

Addressing Gender Equity in Senior Leadership Roles in Translational Science

Dianna J. Magliano,* Vaughan G. Macefield, Tracey M. Ellis, and Anna C. Calkin*



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ABSTRACT: Inequities for women exist across many leverage points of an academic career in science, technology, engineering, mathematics, and medicine (STEMM) disciplines, ranging from poorer success rates at promotion, reduced grant success, and a lower likelihood of invited conference presentations, to a propensity to undertake the lion's share of academic service roles. Moreover, an almost intractable salary gap exists, along with a stark under-representation of women in senior scientific leadership roles, widespread throughout the United States, United Kingdom, Europe, and Australia. Numerous factors have been put forward as contributors to this disparity, including the notions that these inequities are a result of a pipeline issue and that women are less qualified or have less experience than men, implicit bias, a lack of flexibility in the work place, a lack of role models, the use of biased measures of success for promotion, and the lack of equitable parental leave programs. In this viewpoint, we address factors shown to contribute to the lack of women in leadership roles. Specifically, we look at systemic barriers, parental and carer leave, and domestic barriers, and we present solutions to address these barriers across an individual's professional and personal life. For women to achieve equity in senior scientific leadership roles, we believe that barriers across all facets of life need to be addressed and that the important contributions that women make and have made to STEMM need to be recognized.

KEYWORDS: *gender equity, implicit bias, women in STEMM, career barriers, parental leave*

1. INTRODUCTION

Over the past few decades, there has been an increasing awareness of women in the workplace and the disadvantages and systematic barriers that they face. Like many other industries, the scientific community has begun to review its practices to determine whether similar patterns are observed, the results of which demonstrated that there are indeed distinct inequities for women across the science, technology, engineering, mathematics, and medicine (STEMM) disciplines. The most concerning inequities include an almost intractable salary gap^{1,2} and a stark lack of women in senior scientific leadership roles,^{3–5} both of which are widespread through the United States, United Kingdom, Europe, and Australia. Disadvantages to women remain across many leverage points of an academic career, from poorer success rates at promotion⁶ to reduced grant success,^{7,8} a lower likelihood of invited conference presentations,⁹ and a propensity to undertake the lion's share of academic service roles.¹⁰ It is hotly debated why these inequities continue to exist well into the 20th century, despite the fact that women have been employed in the workplace in significant proportions for decades and are equally qualified.

Reasons commonly cited for these disparities that ultimately lead to a stark under-representation of women at leadership level, include (i) the notion that this is a result of a pipeline issue, (ii) the notion that women are less qualified or have less experience than men, (iii) implicit bias, (iv) the lack of flexibility in the work place, (v) the lack of role models, (vi) poor work culture (a culture that fosters a "boys' club"), (vii) the use of biased measures of success for promotion, and (viii)

the lack of equitable parental leave programs. Complicating this further is the fact that although society has learned to accept women working full time in professional careers over the last three decades, similar progress in our thinking about the role of men in the home is less apparent, particularly in the context of parental leave and attitudes toward men in carer roles. In order to achieve equity between genders, a change in culture has to occur not only in the work place but also in domestic life. History tells us that societies' views on the role of women in the workplace have changed: During the second World War women took on factory roles usually held by men who were conscripted to go to war. Of course, caring for children also had to be factored in to the work women performed for the war effort, and these unsung heroines had to return to domestic duties when the men returned from war.

In this narrative viewpoint, we will not only examine some of these issues but also discuss other factors that contribute to the lack of women in leadership roles, some of which have previously been under-appreciated. Furthermore, we will present some solutions to address these barriers across an individual's professional and personal life. We present the viewpoint that for women to achieve equity in senior

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leadership roles barriers across all facets of life need to be addressed (Figure 1).



Figure 1. Intersection of barriers across personal and professional facets that impact on career trajectory

2. STRUCTURAL AND SYSTEMIC CAREER BARRIERS

The lack of women in senior roles has often been considered to be a pipeline issue: Specifically, it has been suggested that since there are fewer women entering STEM fields in university there are less women moving through the pipeline. This, in turn, leads to reduced numbers of suitability experienced women for senior scientific roles. While this may have been the case in the past, the number of female graduates in STEM has continued to grow. In the United States, the number of male students who have been granted a STEM degree increased by 38% between the 2009 and 2016 school years, while the number of female students who achieved the same degree increased by 48%. Despite this, female representation at senior levels is still disproportionately low.¹¹ In life sciences and medical degrees, the proportion of female graduates has been at parity for over a decade in many countries,¹² and in many research institutes, there is a higher proportion of female students undertaking a higher degree by research. Given that sufficient numbers of women are entering the STEM fields and progressing through university, this is clearly not a pipeline issue. A more accurate description of the issue may be a “leaky” pipeline where women leave scientific research careers, likely due to a range of structural and systematic barriers that women face in the workplace, in turn resulting in a lack of women in leadership roles (Figure 2). These effects are particularly evident following periods such as parental leave or leave due to taking on carer roles for sick or elderly family members. It is noteworthy that women who do not take such leave still appear to face barriers which adversely affect their career trajectory. We will expand upon some of these barriers and provide some examples.

Implicit or unconscious bias is a key contributor to gender inequity at senior leadership levels. Implicit bias is considered to be a mechanism by which we simplify and streamline the way that we perceive others.¹³ It is largely influenced by previous experience in an unconscious manner¹⁴ and results in stereotypes and socially acceptable norms,^{14,15} ultimately shaping the way we see the world. There are numerous examples across STEM of how implicit bias disadvantages women and impacts on their career progression. For example, in a Canadian study, women were significantly less likely to receive grant funding when the principal investigator was explicitly assessed, compared to assessment of the scientific proposal itself, which did not result in a significant difference in

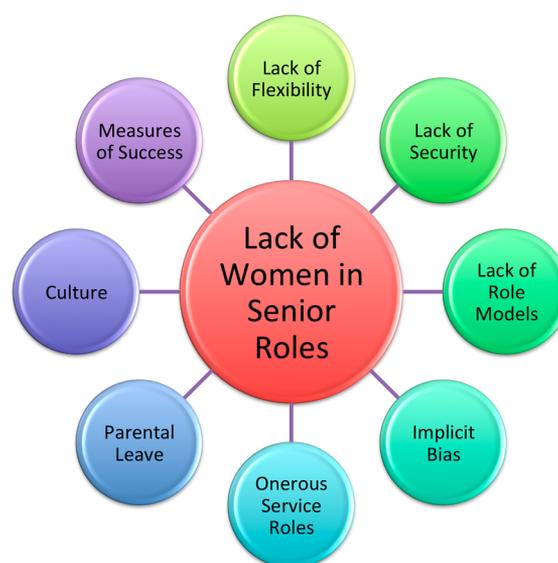


Figure 2. Systemic career barriers faced by women leading to a “leaky” pipeline

the success rate between genders.¹⁶ This suggests a less favorable assessment of female applicants rather than the quality of their research proposal. Similar effects were observed in The Netherlands¹⁷ and in Sweden.¹⁸

These effects are compounded by core differences in the way each gender tends to promote themselves. For example, in a study in which performance was self-reported, female candidates were selected by the employer less frequently than male candidates. The authors suggested that this was because women underestimated their performance in comparison to men, who were more likely to overemphasize their performance, despite on average, both genders performing equally well.^{19–21} This is an important consideration in grant and fellowship applications where the track record of an applicant is self-reported and is typically written using a self-promoting narrative. Indeed, women have been shown to be less successful in securing grants, and the grants they are awarded are often of a lesser value.^{7,8} In the recent announcement of National Health and Medical Research Council Investigator Grants in Australia, a new grant scheme introduced in 2018, men were more likely to secure fellowship-style grants than women (14.9% compared with 11.3%, respectively), and this discrepancy was more marked at the senior level. Among women, the success rate was 29.4% compared to 49.3% among men.⁷ The evaluation of career disruptions such as parental leave, which commonly affects women more than men, and its impact on track record was discussed as a contributor to this;⁷ however, core to this is the fact that these grants included sections for self-reported research impact, albeit with “verifiable evidence”. In contrast, in 2010 the European Research Council removed the self-evaluation section from their grants as they recognized that women are not good at “prizing themselves for their achievements”.²² A report into funding by the Swedish Research Council highlighted the different behaviors of men and women in assessment panels, with men being twice as likely to speak, to spontaneously take the floor, and to belittle comments made by women.²³ Gender bias is also pervasive and creeps in as early as the recruitment stage, where the

narrative of a job advertisement can be biased toward recruiting males compared to females.²⁴

There is strong evidence from several countries to suggest that the metrics used to deem success in funding applications also puts women at a disadvantage, further contributing to the reduced success rate of women securing competitive, peer-reviewed funding.^{7,16,18,8} This in turn impacts track record and promotion to senior and so-called “leadership” positions. For example, significant emphasis is currently placed on publication output and impact; however, this can be influenced by a number of factors including career disruption (parental or carers leave), which, as discussed below, is almost exclusively taken by women in most countries. In addition, women are less able to attend conferences due to carer responsibilities. This impacts networking opportunities and collaborations, which in turn can influence publication quality and quantity, both of which are hallmarks of success in scientific research. Furthermore, while the gender gap for first authorship is improving, under-representation of women persists for senior authorship and single-authored papers.²⁵ Moreover, manuscripts authored by women, whether in first or last position or as sole author, are less frequently cited than those by men.²⁶ Given the importance of citations on the evaluation of track record, this has significant implications. Finally, it is well-established that women are more likely to take on time-consuming service roles compared with men.¹⁰ Given the move for gender-balanced panels and committees and the fact that there are already fewer women in senior roles, these roles are likely to place an even greater demand on their time and have a subsequent negative impact on their research outputs.

With fewer women in senior leadership roles, there are less opportunities for women to be role models; as the saying goes, “you can’t be what you can’t see”. Female role models are important for inspiring and motivating girls and women throughout the pipeline, from the entry point into STEM fields to supporting and mentoring them through their careers. This lack of visibility is further compounded by the fact that women are less likely to receive conference invitations,⁹ less likely to speak in seminar series,²⁷ and less likely to speak up in meetings.²⁸ In addition, women are less frequently invited to write editorials and review papers than men.²⁹ This not only impacts on their track record, further disadvantaging women but also results in reduced opportunities for visibility of women. This is likely a consequence of the fact that more men serve as Editors-in-Chief of scientific journals and more men being invited to serve on their editorial boards.³⁰ This can lead to a very real perception of many journals operating as a “boys’ club”.

Finally, the lack of flexibility in the work place is another barrier thought to contribute to the “leaky” pipeline. The Alfred P. Sloan Foundation’s Workplace, Work Force, and Working Families Program pioneered research into the intersection between work and family, with the intention of creating a more flexible workplace that meets the needs of both employees and employers.³¹ Their key findings included the following: (i) Parents were stressed from the combined work and family demands and were consequently seeking new jobs.³² (ii) There were reduced opportunities to interact together as a family.³³ (iii) Educated mothers were leaving the workforce due to lack of ongoing part-time opportunities.³⁴ (iv) Work–life imbalance led to decreased psychological wellbeing. (v) Dual-earning parents reported feeling psychologically and emotionally exhausted and approaching burn-

out.³⁵ These studies highlight the need for alternative approaches that accommodate the conflicting demands of both work and family, not only for women but for all parents. In order to retain women in STEM fields, employers urgently need to accommodate the flexibility required to juggle the demands of work family life. Part-time employment opportunities, working from home, and working unconventional hours (i.e., not 9 am to 5 pm) are all options that may be more suited to individuals with conflicting responsibilities.

It is reaffirming to see that the landscape is starting to change, with the introduction of national strategies to address the barriers faced by women in STEM. Below we discuss programs and policies that have been developed to address some of these barriers across the United Kingdom, United States, and Australia (section 4).

3. PARENTAL AND CARERS LEAVE

Parenthood is a time in life when careers can be adversely affected for both men and women, although the effects are greater on women due to them being far more likely to take on a primary carer role than men. In a US study, 43% of women left full-time STEM employment after their first child compared to 23% of men. This was not at the birth of the children, but at 4–7 years after birth. In this study, new mothers were more likely than new fathers to leave STEM fields, to switch to part-time work, and to exit the labor force.³⁶ Parental leave can be a barrier for STEM workers achieving leadership roles as career progression is strongly dependent on track record. Data suggests that the impact of parenting on academic track record and productivity extends well beyond the initial leave period, whether it is parental or carer leave, often impacting careers for many years.³⁶ Solutions to mitigate the effect of parental and carers leave on track records by allowing for career disruptions and assessing research metrics relative to opportunity have been implemented by funding institutions, but there is little evidence underpinning their ability to adequately capture the potential loss of productivity attributed to this period.

Among the Organisation for Economic Co-operation and Development (OECD) countries, the average duration of paid parental leave offered is 18 weeks.³⁷ The exception to this is the United States, where no statutory entitlement exists nationally.³⁷ In some countries, entitlement to paid maternity leave extends for over 6 months. For example, in the United Kingdom mothers can take up to 9 months of paid maternity leave.³⁷ In Australia, the “Rolls Royce” package administered by some universities has an approximately 26 week paid component from the employer plus a government parental leave package, keeping-in-touch days, and the flexibility to come back part-time and/or undertake a gradual return to the workplace.³⁸ These parental leave packages within the STEM industry may also include additional funding opportunities that allow an individual to employ a research assistant to continue their research while the parent is on leave. This is especially important given the emphasis on research output as a key factor in promotion, as well as in securing funding. Fair and generous parental leave packages allow women to have children without putting the family under financial stress. Moreover, they provide the opportunity for their research to progress while on leave. A lack of appropriate parental leave programs means that women often investigate alternate career opportunities or even drop out of the STEM work force altogether.

3.1. Who Should Take Leave? Societal expectation has been that women take leave when a child is born. This is typified by the use of terms such as “maternity” leave and “mothers’ groups”; however, research suggests that having a child is particularly adverse for a woman’s career. Studies have demonstrated that women’s careers stagnate at this time, while men’s careers flourish. Likewise, women earn less, but men earn more.³⁹ This is borne out through stagnating salary at the start of leave for women, while men at an equivalent stage of career on average receive an increase in salary.³⁹ Nowadays, men are offered parental leave, even if it is 1–2 weeks at most places of employment. Uptake rates from men are generally the highest in the Nordic countries at 40% but are poor elsewhere.⁴⁰ For example, uptake is about 2% in countries such as Australia and Poland and about 4% in other European countries such as France and Austria.⁴⁰ Some countries are seeing an increase in this rate, but others are stagnating.⁴⁰ This is despite studies suggesting that men who take up parental leave become more involved in their children’s lives later in life.⁴¹

There are many reasons why uptake is low, but an often overlooked reason is the prejudice from both men and women directed at those who take such leave. Cultural norms, which historically expect women to take the parental leave, frown upon men taking this leave. As noted above, this is compounded by the labeling of the actual entitlement as “maternity” or “primary” caregiver leave as compared to “paternity” and “secondary” caregiver leave. Reassuringly, this labeling is now changing and many institutions are using more neutral terms such as “parental leave”, and leave entitlements are becoming independent of gender. However, we want to emphasize that the cultural norms that have existed for centuries will take decades to change.

As a result of fair and non-gendered parental leave schemes in Scandinavian countries, the proportion of men and women taking parental leave is roughly equal, and the proportion of women who work is 80% compared to 50% in other OECD countries such as Australia.³⁷ In Norway, parental leave comprises 46 weeks at full pay, of which 10 weeks are reserved specifically for the father (15 weeks if the child was born after 2018).³⁷ Furthermore, in this scheme a portion of paid leave is lost if the father does not use it. In 2018, the fact that 90% of men who had children took parental leave of 15 weeks at full pay highlights the impact of schemes targeted at both parents on the uptake of parental leave by males.³⁷

4. DOMESTIC BARRIERS

In addition to those already discussed, there are other barriers that need to be overcome to allow women to attain leadership roles in the same proportions as men. These relate to the division of labor in our home lives. In the past, women were almost exclusively the carers of children and undertook home duties, whereas men were the “bread winners”. Although women have been in the workplace for many decades, full-time work for married women with children did not really become a feature of modern life until much later. In the United States, since the 1970s, women have represented 42% of university graduates; consequently, we have observed more women working full time in professional jobs. By 2016, the proportion of dual-income families was 61%, but what was the impact on home duties? In Australia, data suggests that when a woman has a full-time job, it does not mean that the hours she spends undertaking domestic duties decreases despite the number of

hours spent at work. In fact, the number of hours spent on domestic duties remains constant. Furthermore, when a woman has a child, the number of hours spent at work decreases, and the number of hours in domestic duties increases.⁴² Conversely, when a man has a child, the number of hours spent at work stays the same, and some evidence suggests that in the first couple of weeks following the birth of a baby, the number of hours a man spends at work increases. We need to work on changing the division of labor in the home, as well as the perceptions of what is women’s work and what is men’s work, before we can hope to achieve equity in the work place.

It is interesting to observe the effect on gender balance of domestic duties of countries adopting government-administered parental leave packages which enforce a financial penalty if men and women do not share parental leave. Indeed, Norway is the second-ranked country globally by ratio of women and men undertaking unpaid caring and volunteer work. In Norway, women undertake 39% more of this work than men. By way of comparison, in Australia women undertake 80% more domestic work than men. In Japan, women undertake 380% more domestic duties than men.⁴³ Surprisingly, in middle- and high-income countries, the unpaid care gap between men and women has decreased by only 7 min a day across a 15 year time span.⁴³ The State of the World’s Fathers 2019 report is working toward gender equity in care work and greater involvement of fathers. They state that for men to undertake 50% of unpaid care work, men would need to spend an additional 50 minutes per day at a minimum to achieve this goal.⁴³

5. WHAT ARE THE SOLUTIONS?

5.1. Strategies Addressing Systemic Career Barriers.

One program developed to address gender inequity to advance women’s careers in STEMM employment in higher education and research is the Athena SWAN program.⁴⁴ This program was developed in the early 2000s and originated from the United Kingdom. The Athena SWAN charter has established a framework by which organizations that employ STEMM workers, such as universities and medical research institutes, examine the totality of their procedures, policies, and practices relating to employment and how their business is conducted by gender. This framework requires institutes or universities to compile data to identify any disparities between the genders in regard to these areas and then develop initiatives and actions that seek to address these disparities over a 4 year period. Applications are designed to be an honest reflection of work place practice and how it may impact women and other diverse groups to achieve their leadership potential. There are three levels of achievement awarded following submission of a detailed application: bronze, silver, and gold. If the institution fails to meet the minimal standards, then no award is given. Each level after bronze requires an organization to demonstrate and validate a deeper understanding and further progress on the path to gender equity, with the final aim being to provide a working culture free of bias and structural barriers that allows all individuals to flourish regardless of gender or race. In 2019, 70% of higher education institutes in the United Kingdom were engaged with Athena SWAN.⁴⁵ Interestingly, in the United Kingdom, success in securing an Athena SWAN silver award is a requisite to receive funding from the National Institute for Health Research.⁴⁶

In Australia, a modified program has recently been piloted by The Australian Academy of Science and the Australian Academy of Technology and Engineering. This program aims to improve the attraction, retention, and success of women across the Australian STEMM higher education and research sectors, similar to that in the United Kingdom. The modified program, however, also aims to include the employer's experience at addressing systematic bias for indigenous staff and other marginalized groups. The program focuses on promoting systemic changes, rather than trying to "fix" women, through a reflective program based on the Athena SWAN system. Established in Australia in 2016, this program is known as Science in Australia Gender Equity (SAGE) Athena SWAN. By the end of 2019, 39 higher education organizations, medical research institutes, and publicly funded organizations had been successful at securing a SAGE Athena Swan Bronze Award.

The Athena Swan framework has also been adopted by Canada and America. While it exists in a slightly different form and name ("Dimensions" in Canada and "Sea Change" in the United States), the key objectives are similar, as is the recipe: undertake an honest appraisal of workplace practice based on data demonstrating how the institution or university conducts its business and then address the inadequacies by implementing initiatives or actions that seek to change practice. The aim is to make recommendations to improve workplaces and create an environment where the structural barriers are minimized and efforts are made to understand both conscious and unconscious biases which plague STEMM disciplines in regard to women and diverse groups. It remains to be seen if linking these awards to eligibility for funding, as has been done in the United Kingdom, will be adopted by others. Nonetheless, the approach is a useful way to build awareness around these issues and may drive some competition within the sector.

An alternate approach in the United States is ADVANCE, which launched in 2001. In contrast to the above-mentioned schemes that lack a funding source and rely upon the university or institute to provide funds to drive initiatives, ADVANCE uses competitive grants to promote a productive and diverse STEMM workforce.⁴⁷ These Institutional Transformation Grants describe a range of initiatives aimed at addressing inequity in STEMM and have been awarded to over 180 higher education institutes and not-for-profit organizations totalling over \$300 million.^{48,49}

A recent impact evaluation of the Athena SWAN Charter demonstrated that it was particularly effective as a tool to ensure that practices and policies were not disadvantaging any staff or students. Interestingly, 93% of Athena SWAN Champions reported that the program had a positive impact on gender issues within their workplace. Additionally, 78% of Athena SWAN Champions believed it had a positive impact on equality and diversity, and 78% of Athena SWAN Champions felt it had a positive effect on the career progression of women.⁴⁵ Furthermore, institutions with an Athena SWAN award had on average 7% more female staff; while overall there was evidence supporting behavioral and cultural change, they acknowledged more significant change will take time. Importantly, they also recognized key challenges, which included a lack of leadership support as well as a lack of financial support and resources. Regarding ADVANCE, a greater increase in the recruitment of women into STEMM roles was observed in those institutions that received Institutional Transformation Grants compared to those that did not. Furthermore, changes to policies regarding recruit-

ment, tenure criteria, and work-life balance were addressed by >75% of institutes that received these grants.⁴⁹ Only time will tell whether the changes made by Athena SWAN, SAGE, ADVANCE, and similar programs will translate into real permanent culture change. Indeed, assessment of the effectiveness of such strategies will be imperative to determine whether they are making impactful change.

We also need better methods to capture the impact of career disruptions on track record. In Australia, current methods are not consistent between funding bodies, are not evidence based, and likely grossly underestimate the impact of the disruption.

5.2. Strategies around Improving Parental Leave.

Increasing the proportion of men undertaking parental leave for meaningful lengths of time is an important part of the solution. This has been implemented using a range of approaches with clear success. In Canada, following implementation of the Quebec Parental Insurance Program (QPIP), male-specific parental leave surged from 21.3 to 53.6% from 2005 to 2006. These changes in behavior were driven by two factors: higher economic benefits for families of men who took leave of 5 weeks in a "use it or lose it" approach and the fact that the initiative was labeled "daddy only".⁵⁰ This scheme worked well partly because it targeted the main reason why men do not take leave: the financial effects on household income.⁵⁰ It also found that after the scheme, fathers spent more time at home and more time doing domestic chores, highlighting a long-term beneficial effect of the scheme. Other successes are found in Scandinavian countries, which offer equal duration of parental leave for men and women and penalize families when only one gender takes the leave. This system clearly operates as the gold standard.³⁷

Institutions are trying to change how leave is labeled so that it is independent of gender and removes the distinction between primary and secondary leave, resulting in a program that is more equitable for both genders. This should be applauded and encouraged. In Australia, Medibank, a leading health insurance company, is providing leave that is non-gendered and equal in duration for either parent. In this scheme, either parent can choose to take their 14 weeks leave across two different periods within the first 24 months. This policy has shown great success. Before its release in March 2018, 2.5% of males took parental leave, and now 33% of males take leave, with an average duration of 14 weeks. Importantly, while some men had initially expressed concern as to whether taking parental leave would be "career suicide", the uptake has been good, and the management is strongly supportive of the initiative. Generous parental programs require significant financial investment and a willingness to embrace change, but as shown by several industries,^{51,52} the gains are clear from both the employers and employees perspective.

5.3. Strategies to Remove Domestic Barriers. There are several solutions we can implement to change the domestic barriers faced by women in STEMM. The most important is changing the notion that women are the carers and men are the breadwinners. We also need to value unpaid work as much as paid work and accept that it should be shared equally between the genders. However, eroding domestic barriers will prove difficult. As an example of what could be done, the State of the World report states that the establishment of policies to support the redistribution of unpaid care work, such as nontransferable leave of equal amounts for both parents, is core to helping fathers undertake 50% of unpaid care work. Part of the solution will be parental leave schemes, such as

QPIP in Canada, that allow and encourage men to take leave and enjoy flexible working hours. Properly enforced work place policies in regards to parental leave and flexible work arrangements, rather than *ad hoc* requests, will also go some way toward encouraging change. Awareness of the changing culture of parenting across all generations, as well as across the work place, will also be key to this.

5.4. Summary and Way Forward. There are many barriers affecting a woman's ability to achieve equity in STEMM workplaces, particularly at a senior level. Many relate to strongly held societal norms, implicit bias, and structural problems in the work place, as well as an unfair division of labor in domestic settings. While some progress has been made in changing the circumstances for women at home and in the workplace, progress is slow, and there is still a long way to go. It remains to be seen how effective programs such as SAGE are at combatting the systemic barriers faced by female scientists in countries such as Australia. Adequate government funding and financial support from the institution itself will be paramount in ensuring the implementation and evaluation of these programs to critically determine their value in delivering sustainable change. Research funding could in turn only be available to organizations that have achieved accreditation from such programs. We need to ensure these programs are supported by senior leaders and or management boards who should be made accountable for their success.

We argue for a change in the structure of the work place, a change in domestic arrangements, and a change in culture, rather than a change in women. This is even more critical in the scientific research setting, which lags behind other industries in countries such as Australia. Governments and employers have a critical role to play here to allow countries like Australia to be progressive in the STEMM field like their Scandinavian counterparts. Visible role models are critical to driving change. We also need to reassess how we portray scientists in film, literature, the media and other communication platforms. This is starting to happen, but private and public organizations can play a greater role in fostering and driving this change, because without change, talented female scientists will be lost to more progressive countries that place a higher value on gender equity.

AUTHOR INFORMATION

Corresponding Authors

Anna C. Calkin – Baker Heart and Diabetes Institute, Melbourne, Victoria 3004, Australia; Central Clinical School, Monash University, Melbourne, Victoria 3004, Australia; Baker Department of Cardiometabolic Health, University of Melbourne, Parkville, Victoria 3010, Australia; orcid.org/0000-0002-9861-0602; Email: anna.calkin@baker.edu.au

Dianna J. Magliano – Baker Heart and Diabetes Institute, Melbourne, Victoria 3004, Australia; School of Public Health and Preventive Medicine, Monash University, Melbourne, Victoria 3004, Australia; Email: dianna.magliano@baker.edu.au

Authors

Vaughan G. Macefield – Baker Heart and Diabetes Institute, Melbourne, Victoria 3004, Australia; Department of Physiology and Baker Department of Cardiometabolic Health, University of Melbourne, Parkville, Victoria 3010, Australia; Central Clinical School, Monash University, Melbourne, Victoria 3004, Australia

Tracey M. Ellis – Baker Heart and Diabetes Institute, Melbourne, Victoria 3004, Australia

Complete contact information is available at:

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Notes

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