFI%20Gender%20Strategy%202016-2020>
- ⁹ https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/she_figures_2015-final.pdf
- ¹⁰ <http://www.sfi.ie/assets/files/downloads/Publications/Organisation%20Publications/SFI%20Gender%20Strategy%202016-2020>
- ¹¹ <https://www.fwf.ac.at/en/research-funding/fwf-programmes/wittgenstein-award/>
- ¹² http://www.dfg.de/en/funded_projects/prizewinners/leibniz_prize/
- ¹³ "Researcher" is defined in, for example, She Figures 2015. Often the term "academic staff" is used.
- ¹⁴ <http://www.cnrs.fr/en/research/awards.htm>
- ¹⁵ Reaching Gender Equity in Science: The Importance of Role Models And Mentors, Science (Careers Magazine), Feb 2010
- ¹⁶ Fix The System, Not The Women, Science (Careers Magazine), Jan 2011
- ¹⁷ <http://www.irishtimes.com/news/education/universities-sign-up-to-gender-equality-charter-1.2091578>
- ¹⁸ The terms "grant" and "award" are used interchangeably throughout this document.
- ¹⁹ <http://www.theatlantic.com/magazine/archive/2014/01/the-daddy-track/355746/>
- ²⁰ Terminology varies across countries. See the Glossary (p. 60) for clarity.
- ²¹ See Table A, p. 48
- ²² See Table A, p. 48
- ²³ See Table A, p. 48
- ²⁴ See Table A, p. 48
- ²⁵ See Table A, p. 48
- ²⁶ A no-cost extension is permission to extend the duration of the project without extra funding.
- ²⁷ See Table A, p. 48
- ²⁸ <http://www.sfi.ie/funding/funding-calls/open-calls/industry-fellowship-programme-2016.html>
- ²⁹ <http://www.snf.ch/en/funding/supplementary-measures/120-support-grant/Pages/default.aspx>

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Science Europe
Rue de la Science 14
1040 Brussels
Belgium

Tel +32 (0)2 226 03 00
Fax +32 (0)2 226 03 01
office@scienceeurope.org
www.scienceeurope.org

