

# Examining gender trends of conference speakers at major dermatology conferences, 2018–2023

**Keywords:** Dermatology, gender equity, gender trends, women speakers

## Introduction

Despite a stable and equal percentage of practicing male and female dermatologists across the past 6 years, underrepresentation of women in academic medicine persists.<sup>1</sup> Previous studies have examined trends in academic conference speakers in dermatology.<sup>2,3</sup> According to the UN Women's Annual Report, in 2020, women and children were affected the most during the global pandemic, with more women leaving the workforce due to the pandemic, and an increased number of women completing unpaid care and domestic work.<sup>4</sup> We aimed to evaluate changes in the representation of women in major dermatology conferences between the years before, during, and after the COVID-19 pandemic.

## Materials and methods

We investigated the trends in gender among speakers at the American Academy of Dermatology (AAD) and Society of Investigative Dermatology (SID) annual conferences between 2018 and 2023 by completing a retrospective review of conference programs. Of note, the 2020 and 2021 SID conferences were held virtually and the AAD conference was canceled during these years. Demographic data, speaker roles, and speaking time were collected.  $\chi^2$  tests were used to identify significant differences between the proportion of women and men speakers at each conference year.

## Results

A total of 2,758 speakers were included, 1,327 (48%) were women and 1,431 (52%) were men, determined by online medical licensure gender data (Table 1). Among AAD speakers, there was a notable rise in the proportion of women speakers at AAD from 49.5% in 2018 to 56.4% in 2023 (Table 2). Following the onset of the COVID-19 pandemic, there was a higher representation of women speakers (54%) compared to the pre-COVID-19 period (50%,  $P = .0015$ ,  $\chi^2$  test). The percentage of women plenary AAD speakers was lower than men during 3 of the 4 years studied (2018: 40%, 2022: 16.7%, and 2023: 27.3%) and relatively low compared to the percentage of women practicing dermatologists, which reached above 50% in

2018. Among the SID speakers, the proportion of women speakers at SID after the onset of COVID-19 (37%) was unchanged compared to before the COVID-19 pandemic (37%). The overall percentage of women speakers at SID was highest during the virtual conference years during the COVID-19 pandemic (56% in 2020 and 51% in 2021) (Table 2). In 2018, it was reported that 39.9% of SID members were women; the percentage of plenary speakers (20%) and women speakers overall (18%) fell short of the percentage of women SID members during this year.

Compared to the years pre-COVID-19 (2018–2019), there has been an increase in the representation of women speakers at the AAD conference between 2020 and 2023, though the representation of women at plenary sessions at the AAD conference did not show the same trend. Representation of women speakers in the SID conferences increased during the virtual conference years of 2020 and 2021. This trend held in 2022, but reverted to close to pre-COVID-19 levels in 2023.

## Discussion

While the general trend of women speakers at dermatology conferences is encouraging, there are still improvements to be made, particularly in the representation of women as plenary speakers and in maintaining representation at levels achieved during the COVID-19 pandemic.<sup>8</sup> Additional data is warranted for gender breakdowns of the annual society memberships of AAD and SID for future comparisons. We were only able to obtain the gender breakdown of society membership in 2018

### What is known about this subject in regard to women and their families?

- Despite a stable and equal percentage of practicing male and female dermatologists across the past 6 years, underrepresentation of women in academic medicine persists.
- A prior study examined gender trends of the American Academy of Dermatology until 2018, noting an overall increase in the representation of women speakers.

### What is new from this article as messages for women and their families?

- While the general trend of women speakers at dermatology conferences is encouraging, there are still improvements to be made, particularly in the representation of women as plenary speakers and in maintaining representation at levels achieved during the COVID-19 pandemic.

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**Table 1**  
Demographics of speakers at SID and AAD between 2018 and 2023

Gender	
Man (%)	1327 (48.1)
Woman (%)	1431 (51.8)
Nonbinary (%)	1 (0.04)
Cannot determine (%)	1 (0.04)
MD (%)	2573 (90.3)
PhD (%)	634 (22.7)
Board-certified dermatologist (%)	2111 (75.6)
Number of plenary speakers (%)	146 (2.6)
Minutes per speaker (median)	20.0 minutes
AAD speakers (%)	5193 (91.8)
SID speakers (%)	465 (8.2)

AAD, American Academy of Dermatology; SID, Society of Investigative Dermatology.

for the SID data. Further data would be useful for contextualizing the relative representation of conference and plenary speakers.

Even though women represent approximately 60% of dermatology trainees and 51% of full-time faculty, there was a higher number of male recipients of National Institutes of Health dermatology grants, which resulted in \$121.3 million more funding received by male compared to female recipients over the span of 2015 to 2019.<sup>9,10</sup> Additionally, most scientific publications do not report on potential gender differences among publications that include all genders.<sup>11</sup> We recommend the use of SAGER guidelines by journals, which provide guidance for reporting gender in publications and can allow reviewers to examine the assessment of gender as part of the editorial process.<sup>11</sup>

Previous studies have identified a “glass ceiling” in medicine that prevents women from pursuing speaking opportunities and leadership positions at national conferences. Such obstacles include nepotism, gender bias, lack of mentorship, and accessibility issues.<sup>12</sup> To circumvent issues involved with accessibility, virtual conferences may serve as a potential solution to mitigate meeting spaces inaccessible to those with health considerations, travel restrictions, or lack of access to childcare.<sup>13</sup> Global Dermatology Talks implemented a virtual conference to address the educational demands of the dermatology community, yielding 87.18% of attendees strongly agreeing to continue participating, and 84.62% affirming that virtual Global Dermatology Talks are more cost-effective than in-person options.<sup>14</sup> Their

positive results support the notion that virtual conferences lead to a broader and more diverse audience, by virtue of convenience, resulting in an equitable exchange of information that enhances the progress of the field.<sup>15</sup>

In addition to taking advantage of virtual platforms, joint efforts should be employed to further identify, address, and dismantle systemic barriers to equitable representation of women as conference and plenary speakers at dermatology conferences. One such barrier involves implicit biases or beliefs based on societal norms and expectations that subsequently impact individuals’ behaviors and attitudes on an unconscious level.<sup>16–18</sup> Academic medicine is no exception, where implicit gender biases exist such as reporting higher competencies in male applicants, assigning higher salaries to male physicians of equal experience, and providing more mentorship opportunities to men with comparable resumes.<sup>19,20</sup> To effectively address gender bias and promote women’s empowerment in our field, we have several actionable recommendations. Institutions and conference organizers should implement proactive measures to ensure diversity in speaker selection committees and prioritize the inclusion of women’s voices. To combat implicit biases, institutions and conferences should implement implicit bias training—such as short educational sessions, interactive workshops, and continued reassessment—to not only increase awareness of implicit gender bias, but effectively mitigate these biases to improve women’s representation within academic medicine.<sup>17,20,21</sup> Such interventions have been shown to be successful in improving women’s representation by increasing female faculty in departments and promoting institutional change.

Beyond unlearning deep-seated beliefs to enhance gender equity in medicine, the field will make large strides in increasing women dermatologists’ voices through active initiatives at all levels of the profession. Fostering mentorship programs tailored to the unique needs and challenges faced by women dermatologists can provide invaluable support in navigating career advancement pathways.<sup>22,23</sup> Such programs, hosted by institutions, journals, or conferences, will help women to establish networks addressing the intersectional challenges faced by women from diverse backgrounds within dermatology to further enhance inclusivity and promote equitable career progression.<sup>23–25</sup>

**Conflicts of interest**

None.

**Table 2**  
Gender breakdown of speakers at AAD and SID between 2018 and 2023

Year	Number of women speakers overall (%)	P value*	Number of women plenary speakers overall (%)	% of women practicing dermatologists <sup>1</sup>	% of women in academic society <sup>5–7</sup>
AAD					
2018	620 (49.5)	.12	4 (40.0)	51	a
2019	594 (50.6)	.68	6 (60.0)	51	53
2022	634 (52.0)	.17	2 (16.7)	a	54
2023	859 (56.4)	<b>&lt;.001</b>	3 (27.3)	a	a
SID					
2018	9 (18.0)	<b>&lt;.001</b>	3 (20.0)	51	39.9
2019	67 (42.3)	.09	4 (30.8)	51	a
2020	10 (55.6)	.64	7 (53.8)	49.9	a
2021	18 (51.4)	.87	7 (43.7)	52.2	a
2022	22 (45.8)	.56	7 (58.3)	a	a
2023	38 (27.5)	<b>&lt;.001</b>	2 (13.3)	a	a

Women were noted to be represented in a greater-than-expected proportion at the AAD in 2023 and less-than-expected proportion at the SID in 2018 and 2023.

AAD, American Academy of Dermatology; SID, Society of Investigative Dermatology.

\* $\chi^2$  test comparing the proportion of men and women speakers for each conference year listed, given that the representation of women practicing dermatologists was close to 50% in the years studied.

Values are bolded for  $P < .05$ .

<sup>a</sup>Data not yet available.

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None.

**Study approval**

N/A

**Author contributions**

JM and ARL: Conceptualization, investigation, methodology, validation, and visualization. JM: Formal analysis. ARL: Funding acquisition, resources, and supervision. IS, JG, LC, RKY: Data collection. JM, IS, JG, LC, RKY: Writing—original draft preparation. JM, IS, JG, LC, RKY, and ARL: Writing—review and editing.

**Data availability**

Data used in this study is available upon request from the corresponding author.

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