



Supporting Women in Research

Policies, Programs and Initiatives
Undertaken by Public Research
Funding Agencies



GLOBAL RESEARCH COUNCIL

The Global Research Council (GRC) is a virtual organization, comprised of the heads of science and engineering funding agencies from around the world, dedicated to promote the sharing of data and best practices for high-quality collaboration among funding agencies worldwide.

The worldwide growth of public support for research has presented an opportunity for countries large and small to work in concert across national borders. Cooperation and collaboration can enhance the quality of science, avoid unnecessary duplication, provide economies of scale, and address issues that can only be solved by working together. Research funding agencies have a responsibility to meet these objectives on behalf of the research communities.

The purposes of the GRC thus are sixfold:

1. To improve communication and cooperation among funding agencies;
2. To promote the sharing of data and best practices for high-quality research cooperation;
3. To provide a forum for regular meetings of the Heads of Research Councils;
4. To respond to opportunities and to address issues of common concern in the support of research and education;
5. To be a resource for those institutions wishing to build a world-class research landscape; and
6. To explore mechanisms that support the global science enterprise and the worldwide research community.

GENDER WORKING GROUP

The Gender Working Group (GWG) was formed in 2017 to champion the implementation of the 2016 Statement of Principles and Actions: Promoting the Equality and Status of Women in Research.

Accountable to the GRC Executive Support Group, GWG activities and strategic planning are guided by the two overarching considerations adopted by the 2016 Statement of Principles and Actions:

- the participation and promotion of women in the research workforce;
- and the integration of the gender dimension in research design and in the analysis of research outcomes.

The GWG is constituted by representatives of all GRC regions who are nominated and supported by their respective GRC Heads of Research Councils. Working group members act as the lead GWG champions in their respective GRC regions. The GWG may request additional expertise as necessary. Bi-annually, two co-chairs representing the Global North and the Global South are selected from amongst its membership, and are supported by their respective HORCs to lead the GWG.

Foreword

Research excellence must exist within the context of inclusivity, and yet only thirty percent of all researchers, globally, are women.

The Global Research Council (GRC) brings together national research funding agencies that aim to support excellent research and excellent researchers – regardless of, *inter alia*, their gender, ethnic origin, age, and health. However, studies continue to report lack of progression, the proverbial glass ceiling, and few women in research leadership. Recently, studies are drawing our attention the importance of considering the gender dimension of research as a means of enhancing research impact. GRC participants have a responsibility to catalyse and mobilise all talent – to ensure that all excellent researchers have equitable access to funding opportunities, and that processes and environments guarantee fair funding outcomes.

As funders of research, we have a unique opportunity to influence, advocate for and action change that addresses gender and diversity in research and innovation. This was affirmed in 2016, when the GRC endorsed the *Statement of Principles and Actions Promoting the Equality and Status of Women in Research* with the aims of increasing the participation and promotion of women in the research workforce; and considering the integration of the gender dimension in research design and in the analysis of research outcomes. In 2017, the GRC Gender Working Group (GRC GWG) was formed in order to promote the implementation of this Statement of Principles and Actions across the GRC.

This case study booklet is a significant contribution in furthering mutual learning amongst GRC members and across the sector, by showcasing actions various GRC participants are taking to further the equality and status of women in research. The actions in the book provide a view of the breadth and depth of practice from GRC participants from around the globe, and also reflect the different cultural and socio-economic contexts of each country.

As GRC members, we are custodians and advocates of the 2016 Statement of Principles and Actions. We anticipated that the case studies in this booklet will serve as inspiration, and contribute to further strengthening our individual and collective support for and discourse on gender equality and equity within our national contexts and in the global science system.

As GRC participants, we appreciate your support in the process of collating this booklet, including your contributions during the 2018 GRC Annual Meeting and Regional Meetings that followed.

We wish to express our sincere gratitude to all the members of the GRC GWG for their time and efforts on this publication, and their continued contributions to furthering the 2016 Statement of Principles and Actions.

Dr Molapo Qhobela (National Research Foundation South Africa)

Professor Andrew Thompson (UK Research and Innovation)

HORC Co-chairs, GRC Gender Working Group

THE GRC GENDER WORKING GROUP

The case studies included in this book demonstrate the ways which GRC participants have catalysed, promoted and implemented actions, informed by national socio-cultural contexts, to contribute to women's equality and equity in research. The case studies represent the diversity of GRC members, including submissions from 28 countries, actions from all regions, and are organised in alignment with the *10 Actions endorsed in 2016*. The areas of focus and types of interventions mentioned in these case studies reflect trends observed in the lead up to the endorsement of the Statement of Principles and Actions; during the GWG work, and in conversations with GRC participants during annual and regional meetings, especially in the 2018 cycle.

Most of the actions mentioned in this book aim to raise awareness and create policy frameworks (Action 1), include dedicated or strategic programmes aimed at women and encouraging female leadership (Actions 6 and 7), or flexibility due to family or caring responsibilities (Action 8).

Action 9 does not include actions, as it asks GRC members to periodically review the Statement and Actions.

The submitted case studies reveal some trends, and give us an opportunity to reflect on future areas of focus for the GRC and on Action 9 itself:

- Many funders are developing wider diversity goals that go beyond gender to include intersectionality (the interconnected nature of social categorisations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage) or target other groups – such as indigenous groups, under-represented ethnicities and those who may have been disadvantaged socially, economically or for health reasons;

- GRC members are increasingly looking at programmes of large scale institutional and culture change. By sharing the challenges faced in a shifting global, regional and national cultures, GRC participating organisations can cultivate an atmosphere of mutual sharing and learning; and
- The case studies include multiple examples of dedicated or strategic programmes mentioned in Action 7, such as advertising for female only positions, or the use of targets, quotas and caps.

GRC participating organisations are encouraged to evaluate the effectiveness of different interventions, and to share findings about what works. In this regard, the GWG will launch a short survey to collect information on the types of data gathered across GRC organisations at the 2019 Annual Meeting. The GWG will consider the need for developing consistent key evaluation questions and indicators, to contribute to building a global picture of what has worked and allow for cross-comparison.

The GWG has catalysed conversations at annual and regional meetings; and through this promoted the domestication of the 2016 statement of principles and actions. This book represents a significant highlight of the GWG, building on related conversations and extensive learnings since its formation. The GWG hopes this book sparks similar conversations amongst GRC participating organisations, and encourages further opportunities for mutual learning on a wider scale.

The GWG would like to thank all Heads of Research Councils who have championed its work, and provided advice, financial and human resources to support the GWG; GRC contributions to further the GWG work during annual and regional meetings; and all GRC participating organisations who have contributed case studies showcased herein.

Gender Working Group Composition

Africa

Senegal	Ministère Enseignement Supérieur et Recherche
South Africa	National Research Foundation (NRF) – GWG co-lead

Americas

Brazil	Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP)
Canada	Natural Sciences and Engineering Research Council (NSERC)

Asia-Pacific

New Zealand	Ministry of Business, Innovation & Employment
Sri Lanka	National Science Foundation

Europe

Europe	Science Europe
Germany	German Research Foundation (DFG)
United Kingdom	UK Research and Innovation (UKRI) – GWG co-lead

MENA

Oman	The Research Council
Saudi Arabia	King Abdulaziz City for Science and Technology (KACST)



Key Figures:

53 Actions and Case Studies

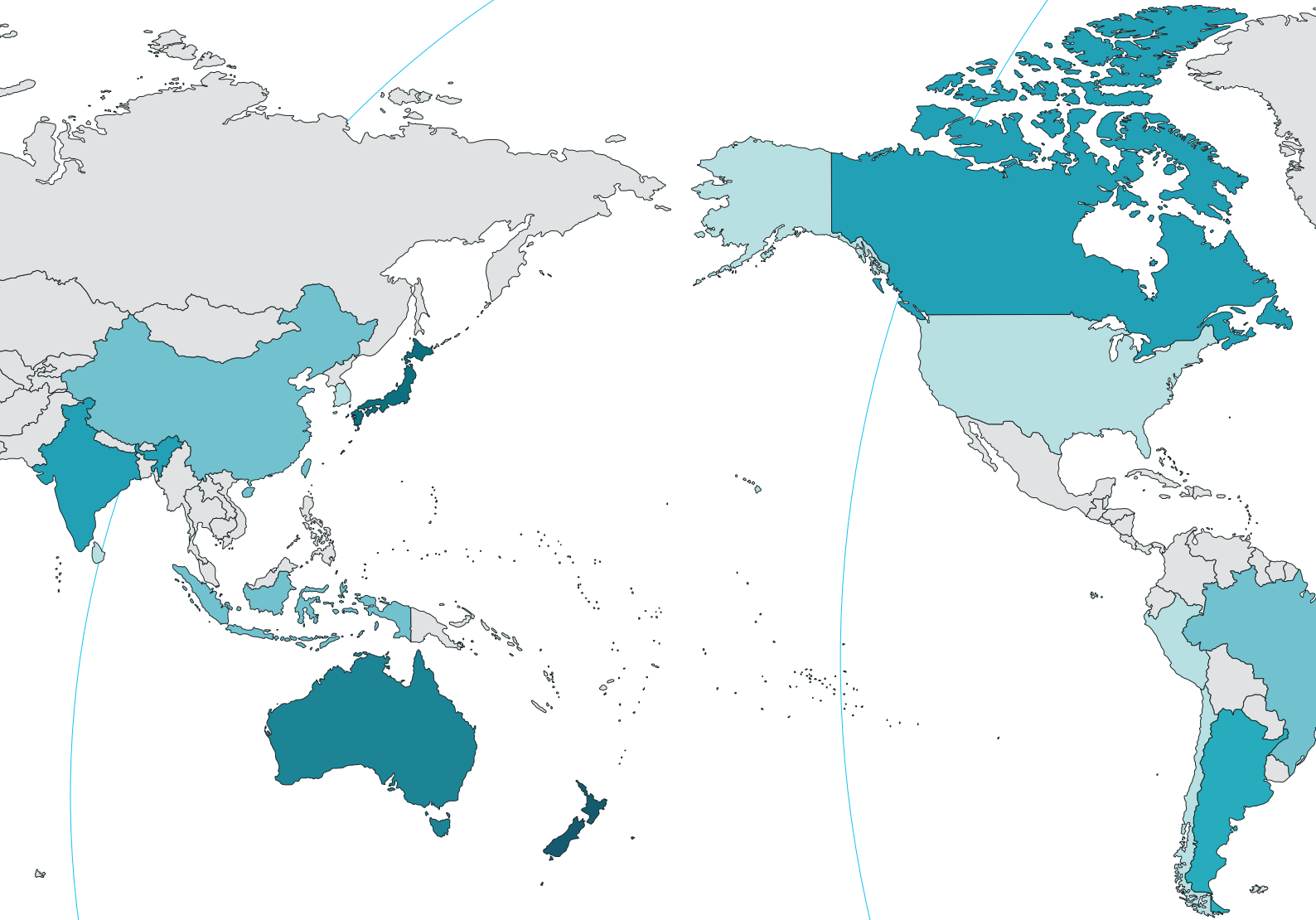
28 Countries

All 5 GRC Regions

#Case Studies



Countries Contributing Actions and Case Studies



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Statement of Principles and Actions Promoting the Equality and Status of Women in Research

PRINCIPLES

Continued global diversity in research excellence requires that all citizens have opportunities to participate in and contribute to achieving the full potential of research and innovation activities. Participants in the Global Research Council (GRC) consider that supporting gender equality is a key component of harnessing this diversity of talent, while recognising that the equality and status of women in research should be considered together with broader equality and diversity issues.

The 2014 GRC *Statement of Principles and Actions for Shaping the Future: Supporting the Next Generation of Researchers* includes the principle of “*Attracting and retaining the best talents in all their diversity*” and the 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.*”

The national environments in which GRC participants operate increasingly include expectations or requirements in relation to equality and diversity. On a national scale, policies are often focused on ensuring fair and open access for all groups in a society. In a research context this concept may be expressed as the ability to attract and retain the best talent into research.

To address the equality and the status of women in research and, in turn, change and improve systems, two aspects need to be considered:

1. The participation and promotion of women in the research workforce. This includes the longstanding dominance of certain demographics in academic culture and historical obstacles to their participation within particular disciplines and fields of research.
2. The integration of the gender dimension in research design and in the analysis of research outcomes.

GRC participants have the opportunity to lead within their own jurisdictions, remits, and in wider policy and cultural contexts. They should expect and encourage improved equality and diversity policies and practices in the research activities that they support. Through our combined commitment to research excellence and effective stewardship of public funds, GRC participants share a responsibility to encourage and support research with the greatest academic, economic and societal impact. This is achieved through the deployment of the best available talent.

These principles and actions represent the perspectives of participants in the Global Research Council 2016 Annual Meeting on how, through the development and sharing of our policies and practices, we can promote a research environment which more fully supports the equality and status of women in research. This is a living document and will evolve over time as circumstances change.



Statement of Principles and Actions Promoting the Equality and Status of Women in Research

ACTIONS

The following actions are presented as a suite of potential activities, with the intent of providing GRC participants with the opportunity to implement those actions most suitable and beneficial for their organisation and national research system. Implementation may depend not only on current policies and practices but also on national considerations. In order for progress to be made, GRC participants may seek to:

1. Engage in national discussions of policy frameworks regarding equality, diversity and the status of women to ensure recognition of these issues.
2. Collect and make available data (against consistent parameters) for comparative analysis, potentially under the auspices of the GRC.
3. Incorporate the evaluation of progress towards gender-based goals.
4. Shift the focus from the researcher “track record” to “research opportunity”.
5. Provide training on equality and diversity policies, including the recognition of unconscious bias and how it can be addressed.
6. Explore pathways for women to succeed in research and to rise in leadership in policy and decision making bodies.
7. Consider dedicated or strategic programmes, where appropriate, with the specific purpose of encouraging gender equality.
8. Promote family friendly policies and practices in relation to caregiving obligations.
9. Periodically review this Principles and Actions document.
10. Recognise the advantages of considering the gender dimension in research and encourage the development of this.

Action 1

EXAMPLES OF POLICY FRAMEWORKS, ACTION PLANS, AND AWARENESS RAISING ACTIVITIES

A large number of countries have policy frameworks at the level of research funding organisations or at the ministerial level which vary according to their country's history and priorities. The policies guide the implementation of other Actions of the Statement of Principles, such as disaggregated data collection, the setting of objectives to track the progress towards gender-based goals, and a variety of dedicated programmes to achieve those goals. Funders find different ways to raise awareness for challenges faced by women in research and communicate their policies, such as through media engagement, awards and training programmes (for training, see Action 5 of the Statement of Principles). Policy frameworks provide the context within which evidence can be gathered and compared both nationally and with international partners and are important in evaluating the success of policy implementation.



Action 1

BRAZIL: USING MASS-MEDIA TO HIGHLIGHT WOMEN'S CONTRIBUTION TO RESEARCH

The São Paulo Research Foundation (FAPESP), 'Raising Awareness on Women in Research' initiative publicises the contribution and challenges faced by women in research through magazine and online articles, TV programmes and an award ceremony.

Recently, women in research has been a topic featured in the **FAPESP Magazine**, which has 30,000 copies in its Portuguese print run per month. The publication, which also has a podcast, website, and versions in English and Spanish has covered:

- creation of a working group at the University of Campinas to consider policies to fight gender discrimination, sexual violence and sexual harassment;
- data about submissions and project approval rates for women and men at FAPESP; and
- Maternity in the Resumé – discussion of maternity's impact on scientific careers, and discussions of a Parents in Science-group of researchers. In addition to the print run, the *FAPESP Magazine* article, Maternity in the Resumé, had 7,408 views up until October 2018 and it reached over 25 thousand people via Facebook.

.....

TV show focused on 'Women in Science', gathering a group of experts to debate the contributions and challenges faced by women in research.

.....

In August 2018, a TV show focused on 'Women in Science' aired on Open Science, a 90-minute TV show produced monthly by FAPESP in partnership with Brazil's largest newspaper. The show gathered a group of experts to debate the contributions and challenges faced by women in research, and discuss good practice initiatives such as: UNESCO's STEM and Gender Advancement Programme; and others. The Open Science TV show reached more than 19,000 people. In addition, several other media channels publicised the show.

An award Ceremony for Women in Chemistry and Related Sciences

was organised in partnership with the American Chemical Society, the Brazilian Society of Chemistry, and the Chemical and Engineering News. The ceremony was held for 35 participants at FAPESP, and streamed online, to promote gender equality in STEM subjects and foster a understanding of the positive impact diversity can have in science investigations.

Further information

FAPESP Magazine:
www.revistapesquisa.fapesp.br/en/2019/01/17/unicamp-discusses-gender-discrimination-and-sexual-violence

JAPAN: INCREASING GENDER EQUALITY IN SCIENCE AND TECHNOLOGY

In 2017, the "Gender Summit 10" (GS10) took place in Tokyo. It was organised by Japan Science and Technology Agency (JST) in collaboration with Science Council of Japan and Portia Ltd.

The theme was 'Better Science and Innovation through Gender, Diversity and Inclusive Engagement'. Speakers and delegates considered ways to increase innovation by incorporating gender-equality perspectives into science and technology. Over 600 people took part from 23 different countries.

GS10 aimed to reach consensus on where improvements to science knowledge and science practice are needed and who should take action. It adopted the "Gender Summit Tokyo Recommendation: BRIDGE" declaration and the "Gender 2.0" that it contained.

Results of the GS10 discussions and their outcome are disseminated at international conferences and other events. In June 2018, a follow-up symposium was arranged to share initiatives, progress, and new developments, and was attended by 110 people. Symposia are planned annually to share initiatives following GS10 and discuss future actions – the next is scheduled for July 2019.

Further information

Gender Summit Tokyo
Recommendation – BRIDGE: www.jst.go.jp/diversity/en/GS10/message.html

Action 1

JAPAN: ENCOURAGING WORDS PROMOTING DIVERSITY

The JST has added messages of encouragement to its research proposal application guidelines. The messages were given by Michinari Hamaguchi, President of JST, and Ms Miyoko Watanabe, Head of Office for Diversity and Inclusion.

'Today, women's untapped potential is considered central to Japan's growth strategy. Increasing participation by women is important for research and development as well. Indeed, female researchers and their diverse perspectives are key to scientific and technological innovation. JST actively encourages female researchers to apply. We are continually working to improve our existing support system to help researchers who give birth, raise children or provide nursing care, carefully listening to the experiences of the researchers who have taken advantage of this system to create an environment where other researchers can always return to their work,' says President Hamaguchi.

'Our goal is to create an environment where people of every background can accomplish their best work together. As we work to create new value we particularly welcome applications from female researchers, who have been somewhat under-represented in the past. So we look forward to receiving large numbers of applications, especially from female researchers,' says Ms Watanabe.

Please note that both quotes are extracts from longer statements.

Further information

Gender Summit Tokyo Recommendation – BRIDGE: www.jst.go.jp/diversity/en/GS10/message.html

CANADA: ACTION PLAN IS ENSURING GREATER EQUITY, DIVERSITY AND INCLUSION

The Natural Sciences and Engineering Research Council of Canada (NSERC) introduced its Framework on Equity, Diversity and Inclusion (EDI) in 2015. The development of the EDI framework was in response to the Council of Canadian Academies' report, "Strengthening Canada's Research Capacity: the Gender Dimension" published in 2012, which highlighted the inequality of women researchers in Canadian universities.

The framework is an eight-point action plan that outlines the corporate-wide changes which are being made to integrate equity, diversity and inclusion into the council's policies, processes, indicators of research excellence, and evaluation criteria. It is also intended to eliminate systemic biases that could hinder equitable access by an individual or group to NSERC's funding opportunities.

Challenges remain in achieving the full participation of all researchers (e.g., researchers who identify as women, visible minorities, Indigenous peoples, LGBTQ2+ people and people with disabilities) in science and engineering careers. NSERC is committed to fully implementing the EDI framework in order to increase equity in all of its programmes and awards and also to enhance research excellence. The framework aims to ensure that NSERC's policies and programmes are inclusive of researchers from all currently underrepresented groups, and EDI considerations are embedded in research, where previously it was focused on increasing women's participation in the research ecosystem.

.....
integrating equity, diversity and inclusion into NSERC's policies, processes, indicators of research excellence and evaluation criteria
.....

Moving forward to a Tri-Agency EDI Action Plan design, implementation, monitoring and evaluation

In 2018, a tri-agency EDI Action Plan was formed that combined the priorities contained in NSERC's EDI Framework with those of the other two federal research granting agencies (Social Sciences and Humanities Research Council (SSHRC) and Canadian Institutes of Health Research (CIHR)). This Action Plan will be posted on the funding agencies' websites in 2019, and will be accompanied by implementation, monitoring and evaluation processes.

Extensive task implementing EDI and changing research culture

NSERC is continuing to address barriers to implementation, including of capacity and relating to the expansiveness of the tasks involved. The EDI framework identifies initiatives that involve changes to the research culture as well as implementing policy and programme changes agency-wide. These matters are multi-faceted – they can be viewed and experienced as questioning, and moving-on from established practices and values.

Further information

Framework on Equity, Diversity and Inclusion: www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/framework_cadre-de-reference_eng.asp

Action 1

GERMANY: COMMITTING TO GENDER EQUALITY STANDARDS IN RESEARCH

In 2008, the member institutions, mainly universities, of the German Research Foundation (DFG) adopted 'Research-Oriented Standards on Gender Equality'. By entering into this voluntary commitment, organisations defined their structural and personnel-related standards for a sustainable equality policy.

One of the structural standards stipulates that the goal of gender equality should be pursued visibly 'at all organisational levels, making it integral to a research institution's management agenda'. A key personnel-related standard is 'publicising and meeting institutional objectives for achieving true gender equality, based on differentiated data'.

Further information
DFG: www.dfg.de/en/

CÔTE D'IVOIRE: ENCOURAGING WOMEN TO TAKE UP SENIOR SCIENTIFIC ROLES

In 2007, the Strategic Support Programme for Scientific Research (PASRES) of Côte d'Ivoire introduced a gender initiative that is seeking to encourage more women to become researchers in the fields of science, technology and innovation. It also has initiatives to enable and encourage more women to achieve high-level positions in the scientific community – to redress gender imbalance.

Further information
PASRES: <http://www.csr.ch/pasres/>

NEW ZEALAND: SETTING OUT COMMITMENTS TO DIVERSITY IN SCIENCE

In 2018, New Zealand's Ministry of Business, Innovation and Employment (MBIE) published its Diversity in Science Statement which outlines short-term and long-term actions and commitment to supporting diversity.

.....
Diversity is vital for our science system to realise its full potential. A focus on diversity ensures we capture the very best ideas and talent to support the highest quality research. MBIE
.....

The Statement is significant because, as the funding body, the science community looks to MBIE for leadership – stating its commitment sends a strong message that diversity is to be taken seriously. Furthermore, MBIE will be expected to report on progress, requiring it to be transparent and accountable. Among other metrics, data about the gender, ethnicity and career stage of applicants, award holders and assessors will be gathered.

The Diversity Statement is encouraging people at universities, crown research institutes and independent research organisations to talk about the key issues, and prompting actions that result in greater diversity.

Further information
MBIE: www.mbie.govt.nz/info-services/science-innovation/agencies-policies-budget-initiatives/diversity-in-science

NEW ZEALAND: ROYAL SOCIETY TE APARANGI

Embracing diversity is identified as a cross-cutting theme in the Royal Society Te Apārangi's (RSNZ) Strategic Plan 2018–2021. Partnering with Māori and recognising, and embracing, diversity is essential for long-term success the Society believes. To this end, a Diversity Policy details a commitment to providing an inclusive and diverse environment, and also outlines the practical application of the policy across the Society and in all of its processes and activities.

The Society asserts that diversity will make the organisation stronger, lead to increased morale, and is an essential element for its long-term success.

The Council of the Society will review the policy on an annual basis to ensure it continues to promote an holistic approach and will make changes if necessary.

New Zealand's Ministry of Business, Innovation and Employment (MBIE) works closely with RSNZ, as a funding agency, to promote science and innovation in New Zealand.

Further information
Royal Society Te Apārangi: www.royalsociety.org.nz/who-we-are/our-goals/diversity/royal-society-te-aporangi-diversity-policy/#556

Action 1

GHANA: BECOMING A MORE GENDER-SENSITIVE ORGANISATION

The Minister of Environment, Science and Technology, and Innovation (MESTI) advocates for the formalisation of policy instruments across its agencies. Ghana's Council for Scientific and Industrial Research (CSIR) has recently introduced a gender policy, which will be operationalised through a Gender Unit and Gender Desks at all its institutes. The CSIR anticipates becoming a more gender-sensitive organisation. The policy stipulates the provision of care facilities for infant children of staff, which is intended to support work-life balance, and promotes gender-sensitive research.

Further information

CSIR: <https://www.csir.org.gh/index.php>

PERU: ACTIONS TO SUPPORT AND INCREASE WOMEN IN SCIENCE

Peru's National Council of Science, Technology and Technological Innovation (CONCYTEC) is aiming for more STEM female researchers. To this end, it has developed a national policy for women in science and formed a steering committee of scientists who champion the implementation of this policy. Also taking place are initiatives encouraging school-aged females to choose science careers.

Since 2008, CONCYTEC, in collaboration with L'Oréal, UNESCO and the National Academy of Science has presented national awards 'For Women in Science' in recognition of leadership and research excellence.

Funding schemes give additional points when grading female researchers' proposals, while still considering the quality. From 2018, CONCYTEC supported work-life balance by extending projects to consider maternity leave and childcare responsibilities for women researchers.

Further information

CONCYTEC: <https://portal.concytec.gob.pe/>

CHILE: WIDE-RANGING INSTITUTIONAL POLICY IS ADDRESSING GENDER INEQUALITIES

In 2013 the National Commission of Science and Technology (CONICYT) introduced an Institutional Policy on Gender Equity in Science and Technology. The Policy aims to:

- promote and enhance gender equality in development of all scientific and technological activity;
- publicise the development of science and technology in Chile from a gender-equity perspective; and
- instill a culture of gender equity and diversity in the organisation's management of human and financial resources.

The Policy was updated in 2017 to ensure continuity, introduce regular monitoring and evaluation of the policy's outcomes, and align initiatives to the UN SDGs. Before 2025, the Institutional Policy is expected to increase the critical mass of women researchers, significantly reduce the gender pay wage gap, create gender diverse research teams and provide equity in access to research and training resources.

Overcoming stereotypes and designating responsibility

CONICYT had to overcome stereotypes about implementation of gender considerations into the funding and innovation functions, as well as a lack of a specialised unit and scarce resources to deliver the policy. The Department of Strategic Institutional Studies and Management acts an oversight agent between different organisational functions and helped to overcome these challenges with a commitment from strategic management and an internal/external gender-equity awareness initiative that addresses stereotyping.

Latin American and Caribbean Gender Summit

Gender Summit 12 with a focus on Science, Technology and Innovation for Latin America and the Caribbean was held in Chile in 2017. It was an opportunity for discussion and dialogue between researchers, academics, and representatives of government, civil society, business and other interested parties, and to consider current evidence on how gender equality/inequality impacts science, technology and innovation

Further information

CONICYT: www.conicyt.cl/mujeres-en-ciencia-y-tecnologia

Action 1

INDIA: INCLUSION, GENDER BALANCE MONITORING, AND CAREER ADVANCEMENT

Promoting women's contribution to science, and wider inclusion of Indian society in research

The Indian Science Congress organises the Women's Science Congress, an important event featuring issues of gender parity. The two-day event highlights women's contribution to science, technology and society. Prominent women scientists, leaders and decision-makers from government, academia and industry deliver lectures, participate in panel discussions and showcase research.

India's Science and Engineering Research Board (SERB) undertakes funding schemes and programmes focusing on inclusion in scientific research of socially and economically marginalised sections of society. For example, diversity in the profile of decision-making bodies is addressed to ensure proportional representation of women members and of members from socially marginalised areas of society.

Further information

DST: <http://www.dst.gov.in/>

SPAIN: MONITORING GENDER EQUALITY PROGRESS AND COMPLIANCE

In 2002, the Spanish National Research Council (CSIC), launched the Women and Science Committee, which monitors, promotes and seeks to optimise women's scientific careers. Annually, the Committee collects CSIC data and reports on gender-balance statistics that reflect the status in different scientific areas.

The Committee also oversees compliance with equal opportunities legislation, gender regulations and the CSIC Equality Plan. It prepared the initial equality plan, made non-sexist language recommendations, and called for integrating gender issues in research content. It also arranges outreach activities to give visibility to women scientists and, jointly, introduced an Equality Award to recognise institutes committed to equality.

Further information

CSIC: <http://www.csic.es/mujeres-y-ciencia>

NORWAY: AN ACTION PLAN FOR ACHIEVING GENDER BALANCE

The Research Council of Norway (RCN) is working in a systematic, strategic and innovative manner to promote gender balance as well as gender perspectives in research. Activities are based on cooperation with other actors, application of internal measures and instruments, and an assessment of new initiatives.

RCN commits to:

- assume greater national responsibility for achieving gender balance in all of the research sector;
- work systematically to promote gender balance in its own administration of research funding; and
- strengthen the knowledge base on gender balance for use in research and innovation policy.

Further information

RCN: www.forskningradet.no

Action 2

GENDER-RELATED DATA COLLECTION, ANALYSIS AND REPORTING

(e.g. through the formulation of gender disaggregated indicators of success)

Member organisations fund researchers with a variety of backgrounds, but the exact distribution of funding between the groups is often unknown. By disaggregating data by gender, funders can better understand applicants and success rates for grants. Such an improved understanding helps to identify gaps and enables better policy making based on evidence. Gathering the data and understanding why participation in research varies across groups of applicants, funding organisations are able to better understand the needs of the community of researchers. Internationally, these needs are likely to vary. However, collecting data allows organisations to benchmark their activities and success rates against those of other funders and find creative ways to ensure excellence across their funding programmes.



Action 2

SRI LANKA: BUILDING A PICTURE OF GENDER COMPOSITION IN STEM AND IDENTIFYING POLICY GAPS

One of Sri Lanka's National Science Foundation (NSF) objectives is: to maintain a current register of scientific and technical personnel, and in other ways to provide a central clearing house for the collection, interpretation and analysis of data, on the availability of, and the current and projected need for, scientific and technical resources in Sri Lanka, and provide a source of information for policy formulation on science, technology and other fields.

STEM gender survey

In line with this objective, NSF initiated a survey in 2018 on gender in science, technology, engineering and mathematics (STEM) – the work is ongoing.

The survey's objectives are to:

- identify the gender composition in postgraduate output;
- identify the gender composition in the vocational training sector;
- identify the gender-related experiences of the advanced qualifications/ position holders;
- study existing policies with regard to the improvement of the gender composition and to identify any existing gaps; and
- suggest policy interventions to overcome policy gaps.

The NSF study was aligned with the UNESCO STEM and Gender Advancement Programme, and is being conducted as a contract research project - it takes place in phases:

Phase One: Identification of existing data sources relating to gender in STEM in Sri Lanka. Compile a detailed inventory of the data sources and the nature of the data. For application in phase two, prepare a data dummy/template for use in an investigation of policy issues.

Phase Two: Identification of local and international policies relating to gender in STEM, followed by the preparation of a detailed policy inventory.

Phase Three: Carry out two surveys in Sri Lanka: the first on gender aspects in Higher Education, vocational training, entrepreneurship and innovation in the STEM disciplines; and the second on gender aspects of advance qualification holders and senior position holders in Higher Education, vocational training, entrepreneurship and innovation in the STEM disciplines.

Institutions lack gender data

A barrier that is being faced is the lack of recorded gender data in many institutions about the ratio of men and women in the fields of STEM and by positions held, and on the qualifications of men and women.

Further information

National Science Foundation (NSF) of Sri Lanka: www.nsf.ac.lk

CANADA: SELF-IDENTIFICATION DATA COLLECTION

Three Federal Granting Agencies in Canada, NSERC, SSHRC and CIHR, are collecting self-identification data from applicants for their programmes. Collection of this information is central to the agencies' commitment to equity, diversity and inclusion (EDI). It shows the diversity of people applying for, and receiving, agency funds. It also increases the agencies' capacity to: monitor progress on increasing EDI in their programmes; recognise and remove barriers; and design measures to achieve greater EDI in research.

Integrating suitable questions into applications, ensuring confidentiality, and building technical information systems has involved considerable time and effort.

Further information

Government of Canada: <https://competitions.nserc-crsng.gc.ca/EDI/pages/home-accueil.aspx>

Action 2

ZAMBIA: MAPPING STI CAPACITY AND PERFORMANCE

Zambia's National Science and Technology Council (NSTC) describes one of its main functions as promotion and advocacy with a focus on:

the development of indigenous technological capacity; the use of science and technology in industry; the integration of gender concerns in science and technology; and the development of broad national priorities in science and technology.

Gathering STI status information

In 2017, NSTC carried out a science, technology and innovation (STI) mapping exercise to gather information about the status of STI in institutions carrying out research and development. The exercise principal objectives were to:

- measure performance of research and development by various sector players in the natural research and development system;
- measure and ascertain innovation activity;
- provide information on STI human resource capacity;
- assess the level of investment in research and development and innovation; and
- document key achievements of the sector.

Using data to develop evidence-based policy measures

The exercise provided NSTC with comprehensive statistics on the number of researchers in Zambia, and enabled better understanding and capturing of data on the ratio of female to male researchers. NSTC reported on its findings and uses the information to develop evidence-based policy measures.

The survey adapted questionnaires from New Partnership for Africa's Development (NEPAD) and UNESCO.

Results indicated that there are few females in research and development institutions and the majority do not hold PhDs, as opposed to male counterparts at same levels.

Loss of institutional memory

A major barrier encountered was a lack of institutional memory. Consequently, for the current mapping exercise, only recent (2018) data will be sought, with the intention of building on that in the future.

Further information

National Science and Technology Council – Our Functions: www.nstc.org.zm/our-functions

AUSTRALIA: MONITORING OUTCOMES FOR MEN AND WOMEN

The Australian Research Council (ARC) is committed to research workforce diversity and aims to contribute to a strong and sustainable research workforce through its policies and programs.

ARC monitors the outcomes for men and women under the individual funding schemes of the National Competitive Grants Programme. It provides an individual report to each university on the gender profile of their researchers applying for ARC funding. The purpose of the report is to raise awareness at each university of the profile of their applicants against a national profile.

Further information

Australian Research Council: www.arc.gov.au/news-publications/media/feature-articles/promoting-and-improving-gender-equality-research-work-progress

Action 3

PROGRESS TOWARDS GENDER-BASED GOALS

(e.g. evaluations, tracking systems, percentages of female researchers at different career stages)

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The preceding chapter described initiatives to disaggregate data by gender, for example proposal application rates. Once this data has been collected, funders can track the progress of their initiatives for gender equality. This understanding of the impact of an initiative enables funders to (1) compare their work against the initiatives of other funding organisations and (2) adapt their efforts to meet the needs of the researcher community more effectively and more efficiently. Tracking systems can enable a deeper understanding of the impact of specific interventions.



Action 3

GERMANY: COLLECTING, ANALYSING AND REPORTING GENDER DATA

Monitoring and reporting equal opportunities

Since 2012, the German Research Foundation (DFG) has been analysing and reporting gender-related data. Data is broken down by: number of research proposals submitted by women; ratio of women to men applicants; success of proposals; and women's representation on DFG statutory bodies.

For comparison, annual reports include data for previous years, which currently indicates a slow rise in female representation. Also, programmes and disciplines are analysed in detail. Additional data from DFG surveys and from the Federal Statistical Office allows the distribution of women at different career levels to be compared.

Further information

DFG – Monitoring Equal Opportunity: https://www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/monitoring_equal_opportunity/index.html

SOUTH AFRICA: ENSURING THE WIDEST ACCESS TO POSTGRADUATE STUDIES AND FUNDING

South Africa intends to improve its global competitiveness and optimise its research base and productivity by drawing on the abilities of the entire population. To achieve this, it is acknowledged that it is essential to reduce discrimination by race, class, gender, age or disability.

A set of Ministerial Guidelines were issued in 2013 for improving equity in the distribution of National Research Foundation (NRF) bursaries and fellowships. The guidelines are:

- ensuring equitable access to postgraduate studies;
- enhancing human capital development funding effectiveness, efficiency, impact and public accountability; and
- bringing coherence to the NRF's postgraduate funding.

The guidelines set targets intended to bring about a more representative scientific workforce: 80% black people (African, coloured and Indian/Asian), 55% women, and 4% people with disabilities. These targets are expected to be achieved for postgraduate students and progress towards them is monitored and reported annually. In 2017, out of a total of 3057 doctoral graduates, 65% were black and 43% were women.

Further information

NRF bursary, scholarships value, rules and guidelines: <https://www.nrf.ac.za/bursaries/opportunities>

JAPAN: UNDERSTANDING BARRIERS FOR WOMEN IN RESEARCH AND DEVELOPMENT

In 2017, Japan Science and Technology Agency (JST) implemented several initiatives to improve the quality of research.

Roundtable events were arranged for female researchers to exchange opinions about greater participation in research and development. Based on the roundtable discussions, a survey was organised entitled, 'Promoting Diversity in Research and Development Projects'. Results of the survey identified two major problems:

- women experience barriers in applying for research and development projects; and
- many male researchers oppose quotas for female researchers, but most women are supportive of quotas.

In response to the findings, JST organised a symposium, 'Creating a Future Together with Female Researchers', in 2018 to share the results of the survey, consider the issues academia should address and the practical measures that JST could take. Based on the results of the survey and the symposium, JST is considering an appropriate funding programme in its business strategy.

Further information

JST symposium report (Japanese only): www.jst.go.jp/diversity/activity/report/report17.html

Action 3

CANADA: ATHENA SWAN PROGRAMME INCLUSIVE OF ALL DISCIPLINES AND ALL POST-SECONDARY INSTITUTIONS

In Canada's federal government budget of 2018, a commitment was made to improve equity, diversity and inclusion (EDI) in the research community by implementing a "Made-in-Canada Athena SWAN" pilot programme.

The initiative is led by NSERC in collaboration with SSHRC and CIHR.

Athena SWAN (Scientific Women's Academic Network) was launched in 2005 in the UK. It's an internationally recognized initiative, which celebrates higher education institutions that have implemented EDI practices in their research systems.

.....
success of initiatives undertaken by post-secondary institutions that apply to the Canadian Athena SWAN program is measured with qualitative and quantitative data, which includes recognition of changes in the research culture to be more equitable and inclusive of underrepresented groups
.....

The UK Athena SWAN programme is being adapted in Canada to meet the country's realities and context. This includes changing the name and developing a Canadian version of the programme's charter and design. Specifically, the charter is inclusive of underrepresented groups

and is relevant to all areas of research and all post-secondary institutions.

Effective EDI-informed policies and practices have been found to: increase access to a large pool of qualified potential participants; enhance the integrity of application and selection processes; and strengthen research outputs and overall research excellence.

National consultations with diverse stakeholders were conducted to develop the charter and programme design. Canadians are being encouraged to share their views and ideas about the Athena SWAN initiative.

Awards for promoting high EDI standards

Institutional participation in the Made-in-Canada Athena SWAN program will be voluntary and its awards will be valid for four years. Applications are peer reviewed, but they're not ranked against each other: they are ranked on the basis of the quality, scope, potential impact and measurability of the institution's EDI action plan.

Applying post-secondary institutions will identify best practices, their achievements and existing barriers to EDI; design an action plan to address challenges; implement actions; and evaluate outcomes. Institutions that meet high standards in promoting and increasing EDI throughout their campus are awarded Bronze, Silver, and Gold levels.

Success of the initiatives undertaken by post-secondary institutions that apply to the Canadian Athena SWAN program is measured with qualitative and quantitative data, which includes recognition of changes in the research culture to be more equitable and inclusive of underrepresented groups. Also, quantitative data is gathered to

determine, for example, the number of people from underrepresented groups among students, faculty and staff in general.

Despite different circumstances, Athena Swan is enjoying strong support

There is strong support for the Made-in-Canada Athena SWAN programme. However, concern was expressed about the amount of work and resources an application requires. Some small institutions held the view that EDI-related initiatives can be challenging as they generally have fewer resources for robust programmes such as this. Institutions of all sizes and locations face unique challenges, which should be taken into account in the programme. Other concerns were: EDI work often falls on people from under-represented groups; the need for comparable data and thus a uniform data collection approach; and the need for privacy protection when collecting personal information.

Further information

Made-in-Canada Athena SWAN consultation: www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Athena-SWAN_eng.asp

Action 4

CONSIDERING “RESEARCH OPPORTUNITY” INSTEAD OF “TRACK RECORD ONLY”

(e.g. measures taking into account career interruptions, “academic age”, reconsidering excellence criteria/ scientific output)

The application process for many grants considers a researcher’s track record, i.e. the researcher’s output in relation to their age or years from their PhD. This approach serves as an instrument to detect some of the most excellent researchers, but the adverse effect of this approach is a disadvantage to those who have come from a non-traditional path to research, or had caregiving responsibilities at one point in their careers: these researchers, whatever their gender, require a different approach in the application process. One alternative is that of the “research opportunity:” Research opportunity in this context considers how a researcher’s productivity and contribution throughout their career corresponds to the opportunities that have been available to them.



Action 4

CHINA: IMPLEMENTING PRIORITY POLICIES FOR WOMEN INCREASES APPLICATIONS

In 2011, the Natural Science Foundation of China (NSFC) raised the upper age limit for women applying for the Young Scientists Fund to 40 years of age, an increase of five years.

This compared with a limitation of 35 years for men. The Excellent Young Scientists Fund, established in 2012, also had its upper age limit increased to 40 years of age for women, compared with 38 years for men.

Encouraged by these policies, women's application rates for research funding have increased. Since 2013, the proportion of female applicants for the Young Scientists Fund has been steadily increasing year by year. For the first time in 2018, female applicants exceeded male applicants; almost 51% of all applications came from women.

Further information

NSFC: http://www.nsf.gov.cn/english/site_1/

NEW ZEALAND: ASSESSING FUNDING APPLICATIONS 'BLIND' TO INCREASE FAIRNESS AND TRANSPARENCY

New Zealand's Health Research Council (HRC) Explorer Grants were launched in 2012 and are a unique approach to research funding. Funding applications are short and assessed 'blind'. Reviewers don't know who's behind the idea and are not influenced by the track record of the team. The scheme was launched to address concerns that assessing committees were risk-averse in making funding decisions meaning that truly ground-breaking opportunities were being missed. It also reduces the potential for prejudice based on an applicant's gender or other perceived personal characteristics. All proposals that meet set criteria are equally eligible to receive funding.

This new approach has resulted in a 16% increase in the number of female applicants since the first round in 2016. In 2018, 50% of all applicants were female. The scheme has gained international attention and is being looked to as an example of best-practice for funding mechanisms. Informal feedback from a number of stakeholders indicates general support for this investment mechanism. A survey of applicants indicated that Explorer Grants are regarded as a fair and transparent approach to research funding.

New Zealand's Ministry of Business, Innovation and Employment (MBIE) works closely with HRC, as a funding agency, to promote science and innovation in New Zealand.

Further information

Health Research Council of New Zealand – Explorer Grants:
www.hrc.govt.nz/funding-opportunities/researcher-initiated-proposals/explorer-grants



Action 4

SOUTH AFRICA: REDRESSING HISTORICAL IMBALANCES

In 1996, a White Paper published by South Africa's Department of Science and Technology identified that historically disadvantaged higher education institutions had limited capacity for science and technology research. This was due to a disproportionate emphasis on teaching, rather than a focus on research and development.

As part of its Research Capacity Development Strategy, the South African Government committed to addressing the situation through targeted interventions, including targeting women and black people for research support.

Targeted intervention for women and black researchers

The National Research Foundation developed a set of strategic initiatives in line with the government's commitments. One of the actions taken was to establish the Thuthuka Funding Instrument in 2001.

.....

promoting professional development of researchers, with specific provision to support and encourage female researchers

.....

Thuthuka's aim is to develop human capital and improve the research capacities of people from designated groups: black (African, Indian and coloured); female; and disabled. The NRF's ultimate aim is to redress historical imbalances.

Encouraging women researchers

Since its introduction nearly two decades ago, a number of evaluations have led to value-adding changes being made to the Thuthuka Funding Instrument. In 2015, new clauses in the instrument's framework were made and implemented, which specifically encourage females to apply for funding.

Additions included:

- Promoting the attainment of NRF ratings* by academics who have not been able to realise their potential or sustain their research outputs due to family responsibilities;
- Female applicants who are appointed on a fixed-term half-time appointment in order to accommodate family responsibilities, are eligible to apply; and
- Applicants over 45 years of age may be considered by demonstrating that they are late entrants to research, or are returning to research after an absence due to family responsibilities.

*The NRF's rating system is a key driver to build a globally competitive science system in South Africa. It is a tool for benchmarking the quality of researchers' work against their peers. NRF ratings are allocated based on a researcher's recent research outputs and impact as judged by international peer review.

Progress of Thuthuka objectives

The success of the initiative is monitored and reported annually. A socio-economic impact assessment published in 2015 indicates a number of findings regarding the programme, *inter alia*: it has fast-tracked the completion of PhDs; it enables first-time NRF rating for early career researchers; many grant holders have been retained within the national system of innovation; and they have leveraged more sources of funding from the NRF, as well as from other national and international sources following their engagement with Thuthuka. In 2018, 65% of all Thuthuka grant-holders were female.

Further information

NRF – Thuthuka 2019: www.nrf.ac.za/division/funding/thuthuka-2019

Action 5

EQUALITY AND DIVERSITY TRAINING

(e.g. Equality, Diversity and Inclusion (EDI), unconscious bias training for reviewers and evaluators, training for female researchers, gender competence training)

Equality and diversity policies are more effective if they are understood and actively implemented by the organisation's staff. There are many varied potential sources of bias, but they can all hinder the selection of the most excellent projects for funding. Many funders have therefore taken measures to provide training on their policies as well as training on bias to staff, peer reviewers, or panel members. These initiatives are linked to other Actions in the Statement of Principles that funders undertake: for example, training is necessary to communicate policy changes (Action 1 of the Statement of Principles) or the shift from "track record" to "research opportunity" (Action 4).



Action 5

UNITED KINGDOM: POSITIVE SHIFT IN EQUALITY, DIVERSITY AND INCLUSION AWARENESS AND BEHAVIOUR

At UK Research and Innovation (UKRI), before awards are made, proposals are first considered by external experts, followed by discipline-specific panel meetings. Peer review underpins the process, adhering to principles of: accountability; credibility and transparency; flexibility; and quality of funding decisions.

.....
raising awareness of unconscious bias, agreeing on messaging about good decision-making, identifying and removing barriers in grant application and awarding processes, and publishing grant application diversity data and success rates
.....

In 2016, a review and observation of funding committees took place at UKRI, which resulted in an agreement to challenge bias and ensure:

- transparency and accountability on who, and how, UKRI funds research; and
- funding is not influenced by an applicant's gender or by other protected characteristics.

Action was taken to: raise awareness of unconscious bias and agreed messaging about good decision-making; identify and remove barriers in grant application and awarding processes; and publish grant application diversity data and success rates for researchers, fellowships and students.

Grant forums took place in non-judgemental environments that enabled staff to talk about their experience as panel conveners and managers, share lessons learned and provide peer support.

Training to avoid gender bias

Unconscious-bias training was included in the induction of new committee members and integrated into peer-review guidance. Staff also received training on identifying and challenging bias, and working with committees to improve decision-making.

Amendments in procedures were made to embed equality, diversity and inclusion (EDI) in peer review processes. Equality Impact Assessments are undertaken and published alongside new funding calls, and these assessments are made when appointing new members to committees and panels. EDI analysis and evaluation is also made of advisory panels' decision-making processes.

Greater awareness and flexibility

Following another round of funding-committee observations, feedback indicated a shift in participants' EDI awareness and behaviour. During meetings, a new language around 'safeguarding' decisions was used, and fair and appropriate decision-making was integral to discussions. Findings are due to be shared with meeting conveners and committee members.

It is recognised that good decision-making requires a conducive environment by having, for example, sufficient breaks, opportunities to stand up and walk around, and time to 'release the cognitive load'.

Equality Impact Assessments led to action being taken to enable flexibility in how people participate in committee meetings, including funding for childcare and participation via videoconferencing. Assessments have led to: improved language choices in call documentation; modified venue choices for meetings; and more inclusive activities for people with nursing or caring responsibilities.

Further information

UKRI – Our policies on equality, diversity and inclusion:
www.ukri.org/about-us/policies-and-standards/equality-diversity-and-inclusion

FRANCE: GENDER-BIAS ANALYSIS

For the first time in 2017, the French National Research Funding Agency (ANR) gathered data to measure gender bias in its evaluation processes. It identified the causes of bias, and sought to reduce them by training interventions. Initially, staff working on the evaluation process were alerted to gender bias and undertook training, followed by committee members and reviewers who were also trained.

Further information

ANR : <https://anr.fr/en/>

Action 5

INDIA: WOMEN RESEARCHERS PRIORITISED IN CASES OF EQUALLY-SCORED EVALUATIONS

India's Science and Engineering Research Board (SERB) is aware of the possibility of unconscious bias in decision-making processes when selecting research proposals. SERB is strongly committed to its eradication and peer-review panels are regularly alerted to the issue. Positive discrimination during selection is encouraged. For example, if a panel has two research proposals, one submitted by a male and the other by a female, and both score equally in an evaluation, then panels are encouraged to choose the proposal submitted by the female researcher.

Increase in committee diversity

SERB has in place a large number of domain expert committees, such as, programme advisory committees and subject expert committees that make funding decisions on peer-reviewed research and development proposals. SERB's equality policies have resulted in greater female representation on these decision-making committees, many of which are now chaired by women scientists.

Further information

DST: <http://www.dst.gov.in/>

INDONESIA: RAISING AWARENESS OF GENDER ISSUES IN SCIENCE, TECHNOLOGY AND INNOVATION

The Science, Technology and Innovation Policy and Management Research Centre (STIPM) has been conducting gender-related activities in science, technology and innovation in Indonesia since 1996. Several results have been achieved including: a gender mainstreaming guide in science and technology; a comparative study on gender policies in science and technology in the ten countries that make up the Association of Southeast Asian Nations (ASEAN); and setting up a gender and science, technology and innovation working group.

Limited availability of STI gender data

Since 2008 and until the present, gender-related activities have been conducted by several Indonesian Institute of Sciences (LIPI) research centres. The STIPM focuses principally on gender issues in science, technology and innovation (STI).

STI gender data and indicators are not easily available in Indonesia. However, over the years, three books on gender in science, technology and innovation have been written based on research and the working experiences of women researchers. The publications are intended to raise awareness about supporting gender equity and equality in science, technology and innovation of policymakers, researchers, academics, higher-education students, and the media. All books are written in Indonesian and are published by LIPI Press.

Further information

LIPI: <http://lipi.go.id/>

GERMANY: DRAWING INSPIRATION FROM 100S OF EXAMPLES OF GENDER EQUALITY IN RESEARCH

In 2009, the German Research Foundation (DFG) introduced the Gender Equality in Research and Academia Toolbox.

The Toolbox is a freely available online information resource that sets out selected real-life examples illustrating the possible breadth of gender-equality measures in research and teaching in German institutions. Examples provide inspiration and ideas that users apply in their working environments.

.....
a selection of real-life examples illustrating the possible breadth of gender-equality measures in research and teaching
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The initial concept for Toolbox resulted from implementing DFG's Research-Oriented Standards on Gender Equality. Since its launch, the Toolbox has been revised and updated several times to ensure its relevance and topicality. For example, in spring 2014, the Toolbox was given a new design, improved functionality and a revised selection of examples featuring high-quality equal-opportunity measures.

Currently, the database has more than 300 examples online. Users of the website also have an option to submit their own examples of equal-opportunity measures.

Action 5

Information about measures in the Toolbox includes: classification in defined topics and action areas, target groups and subject groups, general description of measures such as: content; structure and timeframe; description of goals; results and effectiveness; and collaborations and networks.

Fresh innovative exemplars

At present, 29 outstanding measures are flagged as 'innovative models'. These differ from other examples in that they address current problems, or offer very recent and innovative approaches. As part of the ongoing quality assurance process and a desire to keep the content fresh, models with this designation may change from time to time.

The target group for Toolbox is the German research and university 'landscape', DFG member organisations (research universities, non-university research institutions, scientific associations and the academies of science and the humanities), staff of these organisations, applicants for DFG-funding, and equal opportunity specialists.

Examples are high quality, diverse and distinct

Models in the Toolbox are selected by a quality-assured process, which is intended to ensure that the chosen examples are:

- of high quality;
- sufficiently diverse; and
- do not duplicate other content.

In addition, regular ongoing content quality-assurance processes and accessibility checks are made.

When examples of measures are proposed by users, they are checked by the Leibniz Institute for the Social Sciences (GESIS) which, in collaboration with DFG, provides the content and programming of Toolbox. After a user proposal has been checked, the Institute prepares an evaluation which is then considered by the DFG to decide whether, or not, the measure should be included in the database.

Further information

DFG – Toolbox – Gender Equality in Research and Academia
https://instrumentenkasten.dfg.de/index_en.html



Action 6

ADDRESSING SYSTEMIC AND INSTITUTIONAL BARRIERS

- a. Career pathways and progress of female researchers (e.g. measures to support female principal investigators, teaching replacements, flexible mobility support hence catalysing change in institutions)
 - b. Leadership in policy and decision making bodies (e.g. provision of evidence to government to support policy for science)
-

Many funders see the gender gap most acutely in senior positions in research and research management, and different strategies target a variety of stakeholders in the research landscape. Their strategies vary according to context, but all aim to remove institutional and systemic barriers to equal opportunities in the long-term. Funders either have their own programmes or make ideas easily accessible to organisations with which they collaborate. These measures target the different stages on the path to senior-level researcher, and include initiatives to encourage gender balance in earlier stages of research careers.



Action 6

ZAMBIA: ENCOURAGING FEMALE STUDENTS TO TAKE UP SCIENCE

As the number of females taking up Science, Technology and Innovation (STI) courses remains low in Zambian universities and colleges, the National Science and Technology Council (NSTC) is encouraging young women to choose science career paths. It implements mentorship programmes, and grants awards to women scientists and female students.

NSTC has organised workshops at which experienced researchers or scientists speak to students about careers in STI. It aims to increase the frequency of its mentorship programme, ensure mentorships have greater disciplinary representation within STI, and arrange a symposium. NSTC is tracking the number of students leaving secondary schools and comparing this with the number enrolling or graduating in STI courses at university.

Further information

NSTC: <https://www.nstc.org.zm/>

SAUDI ARABIA: PREPARING WOMEN EMPLOYEES TO UNDERTAKE SCIENTIFIC RESEARCH

King Abdulaziz City for Science and Technology (KACST) has a programme that aims to improve the qualifications and expertise of women employees and prepare them for advanced scientific research.

The programme's objectives:

- suggest ways to improve the working environment of female employees;
- coordinate with various administrative units to address obstacles that limit the efficiency of their employees and to overcome obstacles within the existing rules and regulations;
- develop appropriate mechanisms to improve the work of the women's division and increase its role in administration and implementation of projects;
- facilitate recruitment and training of female employees in approved programmes; and
- increase the contribution of female employees in scientific activities.

Overall, the programme is intended to enable the participation of women in scientific research and management positions, and to provide a suitable work environment that enables women to perform their jobs with increased efficiency.

Further information

King Abdulaziz City for Science and Technology: www.kacst.edu.sa/eng/Pages/default.aspx

ARGENTINA: SUPPORTING EQUAL REPRESENTATION AT SCIENTIFIC EVENTS

Argentina's National Council of Scientific and Technical Research (CONICET) grants institutional endorsements to scientific events (e.g. scientific meetings) when they have adequate gender representation of both sexes. This stipulation respects international commitments and constitutional rights, and is intended to ensure equal opportunities for men and women.

Further information

CONICET: www.conicet.gov.ar

JAPAN: WORKING TO INCREASE FEMALE MEMBERSHIP OF COMMITTEES

Since 2012, the Japan Science and Technology Agency (JST) has been implementing a number of initiatives to boost its efforts to achieve a government goal of 30% women members on JST committees by 2020. To achieve the target, JST has set its own interim gender-balance targets over the years for all of its committees. It has also shared internally lists of the names of all committee members, and collated and shared information about female candidates nominated for committee memberships.

JST's track record shows that at the start of the initiative in 2012, approximately 15% of committee members were women. Four years later the percentage had risen and was over 23%. Actions will continue to be taken in the coming years to meet the target.

Further information

JST: <http://www.jst.go.jp/EN/>

Action 6

NORWAY: PROMOTING GENDER BALANCE AT SENIOR LEVELS IN RESEARCH

In Norway, the overall recruitment to research positions has been gender balanced for many years. However, when it comes to the highest levels of academia, a large proportion of posts are taken by men. Recently, only a quarter of professors in the country were women.

To address this situation, the Research Council of Norway (RCN) introduced the Gender Balance in Senior Positions and Research Management (BALANSE) initiative in 2013. The programme is expected to run for a minimum of ten years and receives funding from the Ministry of Education and Research.

Programme's aims and objectives

From the outset, the BALANSE programme's aim has been to achieve gender equality in the entire research community, but with a particular emphasis on increasing the proportion of women in senior academic and research management positions.

.....
greater awareness of the issues and more knowledge about the underlying factors that promote or obstruct equitable career development are essential
.....

To achieve the aim, it has been necessary to take measures such as, changing organisational structures and practices and eliminating institutional barriers that result in discrimination against people. The BALANSE programme is also responsible for steps being taken to achieve greater career path equality for women and men.

Objectives are being achieved by:

- providing funding to strengthen the efforts of research institutions in promoting gender equality and gender balance;
- support for greater knowledge about, and awareness of, gender imbalances;
- funding research on gender issues; and
- establishing a national learning arena in the field.

Benefits and vision

Achieving a balance is seen as improving the quality of research, enhancing the relevance of research to society, and advancing the competitiveness of research groups. RCN's vision is that the country will be the European leader in gender balance in top-level positions and research management.

Barometer indicates progress

RCN publishes statistics on gender distribution in research grant applications submitted to it and also for the funding awards that it makes. In addition, statistics provide an overview of the gender distribution among project managers at institutions which submit proposals to the Council. The gender balance barometer shows the effects of the efforts being made by the BALANSE programme, and the degree to which institutions are achieving an equity in the grant applications that they submit.

Further information

RCN: www.forskningradet.no/prognett-balanse/Home_page/1253964606519

SOUTH KOREA: MAINTAINING A TARGET SYSTEM FOR FEMALE MID-CAREER SCIENTISTS

In 2016, female applicants and awardees of South Korea's National Research Foundation (NRF) 'Mid-Career Researcher Programme' had an almost 54% success rate in female researchers, compared with a 32% success rate for males. In 2017, the female success rate reached over 66%, but fell to 29% in 2018. For the same period, male success rates reached almost 48%, but only 18% in 2018.

In 2019, NRF announced a strategic plan to maintain its target system for female mid-career scientists. Its aim is to ensure 20% of new project selections go to women scientists, helping expand female participation and creating a stable research environment. Plans also include details about maternity leave – scientists who become pregnant can extend their research by up to two years.

Further information

NRF: <https://www.nrf.re.kr/eng/main>

Action 6

SWITZERLAND: WOMEN'S STEPPING STONE TO PROFESSORSHIP

In 2017, the Swiss National Science Foundation (SNSF) launched a new grant that is described as a stepping stone for women on the path to a professorship. Career funding is one of SNSF's main concerns.

The PRIMA (Promoting Women in Academia) grants are aimed at outstanding women researchers who show a high potential for obtaining a professorship. Those who receive PRIMA grants conduct independent research projects with their own team at a Swiss research institution.

Carving out a name for themselves

The grants cover the recipient's salary and project costs for a five-year period. With this competitive grant, women who receive a PRIMA grant can carve out a name for themselves and take the next step up the academic career ladder – to a professorship. If a PRIMA recipient is appointed as a professor in Switzerland during the funding period, the remaining amount of the grant is transferred to the new place of work as research funds. The second call for PRIMA grants has only recently been issued.

Further information

Swiss National Science Foundation – PRIMA: www.snf.ch/en/funding/careers/prima/Pages/default.aspx



Action 7

STRATEGIC PROGRAMMES ENCOURAGING GENDER EQUALITY

(e.g. targeted calls, gender specific funding schemes, fellowships for women etc. and conjunction with broader policy frameworks promoting equality, evaluation of long-term impact)

Women are underrepresented in academic positions. Dedicated and strategic programmes to improve gender equality in research are as diverse as the organisations that implement them. Some support women directly, others support those who implement their own measures contributing to gender equality. Certain initiatives combine different goals, such as increasing the number of female researchers in the STEM disciplines and providing a perspective to those without an academic position years after the end of their PhD, regardless of gender. The rich variety of dedicated or strategic programmes reflects the variety of challenges that funders face to enable the best research applications to reach the funding stage.



SENEGAL: BOOSTING RECRUITMENT, RETENTION AND PROMOTION OF WOMEN RESEARCHERS

A special fund for women teacher-researchers was created by the Senegalese Ministry of Higher Education, Research and Innovation. The initiative is known as the Support Programme for the Promotion of Senegalese Teacher-Researchers, or *Programme d'Appui à la Promotion des Enseignantes-Chercheuses du Sénégal* (PAPES).

.....
tackling gender inequalities by supporting academic careers of female researchers with grants, by encouraging advancement and through professional recognition
.....

PAPES aims to stimulate and support the recruitment, retention and promotion of women teacher-researchers at universities in Senegal. The programme was introduced in 2013 to address the under-representation of women teacher-researchers in higher education institutions in comparison with male colleagues. PAPES tackles gender inequalities by supporting careers of female researchers with grants, by encouraging advancement and through professional recognition.

Scale of under-representation and measures to address inequality

Surveys in Senegal found:

- under-representation of women is due to socio-economic and cultural factors such as, marriage, maternity, and family responsibilities – all of which can interrupt the continuity of women's careers;
- only 13% of teacher-researchers in science and technology departments and faculties were women (although 25% of researchers in all areas of research are women); and
- women teacher-researchers are under-represented in the highest grades and positions of significant major responsibility.

PAPES grants support:

- preparation and writing of doctoral theses of teacher-researchers;
- purchase of research articles or other small research equipment;
- travel expenses to facilitate mobility and the continuity of training;
- dissemination of scientific research findings through participation in conferences and publication in scientific journals; and
- preparation of research documentation for submission to the current round of the Aggregation Competition (*Concours d'Agrégation*) for competitive examination and evaluation and subsequently, possible inclusion on the 'lists of aptitudes' of the African and Malagasy Council for Higher Education – helping boost women's academic careers.

Distinguished scientists evaluate research proposals

Each year, a call is opened for the submission of proposals for research projects to be funded by PAPES. After receipt and initial screening of the application files, research projects are submitted to a scientific committee. The scientific committee is made up of eminent experts who evaluate and then propose the best projects for funding. Since its creation, PAPES has funded 157 research proposals that were undertaken by either female teacher-researchers or doctoral students.

Further information

Republic of Senegal – Contract signing ceremony and symbolic discount PAPES Grant checks (video):
www.mesr.gouv.sn

Action 7

UNITED STATES: ADVANCE IS CONTRIBUTING TO A DIVERSE AND CAPABLE STEM WORKFORCE

The ADVANCE programme of the National Science Foundation (NSF) of USA offers grants to support workforce equity and inclusion and reduce factors in science, technology, engineering and mathematics (STEM) faculties that cause workplace inequalities.

Increasing research productivity

Through the programme, NSF underlines and stresses that equitable policies, practices and working cultures increase research productivity. However, inequitable allocation of services and teaching assignments can delay individual advancement and lead to differences in treatment and rewards. ADVANCE contributes to NSF's goal of ensuring a diverse and capable science and engineering workforce.

Since 2001, \$315 million has been invested in support of ADVANCE projects at 170 different higher education institutes and STEM related, not-for-profit organisations across the USA and Puerto Rico. Grants support activities that improve gender equity for women in STEM careers and also research into gender equity.

.....
in 2019, the ADVANCE programme is focusing on the diffusion and scaling-up of evidence-based systemic change strategies that address STEM inequity issues
.....

Latest grant call

In 2019, the ADVANCE programme is focusing on the diffusion and scaling-up of evidence-based strategies that address STEM inequity issues. The current grant call seeks proposals for projects featuring intersectional design of systemic-change strategies, which recognise that gender, race and ethnicity don't exist in isolation or from other categories of social identity.

NSF anticipates having up to \$30 million available over the next two years to support the ADVANCE portfolio. Proposals for funding are only submitted by US-located accredited higher education institutions, and non-profit, non-academic organisations that are directly associated with educational or research activities.

ADVANCE funding paths

Submissions for grants follow four funding tracks:

- Institutional transformation – develop, implement and evaluate systemic change STEM strategies;
- Adaptation – adapt, implement and evaluate evidence-based systemic change STEM strategies at institutional, regional or national level;
- Partnership – facilitate the broad adaptation of gender equity and systemic change strategies at regional or national level, but also within one or more of the STEM disciplines; and
- Catalyst – broaden the types of higher education institutions undertaking self-assessment of STEM gender issues so that inequalities can be addressed.

Each project is required to have an evaluation component appropriate to its scope. Those receiving grants are asked to contribute project-related documents and materials for sharing with others through the ADVANCE Resource Coordination (ARC) Network.

Further information

ARC Network: www.equityinstem.org

Action 7

IRELAND: INITIATIVE TO CLOSE THE GENDER GAP IN NOMINATIONS LEADS TO INCREASED EQUALITY IN APPLICATION AND SUCCESS RATES

In 2016, Science Foundation Ireland (SFI) introduced a gender initiative into its Starting Investigator Research Grant (SIRG) programme for early career researchers. Previously, the percentage of female STEM PhD graduates was approximately 50%. However, the percentage of female applicants to SIRG was only 25%, which didn't reflect the number of women at this stage in their career.

Nominating excellent female candidates

In response, SFI introduced the SIRG gender initiative, which encourages and incentivises research bodies to nominate excellent female candidates by permitting a maximum of six (out of a possible 12) male candidates to be nominated per institution to the funding call. Before it was launched, five additional applications per institution were permitted, with no gender specification.

.....
prior to a gender initiative being introduced into the Starting Investigator Research Grant, women were under represented in the applicant pool
.....

Upon submission to SFI, all applications are treated equally regardless of the gender of the applicant. The number of applicants per institution is capped in line with the available budget and resources available to SFI.

Rise in female applicants and female funding awards

The SIRG gender initiative correlated with an increase in the number of female applicants from 25% in 2013, to 47% in 2015 and similar results when the call was rerun in 2018.

Success rates for male and female applicants were similar, both before and after implementing the gender initiative. However, the figures indicate that there were suitable female candidates available, but prior to the SIRG gender initiative women were under represented in the applicant pool.

Sorting out misunderstandings

Initially, there was some criticism of the SIRG gender initiative, due to false perceptions that it used a quota system. To address the concerns, an information campaign that explained both the SIRG gender initiative and other aspects of the SFI's gender strategy.

Further information

Analysis of the SFI review process, information campaign – SFI Gender Dashboard: <http://sfi.ie/about-us/women-in-science/gender>

AUSTRALIA: FELLOWSHIPS ARE ENCOURAGING GENDER EQUALITY IN RESEARCH

The Australian Research Council (ARC) is committed to supporting all eligible researchers, including those from under-represented groups. In conjunction with its broader policy frameworks promoting equality and evaluation of long-term impact, it has strategic programmes to encourage gender equality. The latter is achieved by, for example, targeted calls, gender-specific funding schemes, and fellowships for women.

Georgina Sweet and Kathleen Fitzpatrick Australian Laureate Fellowships

The ARC has two fellowships schemes that are awarded to highly ranked female candidates: the Kathleen Fitzpatrick Australian Laureate Fellowship for the humanities, arts and social science disciplines; and the Georgina Sweet Australian Laureate Fellowship for science, technology, engineering and mathematics (STEM) disciplines.

Fellows demonstrate their capacity to promote women in research, mentor early-career researchers and encourage women to enter, and establish, careers in research in Australia. Both fellowships also provide funding for an ambassadorial role in promoting women in research.

Chance for discussion and networking

ARC holds an annual forum for all recipients of the Georgina Sweet and Kathleen Fitzpatrick Australian Laureate Fellowships. The forum provides a platform for Australia's leading women researchers to network and discuss gender equality issues and initiatives. The outcomes of the forum also inform ARC's ongoing gender equality commitment for women researchers.

Further information

ARC – Kathleen Fitzpatrick and Georgina Sweet Australian Laureate Fellows: www.arc.gov.au/policies-strategies/strategy/gender-equality-research/kathleen-fitzpatrick-and-georgina-sweet-australian-laureate-fellows

Action 7

AUSTRALIA: ADDITIONAL FUNDING FOR FEMALE LEAD RESEARCHERS REDUCES THE GENDER GAP

The National Health and Medical Research Council (NHMRC) in Australia adopted a new initiative in 2017 to address the funding difference between men and women lead investigators. Since 2001, funding rates for female lead investigators in NHMRC's 'Project Grants' scheme was consistently lower than funding for their male counterparts; on average, men had 4% higher funding rates than women.

In 2017 NHMRC funded 34 additional projects led by women. Supported by strategic funding, this reduced the difference to 1.8%. The initiative was repeated in 2018, but on this occasion priority funding was made available to support 31 additional projects led by women. This reduced the difference between men and women to approximately 1%. The funded rate for men remained unchanged in both years.

Need for good communication

Clear and transparent communication was important for the initiative's success. This included explaining the long-standing gender gap in grant allocations, and emphasising that funding rates for men were unaffected by the additional funding for women. Reassurance also came from the knowledge that all additional grants to women had been rated as 'excellent' by the NHMRC peer-review system.

The Australian Research Council (ARC) and the NHMRC are the two main agencies for competitively allocating research funding in Australia and actively collaborate in this endeavour.

Further information

NHMRC: www.nhmrc.gov.au/research-policy/women-health-science



Action 8

PROMOTE FAMILY FRIENDLY POLICIES AND PRACTICES IN RELATION TO CAREGIVING OBLIGATIONS

There are a range of possible actions which could be introduced to support those who have an obligation to provide care for family members. These actions could be incorporated into personnel and institutional policies or grant conditions. Examples may include providing adequate support for:

- Parental leave (both maternity and paternity);
 - Return to work after an absence related to caring obligations;
 - Options for part-time work or job shares;
 - Access to childcare;
 - Facilitation of international mobility.
-

Across the world, researchers take on significant amounts of caregiving responsibilities. Funders are responding to this challenge by promoting range of possible actions which could be introduced to support those who have an obligation to provide care for family members. These initiatives support continued grant submissions by parents, flexible options for pausing work on grants, and enable them to continue their research career.



Action 8

OMAN: ENCOURAGING MORE WOMEN INTO EMPLOYMENT WITH FAMILY-FRIENDLY POLICIES

.....
determining measures that could help boost women's contribution to the workforce and assist in attracting and retaining women currently and in the future
.....

In 2016 the Research Council of Oman carried out a detailed study that focused on the work-life balance of women in education and research institutes. This was part of a broader study covering women working in different sectors in Oman. This followed an appeal by the government for women to contribute more widely in society.

The project sought to determine measures that would help boost women's contribution to the workforce and could assist in attracting and retaining women currently and in the future. It conducted a series of face-to-face meetings with female researchers in Omani educational institutions about work-life balance issues.

The study investigated a range of topics including how work-life balance in the education sector compared to other sectors, and what governmental and organisational provisions could help women in the education sector deal effectively with work-life balance challenges.

Need for family-friendly policies

It was concluded that there is a need for explicit family-friendly policies that are in line with labour law, and also the provision of benefits by companies as part of their human resource policies.

Research indicated that working in the private education sector was usually a second choice for women – after a higher preference for government jobs. Research found that society looks more favourably on women who work in private educational institutions than women working in other private sector jobs.

The investigation was part of a broader study covering women working in a number of different sectors in Oman. The sample of women from the education sector was quite small; it is seen as being necessary in the future to extend the numbers involved and look into this as a special case, with the aim of ensuring more females are attracted to work in the education and research sector.

Further information

The outcomes of the Objective 1 have been published in Employee Relations Journal and can be accessed using the following link: <https://www.emeraldinsight.com/doi/abs/10.1108/ER-09-2016-0183>. The rest of the objectives were also covered and the findings related to them are available in the form of a report.

CHINA: MATERNITY AND CHILDCARE BENEFITS INCREASE THE NUMBER OF WOMEN RESEARCHERS

The Natural Science Foundation of China (NSFC) has always attached great importance to women researchers. It pays special attention to female project leaders and supports their participation in basic research. Female project leaders may extend the duration of a research project due to pregnancy and childcare responsibilities. Since 2011, this policy for women has been emphasized and implemented in programme reviews, resulting in an increase of female researchers benefitting. The most significant area to benefit has been medical sciences. In 2018, women accounted for almost 44% of funding in medical sciences (compared with over 31% for the whole of NSFC). The success rate of women applying for general programmes increased from 15% in 1986 to 25% in 2018, and for those applying for the Young Scientists Fund, increased from 9% in 1987 to 41% in 2018.

Further information

NSFC: http://www.nsf.gov.cn/english/site_1/

Action 8

ARGENTINA: IMPROVING WOMEN SCIENTISTS' MATERNITY AND CHILDCARE CIRCUMSTANCES

Argentina's National Council of Scientific and Technical Research (CONICET) has guaranteed rights to improve the situation of women scientists and especially those with doctoral and postdoctoral fellowships. Scholarship holders can be absent from work for 100 days for maternity leave. This is broken down as 30 to 45 days pre-delivery (confirmed by a medic), and the balance of days taken after giving birth. Scholarships are extended for a period equal to that of the absence. Since this benefit was introduced in 2010, over 200 scholarship extensions have been agreed.

Another initiative provides for an extension in the presentation of the annual report for women scientists who have taken leave for childbirth or adoption. Reports are made in the year corresponding to the birth or adoption. Since introduction in 2011, over 50 extensions have been requested and obtained.

Providing these two benefits acknowledges the impact childbirth and childcare can have on scientific work. They are measures designed to achieve equality of career opportunity, regardless of gender.

Further information

CONICET in Figures:

<https://cifras.conicet.gov.ar/publica/>
www.cifras.conicet.gov.ar/publica/

GERMANY: TAILORED SOLUTIONS FOR 'FAMILY-REASON' ABSENCE ENSURES PROJECTS SUCCEEDS

In 2004, the German Research Foundation (DFG) introduced compensation measures for absence or part-time working because of maternity leave and parental leave of research project leaders and project staff.

..... projects can be kept running for up to six months despite a project leader's absence

..... Project Leaders can reduce working hours

When a project leader is absent from work for family reasons, the DFG seeks to find a solution tailored to the individual's circumstances to:

- enable the uninterrupted continuation of the funded project; or
- allow a project time extension; or
- fund additional, supporting project staff.

Men and women who are grant holders and project leaders can reduce working hours by up to 50% due to family reasons, and by as much as eight hours per week (20%) during family leave.

Research projects can be kept running for up to six months despite a project leader's absence. If this is the case, and given sufficient justification and a management plan from the grant holder, the grant may be extended. The grant holder can apply for additional funding to support the management of the project, and the existing grant, during his or her absence.

Project staff can improve their qualifications

When project staff members are absent from work or if they work part time during parental leave or for family care reasons, funding is available for a replacement. Alternatively, a cost-neutral project extension is possible. For project staff in their qualification phase, an extension of the employment contract to compensate for his or her absence is ensured by a legal right.

Need for adherence to employment law

Legal barriers exist concerning the opportunities for project staff beyond the qualification phase and their catching-up on the project. In these cases, a replacement has to be funded using the staff funds that become available as a result of the staff member's absence. Consequently, no funding remains for a contract extension of the original project member to compensate his or her absence and to allow him or her to catch-up on the project.

In research networks it can be difficult to put a project on hold or to extend its duration because it was initiated as part of a network involving other projects and leads to a subsequent funding phase.

Further information

DFG – Compensation for Absence or Part-Time Work of Project Leader:

www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/measures/compensation_absence/index.html

DFG – Compensation for Absence or Part-Time Work of Project Staff:

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

Action 8

NEW ZEALAND: HELP FOR CHILDCARE CAREER BREAKS WITH FELLOWSHIP EXTENSIONS

The Royal Society Te Aparangi (RSNZ), has made changes in eligibility conditions for their Marsden Fund Fast-Start grants. The changes, made in 2018 are intended to allow for career interruptions experienced by many early-career researchers when taking time off to have a child or children. An eligibility extension to the Fellowship recognises that a career break as a primary caregiver is more than the time spent on leave – it takes time to get back on track compared with a researcher who has remained in post.

.....
'eligibility may also be extended to take into account any career interruptions experienced due to being the primary caregiver for young children. If the applicant is the primary caregiver of a dependent child, the applicant is able to extend the period of eligibility by two years per child. The extension of two years per dependent child is inclusive of any periods of parental leave – no maximum is identified' quote from 2018 guidelines
.....

To be eligible for Fast-Start, applicants should be within seven full-time years since the completion of their PhD, or ten full-time years since commencing a research career. Under the new changes RSNZ allows for a two-year extension to the eligibility per birth within that timeframe. This can include each child, regardless of the amount of parental leave taken.

Encouraging women back to research

The new policy applies irrespective of the applicant's gender, but it is anticipated that the major effect will be to encourage women back into research. Researchers do not necessarily have to have taken parental leave. For example, if a mother was the primary carer for one year and the father the primary carer for the second year for a single child, and each parent was a researcher applying for a Fast-Start grant, they could both claim a career interruption. Also, separated parents who have primary caregiver roles on a week-on, week-off basis are each entitled to claim a career interruption.

New Zealand's Ministry of Business, Innovation and Employment (MBIE) works closely with RSNZ, as a funding agency, to promote science and innovation in New Zealand.

Further information

Marsden Fund Fast Start:
www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/marsden-fast-start

INDIA: FLEXIBLE WORKING AND FAMILY-FRIENDLY POLICIES FOR WOMEN RESEARCHERS

KIRAN programme

The Knowledge Involvement in Research Advancement Nurturing (KIRAN) programme promotes flexible working and family-friendly policies and is intended to help retain women scientists. The Government of India has a specific policy for maternity leave that is applicable to researchers undertaking publicly funded research projects. KIRAN Mobility Scheme provides opportunities for women scientists and technologists to return to careers after a period of absence for family reasons. The policy also incorporates a 'Mobility Scheme' to overcome the issues and challenges that may be encountered by women scientists needing to relocate after career breaks.

CURIE programme

The Indian Department of Science and Technology's 'Consolidation of University Research for Innovation and Excellence' (CURIE) scheme aims to increase the number of female researchers at women-only universities. These gender-sensitive programmes benefit large numbers of women scientists who are pursuing research in basic and applied sciences, and in frontier areas of science and engineering. Women scientists who might otherwise be lost to science due to family responsibilities, are being brought back to mainstream research with careful interventions. Opportunities are created for self-employment and also return to long-term careers for women scientists.

Further information

DST: <http://www.dst.gov.in/>

SWITZERLAND: FLEXIBLE PROVISION FOR CHILDCARE

In 2018, the Swiss National Science Foundation (SNSF) offered Flexibility Grants. They are aimed at postdoctoral researchers and PhD students who have to look after children at an important stage in their career and are therefore in need of more flexibility. The Flexibility Grant offers researchers two options to balance their professional and private lives:

- funding to help cover the external childcare costs charged to the researcher;
- finance the salary of a support person, allowing the grantee to reduce his/her work quota.

It is also possible to combine the two provisions.

Further information

SNSF: Flexibility Grants: <http://www.snf.ch/en/funding/supplementary-measures/flexibility-grant/Pages/default.aspx#Documents>

AUSTRALIA: FLEXIBLE SUPPORT FOR RESEARCHERS WHO TAKE EXTENDED LEAVE FOR FAMILY REASONS

The Australian Research Council's (ARC) 'Discovery Early Career Researcher' scheme supports early-career researchers who take leave for carer responsibilities. ARC's 'Future Fellowships' scheme aims to attract and retain the best and brightest mid-career researchers. Both schemes' eligibility time frames can be extended to support researchers who have had career interruptions such as, maternity leave or parental/partner leave for carer responsibilities.

Removing barriers hindering progression

ARC recognises that career interruptions for early to mid-career researchers are a possible barrier to career progression and that many women don't return to research following an extended period of leave. The eligibility mechanisms incorporated into both schemes recognise a period of interruption commensurate with the period of leave. In addition, up to two year's interruption is recognised for a researcher who is the primary carer of a child, irrespective of when he/she returns to research.

All ARC funding schemes use a selection criterion that aims to ensure an equitable assessment of a researcher's academic achievement compared to their career stage and the research opportunities which have been available to them. It also takes into account time spent outside of academia for personal and professional reasons. The objective is to balance out different life experiences to provide equity of treatment for all researchers.

Further information

ARC: www.arc.gov.au/policies-strategies/policy/early-career-researchers-statement-support

BRAZIL: BENEFITS FOR RESEARCHERS WHO ARE PARENTS

Before 2013, São Paulo Research Foundation (FAPESP) granted extensions in scholarships when requested and informally justified this due to maternity leave.

Increase in provision

Since 2013, the arrangement has gradually been formalised and the benefits have increased for researchers who are parents, with the following timeline:

- 2013 – established 120 days of paid maternity leave for women holding any kind of FAPESP scholarship (including graduates, post-graduates, postdoctoral researchers, young researchers, or those with company seed funding)
- 2014 – established a five-day paid paternity leave for men holding FAPESP scholarships
- 2015 – included in the benefit for the 120 days leave were: women in cases of stillbirth and men in cases of single parent adoption, or same-sex marriage if they show the partner has not claimed the same benefit. It also confirmed the maintenance of paid leave in the case of a death of an infant.

These benefits also apply for scholarships.

Almost 200 granted in six years

Since 2013, 192 parental leaves have been granted.

Further information

FAPESP: www.fapesp.br/en

Action 8

JAPAN: SUPPORT FOR RESEARCHERS AT DIFFERENT STAGES OF LIFE

Since 2006, The Japan Science and Technology Agency (JST) has supported researchers at different stages of life, including childbirth, raising children or providing nursing care. The aim is to ensure individuals can continue their research activities without a career interruption.

Support applies to researchers who are full-time employees of JST and who are paid from research funds. After evaluation of an application for support, researchers receive a 'gender equality promotion fund' grant of JPY 250,000 per month for up to one year, after which a reapplication can be made.

Funds can be used to: employ research assistants; purchase goods and equipment for research purposes; support research activities of the researcher in question; and generally reduce the 'individual burden' of the researcher.

Depending on the research project, a researcher requiring leave of two weeks or longer can use funds to enable a team member to act as a project leader's representative, or research can be suspended on a week-by-week basis if a researcher works alone.

Support is provided for:

- pregnancy – six weeks before delivery and eight weeks after the birth;
- childcare responsibilities – until the child's first birthday; and
- nursing care – up to six months.

Since introduction, 333 researchers (including 296 women) have received support – amounting to JPY 1,018 billion.

Further information

JST: <http://www.jst.go.jp/diversity/en/index.html>



Action 9

PERIODICALLY REVIEW THIS PRINCIPLES AND ACTIONS DOCUMENT

In order to stimulate and encourage ongoing efforts to improve, develop and/or implement relevant actions to foster an environment which supports equality for women in research, information on actions taken and progress achieved will be shared at appropriate intervals via GRC networks and through updates at future GRC meetings.

.....

Action 9 does not include examples, as it asks GRC members to periodically review the Statement and Actions. However, the submitted case studies reveal other trends that give us an opportunity to reflect on future areas of focus for the GWG and on Action 9 itself.



Action 10

RECOGNISE THE ADVANTAGES OF CONSIDERING THE GENDER DIMENSION IN RESEARCH AND ENCOURAGE THE DEVELOPMENT OF THIS

Gender dimension in research (e.g. reviews and evaluation process changes, encouraging this in applications, guideline to researchers)

.....

Unlike the other Actions of the Statement of Principles, the gender dimension in research focuses on the research content rather than the participation of women in research. The term “gender dimension” describes the integration of sex and gender analysis into research. The gender dimension should be considered in funding decisions, study design, data analysis and evaluation to ensure excellence in research: for example, new drugs should be tested on male and female test subjects to account for biological differences in reaction to the drug. Several scientific journals require sex- or gender-specific reporting. Thus, integrating the gender dimension increases the chances of publishing research results. Given the significance of integrating the gender dimension in research to achieve excellence, some funders have begun implementing such policies.



Action 10

ARGENTINA: PROMOTING GENDER EQUALITY IN RESEARCH AND PREVENTING WORKPLACE VIOLENCE

In November 2018, Argentina's National Scientific and Technical Research Council (CONICET) delivered a new strategic plan that included initiatives to promote greater gender equality in scientific and technical appointments and scholarships and also prevent workplace violence – especially gender violence.

To meet legal obligations for transparency, in 2018, an online CONICET portal went public with statistics and graphics about scientific and technological personnel, research projects, technological/scientific services provided, and management and evaluation activities. Searches can be made for people, positions, gender, scholarships recipients, doctoral and postdoctoral fellows and many other personnel groups. It is also possible to access datasets to determine male/female ratios in different categories.

.....
disseminating and increasing knowledge about human rights practices and contributing to the development of public policies on human rights
.....

Human rights investigation network

Before the introduction of the latest strategic plan however, there were initiatives in place that promoted gender equality. One of which was the 'Network for the articulation and strengthening of human rights investigations in Argentina', introduced in 2015.

The Network aims to disseminate and increase knowledge about human rights practices resulting from academic research, public management and social actors. Its intention is to contribute to the development of public policies focusing on human rights, and foster new forms of dialogue about the issues. The Network also promotes critical review of debates and investigations in the field of human rights, based on the guidelines of the Secretariat of Human Rights of the Nation.

The Network addresses issues, such as:

- women and human rights;
- rights related to sexual diversity and gender identity;
- institutional violence; and
- people trafficking for purposes of sexual and labour exploitation.

Charting contribution to public policies

Meetings dealing with public policies on gender violence were held in 2016 and 2017. Three areas were covered:

- articulation of knowledge in the field of research and public policy management to provide an effective response by the State to problems of gender violence;
- compilation of official statistics to make visible and 'denaturalise' violence against women and contribute to the design and application of public policies; and
- production of data that contribute to the elaboration of public policies to prevent and combat gender-based violence within the framework of human rights.

In 2019, progress made in complying with the CONICET 2018 Strategic Plan's goals will be reported.

Further information

CONICET in Figures:
<https://cifras.conicet.gov.ar/publica/>
www.cifras.conicet.gov.ar/publica/

Notes

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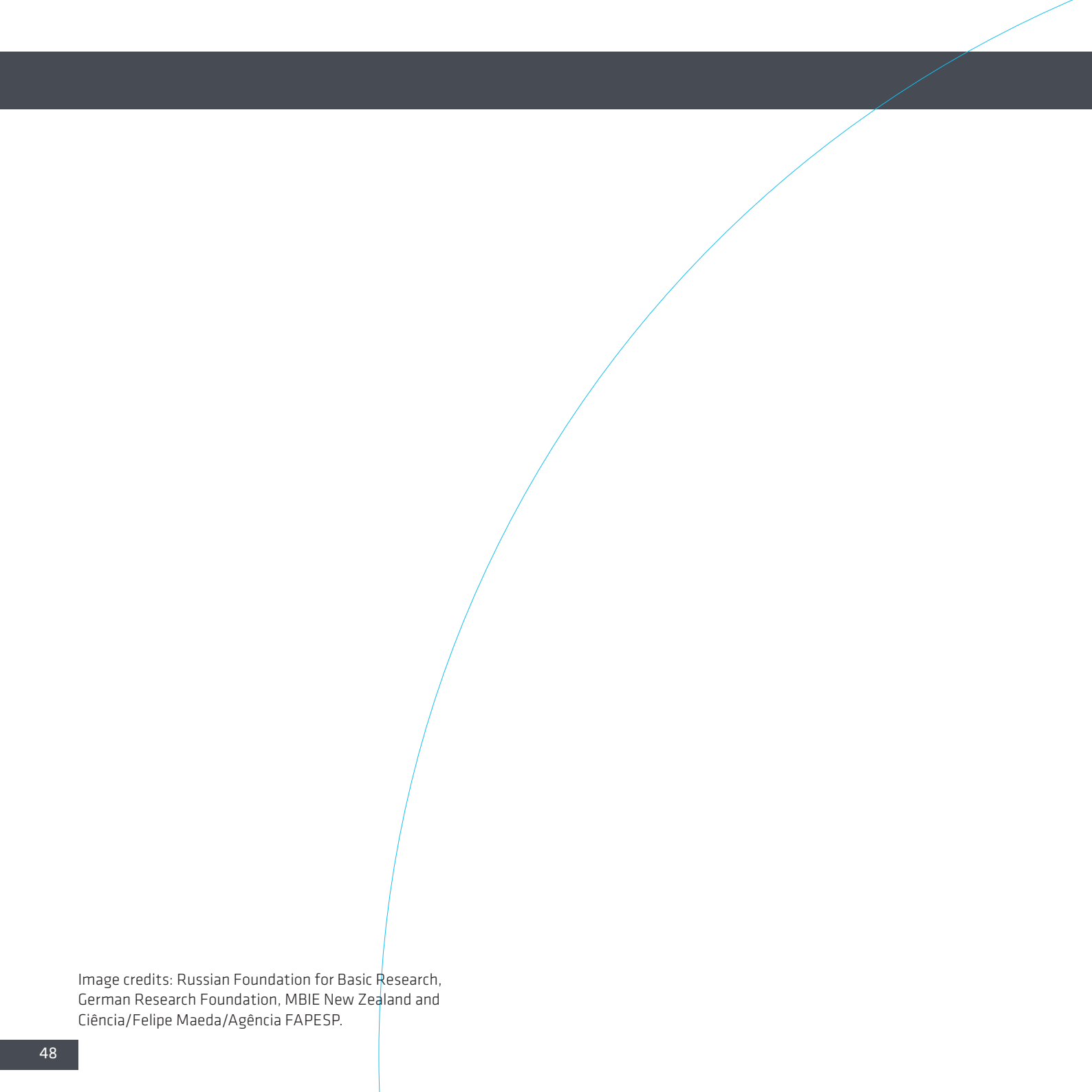


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German Research Foundation, MBIE New Zealand and
Ciência/Felipe Maeda/Agência FAPESP.

Contact information and resources

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The GWG welcomes updates to case studies herein, and the opportunity to increase the number of case studies, which will be available on the GRC website.

RESOURCES

www.globalresearchcouncil.org/about/gender-working-group/

GRC, Statement of Principles and Actions Promoting the Equality and Status of Women in Research (2016):

Arabic

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/statement-of-principles-actions-arabic.pdf

English

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/Statement_of_Principles_and_Actions_Promoting_the_Equality_and_Status_of_Women_in_Research.pdf

French

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/French_Statement_of_Principles_and_Actions_Promoting_the_Equality_and_Status_of...pdf

Portuguese

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/PRO__Statement_of_Principles_and_Actions_Promoting_the_Equality_and_Status_of_Women_in_Research.pdf

Spanish

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/DdP_y_Acciones...Mujer_en_la_Investigaci...n.pdf

GRC, Equality and Status of Women in Research Survey Report for the Global Research Council 2016 Annual Meeting (2016):

https://www.globalresearchcouncil.org/fileadmin//documents/GRC_Publications/Survey_Report_on_Equality_for_GRC_Vitae.pdf

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