

# Insights from the “Women in Evolutionary Biology Workshop” on gender equality in science

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## Abstract

In May 2024, the *Women in Evolutionary Biology Workshop* was held at the Max Planck Institute for Evolutionary Biology. The event served as a platform for researchers to present their scientific work and to reflect on challenges that can arise for women in academic environments. The program featured scientific talks and poster sessions, alongside discussion forums focused on advancing equity and improving working conditions in academia. In this manuscript, we provide an overview of the workshop and highlight key themes that emerged from the discussions. These included under-representation in leadership roles, implicit bias, structural inequality, intersectionality, workplace culture, and the impact of parenthood on academic careers. By situating these insights within the broader scholarly literature, we identify recurring structural patterns across institutions and disciplines. We also offer actionable strategies to inform efforts toward a more supportive academic culture. The workshop discussions emphasized how power imbalances and distorted assumptions about meritocracy can contribute to unequal access to opportunities, with intersectional factors—such as race, class, and cultural background—further shaping these dynamics. This manuscript highlights the value of events like this one and contributes to ongoing conversations around equity and inclusion in science by capturing and contextualizing the experiences and reflections shared during the workshop.

**Keywords:** evolutionary biology, gender equality, intersectionality, inclusion in science

## Introduction

Science is a human endeavor, embedded within society and reflecting its broader challenges. Gender inequality within academia arises from a complex interplay of societal factors, such as systemic biases, cultural norms, institutional practices, and social expectations (Harding, 1986; Podreka et al., 2024), that have been shaped by centuries of under-representation (Harding, 1986; Orr, 2015; Wellenreuther & Otto, 2016). Collective efforts toward gender equality over the past decades have helped narrow the gap between the number of women and men pursuing science degrees, enabling greater representation of women in traditionally male-dominated scientific fields (England & Li, 2006; Holman et al., 2018). However, barriers to the full participation and recognition of women in science persist and are often reinforced by the hierarchical structure of academia, with intersecting identities further shaping how these barriers are experienced (Moss-Racusin et al., 2012; Podreka et al., 2024).

Even in fields with gender parity at undergraduate and graduate levels, the proportion of women declines as one moves up the academic or professional hierarchy, with very few reaching senior positions (Clark Blickenstaff, 2005;

O’Connor, 2019). Thus, as the conversation around gender equality in academia continues to evolve, it is crucial to recognize and address the deep-rooted and multifaceted structural issues that hinder women’s advancement despite potential initial parity in early education.

Gender disparities in academia manifest not only in the representation of women but also in the recognition and impact of their work. One key issue is the lower visibility of women’s contributions compared to those of their male peers (Vásárhelyi et al., 2021). Research indicates that, while scientific impact and professional networks contribute significantly to career success, these factors do not have the same effect for female scientists (Vásárhelyi et al., 2021). These disparities are also evident in scientific events, where women remain under-represented (Isbell et al., 2012; Martin, 2014), not only as attendees but even more importantly as invited speakers (Débarre et al., 2018; Isbell et al., 2012; Klein et al., 2017; Schroeder et al., 2013). This is particularly concerning, as such events play a crucial role within the academic ecosystem by facilitating knowledge exchange, increasing professional visibility, and fostering international collaborations—all of which are essential for career progression (Corpas et al., 2008; Kyvik & Larsen, 1994).

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To address this problem, conference organizers play an important role in promoting equality at scientific events (Nittrouer et al., 2018). Research shows that the proportion of female invited speakers increases when women are part of organizing committees, and when gender equity is intentionally prioritized (Casadevall, 2015; Débarre et al., 2018; Lupon et al., 2021; Sardelis & Drew, 2016). Thus, implementing policies that promote equal opportunities is crucial for ensuring fairness in participation and fostering a more inclusive academic culture (Martin, 2014). Encouraging female scientists to take on organizing roles not only amplifies their voices but also equips them with essential leadership, teamwork, and financial management skills, all of which are critical for academic success (Corpas et al., 2008).

In response to these persistent issues, the *Women in Evolutionary Biology Workshop* was organized to provide a platform for women in the field to share their research and reflect upon the challenges they face in academic environments. This article presents a description of the workshop and the main themes that emerged during the discussion sessions, including under-representation in leadership, implicit bias and intersectionality. For each theme, we examine the core issues, potential ways forward, and expected challenges. A brief summary is presented in Table 2.

Although these topics are well documented in the literature, their recurrence in the workshop's discussions, raised again by a new cohort of researchers across multiple career stages, highlights their persistent impact and the continued urgency of addressing them. Therefore, this article contributes to ongoing conversations about equity and inclusion in science by serving as a resource for individuals, particularly within evolutionary biology, who are committed to fostering a more supportive academic culture. It also highlights the value of such events as opportunities for reflection and for building momentum toward meaningful change.

## Workshop summary

The workshop took place from May 14 to 16, 2024 and was organized by female doctoral and postdoctoral researchers with the support of a principal investigator. It was funded by the Scientific Workshop Program of the Max Planck Institute for Evolutionary Biology. Participation was free of charge, but due to limited venue capacity, attendees were selected through a competitive abstract review to ensure a high-quality scientific program. A total of 54 individuals participated for the full workshop. To accommodate broader interest, the keynote talks and poster sessions were also opened to researchers at the hosting institution.

The program included keynote lectures, contributed talks, poster sessions, and small-group discussion forums. Female group leaders from the Max Planck Institute for Evolutionary Biology additionally introduced their research in short presentations. To address the persistent under-representation of women in invited speaker lineups (Débarre et al., 2018; Schroeder et al., 2013; Wellenreuther & Otto, 2016), the organizers invited only women as keynote speakers. These were: Professor Dr Ayari Fuentes-Hernandez (UNAM, Mexico), Professor Dr Bibiana Rojas (University of Veterinary Medicine, Austria), Professor Dr Deepa Agashe (NCBS, India), Professor Dr Katarína Bodová (Comenius

University, Slovakia), Professor Dr Miriam Liedvogel (Institute of Avian Research, Germany), and Professor Dr Rosemary Grant (Princeton University, US). A particular highlight of the workshop was the mentoring talk by Professor Dr Rosemary Grant, who shared personal insights and guidance on building a successful academic career. She also offered broader reflections on the event, discussing challenges and opportunities for advancing equity in science (see Box 1).

A key goal of the workshop was to facilitate discussion on factors shaping the professional and personal development of female scientists. The keynote speakers moderated small-group sessions focusing on strategies to advance equity in academia. These conversations highlighted recurring concerns, which the organizers synthesized into five main themes, explored in detail in the section "Discussion." A code of conduct, shared in advance and described to all participants at the outset of the workshop, helped create a welcoming and respectful environment that supported open dialogue and collaborative problem-solving.

After the workshop, participants were invited to complete an online survey about demographics, affiliations, and research fields. Of the 54 attendees, 32 responded. They represented 17 nationalities (Figure 1), and most were early-career researchers across evolutionary genetics, ecology, theoretical biology, and molecular evolution (Table 1). While the majority were based in Germany, the workshop also included participants affiliated with institutions in South Africa, the US, and India. Even among those currently in Germany, international backgrounds were highly diverse.

Of the 32 survey respondents, 31 identified as women and one as a man. Although workshop registration was open to all genders, the audience was predominantly female, reflecting broader trends of lower male engagement with gender-related topics (Höhmann, 2025; Kozlowski et al., 2022). Future initiatives could aim to encourage participation from individuals of all genders, emphasizing the shared responsibility to advance equity in academia.

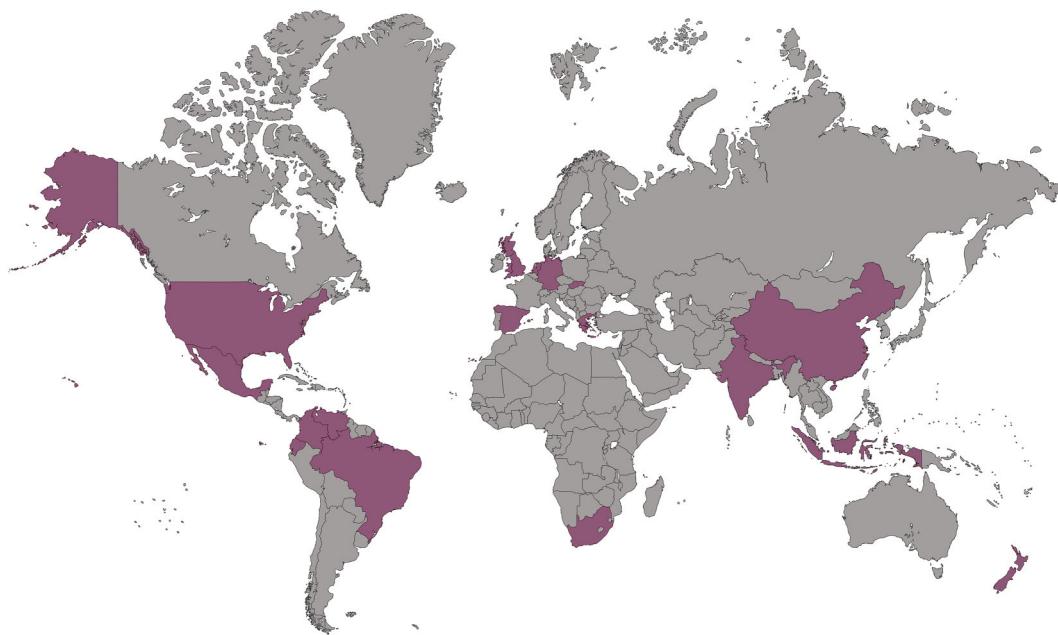
The strong female turnout also highlights the importance of creating spaces where women feel represented and supported. Research shows that in mixed-gender academic settings, women often face challenges such as lower visibility, reduced participation in Q&A sessions, and greater likelihood of presenting posters rather than talks (Hinsley et al., 2017; Pritchard et al., 2014).

## Discussion sessions

We summarize in the following sections five major themes that emerged during the discussion forums of the workshop (see Table 2 for a summary). We contextualize these themes within the broader scholarly literature on gender equity to draw attention to recurring patterns across institutions and disciplines. Our aim is to share these themes with the scientific community and raise awareness of the current challenges faced by female scientists, without claiming to present an exhaustive account.

## Under-representation in leadership roles

A recurring issue discussed was the under-representation of women in leadership roles, a challenge that has been



**Figure 1.** Map representing the nationality of attendees who completed the survey. Country of origin of at least one participant is highlighted by darker shade.

**Table 1.** Distribution of academic positions and countries of affiliation of survey respondents.

Academic position	Count	Location	Count
Doctoral researchers	10	Germany	23
Postdoctoral researchers	7	France	2
Research group leader	6	India	1
Master's student	3	Austria	1
Assistant professor	3	US	1
Max Planck director	1	Mexico	1
Researcher (part time)	1	South Africa	1
Research assistant	1	Slovakia	1
		Portugal	1

well-documented in academic research. Huang et al. (2020) demonstrate that most women in academia remain in lower-level positions, facing persistent barriers to access leadership and influential roles. This under-representation limits women's ability to shape institutional priorities and policies that address gender disparities, reinforcing a significant power imbalance. It also perpetuates the "leaky pipeline" phenomenon, in which women leave academic careers at higher rates than their male counterparts (Shaw & Stanton, 2012). It should be noted, however, that while the "leaky pipeline" metaphor describes broad patterns of attrition, it oversimplifies academic pathways by assuming a single, linear progression. A growing body of work therefore argues that efforts should shift from merely keeping women in the pipeline to addressing the institutional and sociocultural barriers that shape academic careers in ways the metaphor cannot capture (Cannady et al., 2014; Clark Blickenstaff, 2005; Grein, 2017), as it is further examined in the sections that follow.

These structural dynamics are closely linked to the persistent scarcity of women in leadership positions, which has tangible consequences for aspiring female researchers,

most notably by depriving them of visible role models who can inspire them to pursue and persist in science as a career path. More broadly, under-representation in leadership is not limited to gender, it also affects other groups marginalized by systemic biases (see the section "Intersectionality") (Fox Tree & Vaid, 2022). Many participants emphasized that representation at all levels of academia plays a critical role in fostering a sense of belonging and validation, which in turn boosts job engagement and satisfaction. Beyond representation, mentorship—regardless of the mentor's identity—was identified as a key factor in creating a supportive academic environment. Effective mentors provide guidance, motivation, and inspiration while also facilitating networking opportunities, all of which are essential for the success and professional development of early-career researchers.

However, senior female scientists noted that even when women do ascend to leadership positions, they often face the risk of tokenism by being disproportionately burdened with administrative duties and service tasks. With committees seeking more female representation than exists in the pool, women frequently carry heavier workloads than men, making it difficult to balance their leadership responsibilities while also serving as the "de facto" role model for others—pressure that can lead to burnout and exhaustion. To mitigate these challenges, achieving a critical mass of women from diverse backgrounds in leadership positions is essential. A greater representation of women in these roles promotes an equitable distribution of responsibilities and helps prevent feelings of isolation (Nielsen et al., 2017).

Conversely, younger female researchers cautioned against the "Queen Bee" effect. This occurs when senior women, influenced by the deeply ingrained male-dominated culture of academia, fail to support their junior peers. Instead of promoting solidarity and mentorship, some may adopt behaviors that reinforce existing barriers for early-

**Table 2.** Common overarching themes on gender equity, their consequences, potential ways forward, and expected challenges.

Theme	Consequences	Potential ways forward	Expected challenges
Under-representation of women in leadership roles	Power imbalance. Limited impact on decision-making. Lack of visible role models	Clear promotion criteria. Intentional representation of women in leadership roles. Mentorship programs. Tackle the “leaky pipeline” (Cannady et al., 2014)	Individual and collective biases. Risk of tokenism. Institutional inertia
Hostile and antagonistic work environments	Covert and overt discrimination, or harassment potentially contributing to frustration, stress, exhaustion, anxiety, and depression	Empower women to voice experiences. Promote inclusive workplace culture. Clear policies against harassment and discrimination	Gender-related social norms. Fear and experience of retaliation. Lack of institutional support
Implicit bias and gender inequality	Unequal evaluation of performance leading to a negative impact on women’s professional advancement. “Matilda Effect” (Rossiter, 1993)	Implicit bias awareness and training. Blind evaluation processes	Gender-related societal roles. Resistance to acknowledging bias. Institutional inertia
Intersectionality	Inequities in education, mentorship and access. Discrimination. Lack of representation	Equitable merit-based assessment criteria. Scholarships and financial aid. Mentorship networks	Political polarization. Implicit and explicit bias. Limited resources. Institutional inertia
Family and parenthood in academia	Parenthood viewed as a threat to productivity. Limited participation in professional development activities	Effective dual-career programs. Flexible work policies. Access to childcare facilities. Equal maternity and parental leave. Equitable distribution of caregiving responsibilities	Lack of institutional support. Limited allocation of resources to support families. Academia’s incentive structure

career women (Derkx et al., 2016; Faniko et al., 2021). This underlines the importance of building solidarity across career stages, creating a more inclusive and equitable academic environment where young researchers can also thrive.

## Work environment

Unwelcoming work environments were identified by participants as significant contributors to the higher dropout rates among women in science and in turn to their under-representation in leadership roles. Covert and overt gender discrimination, including microaggressions, were frequently cited throughout the discussion sessions as sources of indignation, frustration, and stress. Examples included being constantly interrupted during discussions, receiving condescending explanations about their own areas of expertise, and not being taken seriously as scientists. Many participants expressed exhaustion from repeatedly facing such behavior.

Isolation in male-dominated departments was also reported, with some participants describing feelings of anxiety. This was often linked to the scarcity of both formal and informal workplace networks for women, which can further reinforce gender imbalance in science (Kemelgor & Etzkowitz, 2001).

Unsolicited comments about physical appearance and experiences of sexual harassment were also shared, with fieldwork being a particularly problematic environment. This aligns with findings from Clancy et al. (2014), which highlighted that female scientists are disproportionately likely to experience harassment during fieldwork. Despite the prevalence of these issues, many participants expressed a reluctance to speak out, fearing personal and professional repercussions.

To address these concerns, participants suggested empowering women to voice their experiences. Scientific meetings promoting gender equality, such as this workshop, were highlighted as vital for promoting a safe and inclusive academic community. Participants also underscored the critical role of representation in leadership positions in providing support and advocating for systemic change (Settles et al., 2006). Group leaders, regardless of gender, were recognized as pivotal in creating inclusive and respectful environments in research groups, where achieving a critical mass of women was emphasized to avoid marginalization (Nielsen et al., 2017).

## Implicit bias and gender inequality

Participants also identified implicit biases as a significant factor contributing to the under-representation of women in leadership roles. Traits such as confidence, independence, and ambition are often perceived as essential for leadership when exhibited by men but are viewed as inappropriate or unfitting when displayed by women. These biases create a mismatch between societal expectations and the qualities needed for success, historically undermining perceptions of women’s competence and intellectual ability in science (Wellenreuther & Otto, 2016).

Implicit biases also have a profound negative impact on women’s professional advancement. Research shows that women are often underestimated and held to higher standards than their male counterparts (Card et al., 2020; Hofstra et al., 2020). During the discussion forums, participants highlighted the difficulty of setting realistic expectations and maintaining self-confidence in a system that requires women to continually prove their worth. For instance, contributions by female authors are less likely to be rec-

**Table 3.** References expanding the discussion on intersectionality.

Topic	References
Race/ethnicity	Bourabain (2021), Gutierrez et al. (2012)
Nationality	Johansson and Śliwa (2014), Striebing et al. (2023)
Class	Crew (2020), Morgan et al. (2022)
Sexual orientation	Bilimoria and Stewart (2009), Taylor (2020)
Disabilities	Brown and Leigh (2018), Brown and Leigh (2020)

ognized within academia's reward system—a phenomenon known as the Matilda Effect (Rossiter, 1993). A prominent example is Rosalind Franklin, whose critical contributions to the discovery of DNA's structure were overlooked by her peers and the scientific community (Orr, 2015). Even today, women's contributions are systematically less likely to be acknowledged through authorship on articles and patents, and their work tends to be cited less often (Caplar et al., 2017; Dion et al., 2018; Dworkin et al., 2020; Ross et al., 2022; Stavrova et al., 2025). In addition, women are also less likely to be awarded prestigious grants, or to be honored with major scientific awards (Lincoln et al., 2012; Van der Lee & Ellemers, 2015).

To address these challenges, participants emphasized the importance of building strong support networks to bolster confidence and resilience, as well as fostering healthy coping mechanisms to manage setbacks. Moreover, biases persist in hiring practices and evaluation panels, where both men and women undervalue female candidates (Reuben et al., 2014). To this end participants also highlighted the importance of training committees—often composed of senior scientists—to recognize and address implicit biases. These were identified as key steps toward promoting diversity and the understanding of varied cultural and socioeconomic backgrounds.

## Intersectionality

Gender-based challenges in science are often compounded by factors such as race, class, sexual orientation, and other intersecting identities (Collins & Bilge, 2020; Kozlowski et al., 2022). This concept, known as intersectionality, highlights how overlapping identities can create unique experiences of privilege or oppression (Crenshaw, 1991; Harding, 1986). Consequently, not all women in science face the same barriers, underscoring the importance of considering how various aspects of identity shape individual experiences across different contexts. While an exhaustive discussion of intersectionality lies beyond the scope of this paper, we draw on recurring challenges raised in the workshop to illustrate how overlapping identities influence experiences in academia. For further reading on intersectionality, see Table 3.

One such factor is socioeconomic background. For instance, studies show that generational wealth, particularly linked to parental educational attainment, correlates strongly with academic success (Morgan et al., 2022). Socioeconomic background is often linked with ethnicity and race, which determines who is able to access higher education, further exacerbating inequalities (Kozlowski et al., 2022). These disparities are not merely statistical, they man-

ifest in real-world challenges such as experiences of discrimination, lack of representation, and limited access to opportunities, which hinder career progression and alienate individuals from the academic community.

In addition, cultural and national contexts significantly affect women's experiences in science. Some participants reported that due to cultural norms in their countries fewer family resources are allocated to women's education. Others described intense social pressure to marry and have children rather than pursue professional careers, with some discouraged explicitly from entering science because it is perceived as a "man's job." Additionally, mobility expectations in academia pose unique challenges for women from certain cultural backgrounds, as well as for those facing financial barriers or disabilities. Some participants noted that leaving their home countries required male guardian approval, creating significant obstacles to international opportunities. Limited financial resources and inadequate support for researchers with disabilities may further restrict women's ability to pursue an international academic career.

To address these multifaceted disparities, participants stressed the importance of evaluating scientific achievements within the context of an individual's available social, cultural, and financial capital. A proper meritocratic system must ensure that evaluation processes do not unintentionally favor those with privileged backgrounds, e.g., through biased recruitment channels, networking advantages or culturally skewed evaluation criteria. The importance of initiatives that provide resources to individuals from diverse backgrounds, such as scholarships and mentorship networks, was also highlighted, along with the need to continue promoting these initiatives. These measures can help build a more inclusive international scientific community, where equity and fairness are prioritized, fostering an environment where all scientists can thrive.

## Family and parenthood in academia

The issues discussed in the previous sections are exacerbated by family, caregiving, and parenthood responsibilities. While these affect both men and women, women are disproportionately impacted (Misra et al., 2012; Morgan et al., 2021). Societal perceptions often confine women's success to stereotypical roles, such as motherhood and caregiving. These perceptions are reinforced by the naturalistic fallacy, which suggests that women's biological capacity to bear children inherently determines their societal roles (Anderson et al., 2023; Daston, 2014). As a result, women's professional opportunities are frequently limited by social expectations (Powell, 2021; Stanisicuaski et al., 2021, 2023).

Participants emphasized two key factors related to family and academic success: dual-career families and motherhood. Dual-career families, where at least one partner is an academic, face distinct challenges owing to the scarcity of academic positions and the frequent need for relocation (Tzanakou, 2017). These inherent constraints, combined with household duties and other factors such as age disparity and geographic location, often result in one partner (typically the woman) opting to leave academia (Solga & Rusconi, 2007; Spoon et al., 2023).

Academia's mobility requirements pose additional challenges for both dual-career families and individuals without partners or dependents, who must rebuild support networks

with each move. Participants noted that improving working conditions requires institutional responses, such as stronger onboarding processes to ease the demands of frequent relocation and a collective reassessment of the value placed on international mobility.

Dual-career programs, which support the accompanying partner in finding a new position, were viewed as a potential solution. However, participants noted that these programs often lack effectiveness or flexibility (Monahan et al., 2024; Wolf-Wendel et al., 2000). To improve their impact, particularly for early-career researchers, participants suggested practical measures such as assistance with credential validation and document translation, guidance on the local job market for the accompanying partner, and greater flexibility in relocation timing and remote work options for the academic partner.

Participants also emphasized the challenges of motherhood in academia. They expressed concerns about the conflicting demands of the “biological clock” and the “tenure clock,” as the pressure to secure financial stability and career advancement often leads women to delay pregnancy until an age when pregnancy-related risks are higher (Crawford & Windsor, 2021). Academia’s cultural norms and incentive structures can further disadvantage mothers, as family responsibilities are frequently perceived as a threat to research productivity at both individual and group levels. Such perceptions can negatively influence mentorship, career development, and performance evaluations, ultimately reinforcing patterns of under-representation. These pressures are compounded by implicit biases and unspoken cultural norms, which can persist even among leaders who aim to promote gender equity. For instance, a group leader may unconsciously view a graduate student’s decision to start a family as a distraction or a risk to productivity, shaping expectations and support in ways that hinder both the student’s development and broader inclusion efforts.

These structural and cultural barriers also manifest in concrete professional settings. A notable example discussed by participants was the lack of childcare support at conferences (Carter et al., 2024; Swann, 2019). Such barriers often prevent parents—especially mothers—from attending, reinforcing existing inequalities in networking and professional development (Schroeder et al., 2013; Sardelis et al., 2017). In the case of the *Women in Evolutionary Biology Workshop*, organizers attempted to provide childcare services, but logistical constraints such as limited space and resources made this unfeasible. This example illustrates a broader systemic issue in academia, where inadequate institutional support restricts parents’ ability to fully participate in career-advancing opportunities.

To address these issues, participants emphasized the need for policies that promote a sustainable and equitable sharing of childcare responsibilities. Key measures included providing accessible childcare facilities within or near academic institutions and ensuring equal maternity and paternity leave, thereby improving working conditions for parents and reducing the likelihood that parenting-related career gaps are viewed unfavorably on academic CVs. Participants also highlighted practical adjustments—such as scheduling meetings and seminars at family-friendly times—which were widely seen as both feasible and beneficial. Finally, they underscored the importance of supportive partners and strong personal networks, noting that an unequal

distribution of housework and childcare remains a major contributor to missed promotions and foregone job opportunities, particularly in a system that prioritizes international mobility (Morgan et al., 2021).

In general, addressing family-related systemic issues requires sustained workplace dialogue and institutional reform. Institutions need to implement welcome offices that work in conjunction with dual-career initiatives, develop effective parenthood programs, and adjust institutional policies to accommodate parenting responsibilities. Participants stressed that beyond offering paternity leave, fathers must be actively encouraged and supported by their employers and colleagues to take on childcare responsibilities without fear of negative career consequences. Normalizing parenthood involves making changes to existing policies that unfairly penalize parents—especially women (Crawford & Windsor, 2021). This is essential not only for promoting equality in science but also for retaining high-quality applicants. Outstanding candidates, regardless of gender, may be discouraged from applying for positions if they are uncertain about career opportunities for their partners or institutional support for parents.

Beyond institutional policies, sustained progress requires commitment to resource allocation at both institutional and funding-agency levels. This is essential for promoting gender diversity and solidarity across career stages. Hiring and training research assistants to cover specific tasks while individuals are on parental leave were highlighted as effective strategies (Reese et al., 2021). Alternative metrics for research assessment (e.g., the San Francisco Declaration on Research Assessment, DORA; Allen et al., 2025) also have the potential to make academia more inclusive by better integrating parenthood with academic career progression (European University Association, 2025; Vinkenburg et al., 2014).

## Conclusion

Creating an equitable academic environment requires deliberate action at every level of the scientific community. Distorted assumptions about meritocracy that ignore unequal access to opportunities often obscure the structural barriers that disadvantage women and other under-represented groups. Meaningful progress therefore depends on coordinated efforts: individuals must recognize and address implicit biases; departments must cultivate safe and inclusive working environments; institutions must implement policies that accommodate diverse career paths; and funding agencies must actively support equity initiatives and ensure fair evaluation of proposals. Importantly, these measures benefit not only women but also other groups facing similar challenges.

Sustainable change will only be achieved when all members of the academic community—not just those most affected—actively engage in equity efforts. Although high turnover in academia and the disproportionate exit of women from the academic pipeline pose challenges, individual and collective actions, even at a small scale, can create ripple effects that lead to meaningful improvements. Relying solely on under-represented groups to drive equity initiatives risks overburdening them and may inadvertently hinder their career progression, broad participation is therefore essential.

Workshops such as the *Women in Evolutionary Biology Workshop* provide valuable spaces for reflection, community-building, and exchange across career stages and disciplines. Many participants reported that engaging with others facing similar challenges offered a sense of validation, belonging, and solidarity often missing from daily academic life (see the section “Testimonials”). At the same time, like any first edition, the workshop also faced practical limits. Space constraints and the scale of available travel support meant that not all voices could be included. These experiences underscore the importance of future initiatives adopting more inclusive formats, such as hybrid participation, satellite events across institutions, childcare support, and additional funding to enable wider and more diverse participation.

Looking ahead, intentionally structured gatherings like this workshop can serve a dual purpose: increasing the visibility of female researchers in evolutionary biology, and creating opportunities to discuss ongoing challenges and concrete actions to address them. While no single event can resolve all systemic issues, future editions that involve institutional leaders and decision-makers may help amplify impact. In addition, future workshops could highlight not only established researchers but also postdoctoral researchers, research scientists, and other early-career scholars as keynote speakers, to elevate emerging talent and strengthen mentoring networks. Designing topics that encourage broader engagement across genders will also be important, as sustained progress requires participation from all members of the community.

We are pleased to note that funding has already been secured for a second edition of this workshop through the Scientific Workshop Program of the Max Planck Institute for Evolutionary Biology. Although some logistical challenges remain, we are committed to building on the success of this inaugural event and to addressing several of the aims discussed here.

We thus invite the scientific community to continue striving for equity and fairness in academia. Though progress has been made, much more can be achieved through sustained, collective action and a shared commitment to build an inclusive academic culture.

#### Box 1: Professor Dr Rosemary Grant's perspective of the workshop.

*“A major feature of this excellent international meeting was the coming together of women from different backgrounds and scientific disciplines to discuss shared problems and potential solutions. There is immense value in hearing directly from those who are disadvantaged through gender, race, poverty or other circumstances. We witness their problems with a forceful immediacy and learn to appreciate how ideas for solutions vary between countries and communities. Sadly, such groups on their own rarely succeed in overturning entrenched institutionalized inequalities. However, when meetings include people in positions of power, in this case sympathetic men in prominent positions, change can occur remarkably rapidly and produce lasting, beneficial effects.*

*Some years ago, I witnessed an increase in the proportion of female professors in a science department in the US grow from zero to 50 percent within a few years. This was brought about by the administration of the University launching many of the*

*suggestions we discussed in Plön. Specifically, the initiation of a regime to bring equal numbers of men and women for job interviews, the establishment of a position in each department for a senior woman professor and her laboratory and extra tenure time allotted to both parents in junior positions. Affordable daycare centers were set up nearby, and a university office that gave professional aid in acquiring jobs, visas etc. for partners and children. A further consequence of this improved ratio was a reduction in incidents of sexual harassment.*

*I suggest a follow up to this wonderful workshop with one that includes tolerant and sympathetic people who have the power to instigate rapid and much needed change. We are wasting so much talent if we don't build on the momentum generated from this symposium and continue to ignore the diversity around us.”*

#### Testimonials of participants

*“The one feeling that stood out for me in this meeting was the easy camaraderie that formed across participants, in such a short time, across all kinds of boundaries. We were all part of something good and important and lasting, with so much to learn from each other and share. The science was inspiring, conversations were fantastic, and the organizers were smart, efficient, and really nice. I came away energized about my science and my community—the best outcome from any meeting!” Professor Dr Deepa Agashe, National Center for Biological Sciences, India.*

*“As I listened to the participants of the meeting express their views on the problems faced by women in science I was struck by two thoughts. First, the problems are often created by men, deliberately or unconsciously, therefore men need to be engaged more in the discussion of the problems and their solutions. Second, there were few men in the audience. I asked both men and women why this was so and was told that many men had been invited but chose not to come apparently because they thought (wrongly) there was a hidden agenda, that women really did not want the men to be present. Here, then, is a communication barrier that hinders a solution to the first problem. To the extent that a hidden agenda is a general perception among men elsewhere, a joint effort by men and women is needed to dissolve the barrier to communication and cooperation.” Professor Dr Peter Grant, Princeton University, US.*

*“The workshop was well-structured, providing an excellent platform to exchange both scientific and non-scientific ideas. It allowed us to discuss important topics and challenges that women in science have faced and continue to face, aiming to find solutions. The discussions were thought-provoking and empowering, highlighting the importance of collaboration, support, and leadership among women in science. I was inspired not only by the science but also by the mentorship provided throughout the event, which encouraged me to engage more actively in related initiatives. I left feeling motivated to make a greater impact both in my workplace and within my direct scientific community.” Guadalupe López Nava, Doctoral researcher, Max Planck Institute for Biological Intelligence, Germany.*

## Data availability

The survey data are not publicly available, but all aggregated results are reported in the manuscript.

## Author contributions

S.K., M.A.R., N.E.G., G.T.R.S., A.A.L., conceptualization, investigation. S.K., M.A.R., writing-original draft; S.K., M.A.R., N.E.G., G.T.R.S., A.A.L., writing-review and editing; N.E.G., data curation, visualization.

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## Conflict of interest

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