Guideline
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GENDER ACTION+

INCLUSIVE FUNDING

A co-created guideline for mitigating bias along the research funding cycle

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Introduction – A Comprehensive Approach to Inclusive Funding

This guideline aims to provide an overview for research funding organisations (RFOs) of concrete steps to design and implement funding programs that actively aim to mitigate gender bias and to promote inclusivity.

It was developed within the GENDERACTIONplus project in the Community of Practice of research funding organisations (RFO CoP). It reflects some expertise, dialogues, and mutual learnings developed throughout the project's collaborative activities. These experiences were collected and structured by JOANNEUM RESEARCH based on previous research on gender bias in research funding (H2020 project GRANteD, study for ERC and the EIGE GEAR Tool). The guideline was developed in close cooperation with Emer Cahill as RFO CoP work group leader and in co-creation with Vinnova as RFO CoP lead and all CoP members.

In the runtime of the GENDERACTIONplus project, the RFO CoP had several occasions where different parts of an inclusive funding were discussed. Especially the Mutual Learning Workshops (MLW) on Gender Bias and the MLW on Research Assessment were starting points for this document. Input from external speakers and CoP members who shared their knowledge and experience with the CoP in the MLWs were providing valuable content for the guideline. In CoP meetings, mutual experiences and promising practices regarding inclusive funding of the RFO were discussed, which also flowed into the guideline.

The guideline follows each step of the funding cycle in which RFOs can embed equity principles to ensure that all researchers have an equal opportunity to contribute and to advance the scientific knowledge. It enables research funding organisations to move

beyond passive commitments to gender equality and take proactive steps toward a truly inclusive funding ecosystem in which the best ideas can shape the future of science in an inclusive manner.

RFOs as key players for fair research funding and excellent research

RFOs play a key role in deciding who receives grants and which research is funded. This impact is particularly pronounced in early career stages, where funding decisions often determine who remains in academia. Studies show that researchers with grants are more likely to receive future funding and leadership opportunities. At the same time, research performance itself is often evaluated based on previous success in attracting competitive funding, reinforcing the centrality of RFOs in shaping both the definitions of excellence and research careers (O'Connor & O'Hagan, 2016). Overall, RFOs actively shape academic hierarchies: evaluation criteria, funding priorities, and panel procedures all institutionalise a certain understanding of scientific excellence, which often privileges 'conventional' outputs and career paths. This creates structural barriers for those diverging from typical career paths, including women (Cañibano, Otamendi & Andújar, 2019; Cacace, 2009). An inclusive assessment process is essential for ensuring an equitable distribution of research grants, thereby establishing the foundation for equal career opportunities for both female and male researchers. Therefore, there is a growing demand for inclusive funding practices, which take into account diverse career paths and broaden notions of excellence to ensure fairness and equality.

Although RFOs have implemented various policies to foster fair research funding in the applications and assessment phase, gender disparities in research funding remain a persistent challenge: *She Figures 2024* reports funding success rates of 28% for women compared to 32% for men (European Commission, 2024). These phenomena are not limited to women, as success rates also differ intersectionally. Early-career researchers, non-native English speakers, scholars with caring obligations, and those from underrepresented backgrounds, are confronted with funding barriers (Settles et al., 2021).

However, RFOs can actively shape funding outcomes. For instance, the Canadian Institutes of Health Research (CIHR) closed its gender gap with bias training and review redesign (Witteman et al., 2019), the ERC piloted narrative CVs to broaden the notion of excellence (EC, 2021), and UKRI and NWO introduced inclusive assessment practices with measurable impact (UKRI, 2022; NWO, 2023).

The role of bias

Despite reform efforts, biases – both conscious and unconscious – remain deeply embedded in the funding system and continue to influence who is getting funded and how excellence is assessed. Studies show that bias is systemic in nature; it is shaped by structures, practices and norms which guide the assessment processes and shape perceptions of excellence (Kaatz et al., 2016; Ceci et al., 2023). Bias can occur at multiple stages of the funding process – ranging from call design to panel discussions – and that without deliberate mitigation efforts, even well-intentioned procedures may reproduce structural inequalities (Schiffbänker & Husu 2023).

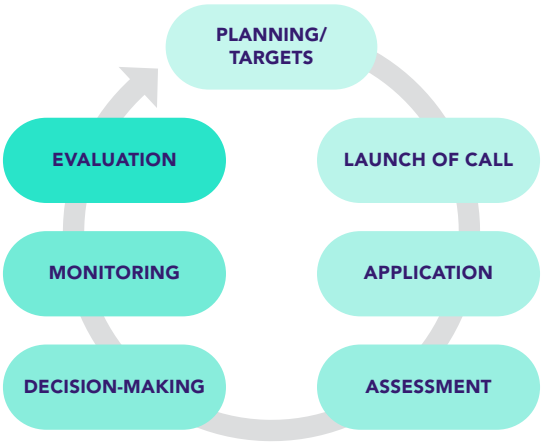
These biases can be caused by multiple factors, such as

- Historically normed assumptions about excellence, assessed by quantitative metrics, for example, h-index and JIF (O'Connor & O'Hagan, 2016; Ceci et al., 2023; DORA, 2020).
- Lack of awareness of heterogeneity of career tracks, research outcomes, etc. (Ploder et al., 2023).
- (Un-)conscious cultural and gender stereotypes: men are seen as more excellent, more independent, more innovative, or leadership-orientated, even with equivalent qualifications (Moss-Racusin et al., 2012; Van der Lee & Ellemers, 2015).
- Varying standards within and across panels (Bornmann et al., 2007; Schiffbänker et al. 2022).
- Limited willingness / resistance to change assessment attitudes and practices (Rushforth, 2025; Dagiené et al., 2025).
- Lacking competence or support (Tamblyn et al., 2018; Ovseiko et al., 2020).
  - how to do assessment differently
  - how to apply existing guidelines in practice

The funding cycle: bias and the mitigation tactics

For every step in the funding cycle, this guideline shows the potential challenges and factors that can cause bias. It provides practice-orientated recommendations on how to mitigate bias and delivers promising practices from RFOs or other organisations that already have successful measures in place. Additionally, this guideline links to useful tools.

Figure 1 **Funding cycle with gender relevance**



STEP 1: **Budget allocation**

Challenges, potential bias factors:

The way budgets are distributed at the beginning of a funding program plays a crucial role in shaping who has access to resources and what research is funded. Funding programs may favour disciplines where men are overrepresented (e.g. engineering), while fields with higher female participation (e.g. health and education) receive less financial prioritisation (She Figures, 2024; EC, 2021). Moreover, women-led projects have been shown to receive smaller budgets, even when the quality of the proposal was comparable (Oliveira et al., 2019). This reflects underlying stereotypes that imagine women as a better fit for 'safe' or lower-budget projects, while men are more trusted with high-risk research (Knobloch-Westerwick et al., 2013; Reuben et al., 2014).

How to mitigate bias:

- Link share of budget and share of women researchers per field.
- Share these detailed data publicly

STEP 2: **Design program**

Challenges, potential bias factors:

The design of a funding program includes elements such as eligibility criteria, thematic focus, evaluation models, and application structures. These can either support or hinder inclusion, and this decides who perceives themselves as eligible, competent or welcome to apply. Inclusion may be hindered, for example, by narrow definitions of excellence, a focus on traditional results, or overlooking structural barriers to participation (Kalpazidou Schmidt & Cacace, 2019; Cañibano et al., 2019). The use of overly technical language or disciplinary framing could also discourage applicants from the social sciences (GEECCO, 2020). Biases can also occur in the formulation of research objectives, for instance, calls that lack gender-sensitive framing or fail to require consideration of the gender dimension in research content risk reinforcing blind spots in knowledge production (Schiebinger & Schraudner, 2011; EC, 2020).

How to mitigate bias:

- Collect statistical information on an annual basis (shares of funded and rejected applications integrating gender) to adapt the program
- Make reference to explicit statement on the commitment of the RFO to gender equality
- Consultation with other EU funding programs on gender-specific issues, which can lead to increased cooperation in EU projects on gender equality and inclusion and sharing good practices

- Publish calls for minority groups (e.g. young researchers, researchers with migration background)
- Provide financial resources to support applicants from minority groups
- Fund personal/project access costs: Costs related to removing barriers due to disability (e.g. assistive technologies for project members, childcare costs for attending a conference or mental health support) in order to support disabled individuals to apply for funding.
- Provide costs for capacity building, such as for gender training, gender coaching or mentoring.
- Design program to be useable and attractive to a target group or a wide range of different people
- Implement gender quotas or tie-breaker mechanisms (e.g., awarding funding to the underrepresented gender when applicants are equally qualified) as a strategic tool to mitigate systemic gender bias and promote balanced participation in funding programs.
- Designing funding instruments that promote and support a responsible and ethical use of AI technologies in research and require the compliance of national and EU legislations for the use of AI

Good practices / measures in place:

- Vinnova (Sweden): integrates social inclusion in the application procedure.
- DFG (Germany): The DFG strongly welcomes proposals from researchers of all genders and sexual identities, from different ethnic, cultural, religious, ideological or social backgrounds, from different career stages, types of universities and research institutions, and with disabilities or chronic illnesses. The DFG encourages female researchers in particular to submit proposals.
- FWF (Austria): The ESPRIT program (Early-Stage Program: Research – Innovation – Training) is intended to improve the skills and support the professional development of researchers from all disciplines early in their research careers by giving them the opportunity to lead an independent research project.
- FCT (Portugal): collects and publishes success rates for W and M (% of funded in total applicants, M and W).
- FCT launched in 2023 the RESTART program to promote gender equality and opportunities through the competitive funding of individual R&D projects in all scientific fields when carried out by researchers who have recently taken parental leave, including adoption. In line with public policies in this area, RESTART also covers, with specific eligibility conditions, cases of shared parental leave, which favours equality in the provision of care and the sharing of family responsibilities and leave durations.
- SNSF: The Swiss Programme for International Research by Scientific Investigation Teams (SPIRIT), which promotes team-orientated cross-border research and equal opportunities, has evaluation criteria including two dimensions related to gender equality and diversity: Presenting how sex and gender in research content will be analysed (or justifying why not relevant) and discussing gender balance in the team composition. Also, the Agora program demands the consideration of diversity in the overall proposal to obtain funding for scientific dialogue.

- Malta: have an internal equality committee, conduct a major review of funding procedures
- Small Grant Scheme for female scientists in technical sciences (SGS) – National Centre for Research and Development (PL): Small Grant Scheme for female scientists in technical sciences (SGS) – National Centre for Research and Development (PL) | European Institute for Gender Equality
- Supporting young mother researchers (MTA) – The National Research, Development and Innovation Office (HU): Supporting young mother researchers (MTA) – The National Research, Development and Innovation Office (HU) | European Institute for Gender Equality
- TUBITAK (Turkey): call for disabled researchers
- L'ORÉAL (Austria): scholarships are awarded to young female scientists in medicine, natural sciences or mathematics who are at the beginning of their scientific career or to support them in (re-)entering a scientific careers.
- ZETA (Czech Republic): was a program for young researchers that offered extra points to the teams that are gender balanced and/or led by a female principal investigator. Now the main framework program is SIGMA with different streams. In two streams, SIGMA DC2 and SIGMA DC3, gender balance in research teams is part of the evaluation criteria. In SIGMA DC2, which is similar to ZÉTA and is aimed at early-career researchers, the proposals submitted by women only may also get the full number of points, as they may also be considered as contributing to a more balanced representation of men and women in research.
- NIHR (UK): covers costs related to inclusive research and relevant steps to ensure inclusive research, e.g. training, recruitment material or alternative data collection.
- Creative Scotland offers access support to the costs of services that help applicants (deaf, hard of hearing, disabled or living with chronic illness, mental illness or neurodivergence) overcome barriers to applying for Creative Scotland funds.
- Helene Schiffbänker & Liisa Husu (2023) GRANteD Policy brief #1 Context, Policies and Practices, https://www.granted-project.eu/wp-content/uploads/2023/12/GRANteD-Policy-Brief_policies-practices-v03.pdf
- Global Research Council: Supporting Women in Research. Policies, Programs and Initiatives Undertaken by Public Research Funding Agencies. This case study booklet is a collection of concrete gender measures implemented by funders from all parts of the world, embedded in different national and cultural contexts and starting from very different levels of gender awareness. GRC_GWG_Case_studies_final.pdf
- Research Ireland (formerly Science Foundation Ireland) published a paper that presents a review of gender initiatives across funding programs of Science Foundation Ireland since 2011 and highlights those that are supporting a stronger representation of women in STEM. Practitioners' perspectives: a funder's experience of addressing gender balance in its portfolio of awards
- Supera project brings an overview of resources and examples of measures that RFOs can take to promote gender equality during the typical cycle of a call for proposals. RFOs journey map – Supera Project
- The role of Funding Agencies in the promotion of Gender Equality in R&I; GENDER-ACTION_PolicyBrief_RFOs-March-8-2019.pdf

STEP 3: **Design call text**

Challenges, potential bias factors:

The call text is crucial as it communicates expectations, priorities, and values. It influences who feels encouraged to apply. Here the framing, language and structure can result in exclusion. Applicants from underrepresented backgrounds, such as women and researchers with less prominent institutional backgrounds, may be discouraged by overly technical terminology, gendered language, or implicit standards (GEECCO, 2020; Gaucher et al., 2021; van den Brink & Benschop, 2012).

How to mitigate bias:

- Use gender-sensitive language and images, have gender-proofed call text; AI could be used to review the use of biased language in calls
- Include reference to GE policy
- Ask applicants to describe planned gender and diversity measures in project teams
- Include questions on inclusive gender analysis in R&I
- Clear and simple application forms with examples of how to include sex/gender analysis
- Incentives/extra marks for all applications having a gender equality expert in teams or having a researcher on gender
- Require reflection and transparency from applicants on their use of AI tools in applications and research activities, as AI can also be biased
- Make caring obligations in applications visible (extending the period for applying, providing compensation for a care person)
- Limit the number of publications that can be listed in the application. Also ask applicants to explain why they chose the publications, what they see as the value of those publications (Narrative CV).

Good practices / measures in place:

- Vinnova (Sweden): policy norm-critical lens on language used, inclusive pictures and currently testing cartoons instead of pictures
- FCT (Portugal) follows a participatory process when designing calls, involving several relevant colleagues and departments.
- FCT follows the principle to promote the involvement of the scientific community in the design and implementation of funding instruments (FCT Tenure – https://www.fct.pt/concursos/fct-tenure-1-edicao).
- TUBITAK (Turkey): Launched a call at the end of 2023 for inclusive society support practices – aims to tackle issues of individuals with special needs and facilitate their integration into society by providing support.
- TACR (Czechia): Prolong eligibility windows for those with caring responsibilities. Applicants can only report 5 main research outputs, which makes it more inclusive.

Tools and resources:

- N. Garg, L. Schiebinger, D. Jurafsky, J. Zou, Word embeddings quantify 100 years of gender and ethnic stereotypes, Proc. Natl. Sci. U.S.A. 115 (16) E3635-E3644
- Gonen, H. & Golderg, Y 2019. Lipstick on a Pig. Debiasing Methods Cover up Systematic Gender Biases in Word Embeddings But do not Remove Them

STEP 4: **Launch of the call and approaching applicants**

Challenges, potential bias factors:

How a call is launched and communicated also impacts who applies. The language, concepts, and dissemination channels can lead to exclusion. They can, for instance, reflect narrow norms of who 'belongs' in the field of research. Women and minority researchers often do not have informal academic networks where the calls and strategies are circulated, which reduces their awareness or preparedness to apply (van den Brink et al., 2010; Ranga & Etzkowitz, 2010). Moreover, masculine-coded language or visuals can signal that men are the default applicants, which hinders other researchers from applying (Gaucher et al., 2011). For these reasons, among others, women apply less frequently, are less likely to be PIs, and receive fewer large grants. But it cannot be reduced to 'self-selection': The disparities are also linked to institutional support, mentorship opportunities, and visibility (Blichenstaff, 2005; van den Besselaar & Sandström, 2017).

How to mitigate bias:

- Know under-served groups and have data on who is under-served.
- Mobilising collaborative actors might be a good solution to reach underrepresented groups
- Reflect on distribution channels: do they target diverse (and underrepresented) applicants?
- Address the pool of potential women applicants explicitly (by workshop, gender networks)
- Nominate a contact point to support applicants
- Have info days for (potential) applicants
- Use a broad range of media sources to ensure different socio-economic groups engage
- Use gender-sensitive language and images (website, newsletter)
- Presentation of the call includes gender statistics and gender targets for the funding body
- Timing: school holidays could increase caring responsibilities. Avoid deadlines near holidays

Good practices / measures in place:

- TACR (Czechia): extends eligibility window for those with caring responsibilities
- TUBITAK (Turkey): implements inclusive language policies in calls and communication services.
- Former Science Foundation Ireland introduced a formal approach for increasing the number of women applicants and allowed a higher number of applications from one institution where women lead the projects: from each research funding body, men can lead a maximum of six projects; if the project leaders are women, six additional applications are possible.

Tools and resources:

- Supera: Guidelines for gender-sensitive communication in research and academia
- Textio: Support for inclusive recruiting
- Gender Decoder: check whether a advert has the kind of subtle linguistic gender-bias
- *Bell, A. (2023) „"If we use the strength of diversity among researchers we can only improve the quality and impact of our research": Issues of equality, diversity, inclusion, and transparency in the process of applying for research funding"*. https://doi.org/10.5281/zenodo.10210812

STEP 5: **Selection of reviewers/panel members**

Challenges, potential bias factors:

Reviewers are usually selected due to their scientific excellence. Reviewers interpret and apply RFO's standard assessment procedures. However, systemic imbalances are frequently reproduced by selection processes, as panels tend to be made up of older researchers whose careers are built on traditional indicators of excellence (e.g. h-index). Thus they are less likely to question established norms (DORA, 2020; Kaltenbrunner & de Rijcke, 2019), which can lead to a lack of diversity in gender, discipline, institution or career stages (Pezzoni & Visentin, 2024; GESIS, 2023). Implicit biases also influence how applications are assessed. When new criteria need to be assessed – like the gender dimension in research – selected reviewers need new capacities (Schiffbänker 2023).

How to mitigate bias:

- Provide guidelines with clear criteria for reviewer selection
- Active search for female reviewers/panel members and members of other under-represented groups
- Gender balance on evaluation panels (introduce quota)
- Set out standards for a conflict of interest

Good practices / measures in place:

- FCT (Portugal): follows standards for conflict of interests (CoI), providing guidelines in the remit of guides for peer reviewers and effectively controlling good practices. "In case a CoI is detected during the evaluation process, the panel member is required to inform the panel chair and the FCT team of this situation. So that application must be swiftly reassigned."
- UKRI embeds EDI principles into reviewer recruitment (UKRI, 2022).
- The Swiss National Science Foundation (SNSF) uses structured scoring guidelines and encourages diversity in panel membership across career stage, institution type, and disciplinary background (SNSF, 2023).
- The European Research Council (ERC) has introduced narrative CVs to enable fairer evaluation of diverse career paths and reduce reliance on traditional metrics (European Commission, 2021).

STEP 6: **Composition of assessment panel**

Challenges, potential bias factors:

The evaluation procedure is significantly impacted by the composition of the assessment panel. The decision-making process is affected by the panel's disciplinary expertise as well as factors like interpersonal and cultural dynamics (Schiffbänker et al., 2022, D6.1). Panels that lack gender diversity are more likely to unintentionally and intentionally maintain biases and norms. Evidence indicates that homogeneous panels favour traditional metrics and well-known research profiles, which ultimately disadvantages women and other marginalised groups (Helmer et al., 2017; Witteman et al., 2019).

How to mitigate bias:

- Gender balance with at least 40% of women and men
- Ensure gender expertise in panels, e.g. by a co-assessor with sound gender competence for reviewers of the gender dimension

Good practices / measures in place:

- The Swedish Research Council applies gender balance targets to panel composition and provides reviewers with guidance on assessing research from a gender perspective (Swedish Research Council, 2021).
- Law 14/2011 on Science, Technology and Innovation, Spain – The STI system's committees and bodies must have a gender balance, with 40–60% of each gender represented. The regulation of the research workforce also takes gender balance and non-discrimination into account. In addition to having the right to take use of their particular research organisations' work-life balance initiatives, researchers have the right to develop their roles and careers in accordance with the gender equality principle. According to the law, steps should be taken during the selection process to

guarantee that professional pauses do not adversely impact the curriculum assessment of researchers.

Tools and resources:

- Hazlett, H. (2024). Improving pre-award processes for equitable and transparent research assessment. Zenodo. https://doi.org/10.5281/zenodo.11246257

STEP 7: **Definition of assessment criteria**

Challenges, potential bias factors:

Through their evaluation criteria, RFOs establish criteria for excellent work, decide on which researchers receive funding, and implement institutional or national agendas, such as gender equality. Candidates' chances of success are influenced by assessment criteria, which define the qualities that are valued in the selection process. Many present criteria still rely on limited, quantitative measures of scientific output, like journal impact factors, citation metrics, and publication counts. Despite being easily adaptable, these metrics usually ignore the systemic factors affecting access to research opportunities and time (DORA, 2020; Kaltenbrunner & de Rijcke, 2019). When excellence is measured only by continuous output, researchers–particularly women–who have experienced career interruptions due to caregiving or who have worked in settings with limited resources may be at a disadvantage (Heijstra et al., 2017; O'Connor & O'Hagan, 2016). Criteria can run the risk of maintaining past disparities and rejecting talent influenced by diverse experiences when they fail to contextualise achievements or take non-traditional career paths into consideration (van den Besselaar & Sandström, 2021; Witteman et al., 2019).

How to mitigate bias:

- Definition of clear, unambiguous assessment criteria
- Definition of unbiased, gender-sensitive eligibility criteria (academic age or active research years instead of biological age)
- Counting out leave years (care obligations, work outside research fields, sick leave, etc.).
- Consider introducing narrative CVs
- Broader merit indicators beyond metrics (team support, mentoring, etc.) included
- Transparency: publish guidance on how reviewers are advised to consider excellence/impact
- Communicate the weight of each criterion
- Minimise ambiguity in scoring systems
- Make transparent how criteria are transferred into scores/grades

Good practices / measures in place:

- Canadian Institutes of Health Research (CIHR) have evaluators to rate the quality of integrating the sex and gender dimension as a "strength", "weakness", or "not

applicable" and to provide a rationale for their rating along with recommendations for applicants to improve

- Former Science Foundation Ireland enabled applicants to the SFI Frontiers for the Future Program who fulfil the program eligibility criteria to be reviewed as an "Emerging Investigator". This means that the quality of research is weighted more heavily than the track record.
- FCT: The following suspensions or interruptions of research activity may be taken into account when counting the time after obtaining the doctoral degree:
  i) For maternity: the number of years after obtaining the doctoral degree shall be reduced by 18 months for each child born before or after obtaining the doctoral degree
  ii) Due to paternity: the number of years after the award of the doctoral degree is reduced by the parental leave time, defined in the legislation in force, for each child before or after the award of the degree
  iii) For reasons of prolonged illness: the period indicated in the certificate of illness, exceeding 90 days, is taken into account in reducing the number of years following the award of the doctoral degree (notices of call for tenders as regards scientific employment).
- FCT: The ongoing assessment process of R&D units by FCT incorporates several guidelines that may contribute to mitigate bias. Among those, the following examples can be highlighted as valuable and relevant in assessment:
  A) Quality, merit, relevance, level of collaboration, and internationalisation of R&D activity carried out in the evaluation period-sub-criterion: The quality of hosting conditions of researchers, such as mentoring plans, gender and equality and inclusiveness actions, and fair and transparent evaluation mechanisms, among others; Furthermore, the future strategic program of R&D units must embed ethical concerns, open science and data policy, and a way for countering precariousness and integrating researchers into permanent career positions. (https://www.fct.pt/concursos/programa-plurianual-de-financiamento-de-unidades-de-i-d-2023-2024-1-1)
  B) Quality, merit, and relevance of the scientific objectives, the overall strategy, the activity plan and the organization of the R&D unit for the next five years – sub criterion: gender and data policies, budget, and programmatic funding request (https://myfct.fct.pt/LibDocument/FileDisplay.aspx?EcrypDoctId=ocSoN5+Wv24gEnivBgQPZsZSkLl/v/GjbDNlYkfwGP2LJxXkefXaGQzQxvteFnAKn6jQzDksh2mE+CwT3Eh/aREh64ZsCDo5ALr+wIofEhZrXDILNmDwjtDMFZpDekLzDZLY+i3RPuFj6UdB4rDkL3KT1Vdk3YCaIQhaoxIc/gc=)

Tools and resources:

- DORA – FORGEN: Using Narrative CVs: Process Optimization and bias mitigation (zenodo.org)
- DORA's Resource Library – Practical guides for developing responsible research assessment practices: https://sfdora.org/resource-library
- UKRI's Resume for Researchers (R4R) – A narrative CV template designed to value broader contributions to research and society: Résumé for Research and Innovation (R4RI): guidance – UKRI

- Horizon Europe Guidance on Gender Dimension – Framework for integrating gender and societal impact into research assessment: Framework for the integration and evaluation of inclusive-KI0124060ENN.pdf
- What is the gender dimension in research? Case studies in interdisciplinary research by Kilden. https://kjonnsforskning.no/sites/default/files/what_is_the_gender_dimension_roggkorsvik_kilden_genderresearch.no_.pdf

STEP 8: **Assessment process**

Challenges, potential bias factors:

Evaluation of research proposals is a vital tool for converting broad policy objectives into practical application. Human judgment unconscious prejudice, and academic practices all have an impact on deliberative processes, even if the ideas of objectivity and meritocracy are essential to research assessment (Lamont, 2009; O'Connor & O'Hagan, 2016).

Panels may favour individuals whose careers follow traditional academic trajectories based on prestige indicators, apparent self-assurance, or competence in disciplinary terminology (van den Brink & Benschop, 2012). Furthermore, group dynamics may take dominance over individual evaluations in the absence of stringent moderation and accurate calibration, leading to uneven scoring.

How to mitigate bias:

- Provide clear guideline of the evaluation process on the website
- Make sure that the same criteria are discussed for each applicant, avoiding double standards (Schiffbänker et. al. 2022, D6.1).
- Offer implicit bias training for reviewers
- Ensure transparency: Are rankings purely based on score, and can scores be altered by the panel? (peer vs panel scores)
- Ensure transparency: provide for double-blind peer reviewers
- Weighting towards gender minority and underrepresented groups
- Panel chair might encourage all members to reflect on gender and the share of women applicants in all steps of the assessment process
- Gender equality observers, external gender experts or trained internal staff can report whether and how gender bias is manifested in the discussion of proposals
- Make sure reviewers/panels use gender-inclusive language and avoid names and pronouns of the applicants
- AI can help identify bias in assessment
- Investigating the use of AI for note-taking in meetings, taking into account data privacy and authorisations when using AI for note-taking.

Good practices / measures in place:

- Former Science Foundation Ireland has recently introduced a tiebreaking approach, weighting pro-equality and preferring women applicants when they have equal

scores as their male colleagues. This implies that gender needs to be taken into account in the negotiation and final decision-making process.
- UKRI offers training on bias awareness and inclusive assessment practices (UKRI, 2022).
- FCT: All reviewers are of reputed competence in the scientific areas of the applications under evaluation and cannot be affiliated with any Portuguese R&D institution. The constitution of the evaluation panels takes into consideration the number of submitted applications and their scientific areas, as well as the balances of gender, geographical and institutional distribution of the reviewers' affiliations.

Tools and resources:

- Science Europe – Practical Guide to Improving Gender Equality in research Organisations (Unconscious Bias in Peer Review Processes; How to Monitor Gender Equality; How to improve Grant Management Practises) se_gender_practical-guide.pdf
- GEECCO: D7.2. Promoting gender equality in the evaluation process: Guideline for jury members, reviewers and research funding organisations' employees: https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5ce76bdf5&appId=PPGMS
- DORA: Hatch, A and R. Schmidt. (2020) Rethinking Research Assessment: Unintended Cognitive and System Biases. DORA_UnintendendedCognitiveSystemBiases.pdf
- NWO: Inclusive assessment: tools for evaluation committee meetings & tools for written assessments
  a. Inclusive assessment video Inclusive assessment | Written assessment (youtube.com)
  b. Interaction and group dynamics in evaluation committees NWO (youtube.com)
  c. Inclusive assessment @NWO | PPT (slideshare.net)
- University of Bristol Elizabeth Blackwell Institute for Health Research, DORA San Francisco Declaration on Research Assessment, Morebrains, & NIHR Bristol Biomedical Research Centre. (2025). Checklists to help implement improvements in training for reviewers and evaluators. Zenodo. https://doi.org/10.5281/zenodo.14729234
- Tools to Advance Research Assessment (TARA) is a project to facilitate the development of new policies and practices for academic career assessment Project TARA | DORA.
- Science Europe: RECOMMENDATIONS ON RESEARCH ASSESSMENT PROCESSES se-position-statement-research-assessment-processes.pdf (scienceeurope.org)
- The Federation of Finnish Learned Societies produced guidelines to improve the assessment of researchers in Finland. The report provides a set of general principles that apply throughout recommended good practices. Good practice in researcher evaluation. Recommendation for the responsible evaluation of a researcher in Finland (avointiede.fi)
- An Irish research body has produced two videos on assessment practices: 'What happens before a panel meeting?' and 'What happens at a panel meeting?' How we assess applications | HRB | Health Research Board
- The changing role of funders in responsible research assessment: progress, obstacles and the way ahead (RoRI Working Paper No.3) (figshare.com)
- Research evaluation in transition: challenges & opportunities (James Wilsdon talk for UIMP, Santander, 6 July 2022) (figshare.com)
- DORA: A practical guide for research evaluators
- DORA: A collection of good practices that illustrate various forms of alternative research and researcher assessment is available here.

- A gender-equal process: A qualitative investigation of the assessment of research grant applications 2023 – Swedish Research Council
- Holm, J., Waltman, L., Newman-Griffis, D., Wilsdon, J. (2022). Good practice in the use of machine learning & AI by research funding organisations: insights from a workshop series. Research on Research Institute. https://doi.org/10.6084/m9.figshare.21710015.v1
- Zou, J. (2024): How to use ChatGPT responsibly in peer review, Nature, Vol 635, Nov 2024

STEP 9: **Post assessment**

Challenges, potential bias factors:

Although the post-assessment phase is sometimes overlooked, it is crucial for fostering transparency, accountability, and trust in funding decisions. At this stage, RFOs have the chance to look at decision patterns, evaluate results, and offer feedback. Not all RFOs consistently monitor or disseminate disaggregated outcome data by gender, institution type, or career stage, hence making it more difficult to identify persistent biases or systemic injustices (EIGE, 2021; Witteman et al., 2019).

The lack of standardised forms or transparency in the assessment makes it harder for applicants from marginalised groups, such as women and early-career researchers, who often receive less detailed or constructive criticism (Tamblyn et al., 2018). Moreover, a lack of clarity in the review process regarding the evaluation of different components may cause ambiguity and discourage reapplication, especially from marginalised or first-time candidates (Lee et al., 2013).

How to mitigate bias:

1. **Applicant feedback**
   - Offering feedback on decisions for funding can ensure final decisions are robust and process-based
   - Final evaluation reports for applicants and panel reports written in gender-sensitive and inclusive language
   - Integrate revision from applicants in final assessment – Feedback loops (former SFI)

2. **Monitoring**
   - Sex/gender dimension – is it actually being addressed?
   - Publish program statistics by gender
   - Exploring AI applications in identifying bias among staff and reviewers
   - Analysis if intentions and goals were achieved; consequences in case of failing

3. **Project implementation**
   - Furthermore, any post-granting activities (e.g. changes to the principal investigator, financial compliance, extension in the case of illness) need to be addressed from a gender perspective

Good practices / measures in place:

- Structured and standardised feedback: Agencies such as CIHR and SNSF provide applicants with consistent, written feedback templates that clarify scoring and decision rationale–improving transparency and enabling learning
- Monitoring and publication of outcome data: The European Commission and UKRI disaggregate success rates by gender, institution type, and career stage to identify and address disparities
- Appeals and resubmission support: Funders like the Swedish Research Council and DFG offer appeals procedures and coaching for resubmission, helping to reduce disengagement, especially among early-career or underrepresented applicants.
- Randomisation, e.g. HRC of New Zealand
- Zimmerman, A., Greaves, H., Klavans, R., Best, J. and Derrick, G. E., 2021. Gendered feedback and negative adjective use in peer-reviewer reports. In: Proceedings of ISSI 2021 [online]. Presented at the 18th International Conference of the International Society for Scientometrics and Informetrics Leuven, Belgium. Available from: https://www.issi-society.org/publications/issi-conference-proceedings/proceedings-of-issi-2021/

Tools and resources:

- Jacqueline Granleese, Gemma Sayer: Gendered ageism and "lookism": a triple jeopardy for female academics. In: Women In Management view. 2006 doi:10.1108/09649420610683480
- AGORRA – Research on Research: AGORRA (A Global Observatory of Responsible Research Assessment) is a collaboration between research funders, evaluation agencies and meta-researchers across 14 countries which aims to generate comparative data, evidence and analysis to support and accelerate responsible research assessment

STEP 10: **Linking assessment to CoARA principles**

CoARA (Coalition for Advancing Research Assessment) aims for a research assessment that acknowledges the diverse outputs, practices and activities that maximise the quality and impact of research. Through the application of common principles and clear commitments, CoARA seeks to systematically reform research assessment and enhance assessment methods.

RFOs can think about how to link their work to these emerging standards. RFOs can sign the CoARA agreement or become full members and commit to apply CoARA recommendations through an action plan within their organisation. CoARA members agree to avoid using incorrect or limited metrics, to base assessments mostly on qualitative evaluations with peer review at the centere, and to acknowledge the diversity of research contributions and careers. CoARA has created a Code of Conduct outlining expected behaviours for participation in all coalition activities in order to fulfil these commitments. This includes preventing conflicts of interest, fostering equality and professionalism, re-

specting the integrity and opinions of others, and avoiding offensive or discriminatory messages.

CoARA has established 13 Working Groups that focus on specific parts of the research assessment. Participating members exchange knowledge, learn from each other's experience, discuss and develop outputs to advance research assessment and support the implementation of members' commitments.

The most relevant working groups focusing on reforming research assessment practices are:

1. Working Group on Early-and-Mid-Career Researchers (EMCRs) – Assessment and Research Culture

This group discusses the difficulties EMCRs come across, like precarity and hypercompetition, which frequently become worse by the way assessments are conducted currently. In order to create fair and encouraging assessment criteria and reduce structural biases in funding allocation, RFOs must have a thorough understanding of the challenges experienced by EMCRs.

Therefore, the foreseen activities of this WG include two reports on academic positions and one on habilitation processes across Europe, collecting good and bad practices and developing guidelines and a toolbox for implementing an inclusive research culture.

2. Working Group on Reforming Academic Career Assessment (ACA)

This group aims to broaden the scope of academic career assessments to reflect the diverse roles and tasks of academics. Their key initiatives include an adaptable toolbox that considers all university missions and the broad scope of academic activities, skills, and competencies at different career stages. By now the Working Group has already published a collection of case studies, which describe well-established international and national level initiatives for reforming research and academic career assessment. Additionally, they summarised their lessons learned from the conducted survey and case studies to reform academic career assessment.

3. Working Group TIER (Towards an Inclusive Evaluation of Research)

This group deals with how to mitigate (gender) bias in research assessment. The TIER WG will identify mitigating actions and disseminate best practices for inclusive and bias-mitigated processes in the evaluation of research quality, develop training programs for institutions and evaluators, as well as a toolkit for self-evaluating the level of bias in research assessment.

CoARA enables RFOs to reform research assessment in their organisation by participating in CoARA and receiving support, knowledge and concrete guidance.

List of Abbreviations

Abbreviation	Meaning
ACA	Academic Career Assessment
AI	Artificial Intelligence
CIHR	Canadian Institutes of Health Research
CoARA	Coalition for Advancing Research Assessment
CoI	Conflict of Interest
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
DORA	Declaration on Research Assessment
EC	European Commission
EIGE	European Institute for Gender Equality
EMCR	Early-and-Mid-Career Researchers
ERC	European Research Council
ESPRIT	Early-Stage Program: Research – Innovation – Training
FCT	Fundação para a Ciência e a Tecnologia (Portuguese Foundation for Science and Technology)
FWF	Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Fund)
GE	Gender Equality
GEAR	Gender Equality in Academia and Research (tool)
GRC	Global Research Council
H2020	Horizon 2020 (EU Research and Innovation program)
JIF	Journal Impact Factor
LERU	League of European Research Universities
MLW	Mutual Learning Workshop
MTA	Magyar Tudományos Akadémia (Hungarian Academy of Sciences)
NWO	Netherlands Organisation for Scientific Research
R&I	Research and Innovation
RFO	Research Funding Organisation
RFO CoP	Research Funding Organisation Community of Practice
SFI	Science Foundation Ireland
SGS	Small Grant Scheme
SNSF	Swiss National Science Foundation
SPIRIT	Swiss Programme for International Research by Scientific Investigation Teams
TIER	Towards an Inclusive Evaluation of Research
TUBITAK	Scientific and Technological Research Council of Turkey
UKRI	UK Research and Innovation

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