

Actionable Guidance for Creating Inclusive, Equitable, and Just Scientific Meetings

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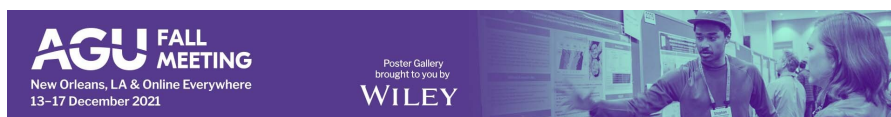
Abstract

Scientific meetings organized by professional organizations have been keystone activities of scientific culture and career advancement. They provide opportunities to share research results, promote discussion on current and emerging research and education needs, apprentice early career participants into the community, and foster professional partnerships. However, scientific meetings are not equally inviting or accessible for all scientists, particularly those from historically marginalized communities. Organizers of scientific meetings have historically not ensured diverse representation of speakers and those in leadership roles, or have not provided needed networking opportunities and professional learning to foster scientists from historically marginalized communities, who often do not have the visibility or networking opportunities needed for persistence and success in a scientific career. As a result, scientific meetings can be an isolating and stressful experience. People from historically excluded identities can encounter structural barriers, such as lack of childcare or safe bathroom spaces, and can experience harassment and bullying. Within professional societies, policies and procedures as well as unwritten norms, can perpetuate bias and exclusion. For instance, certain attire, hair styles, and speaking tone may be targeted as counter to historical norms of professionalism, which were established before BIPOC and women entered the STEM fields in larger numbers. But these challenges also present opportunities to change. Scientific meetings can instead serve as influential intervention points to advance an inclusive environment and climate for geoscientists from across institutions, career stages, and backgrounds. We present a few actionable strategies that professional societies and convening organizations can take before, during, and after scientific meetings to make them more equitable, accessible, and anti-racist. We offer guidance for scientific meeting policies, procedures, awards systems, and leadership opportunities to build structure for inclusion. We also share recommendations for how professional societies can support members to advocate for more equitable and anti-racist culture within scientific meetings and at their home institutions.



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ABSTRACT & MOTIVATION



Scientific meetings have been keystone activities of scientific culture and career advancement. They provide opportunities to share research results, promote discussion on current and emerging research and education needs, apprentice early career participants into the community, and foster professional partnerships.

However, scientific meetings are not equally inviting or accessible for all scientists, particularly those from historically marginalized communities. Organizers of scientific meetings have historically not ensured diverse representation of speakers and those in leadership roles, or have not provided needed networking opportunities and professional learning to foster scientists from marginalized communities, who often do not have the visibility or networking opportunities needed for persistence and success in a scientific career.

As a result, scientific meetings can be an isolating and stressful experience. People from historically excluded identities can encounter structural barriers, such as lack of childcare or safe bathroom spaces, and can experience harassment and bullying. Within professional societies, policies and procedures as well as unwritten norms, can perpetuate bias and exclusion. For instance, certain attire, hair styles, and speaking tone may be targeted as counter to historical norms of professionalism, which were established before BIPOC and women entered the STEM fields in larger numbers. But these challenges also present opportunities to change. Scientific meetings can instead serve as influential intervention points to advance an inclusive environment and climate for geoscientists from across institutions, career stages, and backgrounds. We present a few actionable strategies that professional societies and convening organizations can take before, during, and after scientific meetings to make them more equitable, accessible, and anti-racist.

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GUIDING PRINCIPLES



Each of the following principles should be clearly understood by all organizers in any meeting to foster awareness and facilitate more equitable participation.

1) **Check implicit biases.** Implicit biases affect our perceptions and understanding of the world and impact our decision making. Since these biases (including affinity biases) are outside of our conscious control, awareness of them is key to reducing their impacts.

2) **Whoever talks has the power.** Equity is about access and power; whoever has the floor has the power. Listening is as important as speaking, and conference organizers should ensure facilitation is in place that elevates equitable participation.

3) **Participation is not only about who is in the space, but also how they're doing in the space.** Increasing representation of individuals from marginalized communities in science is important, but it emphasizes counting “types,” rather than ensuring inclusion, providing access, and valuing contributions. Creating a system that works for people with many different, intersecting identities is a prerequisite for making science inclusive—and it is a prerequisite to the scientific process.

4) **Design for universal access.** Universal design is the notion that everyone benefits when you make a meeting (and its accompanying materials like websites) accessible to people facing the biggest barriers to full participation.

5) **Make your equity work transparent.** Share data and assessments of your meetings within your organization and beyond. Write about your efforts as models of how to make progress, naming challenges as you go.

6) **Demonstrating progress requires data.** Establishing baseline data now and monitoring future progress is critical. Sharing data creates accountability for yourself, and also for other groups and events around you. However, it is important to collect, store, and share data responsibly.

7) Set expectations for appropriate behavior AND create structures of accountability in the event of inappropriate behavior. Accountability for inappropriate behavior, especially from people in positions of power, is essential to create a safe space for people who are not in positions of power. Clear Codes of Conduct, even for small meetings, should be (1) developed, if they don't already exist, (2) visible, and (3) widely shared.

8) Who is doing the work and why? Making science inclusive takes work. Historically this work has been done mostly by the very people who lack privilege in the system. Be mindful and reflect on how this work is distributed and aim to ensure that inclusivity efforts are a collective responsibility among privileged and marginalized groups.

9) Funding should reflect equity and inclusion values. Funding agencies and institutions supporting events and meetings have a responsibility to hold event organizers accountable and financially support to organize, conduct and evaluate meetings with equitable and inclusive values.

PLANNING THE MEETING



Regardless of the format (in-person, virtual, hybrid) of a meeting, planning must begin early to ensure that diversity, inclusion, and accessibility can be meaningfully threaded throughout the meeting design and format.

- 1) **Set goals for equity and inclusion** (see Assessment).
- 2) **Make the organizing committee representative** along dimensions including career stage, race, gender, and other axes of identity.
- 3) **Ensure funding reflects your commitment to equity and inclusion.** Seek funding so that your meeting can provide the support people need to fully participate (incl. travel, accessibility costs, and caregiver stipends). Also budget for open access meeting outputs.
- 4) **Schedule the meeting with respect** for participants' calendars and time zones.
- 5) **Choose a meeting modality, location, and venue that prioritize belonging and access for diverse attendees.** Consider meeting carbon footprint and equity and inclusion goals when choosing workshop modality. When choosing a workshop location and venue, consider geographical relevance of the workshop topic, local anti-discrimination protections, gender inclusive facilities, and physical accessibility.
- 6) **Promote the meeting through channels that reach groups that are traditionally excluded** from scientific meetings.
- 7) **Select diverse presenters and participants using well-rounded criteria.** Set up an open registration and/or invite individuals from beyond existing networks. Continually evaluate the diversity of those who have agreed to present. It will take effort and time to create an equitable agenda. Plan accordingly.
- 8) **Foster belonging through early interactions with participants.** Be clear about why participants are being invited, how they can contribute to meeting outputs, and coordinate with speakers on how to create accessible presentations.

9) **Have participants, guests, and exhibitors agree to the Code of Conduct** during registration, with clear consequences for violations and structures for enforcement.

10) **Create a space that is welcoming to trans and non-binary attendees.** Provide gender inclusive bathrooms, provide [removable] labels for attendee pronouns.

11) **Proactively implement measures for accessibility.** Require all committees, planners, and presenters to achieve benchmarked accessibility requirements. Provide materials in multiple accessible formats, and make all parts of the meeting as accessible as possible.

AT THE MEETING



A meeting that centers inclusion should:

- Enable and encourage everyone at the meeting to participate.
- Honor the contributions of all participants.
- Empower all voices to be heard.
- Ensure everyone present can do well in the space.
- Center human experiences and relationship building
- Facilitation is paramount to meeting these goals.

1) Introductory talks or comments can tee up awareness, dispositions, and skills. Intro talks can serve to center the importance of belonging and inclusion, the meeting Code of Conduct, Group Agreements. They can also provide clear guidance on facilitation dynamics, and opportunities to contribute to meeting outputs.

2) Indigenous land and labor acknowledgements can be delivered as a part of broader efforts to develop authentic relationships with and support Indigenous communities.

3) Inclusive and equitable facilitation of presentations and discussions is critical. Facilitators can help balance group power dynamics of who speaks, for how long, and in what order through presentations and discussions. They can also build shared language and integrate asynchronous participation.

4) Agenda pacing is key, regardless of meeting modality (virtual, in-person, or hybrid). Provide enough time and space for the group to discuss, ask questions, and make decisions along the way. Keep the event human-centered, and employ differently paced sessions to maintain group energy and innovation. And build in sufficient break times to stave off meeting fatigue.

5) Establish harassment reporting and accountability mechanisms for different types of harassment. This includes sexual harassment as well as harassment based on race, religion, national origin, ethnicity, physical, mental, or sensory disability, marital status, sex, gender identity or expression, age, veteran/military status. Enforce accountability measures in a timely manner.

6) Lead activities to help participants connect. Meetings are where connections are made and relationships built—everyone should be included in this exchange. Group activities can include group meals, field trips, or outings. Ensure activities have broad appeal, are accessible and affordable.

7) Develop and share clear guidance for meeting deliverables, including criteria for authorship, roles, responsibilities, and target audiences. Encourage contributions to post-meeting outputs, but allow participants to opt-in under low pressure conditions.

8) Collect constructive feedback from participants to evaluate meeting goals to advance diversity, equity, and inclusion from the application registration, to the accessibility of each session, to the diversity of panelists and speakers. (see Assessment section).

ASSESSMENT



Evaluation of work to create more inclusive, equitable, and just scientific meetings can:

- Assess ways in which a meeting cultivated a culture of collaboration.
- Assess whether justice, equity, diversity, accessibility, belonging and inclusion goals were met during the meeting.
- Identify and share what worked well and where things fell short.
- Share results with all interested parties and be transparent about efforts, shortfalls and learnings.
- Make appropriate changes for future events based on learning.

Before the meeting:

Set measurable goals for equity and inclusion, for example:

- Representation of different identities, career stages, or institutional affiliations in different sessions.
- Quantity and quality of interactions in sessions.
- Feelings of safety or belonging at the event

Establish post-survey questions that assess these goals. Use culturally appropriate assessment methods, and actionable questions that will help the conference improve future events.

During the Meeting:

Collect feedback from participants about equity and inclusion goals.

Consider collecting data on participation, e.g., who asks questions and how often different people speak.

Address issues that are flagged through formative evaluation that may impose harm on the positive environment, or on participants. If there is a problem, act!

After the meeting:

Conduct and analyze a summative assessment (post-survey). Which goals were met? Which goals were not met?

What worked well from the organizers' vs. participants' perspectives?
What fell short?



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