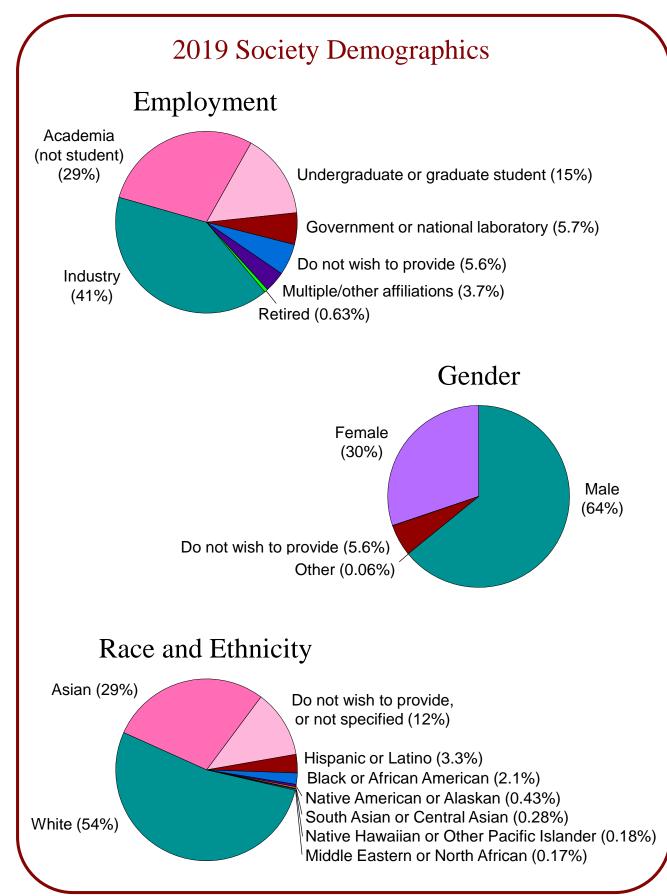


History of ASMS Diversity: A Reflection of Cultural and Geopolitical Changes

Membership has diversified over time

While ASMS demographics have changed in response to both cultural evolution and world events, the mission of the Society remains unchanged: to connect mass spectrometrists, to facilitate the exchange of ideas, to foster career development, and to advance the science of the discipline.



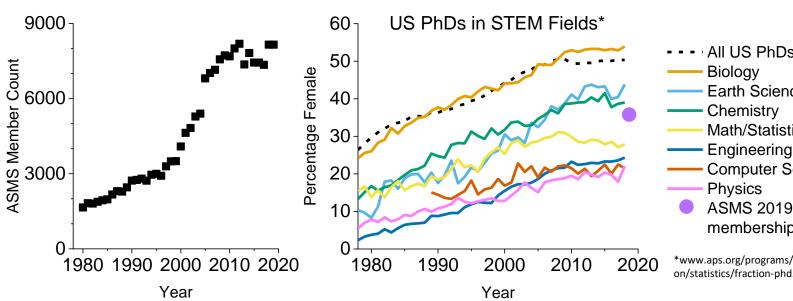
Survey accuracy was limited by non-response, potentially due to incomplete options. In 2019 "African Ancestry", "Middle Eastern or North African", and "South Asian or Central Asian" were not available choices (and are only charted where written-in), likely undercounting members. Non-binary members may have felt similarly excluded by limiting choices to two gender options and "Other".

ASMS and General Timeline

Membership grew rapidly from mid-90s to 2010

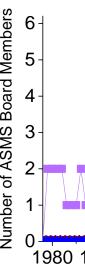
Factors affecting Society membership growth beginning in the mid-1990s: • Field expansion into life sciences (see bibliometric poster) fueled by advances in hardware, software and LCMS

- Geopolitical events, cheaper air travel increase international participation
- Scientific exchange opportunities expanded by official vendor exhibition



ASMS Board: Diversifying Leadership

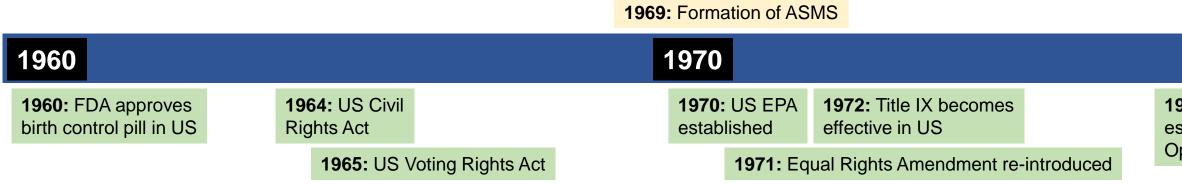
Since the election of the first woman as president in 1982, the roles of women in Society leadership have steadily increased. The institution of processes that further inclusion has fostered greater ethnic and racial diversity in the leadership of all ASMS sponsored activities.



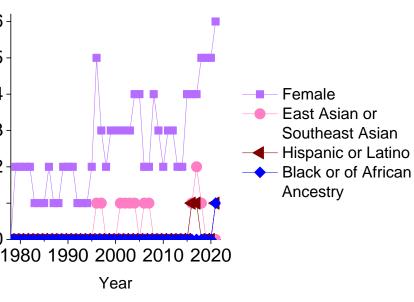
ASMS Awards: Diversity in Recognition

Award	Inception	Recognizing	Female Recipients, through 2020
Research	1986	Early career academics	22 of 87 (25%)
Distinguished Contribution (now John B. Fenn)	1990	Singular focused achievement	3 of 41 (7%)
Biemann Medal	1997	Achievement early in academic career	7 of 24 (29%)
Yergey	2019	Achievement outside academia	1 of 2 (50%)
Primarily Undergraduate Institution	2019	Research in non- graduate setting	2 of 2 (100%)

1962: The 10th mass spectrometry conference (as ASTM) was held at a hotel in New Orleans, a time when there were no more than ten African-American members of the Society. It was known in advance that Black participants would not be allowed to stay at the conference hotel. Local volunteers offered private rooms to Black conference-goers. One Black attendee from the National Bureau of Standards (NBS) complained, which led to a ruling by NBS that no employees would attend a segregated conference in the future. Though there was some turmoil within the mass spectrometry community at the time, the incident was "overlooked and downplayed," as recalled by Ernest Garner, an African-American mass spectrometrist from NBS and later co-chair of the ASMS Isotope Ratio Measurements Committee.



Earth Science - Chemistry Math/Statistics — Engineering - Computer Science Physics ASMS 2019 membershii

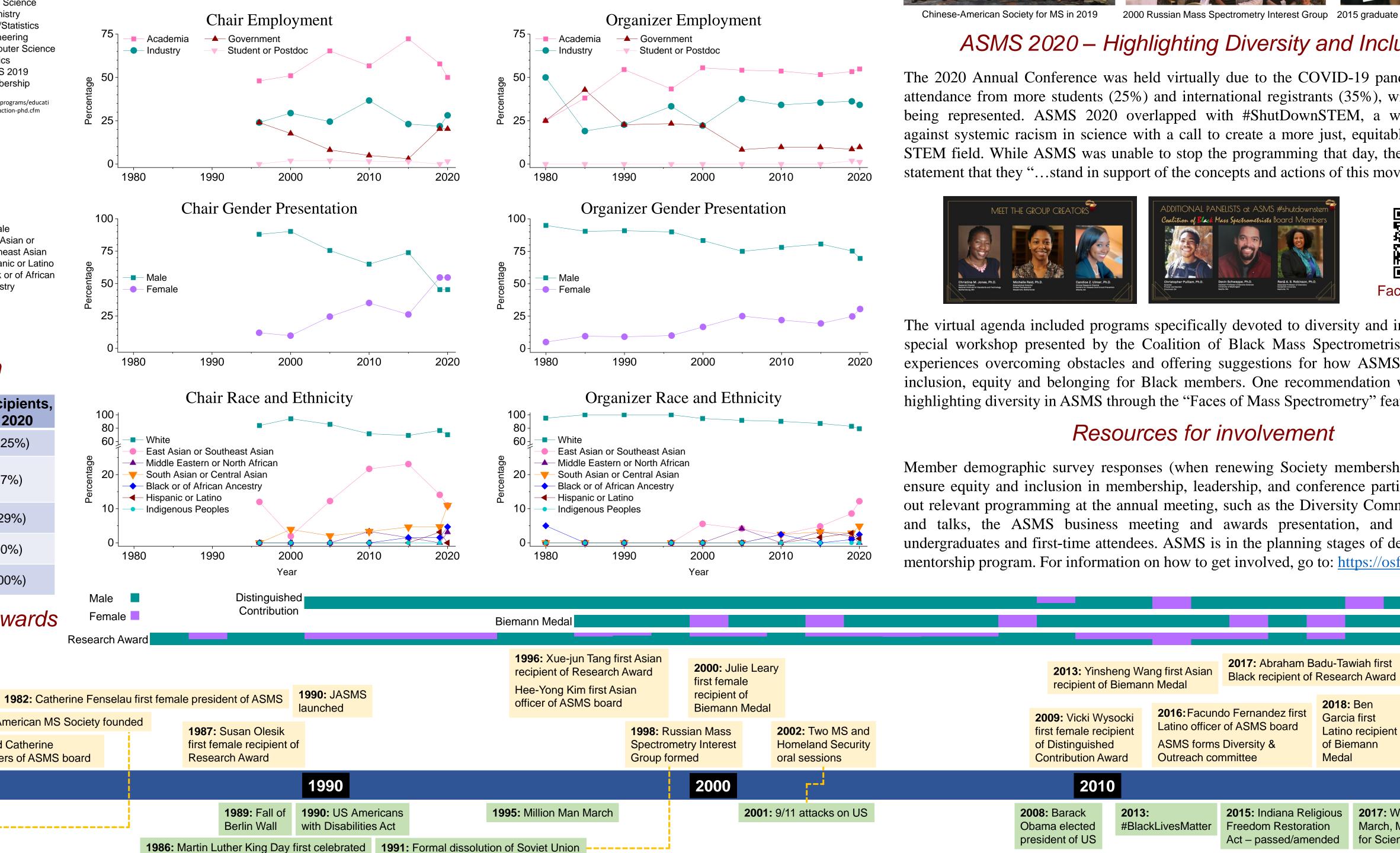


ASMS Awards

Oral session chairs: top-down planning

Session chairs, who choose oral presentations from among applicants, are selected by the Vice President for Programs and can reflect his or her priorities. Review was instituted in 2016 to minimize the possibility of selection bias, and gender and racial and ethnic diversity has increased markedly post-2000. The number of female session chairs has come to equal or exceed males; however, racial and ethnic minority representation only sometimes equals Society-wide demographics where under-counting may also be an issue.

Workshops and interest group records from before 1996 show the program shift from industry and government labs toward academia. Workshop/interest group organizers rise organically from members who attend meetings and are not reviewed by an ASMS committee. Leadership is commonly based on who volunteers, can be convinced, is most willing to speak up, or who the outgoing organizer knows. Representation has increased but lags well behind the Society demographics at large and is consistently below the group of oral session chairs.

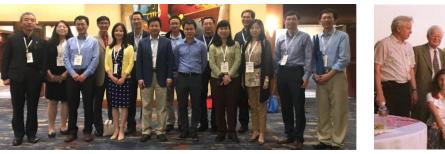


	1979: Margare	Chinese-American MS Society f Frisch and Catherine emale officers of ASMS board	ounded	1	1987: Susan Olesik first female recipient of Research Award					
	19	80					1990			
1 978: Deng Xiaoping establishes China's Open Door Policy							1990: US Ame with Disabilitie		1	995: Million I
			1986: Martin Luther King Day first celebrated			1991: Formal dissolution of Soviet U				

Workshop leaders: bottom-up organizing

Celebrating diversity in race, ethnicity and age

Between 1980 and 2019, the increase in international attendees at ASMS led to the formation of subgroups, among these the Chinese-American Society for MS formed in 1980 and the Russian MS Interest Group in 1998. A Young Mass Spectrometrists Interest Group was formed in 1986, and students were recognized with travel awards beginning in 2015.





ASMS 2020 – Highlighting Diversity and Inclusion

The 2020 Annual Conference was held virtually due to the COVID-19 pandemic, enabling attendance from more students (25%) and international registrants (35%), with 55 countries being represented. ASMS 2020 overlapped with #ShutDownSTEM, a worldwide strike against systemic racism in science with a call to create a more just, equitable and inclusive STEM field. While ASMS was unable to stop the programming that day, the board issued a statement that they "...stand in support of the concepts and actions of this movement".



The virtual agenda included programs specifically devoted to diversity and inclusion, with a special workshop presented by the Coalition of Black Mass Spectrometrists sharing their experiences overcoming obstacles and offering suggestions for how ASMS could increase inclusion, equity and belonging for Black members. One recommendation was to continue highlighting diversity in ASMS through the "Faces of Mass Spectrometry" feature in JASMS.

Member demographic survey responses (when renewing Society membership) help ASMS ensure equity and inclusion in membership, leadership, and conference participation. Check out relevant programming at the annual meeting, such as the Diversity Committee workshop and talks, the ASMS business meeting and awards presentation, and workshops for undergraduates and first-time attendees. ASMS is in the planning stages of developing a new mentorship program. For information on how to get involved, go to: https://osf.io/2ka89/





2017: Abraham Badu-Tawiah first 2020: Coalition Black recipient of Research Award of Black Mass Spectrometrists 2018: Ben ASMS workshop Garcia first Latino recipien Lisa Jones first of Biemann Black officer of ASMS board Medal 2020 **2017:** Women's **2020:** March, March Covid-19 for Science pandemic