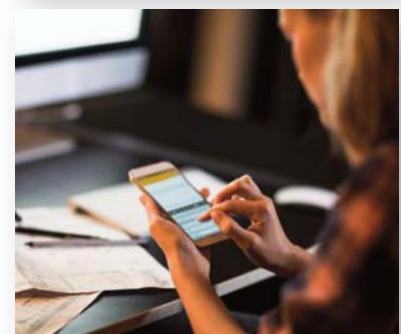
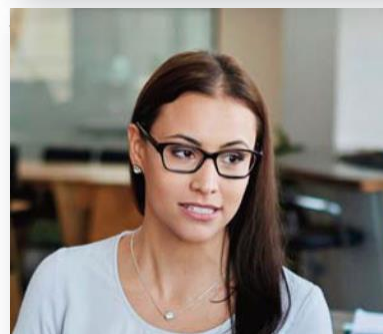


Equality and Status of Women in Research

Survey Report for the Global Research
Council 2016 Annual Meeting

May 2016



'Equality and Status of Women in Research'

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1 Executive summary

This survey report was commissioned by Research Councils UK (RCUK) and the Science and Engineering Research Board of India (SERB) as a contribution to the Global Research Council (GRC) Annual Meeting in Delhi, 26-27 May 2016. As funders of research, GRC participants have the opportunity to influence the development of the research landscape by adopting and implementing policies which aim to redress gender imbalances and inequalities in research.

The report provides an overview of the gender equality policies and practice of a selection of GRC participants, identified through a combination of desk based analysis and interviews. It also presents a summary of practice in each of the five GRC regions: Africa, Americas, Asia-Pacific, Europe and Middle East/North Africa (MENA).

The GRC participants involved were broadly balanced across the five GRC regions and included examples to reflect differences in national research infrastructures within the regions. The research considered gender equality with respect to governance, policies and practice, funding schemes, data and research careers, and incorporating the gender dimension into research.

This report and associated recommendations on the 'Equality and status of women in research' aim to inform the discussions by GRC participants at the 2016 GRC Annual Meeting on how they can enhance the equality and status of women in research worldwide.

Key global findings

1.1

Overall the GRC participants interviewed recognise the importance of gender equality in research and the value of achieving it within the research environment. However, how far GRC participants have engaged in achieving this varies considerably both across and within regions. There is a strong correlation between whether gender is a national priority and its importance for GRC participants.

How gender equality is translated into policies and practice differs across the regions. Well-developed research systems, such as in Europe, North America, Japan and Australia, are more likely to have had a long term focus on gender equality and have developed comprehensive policies and targeted provision for female researchers. GRC participants in these regions are more likely to have very clear policy statements on gender or have published gender equality plans. They regularly collect and publish detailed data on success rates by gender.

GRC participants in countries with less well-developed research systems are generally concerned with attracting more people into research, including women. Concerns around the gender pay gap and the societal influence on equality appears to be primarily an issue in Latin America and to some extent in the Asia-Pacific region.

The five GRC regions are quite diverse in their profile, cultures and interest in gender equality and diversity. There are significant differences between the countries within each region. Given the disparate nature of the countries and regions it is challenging to draw comparisons between regions and countries. However, this does mean that there is a richness of different approaches that can inform GRC participants' practices.

The language relating to gender differs across regions and countries ranging from gender equality through to inclusion. This translates into differences in approaches from incorporating diversity into the research environment to create a fully inclusive research environment.

GRC participants are aware of the importance of gender diversity on advisory or governing boards and peer review panels. Increasingly, GRC participants are setting gender targets for peer review panels. However, governing boards are predominately male, as are the senior management of the majority of GRC participants. The exception is in Africa, where GRC participants are more likely to have a majority of women on their advisory boards. Many GRC participants noted the challenge of achieving gender balance on boards and peer review panels given the relatively small numbers of women at senior levels.

The issue of unconscious bias in decision-making is of growing interest, particularly within Europe and North America. Some European GRC participants are introducing strong policies and training schemes on this topic. There is less discussion of this topic in other regions. GRC participants with more balanced percentages of male/female success rates are less likely to be concerned about bias.

Few GRC participants use the power of their terms and conditions for grants and fellowship funding to influence institutional practice and behaviours. For example, with a few exceptions, GRC participants' have maternity, paternity and flexible working policies that follow national legislation or custom. The use of gender specific funding schemes is dependent on the strength of national legislation on anti-discrimination or societal acceptability. However, there are examples of gender specific funding schemes covering different stages of the research career, including increasing the number of female professors and women returning to research after career breaks. GRC participants also provide a range of diverse activities to support female researchers through mentoring schemes, professional development workshops and seminars.

The majority of GRC participants collect data to some extent on the gender balance of applications to funding schemes and the relative success rates. However, this ranges from systematic comprehensive data collection processes to ad hoc reviews. Publication of this data depends on how important gender equality is as a national priority. There are only a few examples of GRC participants collecting comprehensive data on the destinations or career paths of researchers. Apart from general concern about the proportion of female professors, there is little focus on the status of women in research and surprisingly few examples of GRC participants promoting female researchers as role models on websites. There are very few examples of GRC participants evaluating the impact of their policies and practice on gender equality.

GRC participants in Europe, and to some extent in the Americas, are interested in incorporating the gender dimension within research. There are a few examples in the Americas where this is specifically incorporated into funding requirements. In Europe most GRC participants are still in the process of developing policy on this topic. There was almost no interest in the topic in other regions.

Predominately, the main focus for diversity agendas is gender. Commonly, other aspects of diversity are only considered where there is corresponding national interest, such as indigenous populations, or race. Exceptionally, a few GRC participants have interest in compound discrimination, e.g. indigenous women or 'women of colour'.

Recommendations

1.1

GRC participants have considerable opportunity to address diversity or gender imbalances in the research system. The following recommendations are ways in which GRC participants can achieve the 2014 recommended action that '*GRC participants should advance equal opportunity in research and develop mechanisms that encourage people from all backgrounds to pursue scholarly and scientific careers, contributing to research excellence*'.

Recommendation 1: All GRC participants should publish a policy statement on diversity and gender equality.

Recommendation 2: GRC participants should consider collectively agreeing a set of key indicators and monitoring them regularly to assess progress in gender equality.

Recommendation 3: GRC participants should commit to sharing good practice relating to diversity and gender equality.

Recommendation 4: GRC participants should consider establishing a working group to explore further how they can be leading actors in driving cultural change within the research system.

Recommendation 5: GRC participants should consider sharing their data on equality and diversity.

Recommendation 6: GRC participants should consider funding strategies and policies designed to influence gender diversity and the gender dimension of research.

Recommendation 7: GRC participants should consider whether funding or development programmes targeted towards female researchers are appropriate within their national context.

Recommendation 8: GRC participants should consider improving the public prominence their organisation gives to gender equality.

2 Global overview of equality and the status of women

This report provides a broad overview of the equality and status of women globally in research. It considers the governance, policies and practice of GRC participants within their national context. It explores their gender-related funding schemes, the collection and publication of diversity data, the tracking of research career trajectories and the gender dimension within research.

It provides a global snapshot of current policies and practices based on review of a selection of GRC participants. It also includes recommendations to promote discussion and inform the outcomes of the GRC Annual Meeting. Given the wide variation of practice across GRC participants, five regional chapters provide more specific regional context, as well as highlighting differences within each region.

Introduction 2.1

The GRC have the long-term objective of fostering research and collaboration across regions for the benefit of both developed and developing nations. It is comprised of the heads of funding agencies around the world and is dedicated to promoting the sharing of data and best practice between them.

Amongst the stated purposes of the GRC is '*to address issues of common concern in the support of research and education*' and to contribute to efforts to build a world class research landscape. One such concern, expressed to varying extents worldwide, is the under-representation of women in research, one of two topics addressed at the GRC 2016 Annual Meeting in Delhi, India.

As funders of research, GRC participants have an opportunity to influence the development of the research landscape by adopting and implementing policies which aim to redress gender imbalances and inequalities in research. This report and associated recommendations on the '*Equality and status of women in research*' distils the level of interest in gender, policies and practice of a selection of GRC participants across the five regions. Its aim is to inform the discussions by GRC participants on how they can enhance the equality and status of women in research worldwide.

Examples of GRC participants' practices are provided in an accompanying document: '*Case studies of GRC participants' policies and practices relating to gender equality in research*' available on the GRC website at www.globalresearchcouncil.org/documents.

Background 2.2

Gender issues in research and specifically the under-representation of women have gained increased recognition with universities and research institutes, collectively known as research performing organisations (RPOs), and research funding organisations worldwide^{1,2,3}. There are a number of underpinning rationales for achieving improved diversity in science and research:

- an increase in the diversity of research teams correlates positively with research quality, as more diverse teams are more creative and produce a greater diversity of ideas
- increased diversity can correlate positively with higher performance
- providing equality of opportunity: every current and potential researcher, at any level, should have the chance to fulfil their potential, free from discrimination
- the ability to attract the best talent into the research workforce in future will be hindered if it is perceived not to be fair.

Research is not done in isolation, but undertaken within societal and economic contexts in which equality and diversity issues have become increasingly important, often with a focus on gender. Women constitute half of the world's population, but are under-represented in the workforce. In many countries they are subject to occupational segregation and paid less than their male counterparts: creating the 'gender pay gap'. The 'glass ceiling', illustrating the lack of progression of women into senior management, together with poor representation on organisational boards and committees, is found in all countries and employment sectors. With men occupying the majority of top roles in business, politics and society, they receive the benefits that accompany this – higher pay, status and influence.

Research is not alone in trying to tackle this gender inequality. Many countries and professions are introducing initiatives to increase the proportion of women in higher positions in employment, politics and society generally.

While avoiding discrimination and providing equality of opportunity are essentially generic, the rationale of improving the creativity of the workforce is particularly relevant within the research environment.

¹ European Commission, Meta-analysis of gender and science, 2012 https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/meta-analysis-of-gender-and-science-research-synthesis-report.pdf

² Gender Equality Policies in Public Research, Helsinki Group on Gender in Research and Innovation, 2013 http://ec.europa.eu/research/swafs/pdf/pub_gender_equality/KINA26565EN-web.pdf#view=fit&pagemode=none

³ UNESCO Women in Science www.uis.unesco.org/ScienceTechnology/Pages/women-in-science-leaky-pipeline-data-viz.aspx?SPSLanguage=EN

This was reflected in the GRC's adoption of the principle '*Attracting and retaining the best talents in all their diversity*' at the 2014 Annual meeting. This meeting agreed the recommendation that '*GRC participants should advance equal opportunity in research and develop mechanisms that encourage people from all backgrounds to pursue scholarly and scientific careers, contributing to research excellence*'.⁴

There is strong evidence at national and regional level of the under-representation of women in research⁵. This is in spite of the backdrop where the majority of higher education graduates are now female in OECD nations⁶. In the European Union (EU) female doctoral graduates equal or outnumber men in all disciplines, except for science, mathematics, IT and engineering⁷.

Despite this educational gain, and the apparent benefits that female leaders bring to organisations⁸, women still have lower progression rates than men at all levels of employment, even after controlling for individual characteristics such as age, education, experience and tenure. This is also true in the research environment. Although there has been some recent progress, the proportions of female researchers at senior and professorial level are still low. In the EU 40% of all researchers are female, while only around 20% of full professors are female⁹. In science and engineering this falls to 11% female full professors. In Asia less than 25% of academics are women, and correspondingly lower at professor level¹⁰. In some Middle East countries less than 5% of researchers are female. This lack of senior female role models in academia may reinforce the perception that research is not an environment for women and reduce the potential supply pipeline of women into research.

There is significant research into why there are fewer women at senior levels in research and the factors that influence their progression^{11,12}. This highlights the 'traditional' cultures in research that reflect expectations that women are less ambitious and less assertive than men. Data from research funders imply that women are

less likely to apply for, and be successful in securing, research funding. Women are seen as more caring and collegiate, which may clash with stereotypes associated with research effectiveness and leadership.

There is a tension for female researchers between competitiveness (and self-promotion) and meritocracy. Social psychology and behavioural economics suggest that women tend to be more averse to competition and risk, and have lower self-confidence than men. The Wellcome Trust Risks and Rewards¹³ report concludes that '*While the women in our study were undoubtedly high achievers, many felt that the competitiveness of science (e.g. to secure a grant and post), and especially at the early career stages, results in less weight being given to integrity and meritocracy, making academia an unattractive long-term career option for those who are less naturally competitive*'.

There is also a tension between research careers and family life that is strongly influenced by societal expectations around family, particularly for women. The UK's Royal Society of Chemistry report 'A Change of Heart'¹⁴ examined the percentage of women who change their mind about a research career during the process of completing a PhD. This fell from 72% interested in a research career in the first year of their PhD to just 36% in the final year. Many women highlighted the lack of compatibility of research careers, including the long hours and short contracts, with family life.

Differential participation within the research process itself is also an issue. This is seen in a lack of equality in the processes of doing research, such as the gender balance in research teams. The under-representation of women at senior level and on decision-making bodies affects their status. Additionally, female researchers are disadvantaged by the lack of gender balance in the composition of peer review panels and unconscious bias in the allocation of research funding. Recent attention has been on the diversity of the research itself, i.e. incorporating the gender dimension into research and innovation¹⁵.

This report explores how GRC participants are tackling these issues in their policies and practices. It is based on desk based research of 55 GRC participants' websites and 29 telephone interviews across the five GRC regions.

⁴ Statement of principles and actions for shaping the future: Supporting the next generation of researchers, Global Research Council, 2014 www.globalresearchcouncil.org/

⁵ Gender Equality Policies in Public Research, Helsinki Group on Gender in Research and Innovation, 2013 www.oecd.org/sti/sci-tech/womeninscientificcareersunleashingthepotential.htm

⁶ OECD Education at a glance 2015 www.oecd.org/gender/data/graduationratesintertiaryeducationbysex.htm

⁷ She Figures 2013 Gender in Research and innovation, European Commission, 2013 <https://open-data.europa.eu/en/data/dataset/she-figures-2013-gender-in-research-and-innovation>

⁸ Women matter: Making the breakthrough. McKinsey & Co., 2012 www.mckinsey.com/global-themes/women-matter

⁹ She Figures 2012 Gender in Research and innovation, European Commission, 2012

¹⁰ Global Gender Index developed from the top 400 of THE's World University Rankings www.timeshighereducation.com/features/global-gender-index-2013/2003517.article

¹¹ EU Mapping the Maze: getting more women to the top in research, 2008 http://ec.europa.eu/research/science-society/document_library/pdf_06/mapping-the-maze-getting-more-women-to-the-top-in-research_en.pdf

¹² Strengthening Canada's Research Capacity: The Gender Dimension, Council of Canadian Academies, 2012 www.scienceadvice.ca/en/assessments/completed/women-researchers.aspx

¹³ Wellcome Trust Risks and Rewards: How PhD students choose their careers, 2012 www.wellcome.ac.uk/stellent/groups/corporatesite/@sf_central_grants_admin/documents/web_document/wtp053947.pdf

¹⁴ Royal Society of Chemistry A Change of Heart 2008 www.rsc.org/images/ChangeofHeart_tcm18-139211.pdf

¹⁵ Gendered Innovations, Stanford University <http://genderedinnovations.stanford.edu/terms/dimension.html>

3 Overall findings

The issue of gender equality in research is well recognised. All of the GRC participants interviewed acknowledged that it is an ongoing and important issue, and there is value in achieving equality in the research system. However, how far GRC participants have engaged in achieving this for women varies considerably both across and within regions.

There is a strong correlation between whether gender equality is a national priority and the importance for GRC participants. This ranges from significant initiatives, particularly in Europe and North America countries, where gender mainstreaming is well established in society, i.e. incorporated at all levels and at all stages within policies and practice. In these countries gender equality is a cross-cutting initiative across all government departments and therefore required within GRC participants' policies. Conversely, GRC participants in countries with traditional patriarchal societies where the status of women in society is low, such as in MENA, have to work within local cultures that limit what is achievable and there is little focus on gender equality in the research environment.

Countries with less well developed research systems generally focus on attracting more women into research, with understandably less attention to their situation once in the research system. GRC participants in Asia-Pacific, MENA and Africa are more likely to focus on building research capacity and attracting more young people, including female undergraduates, into research.

Central and South American GRC participants, and to some extent those in the Asia-Pacific region, are concerned about the status of women in society and the gender pay gap. While GRC participants in the Americas and Asia-Pacific are more likely to take a broader view on diversity, with several GRC participants interested in racial equality and supporting indigenous populations.

GRC participants in countries that have had a longer focus on gender equality inevitably have more wide-ranging and structured provision. This is seen in Europe, North America, Australia and Japan. GRC participants in Europe generally have made most progress on gender equality and have sophisticated policies on gender equality, including improving research career pathways for female researchers and more equitable access to research funding.

All countries have a lower portion of women participating in research, although the percentage differs between countries. There are global differences in societal norms

for when women normally have children, ranging from late teens to thirties and beyond, which influences when gender inequalities become most apparent in the research career pathway. The proportions of female researchers are increasing, particularly at early career positions, with some countries seeing more women than men at doctoral level, notably in Eastern Europe. However, all GRC participants report a fall in the overall percentage of women at senior or professorial levels. This is particularly applicable to female researchers in the physical sciences, and to a lesser extent in the biomedical sciences. However, it is not seen in all disciplines, for example in Canada it is seen in chemistry, but not in physics, maths or engineering, although the percentages of female researchers are low in these disciplines. Most GRC participants take a generic approach to gender equality, or focus on science, technology, engineering and mathematics (STEM) subjects, with very few examples specifically focused on social sciences, arts and humanities.

GRC participants' gender related policies 3.1

Anti-discrimination legalisation is now fairly widespread across the world. This inevitably includes gender, but also other aspects of diversity or disadvantaged populations. For example, the UK Equality Act 2010¹⁶ covers nine protected characteristics: age, disability, gender, gender reassignment, marital status, pregnancy and maternity, race, religion and belief, and sexual orientation. However, GRC participants' diversity policies predominately focus on gender. Very few have extended their diversity interests to include other disadvantaged groups (see 3.6).

The language of diversity differs across regions and countries. The most common terminology is gender equality or equality and diversity. Some countries, particularly in the Americas, are using the language of inclusion. The National Science Foundation (NSF), USA use the term broadening participation, relating to all under-represented groups. Gender mainstreaming is increasingly common terminology in European countries.

¹⁶ UK Equality Act 2010 www.legislation.gov.uk/ukpga/2010/15/contents

GRC participants' priorities in developing policies relating to gender depend on whether gender equality is a national initiative. GRC participants in countries where gender equality is a current social issue tend to have very clear, robust and public policy statements on gender. Examples include the Swedish Research Council (SRC)¹⁷, the German Research Foundation (DFG)¹⁸, the Japan Science and Technology Agency (JST) and the Australian Research Council (ARC)¹⁹. GRC participants in MENA and Africa are less likely to have developed and published policy statements.

There has been recent growth in the development and publication of gender equality plans (GEP) for RPOs and funders. These may include equality statements, specific actions to address inequalities, and targets and monitoring of progress. GEPs are more common in Europe where they are being championed by the European Commission (EC) for RPOs through its Framework Programme 7 and Horizon 2020 (H2020). A 2013 report²⁰ for the European Commission on gender equality policies noted that *'about half of the countries surveyed have put in place initiatives supporting the individual careers of female researchers'*. However, the report also noted that the pace of change is slow. *'In the past five years, the number of countries where RPOs have modernised their management through gender equality plans has only modestly risen from 12 to 15. Three countries have enacted legal provisions that require or stimulate RPOs to set up gender equality plans.'*

All GRC participants are aware of the value in having a good gender balance on their governing bodies or strategy boards. Across all regions, however, few GRC participants have specific policies on the gender composition of their governing bodies or strategy boards. RCUK have an action plan²¹ to improve the gender balance on the Councils of the seven Research Councils. Africa is notable in having more GRC participants with a majority or equality of women on their governing bodies.

GRC participants in all regions are aware of the need for diversity in peer review panels. GRC participants in Europe are more likely to have policies on the gender composition of peer review panels, with a target of 40%

women fairly common. 18 EU countries have implemented quotas or targets for the gender representation in decision-making positions²².

Even in countries without formal policies, gender balance is considered as the main criterion (after 'excellence') in the composition of peer review panels. Other diversity criteria may be the level of experience, international representation, race and language.

Typically, GRC participants aim for targets of between 25% and 40% on peer review panels. Many GRC participants, particularly in developing research systems, noted that the limited number of senior female researchers can mean that ensuring panels are balanced can be difficult and put unacceptable burdens on individual female researchers.

The issue of unconscious bias in decision-making is a topic of growing interest, particularly within Europe. Many European GRC participants are developing policies and training programmes on this topic, for example: DFG Germany, Science Foundation Ireland (SFI)²³ and RCUK²⁴. Where specific policies do not exist, GRC participants are aware of the risk of unconscious bias, with some mentioning this risk in the introductory briefing for peer review panels. GRC participants with balanced percentages of male/female success rates are less likely to consider the need to address unconscious bias. The SRC, Sweden have published an interesting study on the equity of the evaluation of grant proposals and produced guidance on the use of gender neutral language²⁵.

There are a range of examples of GRC participants proactively using their terms and conditions of funding to influence institutional behaviours and/or principal investigators' support for female researchers. These are more common in Europe than in other regions.

With a few exceptions, maternity, paternity and flexible working policies within terms and conditions of grants and fellowship tend to follow the relevant national legislation or customs. Particularly in MENA, Africa and Asia-Pacific, many GRC participants make no reference to maternity and paternity leave within their funding conditions, assuming RPOs will have their own policies.

¹⁷ SRC Strategy for Gender Equality www.vr.se/download/18.70a7940b146b8f937949f953/1403793852159/Strategy+Gender+Equality+SRC+2014.pdf

¹⁸ DFG Research-Oriented Standards on Gender Equality www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/research_oriented/index.html

¹⁹ ARC Gender Equality Statement www.arc.gov.au/gender-equality-research-statement

²⁰ Gender Equality Policies in Public Research, European Commission, 2013 http://ec.europa.eu/research/pdf/199627_2014%202971_rtd_report.pdf

²¹ RCUK Diversity in Public Appointments www.rcuk.ac.uk/RCUK-prod/assets/documents/skills/OutcomeofRCUKDiversityinPublicAppointments2014.pdf

²² European Commission, 2013 *ibid*

²³ SFI 2015 Annual Review www.sfi.ie/assets/files/downloads/Publications/Organisation%20Publications/2015%20Annual%20Review%20of%20Agenda%202020.pdf

²⁴ Research Councils UK unconscious bias training programme <http://www.rcuk.ac.uk/media/news/151123/>

²⁵ SRC, A gender neutral process – A qualitative study of the evaluation of research grant applications 2014 www.festa-europa.eu/public/swedish-report-gender-neutral-process-qualitative-study-evaluation-research-grant-application

There are a few examples of policies relating to flexible working practices beyond legal requirements. The National Organisation for Scientific Research (NWO), in the Netherlands have extended their time limits for pregnancy and maternity leave. DFG, Germany have an additional funding scheme for grant holders to improve family-friendly provision²⁶, particularly for female researchers. The National Sciences and Engineering Research Council (NSERC), Canada include provision to extend funding for family leave²⁷. The SERB, India have extended the eligibility for its starter grant by five years for female researchers. Although not formal policies, some GRC participants in MENA and Asia-Pacific noted informal working practices reflecting local or national customs, such as informal flexible working.

Few GRC participants require grant proposals to provide information on the gender composition of the research teams when applying for funding. SFI, Ireland are an example of a GRC participant requiring comprehensive data on project outcomes, including data on gender. NSERC, Canada are modifying their evaluation criteria for their fellowship schemes to take into account more broader activities in recognising research excellence, which is likely to be more advantageous for female researchers.

There are three notable initiatives that provide funding to catalyse cultural change in RPOs and create more inclusive research environments. These are: the National Science Foundation (NSF), USA ADVANCE programme²⁸; the EU-funded INTEGER project²⁹; and the UK Athena Swan charter³⁰. The Athena Swan charter is being implemented by SFI, Ireland and piloted in Australia as 'SAGE'³¹. DFG, Germany is encouraging cultural change in RPOs through the development of a Toolbox³² containing quality-assured examples of gender equality measures in German RPOs.

GRC participants' use of gender specific funding schemes varies considerably, to some extent influenced by the strength of national legislation on non-discrimination. Some GRC participants are legally prevented from having gender specific programmes or use quotas. Others find it culturally unacceptable and prefer a more inclusive approach: these include RCUK, UK and SRC, Sweden. Conversely, other countries have positive action legislation and/or have specific schemes to encourage participation of female researchers at different levels of experience. Examples are: NWO, Netherlands³³; African Women in Agricultural Research and Development, (AWARD) Kenya³⁴; and the National Science and Technology Council (NSTC), Zambia³⁵. A few GRC participants have funding schemes to encourage women to return to research following career breaks. Examples include the Swiss National Science Foundation (SNSF), Switzerland³⁶ and the Indian Council of Medical Research (ICMR), India³⁷.

GRC participants provide a range of activities to support female researchers, such as: mentoring schemes, professional development, workshops and seminars. Examples include specific support for female researchers applying for H2020 funding by the Scientific and Technological Research Council of Turkey (Tubitak); coaching workshops for female researchers by the Austrian Science Fund (FWF)³⁸; an Estonian Research Council (EstRC) seminar on the gender dimension in research³⁹; and a Global Women in Science workshop by the Qatar National Research Fund (QNRF)⁴⁰.

²⁶ DFG family leave policies http://dfg.de/en/research_funding/principles_dfg_funding/legal_aspects/index.html

²⁷ NSERC Family and Medical Leave www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-politiques/Wleave-Fconges_eng.asp

²⁸ National Science Foundation (NSF) ADVANCE: Increasing the participation and advancement of women in academic science and engineering careers. http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383

²⁹ Institutional Transformation for Effecting Gender Equality (INTEGER) www.integer-tools-for-action.eu/en/institutional-page/about-the-integer-project

³⁰ Athena Swan charter www.ecu.ac.uk/equality-charters/athena-swan/

³¹ Science in Australia Gender Equity (SAGE), 2015 www.sciencegenderequity.org.au/science-in-australia-gender-equity-sage-pilot-2015/

³² DFG Gender Equality in Research and Academia Toolbox www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/toolbox/index.html

³³ NWO Aspasia www.nwo.nl/en/funding/our-funding-instruments/nwo/aspasia/aspasia.html

³⁴ AWARD Career Development Programme www.awardfellowships.org

³⁵ Zambia Science and Technology Act www.nstc.org.zm/?page_id=534

³⁶ SNSF Marie Heim-Vögtlin (MHV) grants www.snf.ch/en/funding/careers/mhv-grants/Pages/default.aspx

³⁷ ICMR Human resource development for health research www.icmr.nic.in/

³⁸ FWF Coaching Workshops www.fwf.ac.at/de/forschungsfoerderung/info-veranstaltungen/coaching-workshops/

³⁹ Estonia Research Council seminar on the gender dimension in research, 2015 www.etag.ee/en/uritus/international-capacity-building-workshop-for-researchers-25-26-08-2015

GRC participants are aware of the value of collecting data on gender balance on applications and success rates in funding. How that data is collected, however, ranges from systematic, comprehensive data collection on an annual basis through to more occasional review. The few GRC participants who do not collect gender-related data in some way tend to be new organisations and focused on building research capacity within the country.

The majority of GRC participants analyse both applications and success rates for female researchers by funding scheme and by disciplines. Some GRC participants also compare the percentage of female applicants to the proportion of female researchers in the academic population. A few have looked into the proportion of female applications from different disciplines (RCUK, UK).

Whether GRC participants publish gender data will depend on whether gender equality is a key priority. It is more common in Europe and North America for GRC participants to regularly publish gender statistics (NSF, USA⁴¹; FWF, Austria⁴², and DFG, Germany⁴³). Science Europe have a Gender and Diversity Working Group⁴⁴ that is exploring the key indicators for gender equality.

The systematic collection of data on destinations or career paths of researchers, including female researchers, is not common. There are few examples of comprehensive data collection and analysis. The NSF, USA have a comprehensive dataset on the science, engineering and technology (SET) population⁴⁵ that includes data on women, minorities and persons with disabilities. NWO, Netherlands have an established tracking project, whereas SNSF, Switzerland produced a one off tracking report⁴⁶ examining the specific effects and causes of the decline of women along the research career path.

41 NSF Merit review Process 2013 www.nsf.gov/pubs/2014/nsf14127/nsf14127.pdf

42 FWF Funding Statistics www.fwf.ac.at/en/about-the-fwf/funding-statistics/

43 DFG Monitoring Equal Opportunity www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/monitoring_equal_opportunity/index.jsp

44 Science Europe Working Group on Gender and Diversity www.scienceeurope.org/policy/working-groups/gender-diversity

45 NSF SET data www.nsf.gov/statistics/2015/nsf15311/digest/theme7.cfm#federal

46 SNSF Gender and Research Funding, 2008 www.snf.ch/SiteCollectionDocuments/wom_ber_gefo_synthesis_report_e.pdf

47 FWF Gender Issues www.fwf.ac.at/en/about-the-fwf/gender-issues/

48 DFG Promoting Equal Opportunity www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/index.html

49 ARC Gender Equality in research www.arc.gov.au/gender-equality-in-research

50 JST Women of science www.jst.go.jp/diversity/rolemodel/index.html

51 MICITT Science and Gender www.micit.go.cr/index.php?option=com_content&view=article&id=610&Itemid=916

52 Quality Research and Innovation through Equality <https://gender-summit.com/>

53 Helsinki Group on Gender in Research and Innovation <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=698>

54 L'Oréal-UNESCO Award Women in Science www.unesco.org/new/en/natural-sciences/priority-areas/gender-and-science/for-women-in-science-programme/

55 UNESCO-L'Oréal Rising Talent Grants www.unesco.org/new/en/natural-sciences/priority-areas/gender-and-science/for-women-in-science-programme/2015-international-rising-talents/

How GRC participants promote equality and gender on their public websites varies considerably and to some extent correlates with the importance of these issues for each participant. Not surprisingly, those GRC participants with little interest or no formal policies give considerably less promotion to equality and gender on their websites

For some GRC participants with strong interest in gender equality and clear policies, however, this interest was not always prominent and well presented on their website. The most effective websites have a specific web section that draws together all activities relating to gender. Examples include: FWF, Austria⁴⁷; DFG, Germany⁴⁸ and ARC, Australia⁴⁹.

There is general acknowledgement of the importance of promoting women in research. Examples of GRC participants who profile female researchers on their websites are JST, Japan⁵⁰ and the Ministerio de Ciencia, Tecnológica y Telecomunicaciones (MICITT), Costa Rica⁵¹. However, there is little evidence of wider communication strategies to capitalise on this powerful resource. Several GRC participants noted that they are limited by the relatively small numbers of female role models.

Many GRC participants are connected to national or international gender networks, such as the GENDER Summit⁵², which has a strong profile in all regions.

European GRC participants commonly mentioned GENDER-NET and the Helsinki Group on Gender in Research and Innovation⁵³, which include representatives from EU Member States and Associated Countries. Many GRC participants promote schemes such as the L'Oréal-UNESCO Award Women in Science⁵⁴, which recognise outstanding women researchers in each of the five GRC regions. They also mentioned the UNESCO-L'Oréal Rising Talent Grants awards⁵⁵ that provides two-year international fellowships for early career female researchers.

Incorporating the gender dimension into research has become a recent topic of interest. GRC participants in Europe are most likely to be exploring this topic, which has been incorporated into the conditions for H2020 funding⁵⁶. Many European GRC participants are in the process of developing specific policies in the area, for example Centre national de la recherche scientifique (CNRS) France⁵⁷. NSF, USA and the Mexican National Council of Science and Technology (CONACYT), Mexico are two examples in the Americas where gendered research is specifically incorporated into funding requirements. Some GRC participants highlighted the Gendered Innovations project⁵⁸ at Stanford University as having helpful information in developing their policies. A few GRC participants noted that peer reviewers will implicitly consider the gender dimension in assessing whether research is excellent.

Other aspects of equality and diversity 3.6

For most GRC participants gender is their sole consideration of diversity. Predominately GRC participants refer to gender as a binary concept with no reference to the range of gender identities.

Other aspects of diversity are only considered where there are corresponding national policies or initiatives, such as indigenous or aboriginal populations, or race. Examples of wider approaches to diversity are: NSF, USA⁵⁹; CONACYT, Mexico⁶⁰; ARC, Australia⁶¹; and the Ministry of Business, Innovation and Employment (MBIE), New Zealand⁶². RCUK have incorporated UK legislation into their equality and diversity policy statement⁶³. This includes nine protected characteristics: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

Limited examples of activities relating to disability can be found, but very little on hidden disabilities, such as, mental health. A few GRC participants consider compound discrimination, such as the NSF, USA who are concerned about 'women of colour'. The issue of refugees is of increasing interest in Europe⁶⁴.

All GRC participants interviewed recognise the importance of equality and diversity in research. However, the five GRC regions are quite different in their profile, cultures and level of interest in gender equality and diversity. There is a strong correlation between whether gender is a national priority and the importance for GRC participants. The nature of GRC participants' policies and interventions are strongly influenced by the status of women in society. This is particularly apparent in MENA and to some extent in Central and South America.

The type of equality and diversity activity is related also to the maturity of the national research systems. This ranges from sophisticated and comprehensive approaches in well-developed research systems, through to a basic need to attract more people into research, including women, in less developed research systems.

GRC participants' diversity agendas are dominated by gender. Much of the activity is focused on providing equality of opportunity with few initiatives on the status of female researchers. The very few examples of initiatives on other aspects of diversity correspond with national interest in other disadvantaged groups.

GRC participants are in a powerful position to stimulate cultural change within the research environment. They could use their terms and conditions for grant and fellowships funding to influence RPOs' practice and behaviours. This could be by providing incentives through additional funding for gender related activities. It could be by introducing diversity requirements, such as requiring applicants to provide specific family-friendly conditions as a pre-condition of funding.

Given the diverse nature of the regions and countries, and that only a sample of GRC participants were interviewed, it is not possible to draw robust comparisons between regions and countries. However, this survey report provides an overview of the type and range of provision of GRC participants across the world.

It reveals a richness of approaches and examples of practice that can inform all GRC participants' policies and practice. Overall, it provides a 'soft' benchmark against which future progress could be assessed in three to five years through a similar qualitative study

⁵⁶ Regulation 1291/2013 establishing Horizon 2020: the European Framework Programme for Research and Innovation (2014-2020) http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/fp/h2020-eu-establacl_en.pdf

⁵⁷ CNRS The Mission for the Place of Women www.cnrs.fr/mpdf/?lang=en

⁵⁸ Gendered Innovations, Stanford University <http://genderedinnovations.stanford.edu/terms/dimension.html>

⁵⁹ NSF Broadening participation of under-represented groups www.nsf.gov/od/broadeningparticipation/Summary_PathwaysToBroadeningParticipationInResponseToCEOSE2011-2012Recommendation_Nov2014.pdf

⁶⁰ CONACYT Support for mothers as heads of family www.conacyt.mx/index.php/becas-y-posgrados/apoyo-a-madres-jefas-de-familia

⁶¹ ARC Discovery Indigenous www.arc.gov.au/discovery-indigenous

⁶² MBIE Vision Mātauranga www.mbie.govt.nz/info-services/science-innovation/unlocking-maori-potential

⁶³ RCUK Equality and Diversity Policy www.rcuk.ac.uk/RCUK-prod/assets/documents/terms/EqualityandDiversityPolicy.pdf

⁶⁴ EU Science4refugees <http://ec.europa.eu/euraxess/index.cfm/jobs/science4refugees>

The following recommendations are ways in which GRC participants can achieve the 2014 recommended action that ‘GRC participants should advance equal opportunity in research and develop mechanisms that encourage people from all backgrounds to pursue scholarly and scientific careers, contributing to research excellence’.

Recommendation 1 All GRC participants should publish a policy statement on diversity and gender equality.

This policy statement should clearly set out the overall policy direction and principles relating to equality and diversity, taking into account the local societal context. GRC participants could include their expectations of RPOs and individuals in receipt of their funding. It could include how they will track and evaluate progress against their principles. In creating their policy statements, GRC participants should consider how their policies and actions will contribute to achieving an inclusive research environment for all.

Recommendation 2 GRC participants should consider collectively agreeing a set of key indicators and monitoring them regularly to assess progress in gender equality.

These key indicators should reflect GRC participants’ diverse engagement and commitment to gender equality and accommodate the different national priorities and societal drivers.

Examples of potential indicators of progress could be:

- Publication of a diversity or gender equality statement / gender equality plan
- Dedicated section of the website for equality and diversity / gender, drawing together relevant policies, practice and promotion of female researchers
- Formal targets for the composition of governing boards and peer review panels
- Systematic briefing / training on unconscious bias for staff and peer review panels
- Gender equality requirements specifically incorporated into funding terms and conditions, such as:
 - family-friendly policies, enhanced maternity provision, paternity leave, and flexible working
 - data on the gender composition of research teams, etc.
 - attention to the gender dimension in research
 - policies to attract more women into research

- funding schemes to support gender equality at all stages of the research career
- programmes to catalyse cultural change in the research environment within RPOs
- programme of activities to support female researchers, such as mentoring schemes, professional development, workshops and seminars
- regular publication of data on applications and success rates by gender, discipline, and funding scheme/career stage, compared to the related academic population
- tracking and publication of data on career paths of researchers
- inclusion of other aspects of diversity within policy and strategies.

Recommendation 3 GRC participants should commit to sharing good practice relating to diversity and gender equality.

Among GRC participants there is a significant range of excellent examples of good practice across all aspects of policy and practice that illustrate how GRC participants can make an active contribution to achieving gender equality in research. GRC participants should consider ways in which they can share this good practice to learn from the excellent work that has been done and how this could be implemented or adapted within different national contexts.

GRC participants that have made significant progress on gender equality could consider acting as mentors to GRC participants who are on a similar journey. Working groups could be set up on specific topics of interest to share experiences. It would be particularly useful to share practice and experiences in emerging aspects of gender equality, for example, the development of GEPs, unconscious bias training or considering the gender dimension in research.

Recommendation 4 GRC participants should consider establishing a working group to explore further how they can be leading actors in driving cultural change within the research system.

Achieving gender equality within the research environment will require systemic change if it is to provide equality of opportunity, not only for female researchers but, for all individuals irrespective of their personal circumstances. A few GRC participants, notably NSF, USA (ADVANCE) have schemes that are aimed at achieving cultural change in RPOs. A working group could consider the key characteristics of the effectiveness of these schemes and their broader applicability in different local and regional environments.

Recommendation 5 GRC participants should consider sharing their data on equality and diversity.

All GRC participants appear to collect a range of data associated with applications and success rates in funding schemes. Where it is not already done, this data should be published regularly by GRC participants. Additionally, GRC participants should collectively agree a data specification that enables benchmarking and comparison of applications and success rates by gender. This could include data on the demographic profile of national academic communities, recognising the diversity of academic career structures across and within regions. GRC participants should also consider regular data collection or tracking studies on the career paths of researchers, including female researchers.

Recommendation 6 GRC participants should consider funding strategies and policies designed to influence gender diversity and the gender dimension of research.

GRC participants have considerable power to change the behaviours of RPOs and the research community through the terms and conditions of their funding schemes. Few GRC participants are using this power to stimulate changes in behaviour or culture.

GRC participants could promote cultural change by embedding diversity requirements within their funding requirements. This could be the requirement of particular employment conditions, or consideration of the gender dimension within the research. GRC participants could lead the way in providing family-friendly policies and associated funding within their funding schemes that exceed national legal provision. They could monitor progress and measure the impact within the project and on the research community more broadly.

Recommendation 7 GRC participants should consider whether funding or development programmes targeted towards female researchers are appropriate within their national context.

Female specific programmes and activities can be a prominent and powerful way to promote the importance of gender equality. GRC participants could consider strategies to direct funding preferentially towards female researchers or particular sub-groups, within their national context. This could be, for example, targeting female researchers at different career stages or returning after a career break. GRC participants could provide support for mentoring, training or development programmes to support female career progression.

Recommendation 8 GRC participants should consider improving the public prominence their organisation gives to gender equality.

GRC participants should consider drawing together all their policies and activities relating to diversity and gender equality within a dedicated section of their website. They should present a clear statement of how important this agenda is for the overall health of the research system. GRC participants should promote female role models within their funding schemes and their own organisation to raise the status of female researchers thereby increasing female researchers' aspirations and inspiring more women to become researchers. GRC participants should profile the importance of diversity and gender equality within their annual reports and other publications, and as an integral part of their communications to the research community and society generally.

4 Americas



Summary

4.1

The region as a whole demonstrated significant interest in gender equality, but how that manifests within GRC participants' policies and practices differed enormously between north and south. Due to these considerable differences this chapter considers North America separately from Central and Southern America.

GRC participants in North America have strong rhetoric and policy around gender and under-represented groups, particularly in the USA. In Central and South America GRC participants' interest is linked broadly to the status of women in society and the level of national interest in gender equality. Much of the focus is on attracting women into research

The NSF, USA is one of few GRC participants that take a wider view of diversity including race and disability. They have an ambitious programme to encourage cultural change in RPOs. The NSF, USA is introducing unconscious bias training for peer reviewers.

GRC participants in the Americas generally collect statistics on applications and success rates by gender, with some publishing good data by programme and level of experience, notably the NSF, USA. There are examples of female researchers achieving higher success rates than male researchers in this region.

There is growing interest in the gender dimension in research promoted by the work of the Gendered Innovations programme at Stanford University, with a few GRC participants incorporating this into their funding requirements.

The GRC participants in North America provide strong evidence of specific policies integrating gender equality into their practices. The NSF, USA and the NSERC, Canada have clear gender policies in terms of work force strategy and peer review panels. Both organisations have embedded advisory groups on equality and diversity, e.g. the Tri-Agency Gender Equity Working Group in Canada and the Committee on Equal Opportunities in Science and Engineering (CEOSE)⁶⁵ at the NSF, USA.

Both these organisations have clear family-friendly and maternity policies, with the NSF incorporating family-friendly policies into their early career funding programmes⁶⁶. The NSF Faculty Early Career Development Awards (CAREER) and their postdoctoral fellowship programmes explicitly outline policies to allow grant extensions, funds to pay for temporary technical assistance in the research lab, and paid leave from research for family care needs.

NSERC, Canada provide generous terms for researchers to take family-related leave or medical leave⁶⁷. Researchers are able to add up to two years of additional funding, extend the period for using funds by up to two years, or deferring submission of a renewal application

Although these organisations have flexible working policies for their own staff, there was no evidence of encouraging the availability of flexible working within RPOs through funding terms and conditions.

The NSF, USA have taken an interesting approach to encouraging gender equality in research by setting up the ADVANCE⁶⁸ programme in 2001. This is to encourage culture change in RPOs through institutional transformation grants. These are prestigious grants and highly sought after by USA institutions. The European H2020 funding for INTEGER⁶⁹ is modelled on the ADVANCE programme.

NSERC, Canada are modifying their evaluation criteria for their postgraduate and postdoctoral funding programmes so that leadership, mentorship, public outreach activities and community service are recognised as indicators of the 'excellence of the researcher'. This should be more advantageous for female researchers, who are more likely to engage in

these broader activities. This still requires peer reviewers, however, to recognise these wider contributions and take them into account in practice

The NSF, USA collect extensive data on the composition of the USA academic workforce and have a long standing survey on the careers of doctoral holders. This data includes statistical breakdown by under-represented groups including women⁷⁰. In the USA women in full-time full professorships has doubled since 1993, but still only occupy about a quarter of these senior faculty positions. The NSF, USA are currently piloting a survey of postdoctoral researchers.

Incorporating the gender dimension into research is of growing interest, with several GRC participants in the Americas and Europe mentioning the work of the Gendered Innovations programme at Stanford University⁷¹ (funded by the NSF, USA and the EC). NSERC have the aim to incorporate gender analysis in the research content of applications for all relevant programmes. They have so far reviewed existing good practices and literature.

In NSF, USA they use the term 'broadening participation' to encapsulate their equality and diversity work. Specifically, this is defined as being women, African Americans, Hispanic Americans, Native Americans and persons with disabilities. NSF are interested also in 'women of colour' who are particularly under-represented in research and subject to compound discrimination.

Central and Southern America

4.3

In Central and South America the level of interest in gender equality in research amongst GRC participants tends to reflect the importance of achieving gender equality within society. In some countries, particularly within Central America, the status of women is low and government interest is in eliminating basic discrimination and violence against women.

Compared to North America, gender equality is less likely to be embedded within GRC participants' policies. The Mexico Government have a cross-cutting strategy on gender equality as part of its National Development Plan, which has been translated by the CONACYT, Mexico into a specific programme for science, technology and innovation. They are one of the few examples of GRC participants specifically incorporating the gender dimension into research as a requirement for funding proposals.

Gender equality is also a key objective of the MICITT, Costa Rica

⁶⁵ The Committee on Equal Opportunities in Science and Engineering (CEOSE) www.nsf.gov/od/broadeningparticipation/Summary_PathwaysToBroadeningParticipationInResponseToCEOSE2011-2012Recommendation_Nov2014.pdf

⁶⁶ NSF Career-Life Balance Initiative www.nsf.gov/career-life-balance

⁶⁷ NSERC Family and Medical Leave www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-politiques/Wleave-Fcongeng.asp

⁶⁸ ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383

⁶⁹ Institutional Transformation for Effecting Gender Equality (INTEGER) www.integer-tools-for-action.eu/en/institutional-page/about-the-integer-project

The issue of the gender pay gap came through as a theme for several GRC participants in Central and South America. Women in society have traditionally had low status and are seen as responsible for child-rearing. Any income has been seen as supplementary to the main family earner. One GRC participant noted occupational differences within academia, with women more likely to have undergraduate teaching responsibilities, while men are more likely to be responsible for research and postgraduate education.

There is a tendency in some countries to see family-friendly policies only as maternity leave, particularly where raising children is traditionally a woman's role. Parental leave is being introduced, but this mostly follows national legislation. The concept of dual parenting is relatively new, hence the lack of policies to support this. There is little policy relating to flexible or part-time working. Several GRC participants commented that women have opted to move away from the more demanding research careers purely for logistical reasons.

In South America, both the National Scientific and Technical Research Council (CONICET) in Argentina and the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) in Brazil, respectively, allow three and four month extensions of scholarships for maternity leave. FAPESP, Brazil conditions also include adoption by single males and homosexual couples⁷². CONACYT, Mexico offer a one year extension of grant for maternity.

There were very few policy initiatives found in this part of the region relating to ensuring gender equality within funding application processes. However, awareness of the need for balanced representation on boards and peer review panels was high. GRC participants recognise the importance of the composition of their peer review panels and the need for gender balance. GRC participants generally collect statistics on applications and success rates by gender. However, these are not necessarily published on a regular basis. Participation of female researchers in funding calls is generally lower than for male researchers. Where female success rates are the same or higher than for male researchers (FAPESP, Brazil; CONACYT, Mexico), there is inevitably less concern about ensuring balanced panels.

Training and development relating to gender issues is sporadic, although there are some good examples. MICITT, Costa Rica run an annual workshop for women in science and technology. They also run workshops work with several RPOs where female researchers can share their experiences of working in science and technology. MICITT also have a small scheme to fund activities for female researchers. CONACYT, Mexico have a scholarship scheme for indigenous women to undertake postgraduate studies, which includes English language tuition; there is a similar scheme for men. They also have a scholarship scheme for single mothers who are 'heads of family'.

There are some Central and South American participants who highlight role models on their websites, but these are relatively low numbers. One GRC participant highlighted the difficulties in finding these role models, noting that there is a real lack of female role models who balance family with working life. MICITT, Costa Rica have a selection of female role models on the science and gender section of their website⁷³.

GRC participants are all aware that the proportions of female researchers decline as they progress along the academic pathway. FAPESP noted that this is less acute in Brazil. One participant noted that men tended to be married with families at senior levels in academia, while women at this level tended not to be. Two GRC participants noted that there was anecdotal evidence that promotion for female researchers took more time than for men. South American GRC participants highlighted the significant fall in female participation from undergraduate level to postgraduate researcher.

There is little data on the career progression of researchers. CONACYT, Mexico being the exception. They collect comprehensive career data on their total researcher community, including postdoctoral researchers working abroad. This is updated and evaluated every three years.

⁷⁰ www.nsf.gov/statistics/2015/nsf15311/digest/theme7.cfm#federal

⁷¹ Gendered Innovations in Science, Health & Medicine, Engineering, and Environment <https://genderedinnovations.stanford.edu/>

⁷² www.fapesp.br/9593

⁷³ MICITT Science and Gender www.micitt.go.cr/index.php?option=com_content&view=article&id=610&Itemid=916

5 Europe



Summary

5.1

Achieving gender equality has a high profile in Europe, more so than in other regions, and there is a wealth of good practice examples. There is still considerable variation between countries, however, with more established programmes in Northern and Western European countries compared to the rest of Europe. This difference broadly reflects how well gender awareness is entrenched in society.

The maturity of interest in gender equality in this region is such that it is likely to be embedded in policy statements. As a result there is a good public visibility of gender related activities within the region.

Most GRC participants in this region will have an equality and diversity objective as part of their strategy or have an equality and diversity statement. Increasingly many GRC participants have gender equality plans

There is significant evidence of GRC participants taking steps to improve the composition of peer review panels. Many have introduced gender balance quotas and unconscious bias training for peer reviewers.

Family-friendly policies including maternity and paternity leave are evident, although they still tend to follow national norms with only a few offering enhanced conditions.

There are strong examples of funding schemes to support female researchers, including re-entry schemes. There are a number of examples of mentoring schemes, networks for female researchers, as well as promotion of female researcher role models.

GRC participants are often engaged with gender networks and groups both nationally and across Europe, such as GENDER-NET⁷⁴ and the Helsinki Group⁷⁵ incorporating both RPOs and research funders.

⁷⁴ GENDER-NET www.gender-net.eu/

⁷⁵ Helsinki Group on Gender in Research and Innovation
<http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=698>

Data tracking of gender applications and success rates is prevalent and accepted practice in this region. There is an expectation that statistics will be published. There are limited examples of good career tracking data on researcher careers.

GRC participants recognise the importance of incorporating the gender dimension into research. Most participants are in the process of developing policy on this topic, with a few examples of embedding this within funding requirements. The EC's H2020 funding programme requires consideration of the gender dimension of research.

Key findings

5.2

Interest in gender equality is fairly longstanding in the European region, with some GRC participants having policies dating back before 2000. The level of interest and engagement with gender equality has increased recently. This is partially due to the EC having gender equality as one of its cross-cutting initiatives within responsible research and innovation (RRI) in the H2020 funding programme⁷⁶. This focuses on three objectives:

- gender equality in careers, to eliminate discrimination and providing equality of opportunity
- gender balance in decision-making, to take the views of women and men in research policy
- integration of the gender dimension in research and innovation, to ensure the biological and social characteristics of women and men are considered.

The variation in gender awareness between Northern and Western Europe in comparison with Eastern and Southern Europe broadly reflects how well gender awareness is embedded in society. It also reflects the gender balance within the academic community, which tends to be more equitable in Eastern European countries and therefore gender equality receives less attention.

There are excellent examples of robust policy statements and rhetoric in this area across the region. The majority of GRC participants have strong statements, intent and targets relating to gender.

A few countries have a mainstreamed approach to gender within society and there is less need for, or acceptance of, gender targets or female specific schemes.

⁷⁶ EU Promoting Gender Equality in Research and Innovation <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation>

⁷⁷ HR Excellence in Research Award <http://ec.europa.eu/euraxess/index.cfm/rights/strategy4Researcher>

⁷⁸ European Charter and Code of Conduct for their Recruitment <http://ec.europa.eu/euraxess/index.cfm/rights/europeanCharter>

⁷⁹ European Commission Gender Equality Plan 2014 - 2020 https://erc.europa.eu/sites/default/files/document/file/ERC_ScC_Gender_Equality_Plan_2014-2020.pdf

⁸⁰ CNRS Mission for the Place of Women www.cnrs.fr/mpdf/?lang=en

⁸¹ SNSF Gender Equality Commission www.snf.ch/en/researchinFocus/newsroom/Pages/news-140605-new-snsf-gender-equality-commission-innovative-approaches-to-equal-opportunities.aspx

Eastern European GRC participants are less likely to have public information on their gender policies, with some containing no information at all on their websites, for example the Russian Foundation for Basic Research (RFBR).

Three GRC participants have the EC's HR Excellence in Research Award⁷⁷. These are: the FWF, Austria; the Research Foundation Flanders (FWO), Belgium and the Research Council of Norway (RCN). This Award gives public recognition to RPOs and research funders that have made progress in aligning their human resource policies with the principles set out in the European Charter and Code of Conduct for their Recruitment⁷⁸. It includes principles relating to equality and diversity.

European GRC participants are setting targets to improve the diversity on their governing councils and peer review panels. Commonly, targets on peer review panels are a minimum of 40% women. This reflects the EC's recommendation⁷⁹ of a target 40%:60% balance on evaluation panels. All GRC participants recognise the importance of having diversity of representation on peer review panels. However, GRC participants with female success rates at least equal to male applicants, for example Tubitak, Turkey, are less likely to have targets for the composition of panels. GRC participants acknowledge that the limited numbers of female professors can cause practical difficulties in achieving gender composition targets and can be burdensome on female researchers.

A number of GRC participants are establishing cross-cutting committees and boards to address diversity. CNRS, France, for example, have the Mission for the Place of Women at the French National Center for Scientific Research⁸⁰. SNSF, Switzerland have a Gender Equality Commission.⁸¹

The EC expect Member States to include gender equality in their National Action Plans⁸² as part of the implementation of the European Research Area (ERA). These government commitments inform the policies of public research funders. The EC are also driving the use of gender equality plans (GEP) in RPOs through their funding calls. These GEPs include a gender audit, measures and targets to address inequality, and monitoring of progress.

These approaches signal a change in approach by the EC from 'Fixing the women' to aspiring to systemic change within RPOs. Most GRC participants, however, see the development and implementation of GEPs as the responsibility of individual RPOs.

The European Research Council (ERC) is an example of a research funder developing a GEP (2014-2020)⁸³.

Unconscious bias in decision-making is a topical issue for European GRC participants. All participants are aware of the existence of unconscious bias and the vast majority stress the importance of objective decision-making in their introductory briefings for peer review panels. Several GRC participants are actively developing policies and implementation strategies on unconscious bias. RCUK, UK and SFI, Ireland^{84,85} recently have introduced unconscious bias training for peer reviewers.

A 2013 report⁸⁶ based on a survey by the Helsinki Group on Gender in Research and Innovation identified that about half of countries within ERA have fellowship programmes for female researchers at various levels of experience

Particularly in Northern and Western Europe, GRC participants are interested in increasing the number of female researchers. Examples of initiatives include: FWO Belgium; National Research Fund (FNR), Luxembourg; CNRS, France; SNSF, Switzerland and SFI, Ireland.

Aspasia⁸⁷ at NWO, Netherlands is an example of a programme that aims to advance female researchers into senior positions. The Marie Heim Award⁸⁸ from SNSF, Switzerland assist women to return to research after career breaks.

The DFG, Germany Equality Measures in Research Networks⁸⁹ and the FWF Coaching Workshops for Female Applicants⁹⁰ are two of the few examples of career development training and mentoring schemes for female researchers. The DFG Gender Equality in Research and Academia Toolbox contains examples of existing gender equality measures in the German research community.

Data collection and tracking of the applications and success rates of female researchers is prevalent and accepted practice in this region. Many GRC

participants, particularly in Northern Europe, publish annual data, including disciplinary differences and by funding schemes. Examples include DFG, Germany⁹¹ and NWO, Netherlands⁹². From 2016 the EC will start to collect and publish data on gender equality. SFI, Ireland have looked into differential applications and success rates by RPOs. They also collect data on the gender composition of research teams, as well as international collaborations and research outputs.

This is the only region where there are a range of examples of tracking of researchers' careers, including female researchers. However, given the depth of interest in gender equality and researchers' careers more generally, it could be expected to see more comprehensive data sets on career paths. Examples range from an established tracking project by NWO, Netherlands to one-off studies of specific cohorts, such as the SNSF, Switzerland report⁹³. SFI, Ireland have started to collect data on the subsequent career paths of their funded researchers. RCUK have long term data on the destinations and early career paths of doctoral graduates and comprehensive data on the profile of the academic work force⁹⁴.

The importance of incorporating the gender dimension into research is well recognised with Europe and a requirement in applying for H2020 funding. The topic is currently generating a lot of interest across Europe and most GRC participants are in the process of developing policy on this topic. The EstRC, Estonia have recently delivered a workshop on gender responsible research⁹⁵. A Science Europe gender and diversity working group⁹⁶ are currently addressing the gender dimension in research.

There are very few examples of initiatives on other aspects of diversity. The UK Equality Act 2010 includes nine protected characteristics, including gender, and has led to some initiatives to support other aspects of diversity, including disabled researchers, pregnancy and maternity, race and religion. RCUK have incorporated this legislation into their equality and diversity policy statement. The EC have recently created the 'Science4Refugees'⁹⁷ initiative to help refugee researchers and asylum seekers find suitable jobs in Europe's research system

⁸² ERA Progress reports http://ec.europa.eu/research/era/eraprogress_en.htm

⁸³ European Research Council Gender Equality Plan https://erc.europa.eu/sites/default/files/document/file/ERC_ScC_Gender_Equality_Plan_2014-2020.pdf

⁸⁴ Research Councils UK unconscious bias training programme for peer reviewers and funding decision-makers www.rcuk.ac.uk/media/news/151123/

⁸⁵ Science Foundation Ireland 2015 Annual Review of Agenda 2020

www.sfi.ie/assets/files/downloads/Publications/Organisation%20Publications/2015%20Annual%20Review%20of%20Agenda%202020.pdf

⁸⁶ Gender Equality Policies in Public Research, European Commission, 2013

⁸⁷ Aspasia www.nwo.nl/en/funding/our-funding-instruments/nwo/aspasia/aspasia.html

⁸⁸ Marie Heim Award www.snf.ch/en/funding/careers/mhv-grants/Pages/default.aspx

⁸⁹ DFG Gender Equality Measures in Research Networks www.dfg.de/formulare/52_14/52_14_en.pdf

⁹⁰ FWF Coaching Workshops for Female Applicants www.fwf.ac.at/de/forschungsfoerderung/info-veranstaltungen/coaching-workshops/

⁹¹ DFG Monitoring Equal Opportunity

www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/monitoring_equal_opportunity/index.jsp

⁹² NWO Gender balance in research funding www.nwo.nl/en/policies/gender+diversity/gender+balance+in+research+funding

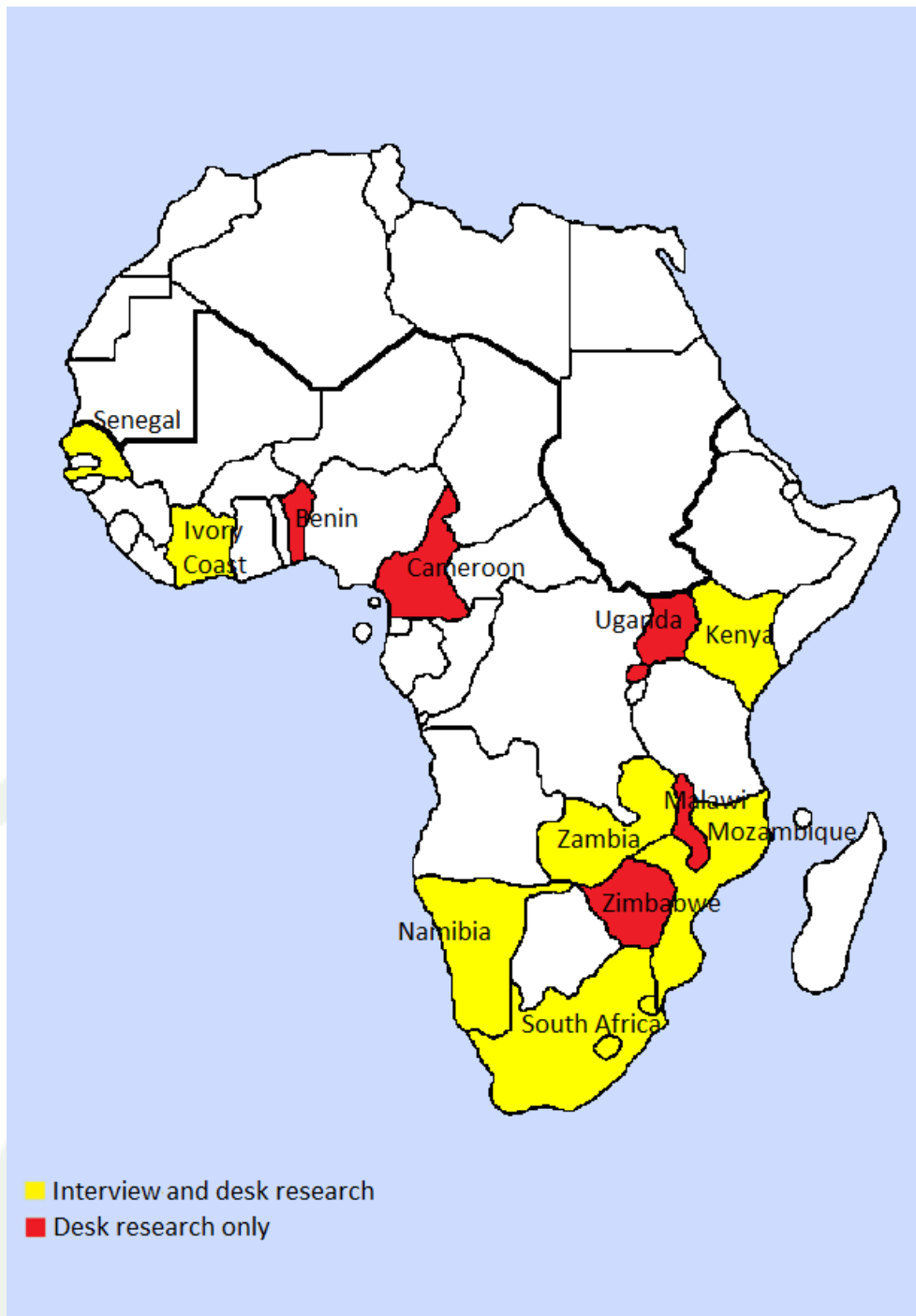
⁹³ SNSF Gender and Research Funding, 2008 www.snf.ch/SiteCollectionDocuments/wom_ber_gefo_synthesis_report_e.pdf

⁹⁵ Estonian Research Council International Capacity Building workshop for Researchers, 2015 www.etag.ee/en/uritus/international-capacity-building-workshop-for-researchers-25-26-08-2015

⁹⁶ Science Europe Working Group on Gender and Diversity www.scienceeurope.org/policy/working-groups/gender-diversity

⁹⁷ EU Science4refugees <http://ec.europa.eu/euraxess/index.cfm/jobs/science4refugees>

6 Africa



Summary

6.1

The countries in this region have wide ranging societal and economic challenges relating to achieving equality and inclusion. This includes the general status of women, preventing gender based violence, removing the gender pay gap, work-family life balance issues, preventing early child marriages, and achieving racial equality,

GRC participants in this region generally are interested in gender equality.

Although this is not as well developed in strategies and policies as in some other regions, they are taking steps towards addressing this issue. GRC participants in developing national research systems are interested predominately in developing research capacity and do not (yet) have a strong focus on gender equality. There are some examples of participants' interests in other aspects of diversity, particularly race.

All the GRC participants interviewed pay attention to aspects of gender equality, including developing gender related policies, providing gender specific funding streams and reviewing gender data.

Female representation on participants' governing boards is generally higher than in other regions with some boards having a majority of female members. GRC participants are also aware of the value of diversity on peer review panels although this is rarely backed up through policy statements.

There are few examples of gender-specific terms and conditions of funding, through a general reluctance to impose requirements on RPO's. Maternity and paternity leave and other employment conditions follow national legislation and are considered the responsibility of RPOs.

Key findings

6.2

Overall, many GRC participants' websites contain little or no evidence of gender related policies. However, GRC participants' websites are fairly basic and cultural differences in the use of websites as a promotion and communication channel may explain the lack of public presence.

The interviews with GRC participants revealed few examples of organisational statements or other policies that address gender and other diversity issues. Some GRC participants are relatively new organisations that have yet to develop an organisational statement on gender. The High Education and Research Ministry (MRS), Senegal and the National Research Fund (FNI) Mozambique both have internal organisational statements on gender.

The National Institute for Science Technology and Innovation (NISTI) in the Seychelles noted that gender equality is much less of an issue in research than in society generally. In Zambia, NSTC have responsibility for integrating gender equality across the science and technology development area. All organisations in Namibia are required to comply with affirmative action legislation, including gender.

In contrast with other regions, membership of governing bodies and senior management teams are likely to have good proportions of female representation. The National Research Foundation (NRF), South Africa; the National Commission for Research, Science and Technology (NCRST), Namibia; and the African Women in Agricultural Research and Development (AWARD), Kenya have an equal or higher proportion of women on their governing boards.

GRC participants interviewed reported proportions of female representation on peer review panels from 25% to 40%. Race is also a consideration in the composition of panels. NRF, South Africa make a concerted effort to consider race / gender/ disability and other diversity issues in the grant management processes.

NSTC, Zambia and FNI, Mozambique provide guidance to their peer review panels on the effect of unconscious gender bias in making funding decisions.

Across this region GRC participants tend not to impose conditions about working practices within their funding schemes. They expect RPOs, however, to have equality and diversity as part of their core values. RPOs are expected to have policies on the recruitment of researchers, maternity and paternity leave for researchers, and guidelines that promote flexible working or family-friendly working environments. Maternity and paternity leave for researchers are broadly defined by national legislation and RPOs tend to follow these requirements.

There are a few examples of specific funding schemes for female researchers, including the AWARD programme⁹⁸ based in Kenya. This is a pan Sub-Saharan Africa programme targeted solely at funding female researchers in agriculture. The AWARD scheme includes research skills capacity building, mentoring, career and leadership development. NRF, South Africa have a diversity programme⁹⁹ that targets a range of disadvantaged populations, including women and race.

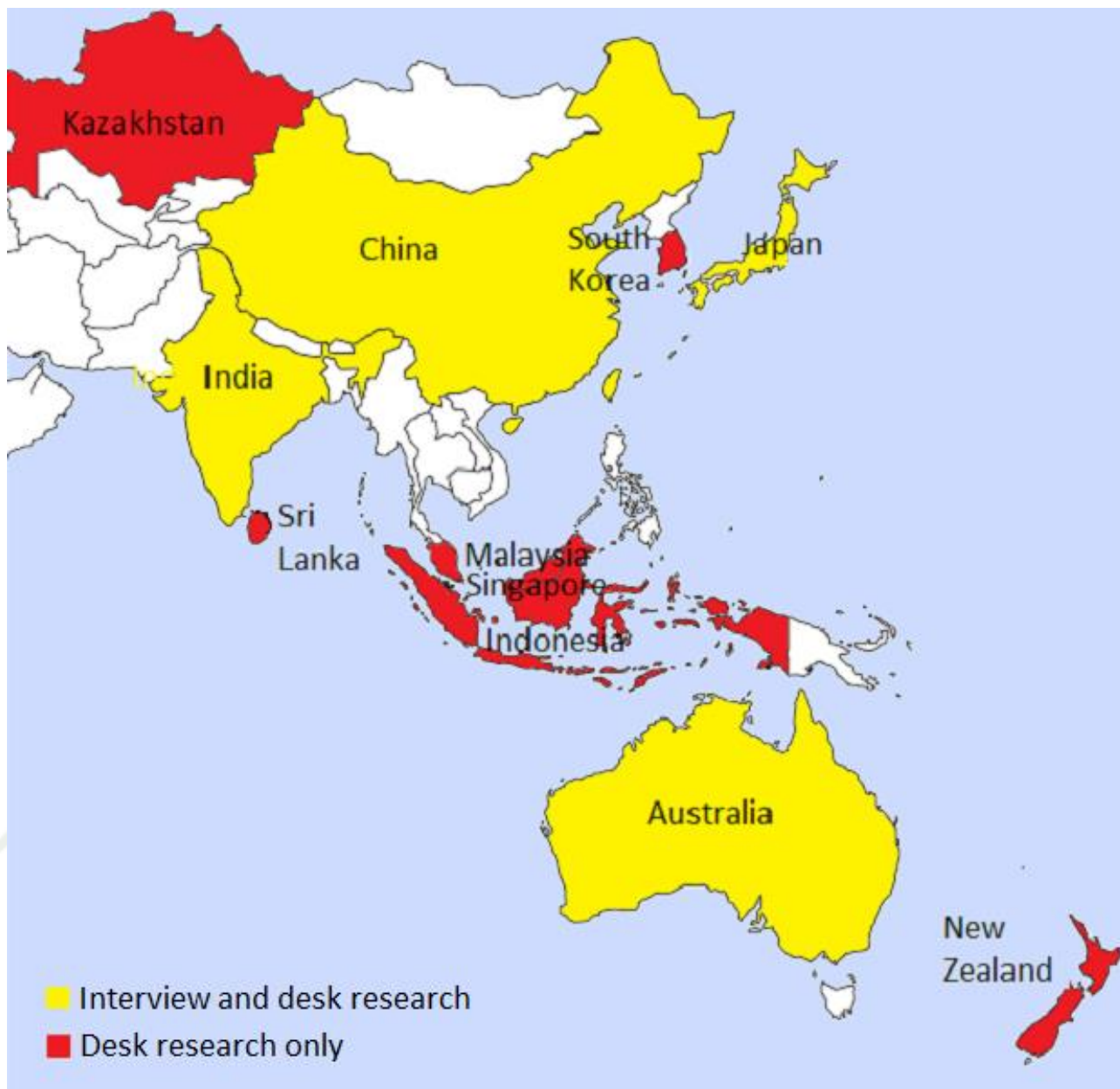
The Strategic Support Programme for Scientific Research (PASRES), Cote d'Ivoire and FNI, Mozambique have training and mentoring schemes targets at female doctoral researchers and postdoctoral researchers.

The majority of GRC participants interviewed collect and review data on applications and success rates of female researchers to some extent. National Institute for Science Technology and Innovation, Seychelles (NISTI), Seychelles record data on the proportion of women in senior academic positions and in the composition of research teams. Very few GRC participants publish gender data. An exception is the NRF, South Africa that have a sophisticated research information system that tracks the gender success rate for applicants at different career stages and levels of experience.

⁹⁸ AWARD Career Development Programme www.awardfellowships.org

⁹⁹ NRF Human Capacity Development Programmes (HCDP) www.nrf.ac.za/division/hcdp/instruments/human-capacity-development-programmes

7 Asia-Pacific



Summary

7.1

The geopolitical diversity of the region means that the national research systems are widely different in terms of their development, which translates into highly varied approaches to gender equality. This ranges from a few GRC participants with comprehensive equality and diversity programmes, to some with no public presence of gender related policies.

Although the interviews with GRC participants revealed general interest in gender equality, few displayed evidence of gender and diversity policies or processes on their websites.

ARC, Australia are a strong example of a GRC participant with a comprehensive approach to gender equality through their policies, programmes and

evaluation mechanisms. JST, Japan also have a strong public position on gender equality.

Interesting examples can be identified of GRC participants' interests in other aspects of diversity, including indigenous populations in Australia and New Zealand, and geographically disadvantaged researchers in India.

There are a few examples of female-only funding schemes and training programmes in the region. Apart from ARC, Australia and JST, Japan, there is very little evidence of published data on applications and success rates for female researchers. It is likely that GRC participants, however, do collect and review gender data for their funding schemes to some extent. There is no evidence of published data on the career paths of female researchers. Furthermore, the gender dimension in research does not appear to be a current topic of interest.

Although the interviews with GRC participants revealed a general interest in gender equality, many participants in this region have little web presence promoting their interest, policies and activities. A few GRC participants do not appear to have a website. Cultural differences in the need to develop and publish formal policies and the use of websites as a promotion and communication channel may explain the lack of public presence.

ARC, Australia and JST, Japan are two GRC participants in this region with strong public statements on their interest in equality and diversity. ARC, Australia have a new Gender Equality Action Plan¹⁰⁰, which contains strong guidance on the composition of its governing bodies and peer review panels. They aim for gender equality in the membership of peer review panels and ARC committees, including the ARC Advisory Council.

As in other regions, memberships of governing bodies and senior management teams of GRC participants are predominantly male. In 2014 all Japanese funding agencies were charged by the Government to increase the proportion of female executive board members and in managerial positions. JST, Japan have a target of 30% women by 2020: they are currently at 13%.

Despite a lack of evidence of policies, there is evidence of awareness of the importance of gender balance in terms of funding and composition on peer review panels. The Chinese Academy of Sciences (CAS), China have guidelines for all funding programmes on the female representation on panels. They expect gender equality and higher female ratios in funding applications. Similarly, JST, Japan expect attention to gender balance on review panels. ARC, Australia provide guidance to their 'College of Experts' peer review panels on the issues of gender and gender equality in their induction and pre-meeting discussions. They are planning to provide unconscious bias training for peer reviewers in 2016.

An Indian Council of Medical Research (ICMR) task force noted that there are differential success rates by gender in India. These findings still have to be translated into policy initiatives. The ICMR, India have an informal policy of achieving a minimum of 20% female representation on peer review panels.

The Chinese Government have a policy to increase the proportion of women in the professions, including

science and technology, to 35% by 2020 and have recently issued a White Paper on Gender Equality and Women's Development in China. At the national level, statistical monitoring and indicators are produced every ten years. There are also annual statistics of the status of women and children since 2008.

Across this region GRC participants tend not to consider specifying family-friendly policies within their funding programmes as part of their remit and leave RPOs to set their own policies. RPOs broadly follow national legislation for maternity and paternity leave, although there was some evidence of informal practices on flexible working. ARC, Australia reported that there is considerable variation between Australian RPOs regarding maternity and paternity leave provisions for researchers. Some RPOs provide the minimum legislated requirement, while others have excellent provision for their researchers.

ARC, Australia¹⁰¹ and ICMR, India¹⁰² have extended eligibility for grants due to career breaks. Japanese universities provide staff with very flexible hours compared to other Japanese organisations. Most large universities have day care centres and researchers with child care responsibilities can work flexibly, although there is still an expectation of long working hours. CAS, China follow government policy on working practices, but noted that they have an informal policy to be more flexible with extended (unpaid) periods for maternity leave, flexible working hours and home working. SERB, India have a start-up research grant for researchers up to 35 years old that has additional eligibility for female researchers for another five years.

There are some examples of specific funding and training schemes for female researchers. ARC Australia have a fellowship scheme¹⁰³ with an ambassadorial role to encourage women to enter and establish careers in research in Australia. They also support fellowships for female researchers from APEC economies¹⁰⁴. JST, Japan offer a web section that strongly profiles female researchers as role models.¹⁰⁵

With the exception of ARC, Australia and JST, Japan, there was very little evidence of published data on applications and success rates for female researchers. As seen in other regions, however, it is likely that GRC participants collect and review gender data to some extent for their funding schemes. For example, ICMR, India reported that they look at the level of participation of female researchers across their funding schemes; presently at around 50%. JST, Japan collect data on the ratios of women within their funded research, such as, the proportion of female researchers, principal investigators, programme officers and directors.

¹⁰⁰ ARC Gender Equality Action Plan www.arc.gov.au/arc-gender-equality-action-plan-2015-16

The gender dimension in research does not appear to be of current interest to GRC participants in this region. That is not to say, however, that they do not take this into account implicitly within their peer review evaluation process and ethical guidelines. JST, Japan noted that since the first Gender Summit in 2011 in Europe, which recognised that the gender dimension in research is important for excellent science and innovation, they are more aware of the physiological differences of gender and the impact on the outcomes of research.

As in other regions, gender is the main interest in relation to equality and diversity. There are some examples of interest in other aspects of diversity. Currently, Australia's two highest social priorities relate to Indigenous Australians, and reducing violence against women and their children. ARC, Australia have a funding scheme targeted at indigenous researchers¹⁰⁶. JST, Japan's Office for Diversity and Inclusion¹⁰⁷ highlight the importance of equality and diversity, irrespective of gender, age and nationality.

The Ministry of Business, Innovation and Employment (MBIE) New Zealand have the 'Vision Mātauranga' policy¹⁰⁸ that aims to unlock the science and innovation potential of Māori knowledge, resources and people for the benefit of New Zealand.

ICNR, India are focused on building their overall research capacity and particularly in remote areas where they consider researchers and potential researchers disadvantaged by their geographical location. They have a scheme to provide funding to RPOs and government colleges in the North East of India¹⁰⁹. They are required by the Indian Government to invest 5% of their funding to research on disability. SERB, India also have a strong interest in building research capacity in the regions, and in the caste system.

¹⁰¹ ARC Gender Equality in Research Statement, 2015 www.arc.gov.au/gender-equality-research-statement

¹⁰² ICMR Human resource development for health research www.icmr.nic.in/

¹⁰³ ARC Australian Laureate Fellowship scheme www.arc.gov.au/australian-laureate-fellowships

¹⁰⁴ APEC Women in Research Fellowships www.rmit.edu.au/about/our-education/academic-colleges/college-of-business/industry/australian-apec-study-centre/projects/australia---apec-women-in-research-fellowswww.arc.gov.au/australian-laureate-fellowshipship/

¹⁰⁵ JST Women of science www.jst.go.jp/diversity/rolemodel/index.html

¹⁰⁶ ARC Discovery Indigenous www.arc.gov.au/discovery-indigenous

¹⁰⁷ JST Office for Diversity and Inclusion www.jst.go.jp/diversity/

¹⁰⁸ MBIE Vision Mātauranga www.mbie.govt.nz/info-services/science-innovation/unlocking-maori-potential

8 Middle East and North Africa (MENA)



Summary

8.1

Across the MENA region there is great diversity in gender awareness and acknowledgement of gender issues. This reflects the patriarchal societies and cultures in many countries in this region. Overall, there is little public evidence of GRC participants' engagement in gender equality on websites. This does not mean, however, that there is no interest in gender equality in this region. Despite the underlying societal challenges, the interviews with a selection of GRC participants revealed that they are beginning to address the issues of gender equality.

The GRC participants interviewed are concerned about the low levels of women in research and their lack of progress to senior levels. Although there are few formal policies relating to gender equality, GRC participants are working to encourage more women into research and to improve the environment for female researchers.

Key findings

8.2

There are immense challenges relating to gender equality for female researchers in this region, with many countries not yet affording women equal status in society. Many countries have strong patriarchal societies and there are strong tensions between tradition and modernisation.

The status of women and attention to gender equality varies considerably by country. For example in Egypt, despite the inequalities, educated women are active at all levels of society. In Saudi Arabia all women are required to have a male guardian and gender segregation is widely practiced. More Saudi women than men are university graduates, but they constitute only 13% of the national labour force.

Overall, there is little public evidence of GRC participants' engagement in gender equality on their websites. It was also difficult to find GRC participants willing to be interviewed in this region. This does not mean, however that there is no interest in gender equality within the research environment or that female friendly modes of working are not occurring. All the GRC participants interviewed acknowledged the importance of gender equality and the challenges faced by female researchers. For example, the Iran National Science Foundation (INSF) expressed a strong commitment to enhancing gender diversity. Of particular concern is the low numbers of female researchers compared with the high level of female undergraduates. For example, in Iran less than 5% of researchers are female, while in Oman less than 2% of academics are women. In Egypt, where women represent more than one third of the scientific community, they occupy just 2% of senior positions.

Although the lack of female researchers is a common issue, GRC participants are at different stages in addressing this. INSF, Iran are focused on increasing the numbers of women embarking on a research career and are actively pursuing a positive discriminate policy towards female researchers. In comparison the QNRF, Qatar are still at an early stage in addressing how to tackle this issue.

There is limited evidence of policies or statements on equality and diversity on websites or in the interviews. A number of GRC participants identify human resources development as a priority without specific mention of gender. For example, the Kuwait Foundation for the Advancement of Science (KFAS) identify human resources as a key priority and that they will '*invest in initiatives and human resources that contribute to the building of a strong Science, Technology and Innovation (STI) system and culture a fostering and enabling environment*'. The Research Council (TRC), Oman is a rare example where gender is expressly mentioned, reflecting gender advancement as a key government priority.

There is little evidence of policy or targets relating to the composition of governing councils and peer review panels. Despite the lack of policy, the GRC participants interviewed are aware of the importance of gender balance on peer review panels. They stated that this is an important consideration in forming peer review panels within the practical challenges of having few female researchers.

One GRC participant noted that the increasing numbers of international researchers employed in RPOs have brought a greater awareness of the importance of gender equality. For example KingAbdullah University of Science and Technology (KAUST) Saudi Arabia, a university and research funder, employs 44 nationalities. There is evidence that this internationalisation of the research environment is having some influence on institutional cultures and practice with regard to equality and diversity.

There is no evidence of gender equality measures, such as family-friendly policies, gender balance in research teams or the provision of GEPs, being incorporated into the terms and conditions of funding schemes.

As in other regions maternity and paternity leave for researchers follow national legislation or practice. In Iran, for example, the funding councils and universities are all government controlled and therefore all have the same regulations with regard to recruitment, maternity and paternity leave.

While there are no formal policies to support flexible working, family is an important aspect of life in many cultures in this region. There is anecdotal evidence of flexible working happening on an informal basis allowing female researchers to balance their working and childcare needs.

The very few examples of programmes for female researchers in this region focus on attracting women into research. INSF Iran have an explicit policy of giving priority to female applicants to funding schemes.¹¹⁰ The Office of Sponsored Research at KAUST, Saudi Arabia¹¹¹ provide mentors to female researchers to help increase their success rate in funding applications.

There is no evidence of published data on the applications and success rates for female researchers. The GRC participants interviewed, however, are aware of and review the gender data for their funding schemes. There are no examples of published data on the career progression of female researchers,

¹¹⁰ INSF Recruitment of female researchers <http://en.insf.org/index.aspx?siteid=44&fkeyid=&siteid=44&pageid=9404&newsview=12739>

¹¹¹ OSR, KAUST www.kaust.edu.sa/research-support.html#rc1

Appendix 1 – Methodology and GRC participants

Methodology

This survey report was commissioned by RCUK and SERB, India to identify the extent to which there is equality in the participation and status of women in research amongst the funding agencies that participate in the GRC, and the policies they are pursuing to achieve it. The research used a mixed-methods approach of desk-based analysis and semi-structured interviews with GRC participants to identify policies and practice relating to gender and other aspects of diversity.

Desk-based research

A programme of desk-based research was undertaken reviewing the websites of 55 GRC participants to identify their public policies in relation to equality and diversity and the support of women in research. This involved taking a cross section of GRC participants across all the five regions. This included fifteen GRC participants in Asia-Pacific, seven in MENA, eleven in Africa, eight in the Americas and fourteen in Europe. Although the aim was to achieve a balance across the regions, some regions are stronger in equality and diversity practice than others. To some extent the desk research was focussed on where practice could be found.

Telephone interviews with GRC participants

A cross-selection of 29 GRC participants was interviewed to explore their policies and practice in more depth and understand their country context. The regional breakdown for interviews was eight GRC participants within Europe, six from the Americas, eight GRC participants from Africa, four from Asia-Pacific and three from MENA.

GRC participants with less-developed gender policies were more reluctant to be interviewed than those with an established approach to gender equality. Some

GRC participants had a lack of confidence in their gender equality provision and therefore were unwilling to discuss this. In both Asia-Pacific and MENA it proved challenging to find candidates who were prepared to be interviewed and difficult to identify people with responsibility for equality and diversity.

The selected interviewees were broadly balanced across the five regions and included examples to reflect different national research environments within the regions. The semi-structured interviews covered:

- an overview of the organisation and interest in gender issues
- organisational policies relating to gender, including composition of governing councils or peer review bodies
- how gender is taken into account within funding schemes, for example in terms and conditions of grants and fellowships
- availability of data by gender, for example in applications and success rates for funding schemes, and career trajectories
- specific funding or training schemes for women
- the gender content of research
- national or regional initiatives relating to women in research
- interest in other aspects of diversity
- the national context.

Gender was the main focus of the research, but GRC participants were also asked about their interest in other aspects of diversity, such as race, ethnicity, disability, and socio-economic groups. The research also considered whether there were any disciplinary differences in policies, funding schemes and data.

Case studies

Case studies were identified from the desk research and interviews in each of the five regions. These illustrate innovative or typical activities that respond to particular needs or context. The case studies are published in an accompanying document available on the GRC website at www.globalresearchcouncil.org/documents.

Appendix 2 List of acronyms

ARC – Australian Research Council, Australia

AWARD - African Women in Agricultural Research and Development, Kenya

CAS – Chinese Academy of Sciences, China

CBRST – Beninese Centre for the Scientific and Technical Research, Benin

CEFYBO - El Centro de Estudios Farmacológicos y Botánicos, Argentina

CEOSE - Committee on Equal Opportunities in Science and Engineering

CIHR – Canadian Institutes of Health Research, Canada

CNRS - Centre national de la recherche scientifique, France

COLCIENCIAS – Department of Science, Technology and Innovation, Colombia

CONACYT - Mexican National Council of Science and Technology, Mexico

CONCYTEC – National Council for Science, Technology and Technological Innovation, Peru

CONICET – National Scientific and Technical Research Council, Argentina

CSF – Czech Science Foundation, Czech Republic

CSIC – Spanish National Research Council, Spain

DFG – Deutsche Forschungsgemeinschaft, Germany

EC – European Commission, Europe

ERA – European Research Area

ERC – European Research Council, Europe

EstRC – Estonian Research Council, Estonia

EU – European Union. Europe

FAPESP – Sao Paolo Research Foundation, Brazil

FNI – National Research Fund, Mozambique

FNR – National Research Fund, Luxembourg

FST – Foundation for Science and Technology, Portugal

FWF – Austrian Science Fund, Austria

FWO – Research Foundation Flanders, Belgium

GEP – Gender Equality Plan

GRC – Global Research Council

H2020 – Horizon 2020

HERM - Higher Education and Research Ministry, Senegal

HRZZ – Croatian Science Foundation, Croatia

ICMR – Indian Council of Medical Research, India

INRC – Italian National Research Council, Italy

INSF – Iran National Science Foundation, Iran

ISF – Israel Science Foundation, Israel

JSPS – Japan Society for the Promotion of Science, Japan

JST – Japan Science and Technology Agency, Japan

KAUST – King Abdullah University of Science & Technology, Saudi Arabia

KFAS – Kuwait Foundation for the Advancement of Sciences, Kuwait

KISR – Kuwait Institute for Scientific Research, Kuwait

LIPI – Indonesian Institute of Science, Indonesia

MBIE – Ministry of Business, Innovation and Employment, New Zealand

MENA – Middle East and North Africa region

MICITT - Ministerio de Ciencia y Tecnología y Telecomunicaciones, Costa Rica

MOSR – Ministry of Scientific Research, Egypt

The GRC participants in bold were interviewed as part of the research for this project.

MRS – Higher Education and Research Ministry, Senegal
NACOSTI – National Commission for Science, Technology and Innovation, Kenya
NCRST – National Commission for Research, Science and Technology, Namibia
NISTI – National Institute for Science Technology and Innovation, Seychelles
NRCC – National Research Council of Cameroon, Cameroon
NRF – National Research Foundation, South Africa
NRFK – National Research Foundation of Korea, Korea
NRFS – National Research Foundation, Singapore
NSERC - Natural Sciences and Engineering Research Council of Canada, Canada
NSFSL – National Science Foundation, Sri Lanka
NSF – National Science Foundation, USA
NSFC – National Natural Science Foundation of China, China
NSRC – National Science and Research Council, Malaysia
NSTCR – National Science and Technology Commission, Rwanda
NSTC– National Science and Technology Council, Zambia
NWO - Netherlands Organisation for Scientific Research, Netherlands
PADRES – Strategic Support Programme for Scientific Research, Ivory Coast
QNRF – Qatar National Research Fund, Qatar
RCUK – Research Councils, UK
RCZ – Research Council, Zimbabwe
RCN – Research Council of Norway
RFBR – Russian Foundation for Basic Research, Russia
RPO – Research Performing Organisation
SERB – Science and Engineering Research Board, India
SFI – Science Foundation, Ireland
SNSF - Swiss National Science Foundation, Switzerland
SFC – Swedish Research Council, Sweden
SSHRC - Social Sciences and Humanities Research Council, Canada
STEM – Science, technology, engineering and mathematics
TUBITAK - Scientific and Technological Research Council of Turkey
TRC – The Research Council, Oman

The GRC participants in bold were interviewed as part of the research for this project.



Vitae, is an international programme led and managed by CRAC, a not-for-profit registered UK charity dedicated to active career learning and development. Working in the UK since 1968, when we ran our first project to support transitions of doctoral researchers to industry, Vitae has considerable expertise in enhancing the skills and careers of researchers.

Vitae works in partnership with UK and international higher education institutions, research organisations, funders, and national bodies to meet society's need for high-level skills and innovation.

Vitae aims to:

- Influence effective policy development and implementation relating to researcher development to build human capital
- Enhance higher education provision to train and develop researchers
- Empower researchers to make an impact in their careers
- Evidence the impact of professional and career development for researchers

Vitae and its membership programme is led and managed by CRAC: The Career Development Organisation. Further information on our activities with HEIs, researchers and employers may be found on this website,

www.vitae.ac.uk



Vitae Every Researcher Counts and Premia aim to improve equality and diversity for researchers.

Every Researcher Counts (ERC) aims to change culture and practice in research organisations by creating an inclusive research environment. ERC has resources, case studies and stakeholder briefings to support understanding of equality and diversity issues amongst those who manage and work with researchers. ERC resources cover the nine protected characteristics of the UK Equality Act, 2010: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

Premia provides an insight into the issues facing disabled researchers in the research environment. It consists of a collection of resources, case studies and advice designed to benefit disabled researchers and those supporting them.

www.vitae.ac.uk/everyresearchercounts
www.vitae.ac.uk/premia

