

CoARA WG TIER - Towards an Inclusive Evaluation of Research

WG (Co-)Chairs:

Silvia Penati (Chair), Bonaria Biancu (Deputy Chair), Jasmine Lorenzini and Arianna Montorsi (Co-chairs of TF1), Lucio Pisacane and Giuliana Rubbia (Co-chairs of TF2)

A BIAS-FREE RESEARCH ASSESSMENT IS POSSIBLE

Report of the TIER in-person meeting of 7 February 2025

On February 7, 2025 the CoARA Working Group TIER - Towards an Inclusive Evaluation of Research organized an in-person meeting to take stock of the ongoing progress and challenges. Local organizers included Silvia Penati, Bonaria Biancu, Maura Coniglione (UniMib - Università Milano-Bicocca), Monica Fabbri (HRS - IRCCS Ospedale San Raffaele) Giuliana Rubbia (INGV - Istituto Nazionale di Geofisica e Vulcanologia).



Some of the participants at the meeting

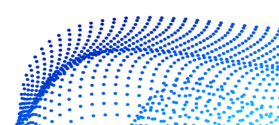
Agenda in-person meeting 07/02/2025:

- 10:00 - Coffee and Cookies
- 10:20 - Welcome and Schedule Overview
- 10:30 - Guest Plenary - Marcela Linkova (Czech Academy of Science, GENDERACTIONplus, ERA Forum) (20 minutes + 10 minutes Q&A)
- 11:00 - Survey Presentation by Maura Coniglione (10 minutes + 5 minutes Q&A)
- 11:15 - Presentation TF1 (45 minutes)
- 12:00 - Presentation TF2 (30 minutes)
- 12:30 - Lunch Break
- 13:15 - Guest Plenary - Cristina Solera (Torino University, Mind the Geps) (20 minutes + 10 minutes Q&A)
- 13:45 - Helene Schifflbänker (Joanneum Research, GENDERACTIONplus, GRANiteD and TIER) (20 minutes + 10 minutes Q&A)
- 14:15 - Small-Group Discussions
 - Topics: How to question Excellence; Best Practices; Outreach Strategies
- 15:00 - Coffee and Cookies Break
- 15:15 - Small-Group Summaries, Presentations, and Final Considerations
- 16:00 - Closing

The meeting took place at the premises of the University Milano-Bicocca and was also open to remote attendance.

Outstanding speakers shared their experiences grounded in various initiatives and European projects, and chairs and co-chairs presented and commented on the progress of the task forces while opening discussions in subgroups among participants.

The present document aims at highlighting key messages from the invited speakers and the main outcomes of the meeting.





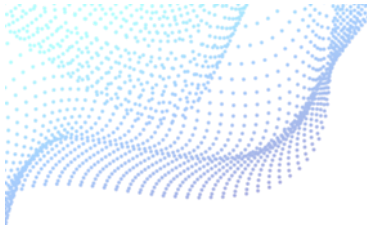
Highlights of presentations

Guest Plenary 1- Contributing to the advancement of gender equality in the ERA

Marcela Linkova, Institute of Sociology Czech Academy of Science, Prague, GENDERACTIONplus, ERA Forum

In her talk, Marcela Linkova first introduced the Horizon Europe GENDERACTIONplus project, which brings together representatives of national authorities and research funding organisations from 22 EU member states and three associated countries. The project works to advance gender equality in the European Research Area through capacity building, policy exchange and coordination, and the provision of strategic policy advice. It thus contributes to implementing ERA Policy Agenda 2022 – 2024. Then she reviewed reasons **why it is difficult to raise the issue of gender bias and excellence and what the arguments can be**. These included objectivity, cognitive dissonance on the part of researchers, lack of awareness and understanding, deeply internalised masculine norms and a culture of hyper-competition and individualism, fear of lowering standards and gender bias as a taboo (see box). In conclusion, Marcela Linkova reviewed actions adopted primarily by Research Funding Organisations to mitigate gender bias, the recommendations of the ERAC Standing Working Group on Gender in Research and Innovation, and the GENDERACTION recommendations from 2019.





WHY IT IS SO HARD: OBJECTIVITY. Science is viewed as neutral and free of bias, with evaluation systems perceived as objective and meritocratic. Metrics like citation counts, h-indices, and impact factors are trusted as **quantifiable indicators of quality**, even though they have well-documented biases. Acknowledging that these “objective” measures are flawed would undermine the core belief in science’s impartiality and fairness. **Note: Peer review and bibliometric indicators are not free from bias—gender, career interruptions, and networking influence outcomes significantly.**

WHY IT IS SO HARD: COGNITIVE DISSONANCE. For many researchers, the current system has **validated their careers**. Questioning it means questioning the legitimacy of their own achievements. **Cognitive dissonance:** accepting gender bias implies that decisions perceived as fair were, in fact, influenced by unequal treatment. Change in evaluation practices is seen as a **threat to tradition** and existing hierarchies and essentially a threat to the core of one’s self. **Note: Reforming how excellence is defined isn’t about diminishing past achievements but ensuring future fairness and inclusivity.**

WHY IT IS SO HARD: LACK OF UNDERSTANDING. Many researchers view bias as a problem that affects others, not themselves, because **unconscious bias is invisible to those who benefit from it**. **Gender bias is systemic and** manifests in subtle ways (e.g., language in recommendation letters, assumptions about potential), making it harder to recognise. The academic culture often lacks sufficient training in **gender and bias awareness**, leading to misconceptions about the issue. **Note: Training on unconscious bias and diversity can increase awareness, but it must be combined with structural change to be effective.**

WHY IT IS SO HARD: MASCULINE NORMS. The **culture of science** rewards hyper-competition, individualism, and productivity—traits associated with traditional male career trajectories. Success is linked to behaviours and attributes that align with dominant gender norms, leading to **unconscious gatekeeping** and exclusion. Researchers who deviate from this ideal (e.g., due to caregiving responsibilities or interdisciplinary research) are often **deemed less “appropriate”** for success. **Note: Broader definitions of excellence that value collaboration, diversity, and societal impact challenge these exclusionary norms.**

WHY IT IS SO HARD: FEAR OF LOWERING STANDARDS. Efforts to address bias tend to also be misinterpreted as **“lowering the bar”**, despite evidence that inclusive practices **raise the quality and diversity of research**. Researchers may resist changes in evaluation criteria, fearing that it will compromise scientific rigour. **Note: Evidence shows that diverse teams produce higher-impact science, and bias-free evaluation improves the fairness and quality of research.**

WHY IT IS SO HARD: GENDER BIAS IS A TABOO. Gender equality discussions can be politicized, leading to discomfort or fear of backlash. Researchers may avoid addressing bias to protect their **reputations, careers, or networks**. The idea of gender bias challenges the scientific identity of being rational, impartial, and fact-driven. **Note: Open discussions about bias are needed, supported by leadership, and backed by data to reduce the stigma.**



Guest Plenary 2- Path of (r)existence between passion, precariousness and «excellence»: data and reflections from MINDtheGEPs

Cristina Solera, Torino University, MINDtheGEPs

In her talk, Cristina Solera first framed the debate around the two rhetorics of “passion for science” and “excellence” referring to literature, and then presented the quantitative and qualitative analysis performed in the framework of the Horizon Europe project MINDtheGEPs, engaging both early career and late career researchers.

Passion for science turns out to be a clear driver of academic choices but also a trap: female and male researchers have passion and enthusiasm but are also "forced" to demonstrate them, especially in the early stages of their careers when one is continually threatened by not becoming a stable position, so that **passion often turns into self-exploitation, over-investment and long working time, strong bonds with supervisors, compliance with the "publish or perish" logic**. Passion becomes a trap and a device of promises. This expected "unconditional" passion is accompanied by a **"neutral" definition of excellence** based on high international mobility, a strong ability to attract funding, and a broad and continuous scientific productivity measured mainly quantitatively through the number of products published in high-impact journals.

Women encounter greater difficulties in adhering to the ideal academic model since they are often less productive (due to care responsibilities), they move less and are less involved in networks "that matter", they are more involved in unrewarded "academic housework" such as teaching, tutoring, administrative management because they suffer bias in evaluation processes.

Guest Plenary 3 - Towards more Inclusive Excellence

Helene Schiffbänker, Joanneum Research, Vienna, GENDERACTIONplus, GRANTeD and TIER

Helene Schiffbänker shared her experiences in research assessment and implementation of gender equality measures and GEPs in research organisations in various projects (gendERC, GRANTeD). She focused on the definition of excellence and how excellence is assessed, and commented on how assessment of excellence can be made more inclusive.

Excellence **is** what **is assessed** as excellence. Excellence does not correspond to a unique, measurable definition; it is often referred to as outstanding performance and reputation; similar terms are research quality and merits. Excellence is context-specific,



by field, discipline, etc; and is assessed by scientific peers; moreover, excellence is negotiable, in that assessment criteria can change over time, for example with a growing relevance of societal impact, and can be changed by actors of the research ecosystem, formally or informally.

The excellent scientist

- has high scientific impact (publications, citations)
- advance knowledge in an **outstanding / groundbreaking** manner
- dedicates as much life time as possible to research
- has extensive networks
- works in prestigious research institutions
- is in a lead position and knows the rules of the game...
- is predominantly male and white

Gender research has revealed various assessment flaws:

- Female applicants need 2.5 times more publications than male applicants to be funded.
- Female candidates are half as likely as male candidates to receive an excellent letter or adjectives like ‘excellent,’ ‘outstanding’ or ‘extraordinary’.

• Assessment criteria are vague and applied unsystematically: e.g. men are “promising”, and women are “inexperienced”.

- CVs describe past performance: Matthew effect.
- Women “sell” their research differently, maybe due to less self-confidence;
- There are assessment biases that go beyond gender, which include reputation, language, geography (Eastern Europe, Global South), and non-linear careers.

In a word, the assessment of excellence is gender biased, regarding panel composition, the assessment process itself and the applied criteria.

A more inclusive excellence can be achieved by:

1. More diverse reviewers/panel members (different career stages, different backgrounds, different research sectors);
2. An assessment process that is clear and systematic;
3. Assessment criteria that attract and enable granting of more diverse researchers (e.g. not all time in academia) with diverse competencies;
4. Assessment criteria that foster a broader research impact and the integration of gender research and innovation content;
5. A more inclusive research culture: including mentorship, and sponsorship.

The inclusive excellent scientist

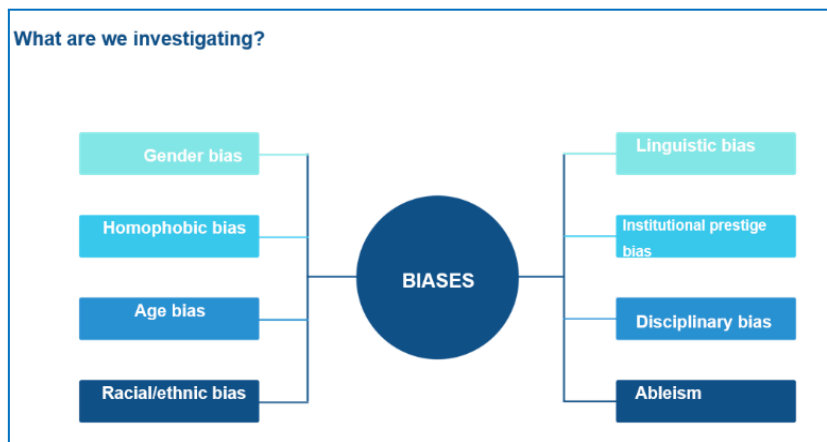
- is well embedded in research teams
- is curiosity driven (not driven by impact points)
- has a good work life balance
- has a work contract that allows developing capacities and network ties
- is of any social / cultural background
- strives for societal impact and collaborates with various stakeholders



Survey on Bias Perception for CoARA Members

Maura Coniglione, University Milano - Bicocca

Biases in research settings impact career advancement and research evaluation simply because we are human and prone to errors. If we hold prejudices, they will inevitably influence our behaviours and how we assess the work of others. So, our goal is not to shame anyone but to foster a culture that promotes awareness and best practices regarding gender bias—and beyond. To achieve this, the survey we have developed plays a crucial role in defining the magnitude of the phenomenon and proposing specific best practices and mitigation strategies based on your insights and experiences. It is a **powerful policy instrument for bottom-up participation** that should not be overlooked—just like voting. This survey targets individuals in those organizations that are CoARA members, from PhD students to full professors.



The main objectives are:

- To investigate the presence of **key biases** in the evaluation of research and at the institutional level and research community level (in hiring, career progression, and e.g. grant allocation) in both RPOs (Research Performing Organizations) and RFOs (Research Funding Organizations).
- To investigate **self-reported biases** and its relationship with research evaluation.
- To assess the **organizational climate** within institutions.
- To **evaluate mitigation strategies** already implemented by institutions (and their level of visibility), such as guardianship measures (e.g., offices where individuals can report biased behavior) and to propose **new bias mitigation strategies**.
- **To define excellence.** Institutional and funding organizations' **criteria for rewarding researchers are often not bias-free**. For example, if a researcher has had a non-linear career due to maternity leave or illness, she/he may face career progression penalties because excellence is often measured by quantity rather than quality. We aim to explore how institutions address this issue and to collect testimonies on how the system can improve.



Data will be stratified by gender, geographical area, seniority level, ethnicity, research field, and age. Institution, country, and personal data of the respondent will remain unknown to ensure full privacy. The survey is open until March 31, 2025 at: https://unimib.qualtrics.com/jfe/form/SV_6mPPuArluJFmP11

GLOSSARY

Bias: Conscious Biases: individuals are aware of and may act upon deliberately, often influenced by personal beliefs, prejudices, or stereotypes.

Unconscious bias: Biases individuals are unaware of, often formed through societal norms or experiences. These can subtly influence decisions without conscious realization.

Gender bias: A tendency to prioritize one gender over others, depending on the context and stereotypes, in hiring, evaluation, and other decision-making processes.

Age bias: Prejudice or favoritism based on an individual's age, typically disadvantageous to younger or older individuals in recruitment, promotions, or treatment.

Homophobic bias: Prejudice or discriminatory attitudes toward individuals based on their sexual orientation, often manifesting as negative assumptions, stereotypes, or behaviors towards LGBTQ+ people.

Racial/ethnic bias: Biases based on race or ethnicity, leading to unequal treatment, representation, or opportunities for individuals from certain racial or ethnic backgrounds.

Linguistic bias: Discrimination based on language or accents, which can affect individuals' credibility or perceived intelligence, often disadvantaging non-native speakers or those with regional accents.

Institutional prestige bias: Favoring individuals or work associated with prestigious institutions, potentially overlooking merit or quality due to institutional affiliation.

Disciplinary bias: A preference or disadvantage based on academic or professional disciplines, often valuing some fields (like STEM) over others (like the humanities).

Ableism: Discrimination, prejudice, or bias against individuals with disabilities, often manifesting as societal attitudes, policies, or practices that devalue people with physical, mental, intellectual, or sensory disabilities.

Intersectional bias: Complex biases that arise from the intersection of the multiple social identities which can compound discrimination or disadvantages.



Task Force 1 - Data Collection & Analysis

Where we stand after one year

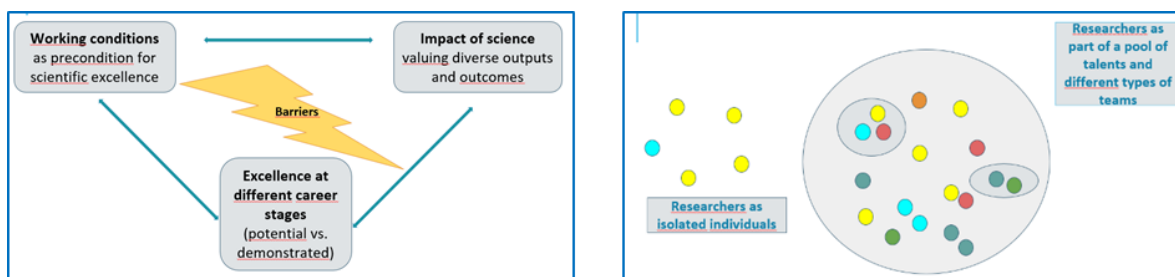
Jasmine Lorenzini, Swiss National Science Foundation and **Arianna Montorsi**, Politecnico di Torino

Jasmine Lorenzini and Arianna Montorsi presented the state of the work of Task Force 1, which is dedicated to the analysis of the impact of implicit and explicit biases on research assessment, and to the elaboration of proposals to counteract them, also in collaboration with Task Force 2.

TF1 collected data to monitor progress about equality, diversity and inclusion; evaluation procedures in place; Research Performing Organizations (RPOs) and Research Funding Organizations (RFOs), in [Finland](#), [Italy](#), [Switzerland](#), the [UK](#), and [EU-Level](#).

The analysis of the case studies shows a variety of scenarios. Regarding data, they are usually collected to compare female and male researchers, while other dimensions of diversity are seldom covered. **Data are not always comparable and raw data are not always accessible**, specifically EU-level data are not accessible.

Regarding evaluation procedures, many organizations have signed the DORA Declaration and CoARA. Variations are present when it comes to taking into account career breaks, non-linear careers, and diversity of tasks. **It is difficult to challenge implicit assumptions about excellence**. Further insights have been presented from the [SNSF's model of excellence](#).



A list of **around 30 best practices** has been proposed and shared with participants, to score those considered most effective and suggest new ones. The list included for example: scientific CVs / narrative CVs, bias training for evaluation committees, national recommendations for good practice in research evaluation, as well as a steering committee for responsible assessment, national guidelines for recruitment and working conditions, anti-racist principles, providing one-to-one feedback for unsuccessful candidates who are part of under-represented groups and many others.



Task Force 2 - Capacity Building & Communication

Where we are and how to proceed

Lucio Pisacane (CNR-IRPPS Institute for Research on Population and Social Policies) and **Giuliana Rubbia** (INGV- National Institute of Geophysics and Volcanology of Italy)

Lucio Pisacane and Giuliana Rubbia presented the various actions performed so far and the next step envisaged for TF2, which is dedicated to organisational aspects, to fostering contacts and synergies with other Working Groups, National Chapters, and CoARA members, to the production of guidelines and training material, and the communication and dissemination of the deliverables. It also assists TF1 in the discussion and elaboration of a list of best practices to mitigate biases.

TF2 has been conducting a general survey of the relevant literature regarding the problem of bias in evaluation procedures, and started populating a **catalogue of open-access tools** (videos, online training courses, etc..) to counteract bias in assessment and evaluation procedures, already available online. Online available videos have been produced by Universities, Research Performing Organizations, Research Funding Organizations, European projects, and Societies. Partly are indicated specifically to gender bias, some include other biases beyond gender, and some others address other kinds of biases. Targets include a variety of stakeholders, such as evaluation committees for recruitment, research proposals evaluation, grant evaluation, jury members, reviewers, and Research Funding Organizations' employees, grant applicants. As for the countries involved, or engaged both as providers of materials or potential users, we have EU members, UK, Horizon Europe consortia, U.S.A., and Canada.

Regarding **communication and engagement**, TF2 started with identifying possible stakeholders in other Working Groups and invited the TIER Chair to the Italian Women in Science Association Conference with a session dedicated to research assessment. It began communicating events and news through the dedicated submission page "Submit to the CoARA Newsletter and update WG+NC Webpages", provided by the CoARA Communication Office, and proposed a new logo, used as a footer in this document.

A LinkedIn group will be opened and other outreach activities are under preparation to effectively share key messages and outputs.

