



Barcelona Institute of
Science and Technology

Summary Report of BIST Round Table on Empowering Women in Science within the BIST Community

62% of people attending the round table *Empowering Women in Science within the BIST Community*, held on November 28, 2017ⁱ, agreed that increasing the number of female group leaders to reach parity will change science for the better—at BIST, where women are right now only occupy 15% of PI positions, and everywhere else. This is the case because a more inclusive and diverse set of candidates will allow us to enroll the best researchers; because different points of view and different sensibilities will enrich and make our research more creative and effective; and because this diversity will promote new leadership styles in research centres and academia, less paternalistic, less condescending.

The inequity of the situation is a fact. In almost every research institution, we can identify the so-called Scissor Graph, which shows how female representation goes down as you look at senior positions. BIST is not an exception: while gender distribution is fairly balanced at the level of PhD students (40% W / 60% M), it is absolutely biased at the level of group leaders (15% W / 85% M). And, as Pastora Martínez, the round-table moderator, reminds us, science is affected by this bias. An article recently published in *Nature Human Behavior* highlighted that medical studies that include women researchers, especially in leading positions, are much more likely to address potential gender and sex differences in disease risk, prevention and treatment.ⁱⁱ

More gender balance will not only make research better (more collaborative projects, cross-cutting issues, new approaches and even new topics), it will also have a positive impact in work (that would be more balanced with personal life) and in society, as far as research institutions can become a reference for educational, business and political worlds.

But, to get the desired equity, we need to clearly identify what the real barriers are and take action to turn around the current situation.

Barriers

According to the testimonies of round-table speakers and the subsequent small group discussions, both the barriers and the actions needed to achieve gender equity in research can be grouped into three categories.

On the one hand, we have what we can call **cultural barriers**, related to personal attitudes—from thoughtlessness and paternalism to unfair competition—, social stereotypes and prejudices.

On the other hand, we should consider **political obstacles**, often erected by inaction: lack of policies that allow a better work-life balance, as for example in parental leave; lack of regulation that guarantees gender parity in academic decision-making bodies; absence of fair procedures that prevent gender bias in selection processes; or the need to target and put an end to unfair practices, such as salary differences. In that framework, '*policies*' also means **internal procedures** that must promote gender balance in every research institution.

The third category is **women's self-empowerment**. As Mónica Pérez-Temprano, group leader from ICIQ, underlined in her speech, "*Women tend to think that we are not good enough.*" In a way, this is a consequence of the male-dominated culture that prevails in today's society, but needs to be specifically targeted if measures are to be taken to transform the problem into an opportunity.

Patriarchal heritage

In science, both men and women are required to be *supermen* and *superwomen*, Núria Montserrat, junior Group Leader from IBEC, warns us. However, women's efforts are constrained by patriarchal stereotypes, which consider them less prepared for leadership. According to Neus Prats, Core Facility Manager at IRB Barcelona, this prejudice hampers the selection of women researchers as group leaders. "*Even in the way positions are advertised there is a bias that makes some women consider they are not good enough to be hired for the job.*" The small number of female members of the selection committees also does not help the gender balance in these decisions.

Women also receive less funding (only about 30% of total grants) and fewer publications because of gender bias and that puts them in a worse position to be hired.

The paternalistic culture questions the ability of women to make the necessary efforts to develop a full scientific career. Women researchers receive a lot of messages from their professional environment (above all from male group leaders) about the sacrifices they have to make if they want to succeed in their careers —sacrifices often related to postponing or even avoiding maternity. "*We are sending the wrong message to young researchers*", Monica Pérez-Temprano warns.

In the session, the challenges that combining scientific career and maternity may entail were mentioned by some speakers and attendees. However, María García-Parajo, Group Leader and ICREA Professor at ICFO, was categorical: "*To have a family, have children and a successful career, be a group leader, is absolutely possible. Women have to be aware of that.*"

García-Parajo also denounced the *paternalistic leadership style* that in her opinion is quite common in academia. This kind of leader "*makes collaborators dependent and slows down their career development.*"

Leadership and mentoring

"*Everything that has to be done [for gender equity] has to begin with ourselves*". That's the recommendation of Neus Domingo, Senior Researcher of ICN2, who thinks women are often excessively self-demanding. "*Scientists are vocational workers and that is a good starting point, but balancing work and personal life requires flexibility and*

systematic time management. Choosing means renouncing, but it does not have to mean losing things, but prioritizing them.”

Both Domingo and Núria Montserrat (IBEC) agreed that often women make the mistake of trying to take control of everything. They must learn to delegate, both at home and at work.

Neus Prats (IRB Barcelona) warned that *“good intentions and personal effort are not enough. Centres have to combat any form of discrimination and guarantee equal opportunities and treatment for men and women, promoting the increase of women scientists to senior and managing positions.”*

One of the deficiencies detected, and underlined by several speakers, is the lack of women group leaders that can act as mentors for young women researchers. *“I only had men as mentors. I was happy, they were great, but I would have appreciated having a woman’s reference, someone to identify with”*, said Benedetta Bolognesi, Post-doctoral Researcher at CRG. For Pérez-Temprano (ICIQ) having a woman mentor during her postdoc *“changed the game completely”*.

Another crucial point is networking. According to Laia Cardiel, Engineering Services Coordinator at IFAE, *“if you want to pursue a career, you need to know people, you need to attend congresses and conferences, and if you have a family, you have to organize yourself, but you must be there”*. Sometimes women underestimate networking, but it is essential to have access to some jobs, when someone is looking for a very specific profile.

Actions to be done

Speakers in the round-table and spokespeople from the discussion groups shared the opinion that **promoting female mentorship for women researchers** is one of the more important measures to be taken to achieve gender parity in leading positions. Mentors’ experience will persuade young women researchers that they can be as good if not better than their male colleagues and encourage them to pursue their career and compete for group leader positions.

Another action that built consensus in the session was **to promote leadership training activities for junior PIs** in order to change the current mainstream paternalistic style.

On the side of breaking down *cultural barriers*, session attendees suggested measures such as:

- BIST and its centres to organize periodic talks on gender issues
- Facilitating researchers at all levels who can discuss topics related to gender equity at work on a regular basis
- Working actively to involve more men in debates about gender equityⁱⁱⁱ
- More communication, to make conscious the unconscious bias

Most of the actions proposed belong to the field of *politics and regulation*. Above all, they imply changes in **internal procedures** in selection and hiring processes and suggest putting in place **new mechanisms** to support women in the tougher moments of their careers. The actions proposed were the following:

- Giving some kind of economic support to researchers in connection with maternity (for things such as babysitters, help with housework, etc.)
- Fostering a more active role for human resources departments in processes for hiring researchers (equity surveillance)
- Mandatory training in selection for PIs
- Gender balance in selection panels
- Selection processes through blind CVs
- More transparency, both in selection processes and salary
- Candidates passing an ethical test to be eligible
- Considering positive discrimination
- Offering opportunities for women with long career breaks (for example, tenure track positions)
- Creating kindergartens in research centres
- Equal parental leave for men and women
- More information about mobility opportunities
- Specific measures concerning gender violence

One of the main conclusions of the session was that all these actions can help, but a big part of the success in achieving gender equity in science —and everywhere— is in the hands of women. A key point is **self-confidence**. Personal decisions, such as becoming a mother, are seen as big barriers —more often, they are said to be *the barrier*. “*But men also stop their careers for various reasons and that does not even merit a mention on their CV*”, remembered Neus Domingo (ICN2).

“*You have to decide what your plan is, what tools you have to be a mother, which is a job for years, how to combine it with your professional career, and go on*”, advised María García-Parajo (ICFO).

Of course, a good environment (family, work colleagues, friends) and conciliation measures (flexibility, economic support, parental leave) will help, but those struggling with contradictory feelings about career and maternity will find some release in this thought:

“*Maternity is such an experience that in the long run it made me more effective and creative as a researcher.*” (Núria Montserrat, IBEC) ■

ⁱ The meeting organized by BIST was held in the Centre Civic Urgell on November 28, 2017. It included a round table moderated by **Pastora Martínez**, Vice-President for Globalization and Cooperation, UOC, and brought together the following speakers: **Benedetta Bolognesi**, post-doctoral researcher, CRG; **Núria Montserrat**, Junior Group Leader, IBEC; **María García-Parajo**, Group Leader and ECREA Professor, ICFO; **Mónica H. Pérez-Temprano**, Group Leader, ICIQ; **Neus Domingo**, Senior Researcher, ICN2; **Laia Cardiel**, Engineering Services Coordinator, IFAE; and **Neus Prats**, Core Facility Manager, IRB Barcelona. There were also six small group discussions in which the 128 participants debated current barriers for gender equity in science and proposed the actions summarized in that document.

ⁱⁱ *Nature Human Behaviour*, November 7, 2017, <https://www.natureasia.com/en/research/highlight/12256>

ⁱⁱⁱ Only 14% of session attendants were men.