

Preparatory material on the 'Equality and Status of Women in Research' for the GRC 2016 Annual Meeting



Context

This concept paper on 'Equality and Status of Women in Research' was prepared by Research Councils UK (RCUK) and the Indian Science and Engineering Research Board (SERB), hosts of the GRC 2016 Annual Meeting, in order to provide a common basis for discussion at the five GRC Regional Meetings in Africa, Americas, Asia-Pacific, Middle East/North Africa (MENA) and Europe.

Preparation for the meeting

The host organisations have prepared a template which is intended to assist participants in their preparation for the meeting. The structure of this document matches the structure of the discussion topics in this paper. Participants are encouraged to use the template and a sample prepared by Research Councils UK is attached for information. Although this template is initially for participants' own use, it is not ruled out that completed templates could be collated and analysed.

Expected outputs from Regional Meetings

The expected output from the discussions at the meeting is a set of regional messages on the role for both individual regions and all GRC participants in tackling the issues relevant to the topic 'Equality and Status of Women in Research'. It is expected that these messages will recognise the challenges faced by GRC participants in addressing the topic within their national or regional context and will focus on positive actions which can be taken, either within their own organisation or by working with other GRC participants. The 2016 Annual Meeting expected outputs will consist of a GRC Position Statement, which will draw on the messages put forward by the five Regional Meetings, and a report commissioned by the co-hosts of the Annual Meeting.

Next steps

Your regional output on Equality and Status of Women in Research, as well as the outputs from the other four GRC Regions, will be presented at the GRC International Steering Committee (ISC) meeting in January 2016. The ISC will consolidate the outputs of the five Regional Meetings and address recommendations to the co-hosts of the GRC 2016 Annual Meeting and GRC Governing Board on possible outcomes to be envisaged for the GRC on this topic.

‘Equality and Status of Women in Research’ Concept Paper

1. Introduction

At the GRC’s fourth Annual Meeting held in Tokyo in 2015, two discussion topics for the Annual Meeting in Delhi on May 26-27, 2016 were endorsed:

- Interdisciplinarity
- Equality and Status of Women in Research

The purpose of this paper is to provide background material for the discussion at the GRC Annual Meeting and Regional Meetings on the theme ‘Interdisciplinarity’.

In this concept paper, a brief background narrative is provided to demonstrate the rationale for taking up this topic at the GRC, followed by seven discussion points (in Section 4: Discussion Points). Taking this background material into account, GRC participants are encouraged to participate actively in the discussions at the GRC Regional Meetings this autumn and next year’s GRC Annual Meeting in Delhi and to provide inputs on their national and/or regional experiences regarding this topic.

Inputs from the Regional Meetings will be consolidated and reported at the Delhi Meeting in May 2016, with a view to adopting a Position Statement on ‘Equality and Status of Women in Research’ covering guiding principles, common understandings, and/or best practice.

In addition to this concept paper, an external report on the ‘Equality and Status of Women in Research’ has been commissioned by the co-hosts. The report’s author(s) will provide input on their concept, methodology and approach to Regional Meeting participants, and their final report and recommendations will be presented to the 2016 Annual Meeting participants. The report is intended to serve a range of functions:

- Discussion paper for the GRC Annual Meeting (an embargoed copy will be shared with participants);
- The creation of a useful baseline of policies and practices of GRC participants in the topic area;
- Output of the GRC 2016 Annual Meeting (it will be published with the proposed ‘Interdisciplinarity’ Position Statement following the Annual Meeting).

2. Background

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 legislative environments in which GRC participants operate increasingly include expectations or requirements in relation to Equality and Diversity. Whereas governments are often concerned to ensure fair and open access for all groups of society throughout the economy, in a research context this may be expressed as the ability to attract and retain the best talent into research regardless of gender or other diversity characteristics. Gender is often the dominant issue in addressing E&D as

evidenced by the series of Gender Summits.¹ However other aspects such as age, disability, gender reassignment, race, religion or belief and sexual orientation must also be considered.

Gender and diversity issues in research have thus gained increased recognition on policy agendas at organisational, national, regional and international levels. For example the Science Europe Roadmap² provides a useful exposition of diversity issues summarised as:

- Giving every current and future researcher, in particular female researchers at all levels, the chance to achieve their potential, free from prejudice and discrimination;
- Increased diversity in research teams correlates positively with the quality of research, partly because diverse teams produce a greater variety of ideas;
- Gender and diversity are interwoven with all aspects of research from peer review to the experimental design and content of the research itself;

GRC participants, as funders and/or performers of research have the opportunity to be influential within their own jurisdiction and remit, by expecting and encouraging improved equality and diversity in research. Issues addressed may be internal to the organisation, such as peer review processes, unconscious bias training or HR matters for their own researchers, or external such as influencing the composition of the research workforce or the content of research or that the funding mechanisms are fair, transparent and sensitive to the needs and drivers of different communities. Ideally the actions and monitoring of outcomes will be informed by evidence.

The challenge may lie in defining the policy actions that can be taken by the GRC participants either alone or in concert with other organisations or governments. **The 2016 GRC meeting should discuss the role and influence of participating organisations in relation to Equality and Status of Women in Research.** Positive examples of exerting that influence with associated evidence should be encouraged and shared as a means of visibly implementing the 2014 *Statement of Principles and Actions*.

3. Supporting information for the GRC summit in May 2016

Pre-meeting template

The host organisations have also agreed a template designed to be used by GRC participants to capture their policies, strategies and actions ahead of the regional meeting. A completed template, filled in by RCUK has also been prepared to act as an exemplar for other GRC participants. This template is only advisory and is intended to assist participants to contribute fruitfully to the discussion at the regional meeting. The discussion points in section 4 of this document follow the structure of the template.

Commissioned report on Equality and Status of Women in Research

A report is being prepared, under contract to RCUK, to provide input to discussion at the GRC in May 2016. The report will not be complete until March 2016 however the contractor will provide input to each regional meeting to introduce the report's concept, methodology and approach to regional meeting attendees.

The report will consist of a combination of:

Desk-based research on what data currently exists regarding gender in relation to the activities of GRC participants. It is anticipated that this data will relate to issues such as: peer

¹ <http://gender-summit.com/about-the-gs>

² <http://www.scienceeurope.org/policy/policy-2/roadmap> pages 13-14

review, including published data on success rates; gender make-up of High-level governing Councils; funding schemes with a specific gender focus and gender dimensions in career trajectories.

This research should also produce an assessment of any gaps in the data; an understanding of the evidence for differences according to age and career stage (using the EU 4-stage framework for Research Careers³) and case studies with disciplinary trend information.

Desk-based research on policies of GRC participants for gender and for supporting women in research. This should include policies that include Gender as part of a wider Diversity strategy and should also identify policies in relation to the composition of research teams and the gender content of research,

A series of telephone interviews with selected research funding agencies around the world to: identify data that is not or not yet publicly available, understand the procedures for the implementation of policies, understand the success or otherwise in implementing policies, understand the status and perceived importance of research and its funding in the country.

The report will include a regional summary for each of the five GRC regions of the world including best practice examples of agency policy in action. The report will also include **conclusions** creating a baseline to enable future progress to be measured covering data, trends in the data and the current state of policy and practice; plus **recommendations** for actions by GRC participants.

The report will initially inform discussions at the GRC annual meeting in May 2016 but is intended for a wider public audience of research policy professionals around the world. Its conclusions and recommendations will feed into a GRC position statement or action plan which will be one of the key outputs of the GRC 2016 annual meeting.

4. Discussion Points

Although the topic 'Equality and Status of Women in Research' can be addressed from various perspectives, this paper proposes two major viewpoints to serve as sub-themes during the discussions in the GRC Regional Meetings. The overall objective of the questions in each case is to better understand the role and influence of GRC participants. Participants are asked to refer to the descriptions provided in the following sections, which follow the headings contained in the template attached to this paper, while expressing other viewpoints based on the particular interests of their respective regions.

Gender-Relevant Policies and Practices, including Assessment of Progress and Monitoring.

1. Policies and positioning strategies:

Are there specific strategies and policies which are found to be effective in promoting equality of gender and status? What principles best describe how co-ordination with other agencies can best be achieved?

³ The European Framework for Research Careers (European Commission, 2011) comprises four stages R1 - First Stage Researcher; R2 - Recognised Researcher; R3 - Established Researcher and R4 - Leading Researcher http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf

Research Funding Organisations can exert their influence by adopting a range of policies and strategies. These actions may be taken alone or in co-ordination with other agencies and can fall into the following broad groups:

- *Co-ordination with other agencies*: which may be either governmental and non-governmental
- *Externally-oriented*: setting expectations aimed at recipients (organisations and individuals) of research funding;
- *Internally-oriented*: agreeing internal policies to guide managers and staff and to raise awareness of gender and equality issues
- *Gender Targets*: stipulating the gender make-up on their governing bodies, advisory and/or peer review panels
- *Rule-based actions*: setting rules and regulations for recipients of funding that facilitate gender equality

2. Data, Evidence and Metrics:

What data, evidence and metrics are favoured and likely to have the greatest influence? Are there disciplinary differences?

Statements of policy and strategy are unlikely to have their optimum effect unless they are backed up by robust data and evidence. Ideally such data or evidence will be made public so that external parties can take actions in response. It may be particularly important to publish aggregate data on the success rate of applicants for Research Projects and Individual Research Fellowships⁴. Such data is amenable to disaggregation by discipline age and academic position such as in the study carried out by Boyle et al. (2015)⁵ where the success of women in applying for social science and biomedical grants from the UK Research Councils are compared. Data may be separately reported for general schemes and schemes focussed primarily on women researchers.

Other areas where data and evidence could be collated and published at either aggregate or organisational level include:

- *Better understanding of practices in Research Organisations*
- *Employee recruitment diversity statistics for GRC participants*
- *Gender Balance of governing boards, peer review and advisory panels*
- *Research Project and Research Fellowship application success rates*
- *Statistics regarding PhD studentship recruitment, termination and graduation by gender.*

3. Monitoring and Evaluation of Impact:

What measures have been taken to evaluate the success of Gender-focussed actions? Which measures are more successful and which less successful? Is there evidence that grant schemes focused primarily on women have a greater impact?

Government bodies and agencies are accountable for the use of public funds and additionally will wish to understand the value and impact of their actions in areas such as Equality and Gender. The data and evidence referred to in the above question may form the basis of these evaluations. Alternatively other methodologies may be employed to measure the effectiveness of measures taken.

⁴ See for example RCUK data at <http://www.rcuk.ac.uk/RCUK-prod/assets/documents/skills/EqualityStatement.pdf>

⁵ Comment published in Nature by Paul Boyle and colleagues at the University of Leicester, UK on 9th September 2015 <http://www.nature.com/news/gender-balance-women-are-funded-more-fairly-in-social-science-1.18310>

4. Training and Awareness of advisors, staff, peer reviewers etc.

What training is being provided by GRC participants, to whom and in what form? Where unconscious bias training has been delivered, is there evidence that it has improved decision processes including peer review?

Training and awareness-raising amongst advisors, staff and researchers, particularly those directly involved as participants in decision making processes, can ensure that unwanted bias can be removed as far as practical. Unconscious bias (often used interchangeably with implicit bias) has received widespread interest recently and featured in the 2013 Gender Summit⁶ in North America. The concept has been described in the literature and a useful reference to the topic was published in a literature review in 2013 by the Equality Challenge Unit in the UK⁷. Many organisations are currently providing or considering unconscious bias training.

In 'A gender Neutral Process' (Ahlqvist et al., 2015)⁸, the Swedish Research Council explored bias in peer review panels. A key conclusion from this work is that gender equality requires long-term and awareness effort. Mandatory training of reviewers and staff was recommended alongside other measures aimed at quality enhancement.

Research Talent and Research Content

5. Research Careers Development (including Recruitment and Progression):

What are the most effective interventions by funders to influence and understand gender equality in research careers?

Research Performing Organisations will in many cases be responsible, as employers, for the recruitment and development of researchers respecting national employment law. GRC participants as Research Funding Organisations therefore must often find ways to influence gender equality in these processes rather than control them. This influence can often be achieved through equality expectations tied to funding allocations. Funders may also choose to promote the development and use of resources to assist for example the understanding of gender, diversity and bias issues amongst supervisors and managers in RPOs.

Funding Organisations may also have a wider interest in the career progression of researchers within and between RPOs or indeed between the higher education sector and the wider economy. To understand career progression requires gender-disaggregated studies of the recruitment of researchers (e.g. into the PhD), progression of researchers within the academy and movement between the academy and the wider economy.

GRC participants are encouraged to enter their actions in their template documents. Each regional meeting should attempt to take stock of the range of issues and common threads within its region.

6. Gender Content of Research and Research Teams:

⁶ Gender Summit 3 Conference Report (2013) <http://gender-summit.com/images/GS3-ConfReport.pdf>

⁷ Unconscious Bias in Higher Education: Literature review Equality Challenge Unit, UK (2013) pages 10-15
<http://www.ecu.ac.uk/publications/unconscious-bias-in-higher-education/>

⁸ <https://publikationer.vr.se/produkt/a-gender-neutral-process/>

Is there evidence of a lack of attention to the gender content of research in applications for funding, if so how has this been addressed? How do we ensure that gender-balanced teams are formed? Is there evidence of better formulated research or research with greater impact as a result of gender diverse teams?

The publication 'Gendered Innovations: How Gender Analysis Contributes to Research' (EU, 2013) presented 21 case studies as concrete illustrations of how sex and gender analysis leads to new ideas and excellence in research. An extensive list of examples from the 4th Gender Summit is contained in the 2nd A-Z guide why gender matters in research and innovation (Politzer, 2014).⁹ A key issue for funding bodies is whether they are satisfied that the gender content of research is adequately considered in the experimental design of proposed research.

The make-up of a research teams can be an important factor in ensuring the best ideas are developed into innovative research. However the 2015 LERU report on 'Gendered Research and Innovation'¹⁰ reports that no studies have yet been undertaken to determine whether there is a relationship between the gender balance of a research team and that team's engagement in gender-sensitive (GRI) research. The paper notes that further study is required and makes reference to a forthcoming H2020 project¹¹ starting in 2015 at the Open University of Catalonia which aims to produce new insights how gender diversity in teams affects research performance.

Concluding Discussion

7. Principles/Overall Statement of purpose

Do GRC participants have a common understanding of the terms 'Equality' and 'Status'? What is the specific role of GRC participants in promoting Gender and Status issues for women in research? Is there a common set of principles that reflect this role?

The legal status and mandate of a Research Funding Organisation (RFO) will strongly influence the influence which it can exercise in a national context. These legitimacy factors together with reputation of the RFO will also determine the strength of that influence. The constituency which a GRC participant can legitimately influence will vary according to their legal status and remit but will typically include organisations and individuals engaged in performing research or managing research in a research performing organisation.

⁹ Gender Summit 2014 Toolbox <http://davinci-institute.net/gs4eup/wp-content/uploads/2014/07/A-Z-H2020-Final.pdf>

¹⁰ LERU Advice paper 18 September 2015: Gendered research and innovation: http://www.leru.org/files/publications/LERU_AP18_Gendered_research_and_innovation_final.pdf

¹¹ Gender Diversity Impact – Improving research and innovation through gender diversity http://cordis.europa.eu/project/rcn/197298_en.html
http://in3.uoc.edu/opencms_portalin3/opencms/en/activitats/destaquem/2015/noticia_008