

## **A Manifesto on the Role of Women Networks in Research**

As UNESCO reports<sup>1</sup>, in 2015 only 28% researchers around the world were women. Nearly equal numbers of men and women pursue bachelor's and master's degrees in STEM fields, but the proportion changes in favour of men already at the PhD stage and the difference increases when we look at the highest organizational levels - a phenomenon sometimes described as a "leaky pipeline". The percentage of female researchers varies geographically: while certain countries have relatively high proportions of women among researchers (Bolivia 63%, Venezuela 56%), others have quite low proportions (Republic of Korea 18%, Japan 15%). Only 25% of researchers in France, Germany, and the Netherlands are women. Gender differences also vary by discipline: the percentage of women is highest in health and life sciences and lowest in engineering and computer science. Gender research shows that legal, economic, cultural and structural obstacles lead to discrimination and create inequality.

Aware of the importance of this problem, on 9 May 2018, SISSA organized the event entitled "When Women in Science Get Together: the Role of Networks", as part of the celebration of its 40<sup>th</sup> Anniversary. The participants analyzed the current situation as well as the major challenges and advancements related to the condition of women in science. Special attention was devoted to the relevant work of many national and international projects and associations operating in different disciplines. The role of women networks in science is of paramount importance and has to be promoted, and actively supported.

The discussions among the participants led to the present Manifesto.

1. Access to science and education systems and, in particular, that female and male students have equal opportunities should be guaranteed at all levels worldwide.
2. Governments should actively support gender equity policy of universities and research institutions and monitor their implementation.

---

<sup>1</sup> <http://unesdoc.unesco.org/images/0023/002354/235406e.pdf>

3. Governments should also collect data that can be sorted by gender regarding all key sectors and make these data easily accessible so to allow monitoring of progress towards gender equality.

4. Universities and research institutions should implement a gender policy addressing:

- unconscious bias in hiring, advancement and performance assessment – increase the awareness of its influence and organize training of the institution's members on how to recognize and try to avoid it
- organization of professional skill development plans, mentoring and training activities dedicated to women
- an inclusive education and work environment
- equal and fair access to funding
- participation of women in all decision-making commissions
- promotion and monitoring of the participation of women in scientific initiatives funded by institutions and Governments.

5. Government, universities, and research institutes should acknowledge and bolster the activities of Women Networks in Science. These networks were created to share experiences and advertise initiatives and good practices aimed to promote the career of women in a male dominated environment.

6. Women Networks in Science are a reference point both for women and institutions. Networks may represent a dialogue partner for governments when trying to improve their policy on equity for women. Networks should be strengthened, become more visible and receive funding in order to increase their activity.

We envisage several directions in which networks' activities might make the difference.

Networks help in raising the awareness of the problem of underrepresentation of women in academia, especially at decision-making levels.

Networks can serve as a reference point also for media when willing to address gender issues or to get in contact with females scholars expert on various subjects. They help to individuate and to increase the visibility of role models of female scientists. Advertising women's scientific achievements is fundamental in order to counter the long lasting

stereotypes on women's capability of being leading researchers in their field.

Networks bring to the fore the problems women collectively experience in several aspect of their research / academic activity. It is easier to reach a solution through a collective action. Since many members of the academic community might have the same problems it is easier also for institutions and government to find a solution through a discussion with a network representing a collectivity rather than treating individual cases.

All networks should create and maintain databases of their members in order to facilitate the spreading of relevant information on achievements of their members. Such databases might help collaborations, recognition, awareness, and dissemination of results.

Networks organize specific activities in order to support women in their careers, such as:

- professional skill development plan, for instance through workshops that provide professional training in effective negotiation and communication skills which serve to facilitate career progress;
- mentoring programs for women scientists, consisting of one or more mentors and mentees, aimed at creating a sustained relationship between junior and more experienced women. Mentors must attend mentor training workshops and will support and assist mentees during their career development;
- travel grants and financial support for specific initiatives.

As networks have a fundamental role in creating an efficient gender policy, strengthening and increasing collaboration among networks worldwide can contribute to changing the status of women and girls in STEM disciplines.

Every country, having its specific needs, should promote a collective network of female scholars, supported by public funds, with the aim of coordinating and monitoring the implementation of the initiatives and good practices aiming at breaking the glass ceiling and stopping the leaky pipeline. In particular, regarding Italy, we strongly believe that a national network that gathers all female scholars and coordinates the activities of the existing Italian networks would be extremely useful. Such a network could collect data on issues regarding women's careers. Furthermore it should promote the implementation of gender policy and become a

reference point and dialogue partner with the Government and decision makers. In this respect, we gratefully welcome the working group “Gender and Research” recently established by the Italian Ministry of Education, University and Research.

**The subscribers**

Tonya Blowers (Organization for Women in Science for the Developing World, Trieste, Italy)

Marica Branchesi (Gran SASSO Science Institute, L’Aquila, Italy)

Alessandra Celletti (University of Rome Tor Vergata, Italy)

Barbara Fantechi (SISSA, Trieste, Italy)

Tamara Grava (SISSA, Trieste, Italy/Bristol University, UK )

Randi Martin (Rice University, USA)

Anna Menini (SISSA, Trieste, Italy)

Silvina Ponce Dawson (Universidad de Buenos Aires, Argentina)

Raffaella Rumiati (SISSA, Trieste, Italy)

Farian Sabahi (Università Della Valle d’Aosta, Italy)

Rodica Toader (Università di Udine, Italy)

Lynne Walling (University of Bristol, UK)