Gender and diversity integration into research content and methodology

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ENLIGHT RISE event "Responsible assessment of research and researchers.
Changing evaluation culture in academia"
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RESET — Redesigning Equality and Scientific Excellence Together

université de BORDEAUX — ARISTOTLE UNIVERSITY OF THESSALONIKI — U.PORTO — UNIVERSITY OF LODZ — UNIVERSITY OF OULU — RUHR UNIVERSITÄT BOCHUM RUB — SciencesPo

Agenda

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1. RESET fact sheet

A network of 7 research-intensive European universities - **national clusters of "scientific excellence",**

acknowledged by dedicated labels, programs and funding

- ❖ *University of Bordeaux, FR;*
- ❖ *University of Oulu, FI;*
- ❖ *Aristoteles University of Thessaloniki, EL;*
- ❖ *University of Łódź, PL;*
- ❖ *University of Porto, PT;*
- ❖ *Ruhr-University Bochum, DE*;
- ❖ *Sciences Po Paris, FR.*

→ **4 universities implementing** Gender Equality Plans

→ 2 mentor **universities**

→ 1 external evaluator

Call for projects: **2020-SWAFS-09-2018 2019 2020**

Budget: 3M€

Duration: **4 years (2021-2024)**

2. Definitions

Sex

Biological and physiological characteristics that define humans as female or male (or intersex*). These sets of biological characteristics are not mutually exclusive, as there are individuals who possess both.

Gender

Social attributes and opportunities associated with being female and male and to the relationships between women and men and girls and boys, as well as to the relations between women and those between men (EIGE, 2020).

Diversity

"Differences in the values, attitudes, cultural perspective, beliefs, ethnic background, sexual orientation, gender identity, skills, knowledge and life experiences of each individual in any group of people" (European Commission, 1998).

Intersectionality

"Intersectionality analysis relates to the distribution of power and other resources in society and therefore it constitutes what in sociology is known as stratification theory. Intersectionality is the most valid approach to the sociological study of social stratification because it does not reduce the complexity of power constructions into a single social division, including class, as has been customarily the case in stratification theories".

YUVAL-DAVIS Nira, « Situated Intersectionality and Social Inequality », Raisons politiques, 2015/2 (N° 58)

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3. The dominant definition of scientific excellence has gender biases and produces gender inequalities

a. Scientific excellence is based on a profit-oriented model, and is not gender-neutral

- **At the level of academic organizations:** international university rankings, exacerbating competition between institutions, reconfiguring the academic sector and provoking successive reforms of the assessment of public research (Gozlan, 2020).

- **At individual level**: scientific career model (based on numerous publications, with rapid and linear progression, international mobility, able to obtain funding and manage large projects).

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Other effects and criteria

- Gate-keepers and Boys' club (Delvaux, 2020)

- Masculine qualities (leadership, availability, authority,…)

- Same characteristics are not analysed the same way according to the sex of the candidate

- Mathilda effect (i.e. the invisibility of women in research support activities, who make it possible for men to excel)

Women's scientific productivity is correlated with the asymmetry of domestic and parental responsibilities, and therefore with less international mobility

Variation du nombre de publications des femmes par rapport aux hommes
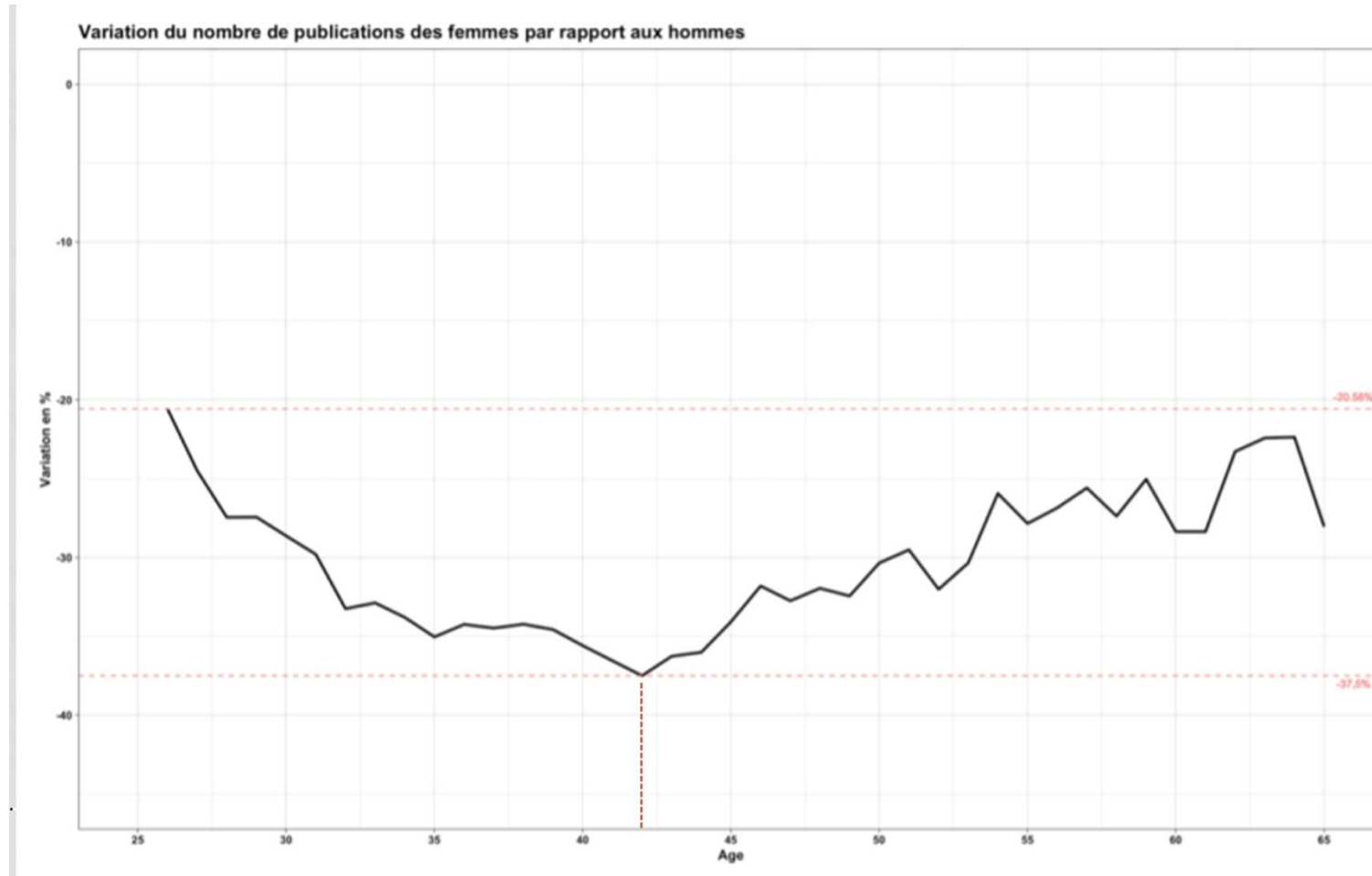
Work in progress, Amal Boughnim, Nicolas Carayol and Pascale Roux,The Anatomy of Gender Gaps in Scientific Productivity Across Career Cycles and Generations / Zippel Kathrin, 2017, Women in global science: Advancing academic careers through international collaboration, Stanford, Stanford University Press.

Academic careers and the glass ceiling
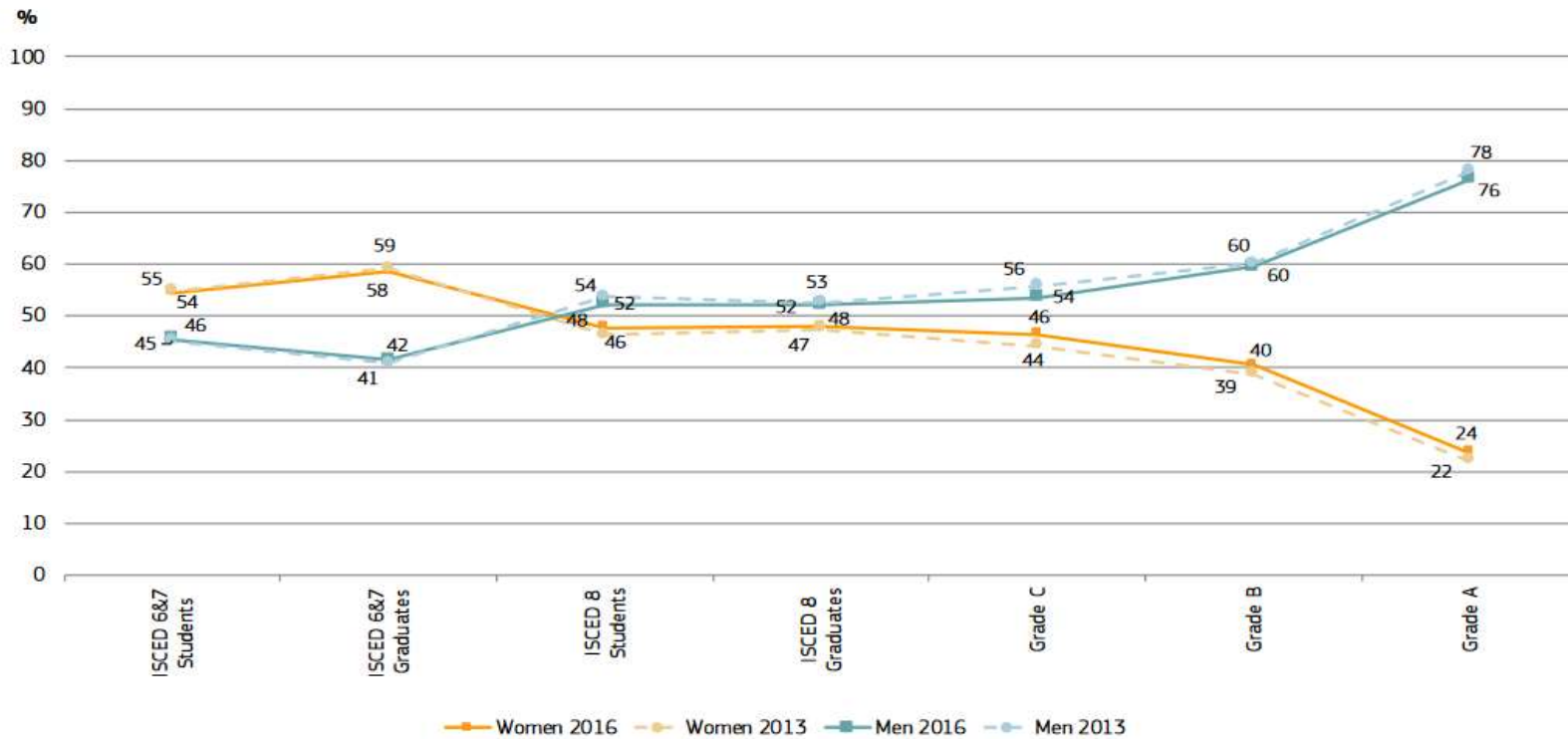
Notes: Reference years for Eurostat data: 2012-2016; Exceptions to the reference year for WiS data: CZ (Grade A), EE (Grade A): 2014-2015; FR: 2012-2015; HR: 2014-2017; LU: 2015-2016; RO, UK: 2014-2016; IE, CY, HU, AT, SI, SE: 2013-2015; BG: 2013-2017; MT (Malta College for Arts, Science and Technology): 2017; Eurostat data unavailable for: NL (ISCED 8 graduates): 2016; WiS data unavailable for: LT (2013), MT (2013), IE (Grade D); Eurostat data for 2013: ISCED 6&7 corresponds to ISCED 5A of ISCED-97; ISCED 8 corresponds to ISCED 6 of ISCED -97. Others: Data are in headcounts (HC); Break in time series: DE (Grades B - C): 2016; ES: 2015; UK: 2014; Data rounded to nearest multiple of 5: UK; The same person may be counted in several grades: BE (French speaking community), SE; Data do not include persons of unknown sex: PL; Private colleges and other smaller institutions are not included: IE; Grade C data include some persons with M.Sc. only: LT, SK; The base reference population of WiS data is that of 'Researchers' as defined in the Frascati Manual (OECD, 2015), with the exception of the following countries which used 'Academic staff' based on the UOE Manual (UNESCO/OECD/Eurostat, 2017): BG, DE, IE, EL, IT, LV, LT, NL, SI, SK, SE.

Source: Women in Science database, DG Research and Innovation; Eurostat – Education Statistics (online data codes: educ_enrl5, educ_grad5, educ_uoe_enrt03, educ_uoe_grad02).

b. Gender bias in scientific research

The ovum in biology: passive like Sleeping Beauty…
…or active like the Black Star in Star Wars?
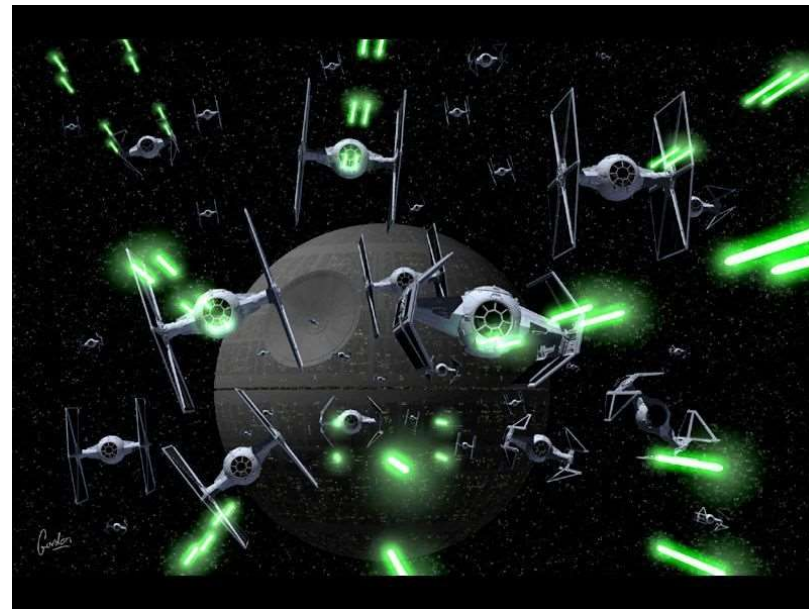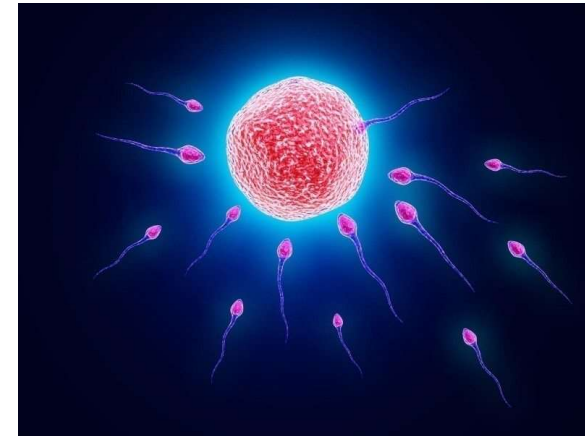
Fox Keller E. (2002). *Making Sense of Life: Explaining Biological Development with Models, Metaphors, and Machines*. Harvard University Press

The Biggest Gaps in Women's Health Research

The Health Gender Gap

means that men and women experience the same healthcare systems differently. It is fed by perceptions of women as being over-emotional and exaggerating their pain. Research even shows women are half as likely as men to get painkillers after surgery.

Women's Heart Attack Symptoms

Most education around heart attacks is based on symptoms in men. Yet, the symptoms women experience are much different. So many women or doctors dismiss this pain as anxiety or acid reflux.

Racism And Injustice In Reproductive Care

Women of colour have a significantly lower number of eggs collected than white women when undergoing fertility treatments like IVF and are less likely to reach the embryo transfer stage than white women.

Endometriosis & Adenomyosis

Despite the fact that half a million Canadians have endometriosis, research shows the average endo patient will spend a decade and will see five different doctors before getting a diagnosis.

Women's Mental Health

The majority of mental health research and therapy is based on the male experience. Yet, women are more likely to experience debilitating depressive episodes and anxiety than men.

c.Racial and gender bias in IA

Bride
Wedding
Woman

Folklore
Costume
Performance

Source : Londa Schiebinger (Professor of History of Science at Stanford University, Director of the US/EU Gendered Innovations Project) : Keynote speech, Gender-Net Plus, **"Integrating Gender Analysis into Research"** **(Paris, 16-17 Nov 2022)**

IMAGE POWER
Deep neural networks for image classification are often trained on ImageNet. The data set comprises more than 14 million labelled images, but most come from just a few nations.
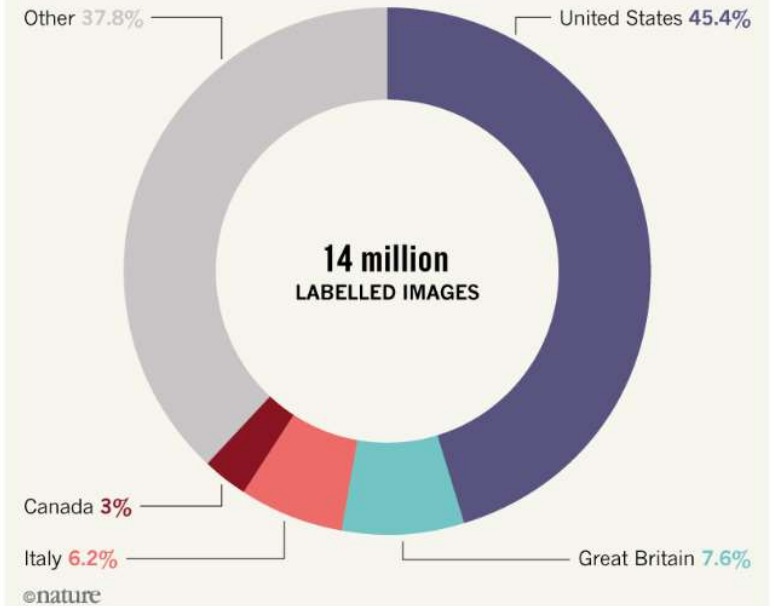
Other 37.8%

United States 45.4%

14 million
LABELLED IMAGES

Canada 3%

Italy 6.2%

Great Britain 7.6%

©nature

4. Incentives from the European Union to integrate gender into research content & assessment

a. Requirements of Horizon Europe (Horizon Europe Programme Guide, 2021)

- Assessing of **new research proposals and innovations** from the gender perspective: <u>unless its non-relevance for a specific topic is specified in the topic description, e.g. by the mention</u>

- **(Inclusive) Gender Equality Plan** is an **eligibility criterion** (public bodies, research organisations and higher education institutions)

- Ensuring **gender balance**, with a target of 50% women in Horizon Europe related advisory bodies such as boards and expert groups, as well as in evaluation panels. **Gender balance among researchers involved in projects** is strongly encouraged as well, and will be taken into account as a ranking criterion for ex aequo proposals.

- Researchers have the possibility to self-identify in proposals and project reporting according to three gender categories: woman, man, or non-binary.

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b. European incentives to take gender into consideration in research assessment

*"Our knowledge is the basis on which future generations will build their societies. It is therefore crucial that the **knowledge** which is **created through research** and **transferred through education** is free of gender bias.*

*Particularly, when relevant, **research and innovation activities** need to critically examine both gender differences and inequalities. The added-value of integrating a gender dimension into research and innovation allows:*

- Ensuring excellence and quality in outcomes and enhancing sustainability;
- Making research and innovation more responsive to social needs;
- Developing new ideas and fostering innovation.

Through the inclusion of a gender dimension in research and innovation content, gender biases are more likely to be tackled, properly addressed and eliminated. Also, as education forms our future scientists, young people need to be taught about the gender aspects of their disciplines and trained to perform gender-sensitive research." (GEAR tool 2016, 48)

SOURCE: Gender equality in academia and research. GEAR tool. (2016) EIGE
https://eige.europa.eu/gender-mainstreaming/toolkits/gear

c. The Coalition on Advancing Research Assessment - CoARA (the university of bordeaux is a member of this coalition)

"Diversity, inclusiveness and collaboration

(…)

- Acknowledge and valorise the diversity in research roles and careers, including roles outside academia. Value the skills (including open science skills), competences and merits of individual researchers, but also recognise team science and collaboration.

- Ensure gender equality, equal opportunities and inclusiveness. Consider gender balance, the gender dimension, and take into account diversity in the broader sense (e.g. racial or ethnic origin, sexual orientation, socio-economic, disability) in research teams at all levels, and in the content of research and innovation."

d. RESET actions in line with European incentives

Faces of campus: Media campaign on women working in research support positions at RESET institutions (2022) - « Behind the scenes »

RESET Top management's Joint statement on their engagement towards equality, diversity and scientific excellence (2022)

1. Governance

2. Institutional culture

3. Occupational equality (assessment)

4. Production & transfer of knowledge (assessment)

5. Focus on *Gender Impact Assessment*

- It was originally a method for evaluating public policies.

- RESET approach: based on the GIA, developing an *ex ante evaluation* of sex and gender dimensions in research activities and products.

- GIA aims to determine the degree of **sex and gender responsibility** of a research proposal.

- GIA questions, analyses, sensitizes and integrates sex and gender into research where appropriate.

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6. The RESET Checklist for Gender Impact Assessment

Phase 1: SUBJECT - What is being researched?

Check if you have the sex and gender dimensions in research and innovation content properly taken into account e.g. topic choice, literature review, knowledge gaps, research question.

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SUBJECT – WHAT IS BEING RESEARCHED?

I have conducted a literature review and included sex and gender in my search of keywords. YES ☐ NO ☐ I don't know ☐

I take in consideration the diversity of quoted authors (sex, geographical origin, …) YES ☐ NO ☐ I don't know ☐

I indicate the first name of the authors in the bibliography. YES ☐ NO ☐ I don't know ☐

I considered gender implications in how I have elaborated my research question and my research goals. YES ☐ NO ☐ I don't know ☐

When thinking of the research or data gaps, I consider how gender may play a role in producing such gaps. YES ☐ NO ☐ I don't know ☐

I plan to include sex and gender disaggregated data. YES ☐ NO ☐ I don't know ☐

If any differences of sex disaggregated data exist, I ask myself whether these differences are influenced by gender roles in society. YES ☐ NO ☐ I don't know ☐

My way to interpret sex disaggregated data (if they exist) includes self-reflection on the influence of stereotypes and unconscious biases. YES ☐ NO ☐ I don't know ☐

I consider diverse (gender, sex, age, origin,...) communities in the sampling YES ☐ NO ☐ I don't know ☐

I have considered the gender-specific risks associated with this research and I have designed measures to mitigate against these risks. YES ☐ NO ☐ I don't know ☐

I have verified existing gender theories that concern the subject of my research. YES ☐ NO ☐ I don't know ☐

I include a gender expert/expertise in my team. YES ☐ NO ☐ I don't know ☐

Phase 2: IMPLEMENTATION – How the research is done?

Check if you have the sex and gender dimension as well as intersections in quality and effectiveness of the work plan properly considered and in a balanced composition of the research team.

IMPLEMENTATION – How the research is done?

I am collecting/using gender-disaggregated data whenever possible. YES ☐ NO ☐ I don't know ☐

I have designed data collection tools to take into account and challenge gender stereotypes and social and cultural factors that may introduce gender bias into the data. YES ☐ NO ☐ I don't know ☐

My research team is balanced in terms of sex and diversity (nationality, age, origin, status, academic age...). YES ☐ NO ☐ I don't know ☐

I have considered the gender balance in the project consortium or team. YES ☐ NO ☐ I don't know ☐

I have considered sex, gender and diversity dimensions in the recruitment, job descriptions and career paths of research group members. YES ☐ NO ☐ I don't know ☐

I will create opportunities throughout the research cycle to be reflexive and aware of my own and my team's gender assumptions, biases and power as researchers. YES ☐ NO ☐ I don't know ☐

There are dimensions other than sex/gender that are important to consider. YES ☐ NO ☐ I don't know ☐

Even if the team is not obviously diverse (e.g : all members come from the same field, gender, ethnicity,**...), I take into account points of view and experiences of all social groups.** YES ☐ NO ☐ I don't know ☐

In my team, all points of views are heard, and all members are listened to. YES ☐ NO ☐ I don't know ☐

Tasks in my team are circulated or distributed in a way that does not reproduce gender stereotypes. YES ☐ NO ☐ I don't know ☐

Researchers trained in gender studies are included in the research team. YES ☐ NO ☐ I don't know ☐

Working conditions enable all staff members to balance their professional and personal/family lives in a satisfactory manner YES ☐ NO ☐ I don't know ☐

Phase 3: IMPACT – What is the purpose of the research?

Check if you have the sex and gender dimensions, as well as intersectionality, properly taken into account in the pathways, impacts, contributions, and societal effects of your research.

IMPACT – What is the purpose of the research?

I am using appropriate terminologies and language that do not reflect gender stereotypes and that do not assume only two genders.
YES ☐ NO ☐ I don't know ☐

All research outputs will be verified for use of appropriate terminologies and language that do not reflect gender stereotypes and that do not assume only two genders. YES ☐ NO ☐ I don't know ☐

When considering authors, inviting keynotes, planning publications and providing visibility for researchers and their work on websites I pay attention to gender balance. YES ☐ NO ☐ I don't know ☐

I valorize all the members of the research team in the dissemination phase (authors, publications, website, keynote,...). YES ☐ NO ☐ I don't know ☐

The sex/gender dimension is included in the presentation of findings. YES ☐ NO ☐ I don't know ☐

Research reports/publications/outputs will be revised by a gender expert. YES ☐ NO ☐ I don't know ☐

I have included gender equality training for the project staff. YES ☐ NO ☐ I don't know ☐

I consider that the results of my research (project) can have different effects on men and women, boys or girls. YES ☐ NO ☐ I don't know ☐

My research can contribute to the advancement of gender equality in society. YES ☐ NO ☐ I don't know ☐

I have planned a specific publication or event on gender-related results YES ☐ NO ☐ I don't know ☐

7. Implementing concrete change

✓ **Using and adapting the RESET checklist**

✓ **Organizing awareness raising sessions on gender biases, gender inequalities and levers**

✓ **Organizing "equality coffee breaks" to enable networking and sharing of best practices**

✓ **Adding poster presentations and round tables on gender and diversity at conferences**

✓ **Facilitating workshops on gender impact assessment and recruitment**

✓ **Valuing the collective approach of research**

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