## ARGUMENT BANK

True or False? Tackling common misconceptions regarding the implementation of an inclusive approach to research and innovation (R\&I) content.

> The Gender STI Argument Bank was created to assist research personnel and Research and Technology Organizations (RTOs) in the field of Science, Technology, and Innovations (STI) to better understand and argue for the necessity of applying an inclusive approach to R\&l content - an approach that has recently gained prominence in the European Research Area. The bank consists of six (6) common misconceptions encountered by the project team, and is accompanied by researchbased answers to these misconceptions.

## M1. GENDER AND INCLUSIVENESS ARE IRRELEVANT TO MY WORK.

False/True. As a golden rule, gender and inclusiveness should always be considered when the R\&l process involves people and/or communities. When conducting research and creating innovations, research personnel should rather ask themselves why sex, gender, and ethnicity among other aspects of inclusiveness are not relevant to their work. Although some positions and fields in the STI landscape do not tackle gender and inclusiveness directly in their day-to-day work, it is plausible that these topics are considered on a wider, research project or RTO level, and thus in some ways influence all research work and innovation process. For example, in 2022 Gender Equality Plan (GEP) became an eligibility criterion for all legal entities applying Horizon Europe funding, in addition to which the integration of a gender dimension into R\&l content is a requirement by default in Horizon Europe.

## M2. GENDER STUDIES ARE NOT REAL SCIENCE.

False. Gender studies is a legitimate, interdisciplinary field of study within social sciences. Gender studies apply various research methodologies (quantitative and qualitative) to study the social, cultural, and historical construction of gender, relations of knowledge production, power and justice. The field has made significant contributions to advancing understanding on gender inequality, gender-based violence, gender-gaps in academia, and gender biases in technology. The misconception that the gender studies are not real science often stems from its difference to natural sciences, as gender studies (like other fields of social sciences) use critical, norm-questioning and multi-vocal research approaches. However, like natural sciences, gender studies strive for objectivity, and take measures to tackle biases and prejudice of researchers.

M3. INTERSECTIONAL FEMINISM IS A CONTROVERSIAL POLITICAL IDEOLOGY, AND THUS IT SHOULD NOT BE USED IN RESEARCH CONTEXT.

False. In the research context, intersectional feminism is a theoretical framework. Using theoretical frameworks is a common and crucial practice in social sciences, as they offer a systematic way of organizing knowledge, guiding research design and interpreting findings. In the context of R\&l, intersectional feminist framework can help us identify the needs, behaviors and power relations of diverse user groups and support the development of innovations with higher acceptance and usability rates amongst the end-users of innovations (EC, 2020). Again, it is true that intersectional feminism, like many other theories in social science (Neoliberalism, Social Democracy, Marxism, etc.) often intersect with ideologies and social movements that carry the same name. As a social movement, (intersectional) feminism seeks to address and combat multiple forms of discrimination and privilege individuals may face due to their social characteristics (gender, age, ethnicity, etc.). Many social justice movements are politicized globally as far right, ultra-conservative, and religious groups often aim to curtail gender equality and oppose further progress when it comes to, for example, promoting the participation of women in political arenas, combating racism, and improving transgender or abortion rights.

M4. THERE IS NO CAUSALITY BETWEEN SOCIAL CHARACTERISTICS AND HOW WE USE PRODUCTS AND SERVICES.

False. Our social characteristics (gender, sexual orientation, wealth, age, etc.) have been found to influence how innovations affect, function on, and are used by individuals in many ways. Lets use the example of urban settings and getting around cities: Public transport has globally been found to be more dangerous for women and the LGBTIQ+ community, as well as moving around in cities by foot (Ramboll, 2021; Weintrob et al., 2021). Wealth is linked to how people get around in cities, as low to mid-income individuals tend to use public transport, while middle and upper-income individuals tend to use more private transportation (Roberts et al., 2019). Getting around in cities is also a gendered issue: men drive and cycle more than women, who use public transport and walk more than men (Ramboll,_2021). In a similar manner, our social characteristics are linked to all mundane activities: how we use electronic devices, what we eat, how we dress, etc. (see for example EC, 2020). Therefore, when innovating, social characteristics should not be overlooked.

## M5. IT IS NOT NECESSARILY MALICIOUS OR DISCRIMINATING IF THE INNOVATION DOES NOT WORK EQUALLY WELL ON EVERYBODY.

True/False. Discrimination (the prejudicial and unfair treatment of individuals or groups based on their social characteristics) manifests itself in various ways: it can occur as name-calling or harassment, or as discriminatory practices, values, and norms upheld by institutions (such as a state, research organization, research project, etc.) (LÖvkrona, 2016). Discrimination can also occur intentionally or unintentionally; even if our intent is good, our actions may result in discrimination. Lets use the example of facial recognition technology to see how this translates to R\&l: A study found that facial recognition technologies in the market identified white male faces well but were inaccurate in identifying female and especially black female faces (Buolamwini \& Gembru, 2018). Thus, regardless of the intentions of the innovators behind the facial recognition technologies, for one reason or another they did not ensure their technology works well on all its user groups, resulting in the technology being discriminatory against women and black women in particular.

## M6. IT IS DIFFICULT TO APPLY AN INCLUSIVE APPROACH TO MY R\&I WORK, SINCE MY PROJECT NOR MY RTO HAVE ALLOCATED RESOURCES FOR THIS TYPE OF WORK.

This is unfortunately often true. As research personnel operate within a broader STI ecosystem, there might be constraints caused by limited resources, values or practices in applying an inclusive approach. Fortunately, gender and inclusiveness are gaining more and more attention in the field of STI, and recently some funders have began to require research projects and organizations to include an inclusive approach to all their activities. There are also small and mundane things we can always do regardless of the scope and funds of the research project: using inclusive language in our writing, collecting sex\&gender dis-aggregated data, organizing research activities in hours and locations that are accessible to all genders, ages, and bodies, reading literature from a diverse group of authors, reflecting on our own biases and worldviews, as well as preferring Open Access publication.

The Argument Bank was published in August 2023 as part of the Gender STI project toolkit for promoting gender and inclusiveness in R\&I content. The bank's misconceptions are generalized versions of misconceptions encountered by the project team in the piloting phase of Gender STI tools in 2022-2023. The toolkit is publicly available at the European Observatory on Gender in STI.

