

Title: Gender Disparities in International Stroke Conference Leadership

Authors: Guzik AK, Kapral, MK, Bishop LE, Barghouthi TT, Vu QD, El Hussein N, Reynolds PS, Tegeler CH, Bushnell CD

Background: Increasing data demonstrate a gender gap in career progression in neurology including underrepresentation of women in high impact neurology journal authorship and American Academy of Neurology recognition awards. We examined gender differences in leadership roles at the International Stroke Conference (ISC) from 2014-2018. **Methods:** As a retrospective analysis of conference data, this study was exempt from review by the institutional review board. Names of program committee members, early career development leaders, award recipients, invited speakers, and moderators for those sessions were taken from the Final Program from the 2014-2018 ISC. Conference leader gender was determined by name inspection and internet search. In a few instances of ambiguity, common gender association of the name was used. Self-reported ISC attendance demographics were obtained through the American Heart Association (AHA). Chi square test or Fisher exact test was used to compare demographics of invited leadership with attendance. **Results:** Between 29.9% and 44.7% of conference attendees were women. Attendees who did not disclose gender increased from 7.38% to 33.02%. Female membership on the program committee increased from 14.3% in 2014 to 48.2% in 2018. Women represented a minority of invited speakers, moderators and award recipients across all years, however, there were increases in female representation over time (see table). **Conclusions:** Women are less likely than men to hold leadership positions at the ISC. This is significant as such opportunities can play a valuable role in networking and career progression. It is reassuring that this gender gap has been decreasing over time, however, the AHA and program committee may wish to consider additional strategies to narrow this gap.

2018	Male (%)	Female (%)	Chi Square	p value
Attendance	1616 (37.08)	1303 (29.9)		
Program Committee	14 (51.85)	13 (48.15)	0.13	0.72
Early Career Development	12 (60)	8 (40)	0.17	0.68
Award Recipient	6 (60)	4 (40)	0.09	0.77
Invited Speaker	110 (67.07)	54 (32.93)	8.64	0.003*
Moderator	58 (69.05)	26 (30.95)	6.2	0.01*
2017				
Attendance	1666 (38.07)	1411 (32.24)		
Program Committee	18 (64.29)	10 (35.71)	1.15	0.28
Early Career Development	11 (68.75)	5 (17.86)	1.37	0.24
Award Recipient	7 (70)	3 (30)	1.01	0.32
Invited Speaker	113 (74.38)	38 (25.17)	24.91	<0.00001*
Moderator	54 (76.06)	17 (23.94)	13.44	0.0002*
2016				
Attendance	2023 (44.85)	1782 (39.5)		
Program Committee	22 (78.57)	6 (21.43)	7.2	0.007*
Early Career Development	14 (56)	11 (44)	0.08	0.78
Award Recipient	6 (66.67)	3 (33.33)	0.66	0.42
Invited Speaker	127 (83.55)	25 (16.45)	54.39	<0.00001*
Moderator	51 (76.12)	16 (23.88)	13.95	0.0002*
2015				
Attendance	2032 (46.91)	1842 (42.02)		
Program Committee	23 (82.71)	5 (17.86)	9.83	0.002*
Early Career Development	16 (64)	9 (36)	1.33	0.25
Award Recipient	7 (100)	0 (0)	Fisher Exact	0.02*
Invited Speaker	110 (78.57)	30 (21.43)	37.04	<0.00001*
Moderator	51 (76.12)	16 (23.88)	14.8	0.0001*
2014				
Attendance	1941 (47.91)	1811 (44.71)		
Program Committee	24 (85.71)	4 (14.29)	12.86	0.0003*
Early Career Development	13 (56.52)	10 (43.48)	0.21	0.65
Award Recipient	5 (83.33)	1 (16.67)	2.4	0.12
Invited Speaker	111 (74)	39 (26)	28.68	<0.00001*
Moderator	49 (73.13)	18 (26.87)	12.08	0.0005*
Attendees with gender not disclosed- 2018: 1439 (33.02%), 2017: 1299 (29.68%), 2016: 706 (15.65%), 2015: 485 (11.17%), 2014: 299 (7.38%)				