

## LETTER FROM ASIA-PACIFIC AND BEYOND

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# Leading women in respiratory medicine and research: Opportunities for international societies to support women with examples from the American Thoracic Society

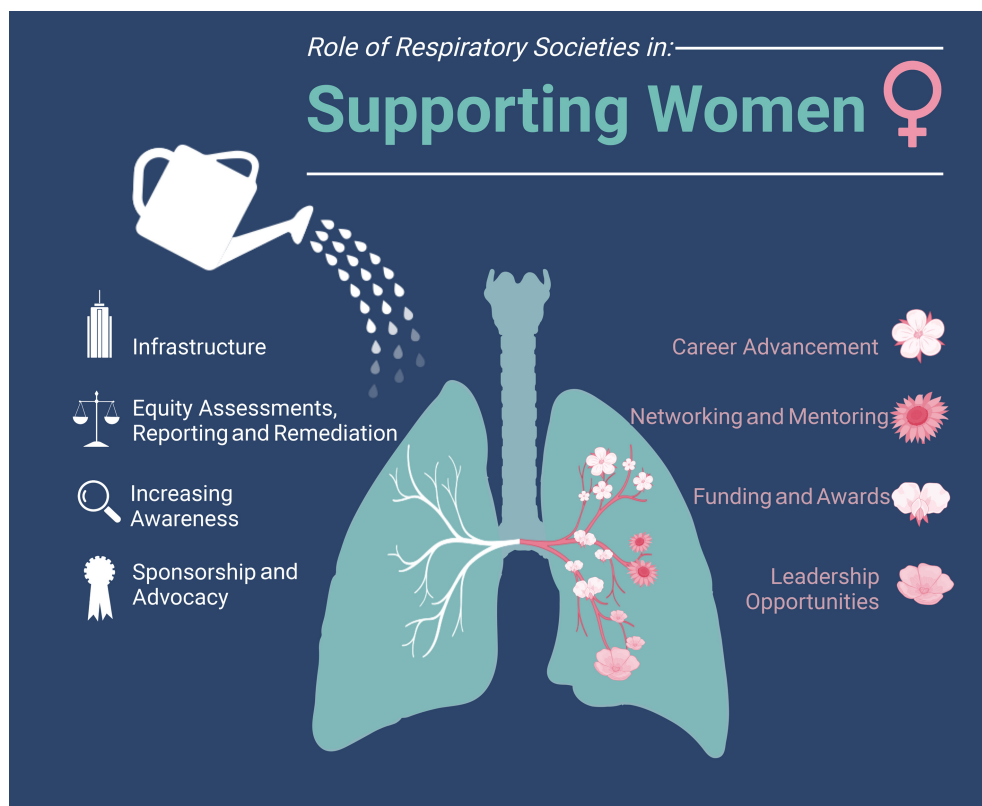
Professional societies, from local to international, play major roles in the careers of scientists and health professionals, from visibility and networking to sources of funding, publications, leadership and service. Roles in these societies are also critical criteria in evaluations for obtaining scientific and/or clinical jobs, as well as tenure, promotion and supporting career advancement. However, recent reports suggest that societal function and organization may be inherently biased.<sup>1</sup> This bias has historically benefited a subset of individuals in science and medicine, particularly white males, and many societies are reimagining their role in supporting under-represented groups. There have been a number of studies indicating that women are less frequently appointed as editors or featured as first or last authors on professional society publications and not as regularly selected as speakers, chairs or discussants at sessions during large annual meetings. Similarly, women are less likely to be selected as award winners, despite equal or higher submission rates, suggesting substantial bias.<sup>2</sup> It is critically important for professional societies to actively work to eliminate gender-biased behaviour, especially as the COVID-19 pandemic has primarily impacted women in terms of extra caregiving duties, further exacerbating inequity between men and women.<sup>3</sup>

To address this issue, reimagining and refocusing of efforts to support under-represented groups was the theme of a recent post-graduate course at the 2022 American Thoracic Society (ATS) annual meeting, *Gender equity in academia: a slippery ladder and a leaky pipeline*.<sup>4</sup> Throughout this day-long course, experts in the field of respiratory medicine, led by Dr. Heather Hoch of the University of Colorado and Dr. Terri Laguna of Lurie Children's Hospital of Chicago, discussed current issues of gender equity in academia and presented ongoing and potential future solutions to address the issues raised. Of relevance, our session was devoted to examining the role of professional societies in supporting women. This session outlined a number of critical areas where professional societies are and should better support women including infrastructure, sponsorship and advocacy, equity assessments, reporting and remediation, as well as training of all members to support gender equity (Figure 1).

**Infrastructure**—Annual meeting infrastructure and resource dispersion can be better leveraged to allow women and other individuals with child or elder care responsibilities to attend meetings. Child and elder care are often reasons for the high attrition of women from Science, Technology, Education and Math (STEM) fields and their prohibitive cost is a barrier to attending and participating in societal meetings.<sup>5</sup> Many scientific and medical societies, including the Society of Toxicology, the American Society of Clinical Oncology, Plant Biology and the American Society for Cell Biology provide a variety of resources for child and elder care from grant funds to support care costs either at home or on site at the conference. Additionally, these societies actively promote baby-wearing or child attendance of participants, free caregiver access and family-friendly conference events.<sup>6</sup> Additionally, as arranging for elder or child-care is typically easier during the week than on the weekend, meetings should be held during the regular work week if at all possible. If not already located in meeting venues, facilities and equipment at annual meetings could be provided to support women. These include lactation areas and child changing stations with adequate resources, such as: clean and private areas, power outlets, refrigerators/freezers, cleaning supplies and a sink, comfortable chairs, live-stream of conference events, visible and convenient locations close to conference activities, lockers or cubbies, as well as a reservation system and access to hospital grade breast pumps. As an example: venues, such as the Moscone Center in San Francisco, which hosted the 2022 annual meeting of the ATS, provide nursing suites, thus ensuring a secure and private room for mothers to nurse or pump breast milk during the meeting.

Currently, parents and caregivers in many international societies often feel isolated or even discouraged from attending due to the lack of visible support for these individuals. These feelings of isolation could be improved by creating active societal social support networks and programming, improving signage and promotion of parent and caregiver meeting infrastructure and active advertisement and publication of family-friendly meeting events and resources.<sup>7</sup>

As women are often primary caregivers and may ultimately be limited in their ability to attend live, in-person conference events, maintaining hybrid conference options



**FIGURE 1** Role of respiratory societies in supporting women. Graphical schematic depicting ways respiratory societies can help women flourish in science. Created with [BioRender.com](https://www.biorender.com)

that were initially facilitated by COVID-19 may increase participation of women in conference events. As an example, the ATS in 2022 recorded high-interest sessions and made them available for online viewing for those members who could not attend in-person.

**Sponsorship and advocacy**—Many respiratory societies actively sponsor and advocate for efforts that will benefit their membership including increased federal funding, regulations that promote public health and laws that equitably ensure medical care access for all patients. In addition to such efforts, societies should use their sponsorship and advocacy power to promote women in respiratory science and medicine through salary equity legislation, federally mandated paid parental leave, increased funding opportunities directed at individuals under-represented in science, and so on. Societies should also contribute to increased rates of nomination of women for major awards and ensure policies are in place for equitable nomination of women for leadership positions.

Membership advocacy could include the formation of job banks where not currently available, so that jobs within the field, especially those in upper leadership are equitably advertised to all members. Mentor and mentee matching initiatives and facilitated networking in multiple modes, such as virtual, in-person, informal, formal, round table, one-on-one and panel type events. Advocacy should also include codes of conduct with clear terms for appropriate and inappropriate behaviour for the variety of modes in which members and societal staff may interact from in-

person and virtual meetings through the publication process in societal journals. This code of conduct should also include guidelines on the consequences for individuals violating the code of conduct, from initial reprimand to suspension or removal from the society, based on the severity of the misconduct. The ATS recently updated their code of conduct on their website, clearly outlining unacceptable behaviour, consequences of violating the code and added an easy-to-use method for reporting violations.

**Equity assessments, reporting and remediation**—Further, professional societies have an opportunity to enact gender equity by reviewing and adjusting annual meeting speakers and activities, editorial board membership and peer reviewer invitation, selection for societal grants and awards, leadership positions, committee membership and generally in any position that might influence or impact the career trajectory of others. To do so, a formal assessment of member representation needs to be done—if we do not know where we currently stand, how can we know what we need to fix? With data in-hand scientific societies can work to enact interventions that will ultimately improve representation at all levels, such as the aforementioned gender equity review criteria, and increase equity transparency through de-identified publication of analysed data.

**Increasing awareness to support equity**—To continue supporting equity initiatives, societies should be actively publicizing data on gender equity in all facets of the society, from membership to representation in leadership to authorship. This will provide an opportunity to highlight areas of

the society that need to re-double efforts in inclusion, but also emphasize successes in achievement of gender equity to provide a model for other areas of the society. Other ways to increase awareness include providing training resources with foci in unconscious bias, microaggressions, gender-aware mentoring and coaching, mentoring circles, sponsoring and advocacy of women, sexual harassment and allyship, among others. Efforts in equity should be at the forefront of societal communications if it is indeed an area of emphasis and desired growth.

While the summarized resources above are not a comprehensive list, adding even a subset of these items would contribute to the improvement of the outlook of women in respiratory societies. Additionally, we would be remiss to omit that many of the items discussed would additionally benefit individuals from any under-represented groups. The same thought framework to identify additional ways to support any under-represented group is desperately needed to improve equity in respiratory medicine.

## KEYWORDS

equity assessment, gender equity, increase awareness, meeting infrastructure, scientific societies, sponsorship, women

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## CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.


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