

MUSIC PROJECT & Gender Issues

In 2002 the EC's Women in Industrial Research (WIR) Report stated that women constituted only an estimated 15% of industrial researchers in the EU and were severely under-represented in university education, and national or governmental laboratories. This was especially evident in the sector of the "hard" sciences; namely mathematics, physics and engineering. In the field of materials research, foundries, car/trucks components research and in automotive research groups, there was also an unacceptable under-representation of women.

Getting closer to actual situation, the European Commission has set a **Strategy for equality between women and men** for the period 2010-2015. It is a comprehensive framework committing the Commission to promote gender equality into all its policies. The EU also has a well-established regulatory framework on gender equality, including binding Directives, which apply widely across the labour market, including the research sector.

Though gender inequalities in R&I persist, the publication "She Figures 2012" shows that some progress has been made. The figures also underline wide differences across Europe.

For instance, although we cannot expect all the PhD graduates to join research, there is a clear gender imbalance, with fewer female than male PhD graduates embracing a career in research. In 2012, in the EU, women represented 46% of the PhD graduates, and this share has been above 40% for a long time now. However, women only represented 33% of researchers and the increase towards a balance is very slow.

Furthermore, too few women are in leadership positions or involved in decision-making in research. Only 20% of top level academics are women, and just one in every ten universities in the European Union has a female rector.

Because of the peculiarities of the research sector, specific additional action is needed to remedy to persisting gender gaps. The European Commission addresses gender equality in two different ways: through its main funding instrument Horizon 2020 and within the European Research Area in collaboration with Member States. It pursues three objectives, namely: gender equality in careers, gender balance in decision making and the integration of the gender dimension in the content of research.

Gender equality in the European Research Area (ERA)

Since 2012, gender equality is one of the key priorities of a "Reinforced European Research Area Partnership for Excellence and Growth" (ERA). To this end, Member States are invited to remove barriers to the recruitment, retention and career progression of female researchers, address gender balance in decision making and strengthen the gender dimension in research programmes.

The European Commission encourages Member States to create the appropriate legal and policy environment to incentivize institutional changes. This should aim to correct gender imbalances in careers and in decision making, and to strengthen the gender dimension in research programmes.

(<http://www.gender-net.eu/>)

Funding Agencies and Research Organizations and Universities are on the forefront in the implementation of institutional changes, in particular through Gender Equality Plans. Gender equality in research will not be achieved unless a critical mass of universities and research institutions are targeted through long-term institutional change actions.

Scientists themselves can contribute to change practices. Networking among practitioners and professional associations, platforms of women scientists and other networks play a key role in this context. The EC funds two important initiatives (run by gender experts) aimed at supporting networking:

1. The COST Action, GenderSTE, which organizes awareness-raising events across Europe, particularly on demand (<http://www.genderste.eu/>)
2. GenPORT is a developing online community of practitioners, served by an internet portal and made up of organizations and individuals working across the globe for gender equality and excellence in science, technology or innovation (<http://www.genderportal.eu/>)

Gender Equality in Horizon 2020

The EC funded expert group "Innovations through Gender" produced the publication "Gendered Innovations", which is part of the wider project "Gendered Innovations".

Download the publication:

http://ec.europa.eu/research/swafs/gendered-innovations/index_en.cfm

The goal of the Gendered Innovations project is to provide scientists and engineers with practical methods for sex and gender analysis. To match the global reach of science and technology, methods of sex and gender analysis were developed through international collaborations.

Gendered Innovations involves experts from across the U.S. and the EU 27 Member States. Discover the "Gendered Innovations" website:

http://ec.europa.eu/research/swafs/gendered-innovations/index_en.cfm

Gender is a cross-cutting issue in Horizon 2020. The promotion of gender equality in research and innovation is a commitment of the European Commission. It is enshrined in the core documents establishing Horizon 2020, with the following objectives:

- **Gender balance in decision making:**
The Commission has set a target of 40% of the under-represented sex in expert groups and evaluation panels. The H2020 Advisory groups have a target of 50% for the under-represented sex in expert groups and evaluation panels. For 2014-2015, there are 52 % of women.
- **Gender balance in research teams at all levels:**
Applicants for funding are encouraged to promote gender balance at all levels in their teams and in management structures. Gender balance in teams will also be taken into account when ranking proposals with the same evaluation scores.
By signing the grant agreement, beneficiaries will commit to promote equal opportunities between men and women in the implementation of their action. They will also commit to aim, as far as possible, for gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level.
- **Integrating the gender dimension in the content of R&I**
R&I need to adequately take into account the needs, behaviors and attitudes of both women and men. In Horizon 2020, the gender dimension is explicitly integrated from the outset in many of the specific programmes. So far, more than a 100 topics

out of 610 are concerned. They are spread in 13 different programmes, out of 20. For each of these topics, one or more proposals will be selected. This gives a promising picture on the number of projects that will be developing a gender dimension and on the new knowledge that they will bring about.

Topics with an explicit gender dimension have been "flagged", which means that a full list of those topics is available on the Participant Portal, under a "quick finder" link on gender. In addition, applicants may also use the search engine, which will list all the topics available which are explicitly referring to gender.

Promoting Gender Equality in Research and Innovation

In Horizon 2020 Gender is a cross-cutting issue and is mainstreamed in each of the different parts of the Work Programme, ensuring a more integrated approach to research and innovation.

Three objectives underpin the strategy on gender equality in Horizon 2020:

1. Fostering gender balance in research teams, in order to close the gaps in the participation of women.
2. Ensuring gender balance in decision-making, in order to reach the target of 40% of the under-represented sex in panels and groups and of 50% in advisory groups.
3. Integrating the gender dimension in research and innovation (R&I) content, helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation.

In many topics across the work programme, it is explicitly requested that applicants take into account women as well as men's needs and behaviors. In addition grant beneficiaries commit to promoting equal opportunities and a balanced participation of women and men at all levels in research and innovation teams and in management structures.

The "Science with and for Society" Work Programme funds specific initiatives in support of the gender equality strategy. Support is given to Research Performing Organizations (RPO) and Research Funding Organizations (RFO) in order to:

- remove barriers that generate discrimination against women in scientific careers and decision-making (supporting research organizations to implement gender equality plans), and
- integrate a gender dimension in research content.

Funding is also provided to the development of a common framework to evaluate national initiatives promoting gender equality in research policy. A dedicated campaign aims at encouraging girls to study science and female students to further embrace a career in research. Research will be funded to analyze the impact of gender diversity in research teams on research and innovation performance.

These activities are targeted to researchers and innovators, research organizations, primary, secondary and higher education establishments, science museums, citizens and their associations or groupings, media, policy makers at national, regional and local levels, etc.

Expected impact

- Reach a critical mass of universities and research institutions in Europe which implement long-term institutional change through gender equality plans,
- Increase the participation of women in research, improve their careers and achieve gender balance in decision making,
- Increase the scientific quality and societal relevance of produced knowledge, technologies and innovations by integrating an in-depth understanding of both genders' needs, behaviors and attitudes. It also contributes to the production of goods and services better suited to potential markets.

One of the aims of the MUSIC Project will be to face this skills-shortage by supporting female researchers into industrial research.

The following special effort to recruit female researchers, and to encourage young female researchers in related fields (Gender Action Plan) will make an attempt at:

1. understanding gender-related problems,
2. adopting positive measures to ensure a fair gender balance in the project, and
3. creating better public awareness of female researchers involved in industrial research, especially inside the SMEs environment, by providing useful information related to gender equality between men and women in the EU.

The partners in the MUSIC Project are in full agreement with the EC's objectives to promote gender equality and supports the European Policy of **equal opportunities between women and men** that is enshrined in the Treaty on EU.

Articles 2 and 3 establish equality between women and men as a specific task of the Community. Currently, it is difficult to estimate a percentage of women involved in the MUSIC project, which is however expected to be slightly higher than the European average of 15% for industrial research. Women's participation has been encouraged just from the beginning in the preparation of this project proposal. Following the recommendations of EU, an average percentage of 30% of people of the working teams involved in the project should be women. However, the intermediate goal within this project is to reach a minimum of 25% of female researchers, at the recruitment stage, and encourage greater participation at senior level.

One of the main challenges is changing company's culture that should include measures towards re-conciling work and family, emotional retribution, intangible factors that have to be reinforced in the knowledge economy if companies want to recruit and retain the best human resources.

A "Gender Panel" committee chaired by a leading female researcher in the project – Dr. Amaya Igartua – has established to:

1. Collect data and statistics from all partners concerning their in-house gender programmes.
2. Collect data on requests, opinions and needs of both women and men relating to the gender dimension.
3. Provide an information hub on the web-based MUSIC dissemination tools concerning gender-related issues; such as rights, hiring policies, family life,

maternity leave, part-time work, distant-working and childcare, as well as relevant EC documents.

4. Offer links to other gender-related networks and specific initiatives addressed to female researchers (i.e EU prize for Women Innovators 2016). (<http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2015&na=na-090315>)
5. Monitor the achievements and report to the project co-ordinator and the EC at the end of the project.

The Gender Action Plan Report is a sort of collection and elaboration of the information provided by the MUSIC partners with regard to gender issues, in reply to the input coming from the Gender Panel Committee. The aim is to share data and useful information among the partners and of course to evaluate the positive or negative results achieved in terms of gender policies. As the promotion of Gender Equality is a main objective on a European level, this section of the MUSIC Project web site, which is easy accessible to a general public and not just restricted to the project members, will constitute a gender portal focused on disseminating how such issues and topics are dealt in the European companies and organizations. In order to offer such perspective, several interesting links concerning gender-related issues (such as rights, hiring policies, family life, maternity leave, part-time work, distant-working and childcare) are listed here below, as well as relevant EC documents are available for downloading.

LINKS

<http://www.umich.edu/~cew/PDFs/designing06.pdf>

<http://edf.org.uk/>

EC DOCUMENTS for downloading

1. [Woman in industrial research: good practices in companies across Europe](#)

Besides directly promoting gender equality within the project, MUSIC will also indirectly encourage women to consider science and engineering as a perspective for life and career. By fundamentally reshaping the image of engineers and scientists, the team is confident that it will succeed in attracting and retaining female researchers for the benefit of the European Research Area.

The Helsinki Group on Gender in Research and Innovation

The Helsinki Group on Gender in Research and Innovation was established in 1999. The Helsinki Group brings together representatives from Member States and Associated Countries, to promote equality between women and men in research and innovation (R&I) and to embed the gender dimension in science, research and innovation contents and programmes. The group is co-chaired by the European Commission and the Member State holding the EU Presidency.

The group's mandate includes the following tasks, to reflect and advise the Commission on the development of initiatives within the different policies and frameworks related to science, research and innovation (eg. the Innovation Union, Europe 2020 Strategy, the European Research Area, Framework Programmes, etc.) with a view to:

- Enhance gender equality in R&I, including work/life balance issues;
- Integrate the gender dimension in research contents and programmes;
- Modernize research institutions;
- Mobilizing stakeholders in order to promote gender equality;
- Facilitating the development of the gender priority in ERA;

The group meets twice a year, usually in Brussels, or in the Member State holding the EU Presidency.

Related documents:

- ✓ The full mandate of the Helsinki Group
- ✓ The Gender Vademecum
- ✓ Advisory Group on Gender

The campaign "Science: it's a girl thing!"

Under the slogan "Science it's a girl thing!" the European Commission has launched a campaign to encourage girls aged 13-18 to study science. Indeed, within this age range, young people tend to choose major school subjects that will influence their future career. At this point in their education they gravitate towards or away from science and technology studies.

"Science: it's a girl thing!" is rooted on the active participation of women scientists acting as role models. Up to now, more than 200 of them have contributed to the campaign through various activities: participation to events and workshops with teenagers, video portraits, chats on the Facebook page to exchange with girls on their careers and passion for science, photos of their professional and private life for the 'Instant Science' photo album.

Visit the website: <http://science-girl-thing.eu>, or contact: RTD-WIRI@ec.europa.eu

Facts and figures: She Figures

What is the proportion of female to male researchers in Europe, and how is this proportion evolving over time? In which scientific fields are women better represented? Do the career paths of female and male researchers follow similar patterns? Are statistics on women in science comparable across Europe? How many women occupy senior positions in scientific research in Europe?

Published every three years since 2003, She Figures replies to these questions. It presents human resource statistics and indicators in the research and technological development (RTD) sector and on gender equality in science. The report is recommended reading for all policymakers, researchers and their employers, citizens with a vision of a participative, competitive and innovative Europe.

The She Figures 2012 shows that despite progress, gender inequalities in science tend to persist. For example, while 59 % of EU graduate students in 2010 were female, only 20 % of EU senior academicians were women . The publication also gives an overview of the scientific fields where women are better or less represented, and compares the research workforce in different economic sectors (e.g. higher education, government, and business sectors).

All She Figures volumes, in addition to other relevant documents, are available through the e- Library. The She Figures 2015 is under preparation.