

SHARING SCIENCE WITH THE WIDEST AUDIENCE: MAKING SCIENTIFIC CONFERENCES ACCESSIBLE

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Introduction: Conference attendance is a necessary component of any science career, providing opportunities to learn new techniques, stay updated on current results, network with potential colleagues, participate in mentoring activities, and receive critical feedback on ongoing work. In addition, giving conference presentations is necessary to achieve standards for job promotions and to demonstrate evidence of successful projects in grant proposals. Unfortunately, conference attendance and presentations can be difficult or even impossible to navigate for attendees who identify as disabled or who have other conditions that impact their participation when accommodations are not readily available. Assuring that scientific conferences are accessible for all scientists is key for maintaining workforce diversity and presenting an inclusive work environment to attract and retain future scientists.

Background: Demographic studies of professional scientists tabulate that approximately 10% of physical scientists identify as disabled, although these numbers are lower when looking specifically at those in physics and astronomy [1] and when considering different levels of education [2]. These percentages are also lower than those of respondents who were identified as disabled by the 2010 U.S. Census, which is nearly 20%. These demographics, however, are likely to undercount the number of scientists who might encounter issues with conference accessibility, as they are not likely to count situations that do not result in a permanent impairment, conditions that are not considered disabilities but may still require accommodation (e.g. neurodivergence, severe allergies), or conditions that affect a traveling companion.

Traveling to conferences can present a number of barriers to accessibility. Conference venues may be difficult to reach via public transportation, lack nearby accommodations, or have confusing labyrinthine layouts. Even within the conference itself, events may be difficult to access due to crowded room layouts, lack of signage, unannounced schedule changes, or illegible and inaudible presentations. Nearly all of these issues can be mitigated (or erased) if addressed during conference preparations and subsequently advertised on conference websites.

Resources: There are numerous online resources available for conference organizers to assist in presenting an experience that is inclusive for all that wish to attend, including an extensive list of resources from the Disability Intersectionality Summit [3], a planning guide from the ADA National Network [4], the SIGACCESS accessible conference guide [5], and numerous blog posts [e.g. 6-8].

Although this is not an exhaustive list, some specific suggestions from these sources (and others) include:

- identifying and advertising a specific contact person for accessibility requests
- providing accessibility information for ground transportation and nearby hotels prior to abstract submission
- requesting accessible rooms as part of conference hotel blocks and confirming that attendees who need them have first priority for those rooms
- presentation guidelines that reflect accessibility standards for font size and color palette [e.g., 9]
- available seating at all events and venues, even if most attendees are expected to stand
- detailed site maps and signage in large fonts and Braille, indicating locations of entrances/exits, attached hotels, conference events, restrooms (with indications for gender neutral facilities), stairways, and elevators
- designated seats and spaces in oral session rooms for those who need to be close to the speaker or who use a mobility device (or have a stroller)



Space in session room designated for mobility devices or other wheeled conveyances (ConFusion, 2019).

- strict adherence to requiring that all speakers and questioners at oral presentations use microphones [10]
- ensuring adequate space around poster boards to accommodate presenters, poster viewers, and passers-by
- a designated “quiet room”, separate from the “parents’ room”, for those who need a distraction-free space.
- volunteers to assist attendees with navigation at large poster sessions and at banquet events
- non-alcoholic beverage options at social events

Summary. Scientific conferences are a venue for collaboration and dissemination of new results but can be inaccessible for a significant fraction of scientists, whether these individuals identify as disabled or not. Changes to the way conferences are advertised and organized can mitigate many of these inaccessible situations, however, and increase the diversity of scientists who are able to participate.

References:

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- [5] <http://www.sigaccess.org/welcome-to-sigaccess/resources/accessible-conference-guide/>
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- [9] Schusterman, M.L., et al., 2019. *LPSC 50*, #2670.
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