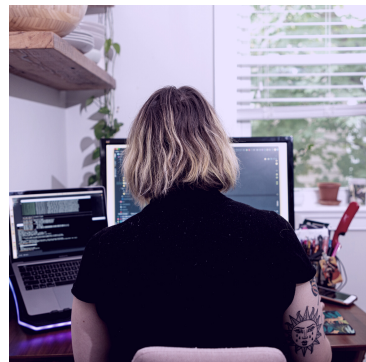
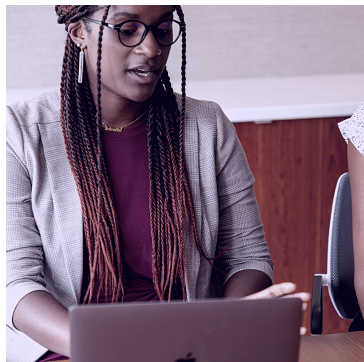


# INCLUSIVE SCIENTIFIC MEETINGS

where to begin

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23



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<b>INTRODUCTION</b>	<b>5</b>
Why do we need this guide?	5
Purpose of this Guide	6
Who is this guide for?	7
<b>GENERAL PRINCIPLES</b>	<b>8</b>
Check implicit biases	8
Whoever talks has the power.	9
Participation is not only about who is in the space, but also about how they're doing in the space.	9
Designing for universal access benefits everyone.	9
Make your diversity, equity, inclusion, justice, accessibility (DEIJA) work transparent.	9
Demonstrating progress requires data.	10
Set and enforce clear expectations for appropriate behavior and structures of accountability.	10
Share DEIJA work equitably.	10
Seek funding that reflects your values around equity and inclusion.	11
<b>PLANNING THE MEETING</b>	<b>12</b>
1. Set goals for equity and inclusion.	12
2. Select a diverse organizing committee representative of career stage, race, gender, and other axes of identity.	13
3. Secure adequate funding that reflects your commitment to equity and inclusion.	15
4. Choose a meeting modality, location, venue, and timing that prioritizes belonging and access for diverse attendees.	16
5. Create a human-centered meeting agenda.	20
6. Promotion & Outreach	21
7. Prioritize diversity in selecting presenters and participants.	22
8. Foster belonging early through pre-workshop interactions with participants and speakers.	24
9. Establish harassment reporting and accountability mechanisms.	26
10. Proactively implement accessibility measures	28
Accessibility Checklist when Choosing a Meeting Venue and/or Platform	30
<b>DURING THE MEETING: INCLUSIVE FACILITATION AND CREATING SPACE</b>	<b>31</b>
1. Introductory talks or comments can tee up awareness, dispositions, and skills.	31

2. Land and labor acknowledgments can be delivered as a part of broader efforts to develop authentic relationships with and support impacted communities.	33
3. Inclusive and equitable facilitation of presentations and discussions is critical.	35
4. Agenda pacing is key.	39
5. Lead activities to help participants connect.	40
6. Develop and share clear guidance for meeting deliverables.	42
7. Collect constructive feedback from participants.	43
<b>ASSESSMENT</b>	<b>43</b>
Goals	44
In Practice	44
Before the meeting	44
During the meeting	45
After the meeting	45
<b>TEN SIMPLE RULES FOR MEASURING THE IMPACT OF WORKSHOPS</b>	<b>47</b>
<b>SUGGESTED QUESTIONS FOR ASSESSING INCLUSIVITY OF YOUR CONFERENCE/EVENT</b>	<b>48</b>
<b>ACKNOWLEDGMENTS</b>	<b>49</b>
<b>RESOURCES &amp; REFERENCES</b>	<b>50</b>

# INTRODUCTION

Scientific meetings form the connective tissue of the global scientific enterprise. Challenging meeting agendas invigorate thinking and promote the exchange of ideas. Social events and serendipitous encounters foster new collaborations and opportunities to reconnect with colleagues outside home institutions. Side meetings provide time and space to collaborate on new projects, create scientific programs and sustain collaborations.

Scientific meetings also serve as a valuable gateway to career development. Many people rely on scientific meetings to grow the knowledge and networks needed for a successful career in science. This is especially true for academics, as scientific meetings are often where researchers and senior faculty scout graduate students to hire as postdocs, postdocs are vetted for future teaching and research positions, and junior faculty can garner recognition for their scientific contributions.

Whether in-person, virtual, or hybrid, scientific meetings are essential for building relationships and trust, and bridging different perspectives on challenging problems. Because participation in scientific meetings is so essential for a successful career in science, it's imperative that they be designed as equitable, inclusive, accessible, and just spaces. Only by creating such conditions can we support diversity in career advancement and, in turn, produce more robust scientific exchange and science-informed solutions.

## WHY DO WE NEED THIS GUIDE?

Science institutions and organizations have a moral responsibility to create inclusive and equitable spaces that allow everyone in the STEM community to be productive, to contribute, and to be valued. Evidence reinforces an intuition held by many: that science and innovation are optimized by the representation of diverse perspectives and approaches. Simply put, inclusive, participatory science is better science ([Nielsen et al., 2017](#), [Loder 1999](#), [Campbell et al., 2013](#), [Freeman & Huang 2014](#)). However, not all scientists experience scientific meetings as inclusive and positive spaces. Some people are left out (intentionally or otherwise). Some feel intimidated and isolated in meetings when they do not see people who look like them or share a common background. A persistent representation gap remains in awards, keynote talks at meetings, and leadership roles (for example, in oceanography, [Kappel & Thompson 2014](#)). Some meeting participants encounter barriers, such as inaccessible venues and presentation formats and lack of childcare support, lactation rooms, or safe bathroom spaces, that keep them from fully participating. Some are even targets of harassment and assault at meetings ([National Science Board 2015](#)).

It is common to feel overwhelmed amidst the deluge of information and social interactions at scientific meetings, big or small. But the structure and culture of scientific meetings can exclude some members of our scientific communities, especially those from marginalized identities.

Exclusionary meetings can result in alienation of those from marginalized identities. Instead of providing forums of belonging, where diverse ideas can flourish because individuals are supported, exclusionary meetings fail to foster ideas and innovation from people who encounter structural barriers to participation. Exclusionary conditions, along with exclusionary institutional practices and norms, too often result in the departure of these individuals from scientific professions.

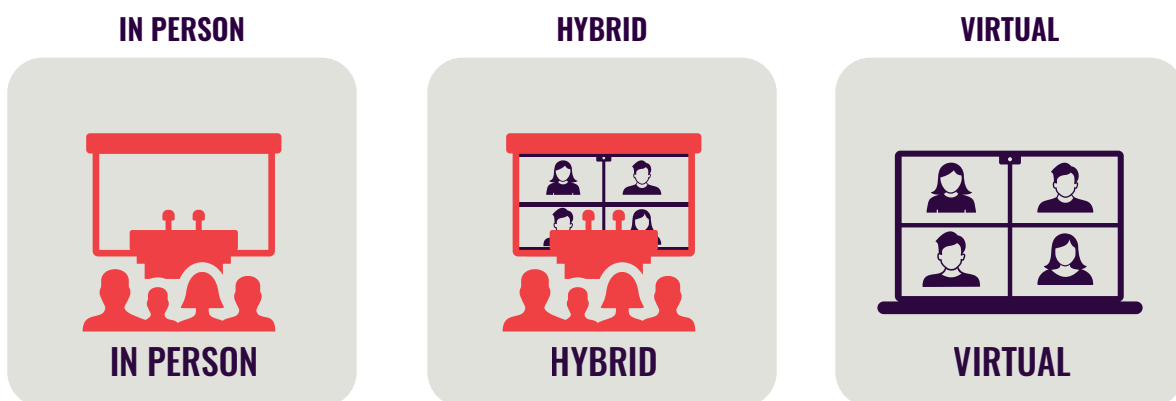
## PURPOSE OF THIS GUIDE

This Guide presents concrete recommendations for how to create inclusive and equitable spaces at scientific meetings, from the ground up. Explicitly, it aims to build structure for inclusion of people from communities often marginalized in the sciences, including those who identify as Black, Indigenous, people of color (BIPOC); LGBTQ+ people, women; D/deaf and Hard of Hearing people, blind and low-vision people, and physically, mentally, and cognitively disabled and neurodivergent people; first-generation people; linguistically diverse people; and people early in their career. We recognize that there are other communities that are also marginalized in the scientific community, and we recognize the ways in which these identities intersect. This Guide is intentionally not an exhaustive resource, and we've linked to related resources throughout instead of being duplicative.

Guidance is provided for different meeting modalities, including in-person, virtual, and hybrid formats, as well as for international contexts. This document includes three sections:

- 1) Planning the meeting,
- 2) During the meeting, and
- 3) Assessing the meeting.

The Guide is meant to be applicable to a broad array of meeting types—but we recognize that not every recommendation will apply to every kind of meeting. Within each section we have marked recommendations that are especially applicable in different modalities:



We recognize this Guide covers many topics and raises recommendations that may not feel relatable to your meeting context or possible to implement. Nonetheless, all these recommendations were written with intentionality and are important to consider. For scientific meetings to become more inclusive, participants at every level—planners, meeting funders, facilitators, presenters, and attendees—must challenge the idea that these recommendations are unlikely to be needed or are not needed by enough people to warrant implementation. We also understand that carrying out these recommendations is a demanding process and may not be possible to do all at once. Even if you are not able to put them all into effect due to meeting format, timing, budget constraints, staffing requirements, or other limitations:

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**WE ENCOURAGE AND CHALLENGE YOU TO IMPLEMENT AS MANY OF THESE RECOMMENDATIONS AS POSSIBLE AND TO BUILD THE CAPACITY OF YOUR TEAM TO IMPLEMENT MORE RECOMMENDATIONS IN THE FUTURE.**

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## **WHO IS THIS GUIDE FOR?**

This Guide is primarily targeted at people in planning or leadership positions for scientific meetings (co-chairs, steering committees, subcommittees, organizers, etc). While there are sometimes power imbalances within planning groups and differences in decision-making structures, we aspire to provide recommendations that can be implemented across planning roles. We also include insights for other key meeting stakeholders, including professional societies, those who fund events, and participants, as denoted by accompanying symbols:

### **PROFESSIONAL SOCIETIES**



### **THOSE WHO FUND EVENTS**



### **PARTICIPANTS**



We will update these recommendations over time to incorporate feedback from meeting organizers who focus on equity and inclusion and share their successes and failures. Sharing our experiences will allow us to iterate on these guidelines as we identify areas for improvement. Please reach out to [partnerships@500womenscientists.org](mailto:partnerships@500womenscientists.org) with any comments or questions.

# GENERAL PRINCIPLES

Before diving into specifics, we want to address considerations that are relevant before, during, and after a meeting. Meeting organizers (and ideally participants) should clearly understand the following principles to foster awareness and facilitate more equitable participation. Consider distributing this Guide and associated resources to all facilitators and attendees, including a Code of Conduct that expresses expectations and values for the event.

## CHECK IMPLICIT BIASES

Implicit biases affect our perceptions and understanding of the world. Since these biases are outside of our conscious control, becoming aware of them and how they can impact our decision-making is key to reducing their impacts. Many STEM institutions and norms were established by and for people from privileged identities, so the prevalence of implicit biases in STEM tends to marginalize those from communities historically (and still) excluded from the sciences ([Malcom & Feder 2016](#)).

For example, due to affinity bias—the tendency to prefer people like ourselves—people are more likely to accept and act on information communicated by someone from a similar background ([Drummond & Fischhoff 2017](#)). Affinity bias influences many leadership decisions in STEM organizations, in turn perpetuating existing power structures and limiting access and opportunity for marginalized groups.

### RELATED RESOURCES

Learn more about implicit bias and its real-world implications and impacts:

- ➔ [Harvard Implicit Association Test \(IAT\)](#)
- ➔ [Blindspot: The Hidden Biases of Good People](#) (Banaji et al. 2013)
- ➔ [Whistling Vivaldi: How Stereotypes Affect Us and What we Can Do](#) (Steele, 2011)
- ➔ [Kirwan Institute for the Study of Race and Ethnicity](#)

In general, the less diverse or inclusive a field is, the heavier the reliance on stereotypes and implicit biases toward marginalized groups will be, the greater the harassment those groups will face, and the more likely they will be to leave STEM fields ([Dutt 2018](#)). This has important implications for how scientific knowledge is shared and used, limiting science's potential for impact.

Conference organizers need to educate themselves on bias and develop a plan to minimize its impacts. Failure to acknowledge implicit biases will result in a meeting environment where marginalized groups will

continue to be excluded and privileged groups will continue to dominate. When promoting awareness about bias, conference organizers should keep in mind that shaming or blaming people is not productive. Rather, discussions should be structured in ways that allow self-reflection in as safe a space as possible.



## WHOEVER TALKS HAS THE POWER.

Equity is about access and power; whoever has the floor has the power. This plays out in scientific conferences on both the macro and micro scales. Who benefits from the meeting? What conference topics are being elevated? Within a conference, listening is as important as speaking, and conference organizers should ensure facilitation that elevates equitable participation. For example, facilitators may institute appropriate pauses and wait for others to process before sharing, recognizing that slow responses may be a result of linguistic or cultural differences. Provide targeted guidance to session organizers to create an environment that welcomes and supports all voices in dialogue and provides opportunities to continue discussions.

## PARTICIPATION IS NOT ONLY ABOUT WHO IS IN THE SPACE, BUT ALSO ABOUT HOW THEY'RE DOING IN THE SPACE.

Historically, the focus on “diversity” has meant increasing representation of individuals from different identities in science, in workplaces, at meetings, and other professional environments. Diversity is important, but it emphasizes counting “types” rather than ensuring inclusion, providing access, and valuing contributions across power hierarchies. Creating a system that works for people with many different, intersecting identities is a prerequisite for making science inclusive—and it is a prerequisite for scientific progress. This can make the difference between whether a meeting creates a culture of belonging for all, as opposed to assimilating diverse perspectives into the historical culture of meetings.

## DESIGNING FOR UNIVERSAL ACCESS BENEFITS EVERYONE.

Universal design is the notion that everyone benefits when you make a meeting and its accompanying materials, like websites, accessible to people who face the biggest challenges ([Office of Disability Employment Policy 2019](#)). The Union of Concerned Scientists has published an extensive guide to making your meeting accessible ([Serrato Marks 2018](#)). It includes many great recommendations, such as providing chairs for all speakers and always using a microphone. Another resource to consult is Universal Design for Learning ([CAST 2019](#)).

## MAKE YOUR DIVERSITY, EQUITY, INCLUSION, JUSTICE, ACCESSIBILITY (DEIJA) WORK TRANSPARENT.

Be public about your commitment and goals to advance diversity, equity, inclusion, justice, and accessibility (DEIJA) in scientific meetings, and include information about accountability structures. Write about your efforts as you go, naming progress and challenges alike. Share data and assessments of your goals within your organization and beyond. By making the journey transparent, you acknowledge that this is always a work in progress, which provides support for others to enter this work regardless of expertise or comfort level (see examples in [Bilimoria & Liang 2012](#)). Transparency also creates opportunities for organizational leadership

to elicit constructive feedback from members, partners, and those who fund events on where additional support or alternate approaches are warranted to meet goals.

## DEMONSTRATING PROGRESS REQUIRES DATA.

Establishing baseline data now and monitoring future progress is critical. Start by collecting and sharing data on your meeting now, at the planning stages, during, and after the meeting, and continue to collect and share it in the future. Sharing data creates accountability for yourself as well as for other groups and events around you.

**Please note:** it is important to collect, store, and share data responsibly. You may need to work with a university institutional review board (IRB) to determine what information you can collect and share. Collect and store people's personal information securely and appropriately, be sensitive when asking people for information about their identities, and don't overshare personal information. Unless strictly necessary to do otherwise, maintain demographic and other information related to diversity as de-identified datasets to limit the risk of exposing confidential or sensitive data. When maintaining personally identifying information, create a policy to describe acceptable storage locations, permissions, sharing, and use (e.g., [University of Michigan's PII](#)).

## SET AND ENFORCE CLEAR EXPECTATIONS FOR APPROPRIATE BEHAVIOR AND STRUCTURES OF ACCOUNTABILITY.

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. These can be communicated via a code of conduct, which is a set of guidelines that establishes clear expectations for appropriate and inclusive behavior during the meeting. A rigorous code of conduct identifies inappropriate behaviors, their consequences, sanctions, and enforcement mechanisms. Organizers should create a clear process for reporting inappropriate behavior and be clear who the point of contact is for reporting; put it in the Code of Conduct and make participants aware of it. Clear Codes of Conduct, even for small meetings, should be (1) developed, if they don't already exist, (2) visible, and (3) widely shared. Refer to the [Planning the Meeting](#) section for guidance on creating a Code of Conduct.

## SHARE DEIJA WORK EQUITABLY.

Making science diverse, equitable, inclusive, and just takes work. Historically this work has been done mostly by the very people who lack privilege in the system—and without compensation ([Jimenez et. al 2019](#)). Meeting organizers and planners typically volunteer subject-specific expertise and leadership. However, when people from marginalized groups do DEIJA-related work, they are also performing emotional labor. Meeting organizers and leaders should seriously consider whether the work at hand is appropriate for a volunteer or a paid consultant/subject matter expert, and compensate individuals appropriately.

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. Finally, sometimes meetings lead to scientific work—projects, publications, and white papers. Doing the work can be an opportunity and/or a burden. Here are some questions to ask:

- 1) Who is doing this work?
- 2) Why are they the ones doing it?
- 3) How does that work impact the scientific reputation of the worker?
- 4) Should they be the ones doing it?
- 5) What are ways to support doing this work, and what resources have we not yet identified to help with it?
- 6) If you see a problem with workload distribution, do something (when possible). If someone has a busy period coming up, they should let others know so someone else can help out. Committee chairs/leads should create an atmosphere where committee members feel comfortable to speak up about these things. All the work for an event should never fall to one person.

## SEEK FUNDING THAT REFLECTS YOUR VALUES AROUND EQUITY AND INCLUSION.

Making science more equitable and inclusive takes funding as well as work. Build appropriate levels of support for DEIJA goals into meeting budgets, including compensation for individuals who too often have to volunteer to achieve those goals. Individuals from marginalized communities, in particular, should be compensated at or above market rate in recognition of their additional emotional labor.



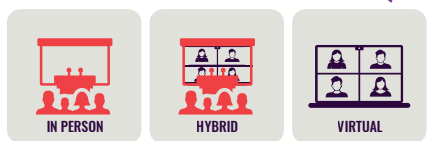
Those who fund events have a responsibility to support activities that expand meeting diversity, equity, inclusion, and accessibility. Those who fund events can achieve this by publishing clear guidelines and expectations and requiring grantees to outline DEIJA goals and assessment plans. Those who fund events can then be uniquely positioned to hold event organizers accountable as they plan, conduct, and evaluate meetings. Meeting organizers should detail how an event or meeting was made inclusive and equitable in funding proposals and outcome reports and include outcomes, such as evaluation and survey results. Event funders can also check in with awardees on a regular basis to ensure progress is upheld.

# PLANNING THE MEETING

Planning an inclusive scientific meeting requires methodologically integrating diversity, equity, inclusion, justice, and accessibility (DEIJA) at every stage. This includes intentional goal setting, recruiting diverse planning team members as well as panelists, finding accessible meeting locations, establishing schedules that maximize engagement while centering the unique needs of participants, developing codes of conduct, and offering a variety of ways for networking and broadening participation. Planning should begin early (6 months - 1 year in advance of the event) to ensure that consideration of diversity, inclusion, and accessibility are meaningfully woven throughout the meeting design and format. It is critical to determine from the outset the meeting purpose, and examine who is likely to benefit from the meeting, who is likely to be left out, and *why*.

This section includes a summary of strategies that can make scientific meetings inclusive of and accessible to a broad diversity of participants, especially those from marginalized communities. **We recognize that meeting planners may not be able to enact all of these recommendations in every meeting; however, we strongly recommend taking as many into account as possible from the start.**

## 1. SET GOALS FOR EQUITY AND INCLUSION.



Meeting organizers should prioritize diversity, equity, inclusion, justice, and accessibility goals from the outset, with specific goals considered in each part of the planning process (e.g., choosing a venue or platform, inviting speakers, publicizing the meeting). For detailed guidance on goal-setting and evaluation, refer to the [Assessment](#) section.

- (a) **Familiarize yourself with relevant research concordats and ethics policies** to inform goals.
- (b) **Create guidelines to monitor progress toward DEIJA goals.** Establish a mechanism early to solicit feedback on the inclusivity of your meeting, and allow adequate time before and during the meeting to respond to and implement feedback. For instance, include questions about your equity and inclusion efforts in participant surveys and post-meeting assessments, and create an action plan to implement feedback for future meetings. Refer to the [Assessment](#) section for sample questions.

## RELATED RESOURCES

### Research Concordants and Ethics Policies

- ➔ National Science Foundation [Responsible and Ethical Conduct of Research](#)
- ➔ The [San Francisco Declaration on Research Assessment](#)
- ➔ [UK Research Concordats and agreements](#)
- ➔ [American Geophysical Union Scientific Integrity and Professional Ethics](#)
- ➔ [The Oceanography Society](#)
- ➔ The Climate and Traditional Knowledges Working Group: [Guidelines for Considering Traditional Knowledges in Climate Change Initiatives](#)
- ➔ American Anthropological Association: [Principles of Professional Responsibility](#)
- ➔ Southwest Network for Environmental and Economic Justice (SNEEJ): [Jemez Principles for Democratic Organizing](#)

## 2. SELECT A DIVERSE ORGANIZING COMMITTEE REPRESENTATIVE OF CAREER STAGE, RACE, GENDER, AND OTHER AXES OF IDENTITY.



Breakthroughs and innovation rely on broadening the lens through which scientific questions are examined ([McLeod et al., 1996](#)). A diverse organizing committee can help ensure a representative roster of participants and speakers. For example, women invite more women to speak ([Sardelis and Drew 2016](#), [Ford et al., 2018](#)), resulting in the proportion of women speakers equivalent to that of the authors of submitted abstracts. A more diverse organizing committee and speaker line-up also helps foster a sense of belonging among participants from marginalized groups, who can see themselves represented in the makeup of the meeting leadership and program ([Barrows et al., 2021](#)).

- (a) **Recruit meeting co-organizers that represent diverse communities and marginalized groups.** Reflect on whether the organizers represent a diversity of identities, experiences, geographies, expertise areas, and fields.
- i. Engage scholars and practitioners whose perspectives and knowledge systems (e.g., traditional and Indigenous ways of knowing) are marginalized.
  - ii. Reach out to community colleges, [Minority Serving Institutions](#) (MSIs), disciplinary affinity associations, and nonprofits outside dominant academic networks.

- iii. Invite input from communities and groups (such as Black, Indigenous, people of color (BIPOC) professional societies and organizations), as opposed to singling out input from individuals from marginalized identities and making them feel tokenized.

Publicly available databases (such as those listed below) can help co-organizers identify diverse participants and speakers.

DATABASE	DESCRIPTION
<a href="#">Gage platform</a>	A resource for journalists, educators, policy makers, and others seeking the expertise of women and gender diverse experts in STEM.
<a href="#">Geoscientists of color</a>	This list is meant to promote geoscientists of color for speakers, collaborations, jobs, and awards.
<a href="#">Diverse speakers in STEM</a>	To create a web resource where conference, workshop, and panel organizers can locate diverse STEM experts to speak at their event.
<a href="#">Water Researchers of Color</a>	This database was inspired by the Geoscientists of Color database by Dr. Jennifer Glass. We want to promote, lift up, and celebrate Water Researchers of Color and see them invited to present their research, nominated for awards, and employed in and outside the University.
<a href="#">Global South Climate Database</a>	The Global South Climate Database is a publicly available, searchable database of scientists and experts in the fields of climate science, policy and energy.

- (b) **Cultivate safe spaces for discussing dimensions of DEIJA relating to the planning process** for organizing committee members. Sometimes these conversations can be contentious, personal, and emotional, so structure them in a way that organizers can voice concerns without fear of retribution (Yee 2019). Before the conversation, familiarize organizers with any codes of conduct and meeting guidelines.
- (c) **Establish clear mechanisms for communication and structures for decision making** in the meeting organizing process.
  - i. Reflect on whether decisions are made through consensus: How are conflicting views or priorities among co-organizers reconciled? (Seeds for Change)
  - ii. Ensure each organizer understands the workshop organizing workflow, their roles and responsibilities within the organizing committee (e.g., roles relating to roster development, agenda setting, funding, promotion, communications, website etc.), and how they can advocate for support from other organizers.
  - iii. Decide on platforms for regular communication between group members (e.g., Slack, email, video calls), and create mechanisms to support or check in with group members who may be struggling.

- (d) **Celebrate and provide credit and visibility to meeting organizers.** Organizing is hard work!
- i. Consider compensating organizing team members for their investment of time and effort, or nominate organizers for awards to publicly celebrate their efforts and advance their careers.
  - ii. Acknowledge their contributions at the beginning of the meeting, and include their names in meeting agendas.

### 3. SECURE ADEQUATE FUNDING THAT REFLECTS YOUR COMMITMENT TO EQUITY AND INCLUSION.



Organizing an inclusive scientific meeting requires funding to support participant attendance, speaker compensation, and open access meeting outputs. Funding can be secured from multiple sources to adequately support initiatives.



THOSE WHO FUND EVENTS CAN ENCOURAGE MEETING ORGANIZERS TO INCLUDE DEIJA COSTS AND QUESTION WHEN THESE COSTS ARE NOT INCLUDED IN MEETING BUDGETS.

- (a) **Seek funding to support organizer and participant costs.**
- i. Provide participant support costs (including registration, travel, lodging, and meal support) for attendees who do not have grant-supported or institutional funding. Ensure that travel grants support the cost of acquiring visas for international attendees ([Greene et al., 2021](#)). Provide a care-taking stipend, preferably with flexibility to be used on site, or for care-taking support at the attendee's home location. (IP)
  - ii. Budget honoraria for organizers, speakers, and participants not directly supported by their home institutions. Prioritize honoraria for early-career professionals, students, members of community groups or frontline communities, and participants from marginalized identities (e.g., BIPOC, from non-[OECD](#))

#### RELATED RESOURCES

Determining equitable honorarium for speakers and panelists

- ➔ The [Fix the Gap database](#) is an open-access directory of honoraria for STEM-related speaking engagements

countries, those with disabilities, etc.). Include international transfer fees for international participants.

- iii. Cover costs for high-quality internet access as needed (costs may be higher for participants from rural areas, on reservations, and from other places with lower-quality or limited internet, such as low- and middle-income countries). (H,V)
- iv. Account for accessibility costs in your funding plan. Costs of participation may be higher for people with disabilities (and potentially their caregivers) ([De Picker 2020](#)). Travel grants should be prorated accordingly, and caregivers should not be required to pay registration fees. For more on accessibility planning, refer to the section on [Accessibility Measures](#).

**(b) Budget for meeting facilitation.** Facilitation by experts during meetings is critical for creating inclusive spaces. They can also be influential in the design of the workshop program or agenda. Hire a facilitator early in the planning process to maximize inclusion and impact. For more on facilitation, refer to the [During the Meeting](#) section.

**(c) Seek event funders that reflect your values around diversity, equity, and inclusion.**

- i. Consider the reputational harm to your group/organization when selecting funding sources. Does a funder display morals or values that match your own? If not, it might be a better idea to avoid them and find an alternative.
- ii. For interdisciplinary meetings, apply for funding from many different sources to reflect the diversity of disciplines, fields, and expertise you aim to have represented. This can aid in the sense of belonging participants have when in attendance.

**(d) Build in funding to support post-meeting output development** and ensure meeting products are open access.

## 4. CHOOSE A MEETING MODALITY, LOCATION, VENUE, AND TIMING THAT PRIORITIZES BELONGING AND ACCESS FOR DIVERSE ATTENDEES.

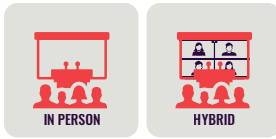


Meeting modality (in-person vs. virtual vs. hybrid) has become a particularly salient dimension of meeting planning since the onset of the COVID-19 pandemic. The pandemic has forced meeting organizers to thoroughly interrogate why, when, and how we meet to advance scientific goals. Co-organizers must contend with overcoming DEIJA barriers within each meeting modality.



	IN-PERSON	HYBRID	VIRTUAL
DEIJ BENEFITS	<ul style="list-style-type: none"> <li>➔ <b>Face-to-face interactions</b> can build trust and foster relationship-building among attendees, which can be particularly critical for those from marginalized identities.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Hybrid meetings allow flexible participation options around life events, competing responsibilities, or travel restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Broader participation and improved accessibility for participants with disabilities, caregiving responsibilities, or those with limited financial resources</li> <li>➔ Lower carbon emissions</li> <li>➔ Removes visa requirements for international attendees</li> <li>➔ Easier to attend for participants with limited schedules, such as caregivers, practitioners, private industry representatives</li> <li>➔ Easier to record sessions and provide opportunities for asynchronous contributions</li> <li>➔ Can more easily provide captions and language translations</li> </ul>
CAUTIONS	<ul style="list-style-type: none"> <li>➔ Can be prohibitively expensive, which disadvantages those with limited financial resources</li> <li>➔ May be space-limited and thereby exclusive</li> <li>➔ Will need to account for a <b>meeting carbon footprint</b> offset</li> </ul>	<ul style="list-style-type: none"> <li>➔ Ensure that hybrid participants are able to access the full scientific content (e.g., appropriate microphones, technology testing prior to the event, clear communication of schedules and expectations, etc.)</li> <li>➔ Carefully consider what virtual participants need to fully engage in the meeting</li> <li>➔ Structure into the meeting agenda or program ways for both in-person and virtual participants to contribute to the meeting, especially in Q&amp;A sessions</li> <li>➔ Hybrid meetings can be more expensive to organize</li> </ul>	<ul style="list-style-type: none"> <li>➔ Global to local inequities in access to high-speed internet can preclude participation and leadership from those without reliable access</li> <li>➔ Need to contend with conflicting international time zones and schedule in ways that don't chronically disadvantage one geography over another</li> <li>➔ Screen fatigue, fractured attention spans</li> <li>➔ Often limits number of speaking roles or eliminates poster presentations, which can disadvantage early career participants</li> <li>➔ Online attacks and Zoom bombings can occur during a conference. Make sure to create a safe and inclusive virtual space for all attendees and speakers.</li> </ul>

(a) Selecting a location for in-person meetings



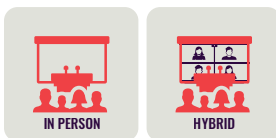
- i. Is the meeting location easily accessible to the majority of participants? If the meeting topic is tied to a particular geography, is the meeting in close proximity?
- ii. Consider hosting meetings in coordination with community organizations and professional societies/organizations to limit carbon emissions associated with participant travel.
- iii. If the meeting location is subject to anti-LGBTQ+ legislation or is subject to discrimination against BIPOC, consider alternate venues or put anti-discrimination protections in place.
- iv. If the meeting location is in a state without full reproductive health services, this can pose serious health risks for attendees. Consider moving the meeting location to a state that protects reproductive rights or at minimum hire a team of healthcare professionals that will be available to answer questions and provide support during the entire meeting.

## RELATED RESOURCES

### Reproductive Health Services at meeting locations

- ➔ Learn about your state's laws and policies around reproductive freedom using [this interactive map](#).
- ➔ [Ineedana.com](#) and [Abortionfinder.org](#) help abortion seekers find verified abortion providers and resources.
- ➔ [Reproductive Freedom Guide](#) is a comprehensive guide including resources about how to access abortion, how to safely use period tracking apps, how to navigate legal risks, funding resources, and more.

(b) Selecting a venue for in-person meetings



- i. Consider hosting events at Minority Serving Institutions, Historically Black Colleges and Universities, Women's Colleges, or other venues that center underrepresented and marginalized communities.
- ii. Ensure the venue has gender-inclusive bathrooms.
- iii. Ensure that a prayer room is available at the venue.
- iv. Meeting spaces where larger groups can congregate also help to facilitate and enhance networking and collaboration.

- v. Choose locations that are accessible in a variety of ways. (For more comprehensive guidance, see the “[Proactively implement accessibility measures](#)” section.)
- vi. Provide designated spaces for lactation, breastfeeding, and pumping.

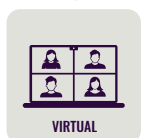
**(c) Selecting a platform for virtual meetings**



- i. Is the virtual platform intuitive for new users? Provide training opportunities before and during the virtual meeting to build shared competencies among all participants.
- ii. Does the virtual platform require account logins that may be firewalled by institutions? Does this exclude participation?
- iii. Choose a virtual platform that provides opportunities for community building through small breakout groups or “face to face” receptions.
- iv. Ensure safety protocols are in place to pre-empt or quickly shut down hacking or harassment.
  - ▶ Have all participants register for the session.
  - ▶ Create a waiting room so that only the host is in charge of granting access to the session.
  - ▶ For a keynote speech or non-interactive sessions, consider using a webinar format. This way the host can manage the webinar, panelists, and attendees. The host can do things like stop and start the webinar, mute panelists, stop panelists' video, and remove attendees from the webinar.
  - ▶ Make sure that all attendees are muted and that screen sharing is disabled.
  - ▶ If cybersecurity is compromised, be prepared to quickly suspend all participant activities and permissions.
- v. Plan for sufficient technical support to be present throughout the virtual meeting to help participants troubleshoot as needed. Have a practice session with technical support to make sure that they are prepared during the actual meeting.
- vi. Plan for a technical facilitator to be present throughout the virtual workshop to advocate for participants with limited connectivity or technological familiarity.

**(d) Schedule the meeting with respect for participants’ calendars and time zones.**

- i. Avoid scheduling virtual and in-person meetings on [cultural and religious holidays](#).
- ii. Consider holding sessions or workshops throughout the day to better accommodate participants from different locations and time zones. Use three four-hour time zone hubs (1:Asia/Pacific, 2: Africa, South West Asia, Europe, 3: North, Central, and South America) and repeat content for each hub.

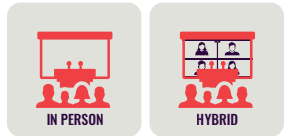


- ▶ Time these hubs so the content is scheduled during typical working hours.

- ▶ Allow participants to access during all times in case they are unable to participate during their presumed hub time.
- iii. Provide an online [time converter](#) that auto-converts speaker and attendee time zones.



- iv. Encourage and/or provide travel funding for international participants and speakers to arrive a day early to adjust to the meeting time zone (IP, H).



## 5. CREATE A HUMAN-CENTERED MEETING AGENDA.



Meeting agendas that are dominated by talks and presentations limit which voices are heard and stymie opportunities for inclusive knowledge sharing, co-learning, and relationship-building. Organizers and facilitators can instead develop an agenda that prioritizes inclusive and equitable engagement, exchange of ideas, critical thinking, and discussion.



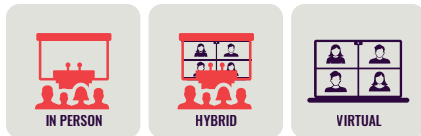
### PROFESSIONAL SOCIETIES CAN PROVIDE FACILITATION TRAININGS FOR MEMBERS.

- (a) **Facilitators can be employed during the meeting design** to ensure the agenda will be engaging, dynamic, and inclusive.
- (b) **Agenda Design**
  - i. Employ differently paced sessions and activities to maintain group energy, innovation, and to achieve meeting goals ([Glauber et al., 2020](#)). A program with a diversity of activities and avenues through which participants can contribute can cater to a diversity of ways of thinking.
  - ii. Consider a “flipped” model of delivery wherein participants are provided with access to meeting resources such as recorded videos, slides, lectures, etc., before the meeting takes place. Doing so can allow more effective engagement among

participants, allowing them to process information in their own time ([Nederveld & Berge 2015](#)). (H, V)

- (c) **Provide opportunities in the agenda for participants to have active roles beyond serving as presenters.** These might include session moderators, rapporteurs, or volunteers during events. This can help to validate participant belonging. Expect that participants will come at these roles with varying levels of experience or comfort, so make sure to provide adequate onboarding.

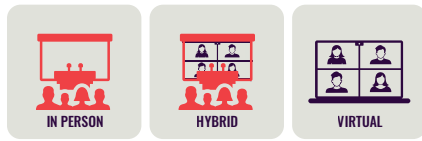
## 6. PROMOTION & OUTREACH



As meeting organizers seek to publicize their meeting, a [communications/promotion guide](#) can be tailored toward groups traditionally excluded from scientific meetings. Without an intentional plan, organizers are more likely to reach only the usual suspects.

- (a) **Leave ample time** for invited speakers and participants to confirm and ask questions. Respond to comments and questions in a timely, personalized manner.
- (b) **Clearly state the funding support and accessibility measures that are available** (including stipends, travel support, honorarium, closed captions, interpreters, venue accessibility, childcare). Making compensation available for speakers can help [close pay gaps](#) that disproportionately disadvantage those from marginalized identities, as well as normalize the practice of valuing expertise.
- (c) Are you using inclusive images and gender-neutral language in promotional materials? Are you explicitly encouraging individuals from diverse backgrounds and expertise to attend? For example, Pal(a)eoPERCS runs a "[This Is What A Pal\(a\)eoScientist Looks Like](#) " series on Twitter to show there is no stereotypical palaeo scientist.
- (d) **Highlight additional opportunities for attendees** to participate in professional development events and/or networking opportunities, including affinity groups for those from marginalized identities.

## 7. PRIORITIZE DIVERSITY IN SELECTING PRESENTERS AND PARTICIPANTS.



During presenter and participant recruitment, the path of least resistance is to rely on existing networks or invite people you already know. However, this can exacerbate known biases within our existing structures (e.g. [Ford et al., 2019](#)). Creating an inclusive and more innovative meeting will require looking outside established networks, which takes more deliberation than rounding up the usual suspects.

- (a) **Recruit participants and speakers outside existing networks**, especially for invitation-only workshops.
  - i. Conduct a literature review to become familiar with individuals and communities outside your existing networks who are active on your event topic(s).
  - ii. Members of the organizing team that work in high-income countries should consider colleagues they have collaborated with at institutions in low- or middle-income countries.
  - iii. Follow best practices to mitigate bias and identify speakers who may not be on your radar. Avoid reliance on traditional metrics for speaker selection criteria, especially journal metrics, h-index, and other citation-based metrics ([San Francisco Declaration on Research Assessment](#)).
  
- (b) **Use an open registration/application process** to recruit participants, and allow self-nominations in addition to external speaker nominations.
  - i. Circulate the call for registration/application broadly, beyond the organizing committee's existing networks. Reach out to [Minority Serving Institutions](#) (MSIs), Historically Black Colleges and Universities, Women's Colleges, and professional societies whose missions advance communities marginalized in STEM fields.
  - ii. Allow ample time to circulate the call for registration/application.
  - iii. Grant extensions/flexibility in registration deadline(s) to accommodate external influences and disruptions that may disproportionately affect certain applicants (e.g. geopolitical strife, pandemic impacts on caretakers).
  
- (c) **Develop clear selection guidelines for participants and speakers.**
  - i. Set clear guidelines and deadlines to minimize workload for applicants and organizers.
  - ii. Develop evaluation criteria *before* evaluating abstracts or application materials! ([Timmer et al., 2003](#)). Criteria should use gender-neutral language and be well-

rounded, transparent, and available to applicants at the time of registration/application. Do your criteria elevate or exclude any groups?

- ▶ Since academic CVs may reflect past privileges and inequities ([Kozlowski et al., 2022](#)), explicitly ask applicants for information that would show reviewers more well-rounded information about the applicant, and use narrative CV formats for evaluation ([Royal Society Resume for Researchers](#)). Examples of information to also take into account include:
  - engagement with policymakers or with the broader public,
  - participation in mentoring programs,
  - advancement of inclusivity efforts,
  - diversity of expertise and experiences.
- ▶ Consider the different ways your speaker/invitee lineup reflects the desired diversity of your community. Do you have speakers/invitees from marginalized identities? Those at transitional phases in their careers? People from disciplines or communities of practice typically excluded at STEMM meetings, such as social sciences?

#### RELATED RESOURCES

Sample rubrics for selecting speakers and/or participants

- ➔ [Evidence of Unconscious Bias – Best Practices and Guidelines for LDEO Search Committees](#)
- ➔ [The State of Black Women in Corporate America](#)

iii. Ensure accountability during the selection process.

- ▶ Assemble a nomination and selection committee, beyond the meeting organizers if possible, to choose presenters and participants. This committee can create selection criteria and standards and hold the meeting organizers accountable to them.
- ▶ Alternatively, have one committee member anonymize submissions (removing all names and institutions) and have the remaining committee members/conveners select presenters based on the anonymized application materials.

(d) **Continually evaluate speaker and participant diversity** throughout the organizing process.

- i. Invitations do not translate directly to acceptances. Women and others from marginalized identities are more likely to decline invitations due to increased demands on their time, limited funding and support for travel, and family responsibilities ([Gay-Antaki & Liverman 2018](#), [Schroeder et al., 2013](#)). Women are more likely to request shorter talks than longer talks ([Jones et al., 2014](#)), and in some instances posters over oral presentations ([Ford et al., 2018](#), [Ford et al., 2019](#), though [Jones et al., 2014](#) found no difference).

- ii. Adapt invitations and/or nomination acceptances as the speaker lineup evolves. If particular groups are missing from the nomination pool, conduct targeted calls for speaker nominations to help balance the pool.
  - iii. It will take effort and time to create an equitable agenda. Organizers need to counter tendencies to invite well-known presenters or participants, especially as a meeting approaches and planning becomes more rushed.
- (e) **Randomize speaker order within sessions** of the meeting agenda to avoid bias and placing speakers from marginalized groups at the bottom of speaker line-ups. Also remember to take time zone locations of speakers into account when creating a session timetable.

## 8. FOSTER BELONGING EARLY THROUGH PRE-WORKSHOP INTERACTIONS WITH PARTICIPANTS AND SPEAKERS.



Early communications with participants and speakers goes a long way in setting a tone of belonging and inclusivity. Providing ample information and guidance can engender confidence among participants who are new to scientific meetings and create a sense of calm and safety. This also creates the opportunity to get participants excited about building connections and about opportunities to learn and share with colleagues at the meeting. It is also critical for coordinating with attendees on logistics and accessibility.

- (a) **Share with participants and speakers why they have been invited** and what their expertise/experience contributes to the lineup/agenda.
- i. People will choose to participate or not depending on how they perceive their contributions will be valued.
  - ii. Let participants know early if they're expected to speak or present to allow people with complex work-life schedules ample time to prepare.

### RELATED RESOURCE

Sample inclusive email template

➔ [What Can Conferences Do To Attract More Women Speakers?](#)

- (b) **Provide information early about intended meeting outcomes and/or deliverables.**
- i. Clarify if/how participants can contribute, and provide criteria for co-authorship if a publication is an intended outcome.
  - ii. Consider soliciting participant input on desired outcomes and target audiences for deliverables (including audiences outside traditional scientific channels).



- (c) **Reiterate availability of stipends and financial support** for participants who won't receive support from their home institutions.
- (d) **Inform all participants how to navigate the meeting space and agenda** (regardless of in-person, virtual, or hybrid), and offer practice time for participants ahead of a meeting. Provide clear guidance on how participants can ask for help, and provide feedback.
- (e) **Provide presenters with adequate guidance** to prepare for success.
  - i. Encourage speakers to practice their talks prior to the event. Explain time-warning mechanisms to speakers in advance.
  - ii. Explain tech arrangements. Ensure that the speaker is comfortable with meeting technology, and arrange opportunities to test prior to the event if helpful. (V, H)
  - iii. Make accessibility resources and guides available to all speakers, and provide a point of contact for speakers who have questions. Refer to the "[Proactively implement accessibility measures](#)" section for additional guidance and related resources.
  - iv. Remind speakers to prepare for a linguistically diverse audience. High English proficiency should not be assumed.
- (f) **Ask attendees through registration what resources or supports they need** to be able to fully participate (e.g., sign language interpretation, caretaking arrangements, etc.). This can inform how co-organizers prioritize accessibility resources, and provide targeted guidance for speakers to maximize inclusion and belonging within their particular meeting.
- (g) **Provide options for participants to correct spelling of their names** (including the placement of diacritical markers, like accents and tildes) and indicate their chosen name.
- (h) **Ask participants to share their pronouns** during registration, and use the opportunity to provide information on [how and why to use pronouns](#). Provide options for participants to self-describe their pronouns, and include a "Prefer not to respond" option. Include pronouns on name tags and rosters in a way that can be changed (i.e., rather than print pronouns on name tags, offer pins or stickers that can be changed). This allows people who use multiple pronouns to easily switch and allows for trans participants to remove their pronoun pin if they feel unsafe.
- (i) **Let participants share their preferences for roommates** if the meeting organizers are coordinating shared hotel rooms. Never automatically group nonbinary or trans participants by known or presumed sex assigned at birth, and avoid automatically grouping nonbinary or trans participants by known or presumed gender. Both of these scenarios can create unsafe rooming environments for trans and nonbinary people.

## 9. ESTABLISH HARASSMENT REPORTING AND ACCOUNTABILITY MECHANISMS.



Establishing and sharing an official code of conduct can help create an inclusive meeting by encouraging respectful treatment of all participants and mitigating harms, such as microaggressions, toward individuals with marginalized identities. Codes of conduct protect organizers as well as participants. It is important to remember that harms can occur outside formal meeting hours and venues, so implementing a code of conduct throughout the entire meeting period is strongly recommended.



- (a) **Develop a code of conduct**, if not already established. Create and distribute clear rules and guidelines on discrimination and harassment along with an easily accessible method for reporting incidents.
- i. Guidelines should address sexual harassment, as well as harassment based on gender; body size; race; religion; national origin; ethnicity; physical, mental, or sensory disability; marital status; sex; sexual orientation; gender identity or expression; age; and veteran/military status.
  - ii. Guidelines should be explicit about support for BIPOC participants/communities and outline accountability structures for participants, facilitators, and speakers who perpetuate racism, anti-Blackness, colonialism, xenophobia, and other forms of racialized oppression.
  - iii. Publicly and comprehensively incorporate respect for disabled participants into event codes of conduct.
  - iv. Address correct gendering of others in codes of conduct.
  - v. Include systems of accountability if discrimination and lack of parity is found in meeting areas such as:

### RELATED RESOURCES

#### Codes of Conduct

- ➔ [AdvanceGEO guide to codes of conduct](#)
- ➔ [AGU Fall Meeting Code of Conduct](#)
- ➔ [Professional and Respectful Code of Conduct at AMS Meetings](#)
- ➔ [AAAS Code of Conduct](#)

- ▶ Speaker suggestions, selections, and payment
- ▶ Participant recruitment and representation
- ▶ Award nominations and selections
- ▶ Group events and field trips
- ▶ Involvement in post-meeting outputs

**(b) Adopt best practices for enforcement of anti-harassment policies.**

- i. Designate appropriately trained individuals to receive and review complaints, such as trained HR staff, DEIJA experts, tech support, etc. It might also be helpful for some of these experts to attend in-person meetings.
- ii. Establish and reiterate a zero-tolerance policy for all [harassment](#) to all participants, speakers, and facilitators, and outline clear consequences that will be enforced if this policy is broken.

### RELATED RESOURCES

Recognizing and responding to sexual harassment

- ➔ Brown University's Title IX Office: [Sexual Violence and Gender Based Harassment Incident Reporting Form](#)
- ➔ [Legalities of sexual harassment in the workplace](#)

- iii. Develop an enforcement mechanism to ensure that the consequences of breaking a code of conduct are clear. For example, the Paleontological Society and Micropalaeontological Society use a [sanctions matrix](#) along with their codes of conduct.
- iv. Provide harassment training to conference planners and organizers so they can respond to any incidents promptly and effectively.

### RELATED RESOURCE

Harassment and bystander trainings

- ➔ [ADVANCEGeo workshop trainings](#)

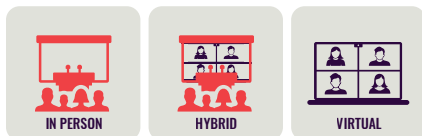
- (c) All participants, guests, and exhibitors should agree to comply with the code of conduct and enforcement mechanisms** during meeting registration. If a code of conduct is missing at an event, participants can ask organizers to implement one.

## 10. PROACTIVELY IMPLEMENT ACCESSIBILITY MEASURES



Plan conferences that are accessible for all attendees: participants, session presenters, poster presenters, keynote speakers, conference volunteers, conference planners, etc. Assume that some participants will have accessibility needs, even if they have not disclosed this information. Whenever possible, hire an accessibility planner (at or above market rate) to coordinate accessibility planning with all working groups.

(a) **Provide attendees with equitable access to information** shared through presentations and discussions.



- i. Provide presenter guidance on minimum font size for slides and posters, color-blind-friendly color recommendations for slides and figures, and ask that presenters prepare verbal descriptions of all visual materials (e.g., videos, images, important visual slide layouts, etc.).
- ii. Transcription, translation, and interpretation services allow for full participation.
  - ▶ Include options for virtual access to conference materials, when possible. Use platforms and websites that are compatible with assistive technology.
  - ▶ Live-caption videos and provide transcripts for presentation audio. Live captioners (as opposed to auto-generated captions) make content higher quality and more accessible.
  - ▶ [Communication Access Real-Time Translation](#) (CART) or ASL interpretation, closed loop hearing systems, or other accessibility options should be made available when requested.
  - ▶ Prepare accessible materials in advance for blind or low-vision attendees. For example, when information is shared as PDFs or infographics, provide a text-only version for low-vision participants; ensure that online content is accessible to screen readers, etc. This can also benefit individuals with dyslexia.

## RELATED RESOURCES

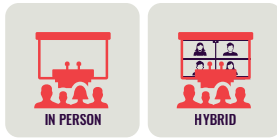
Guidance for creating accessible conferences

- ➔ [How to Make Your Presentations Accessible to All](#)
- ➔ Yale University's [Academic Poster Resources: Accessibility](#)
- ➔ University of Minnesota's [Accessible U: Slide Presentations](#)
- ➔ [How to Make Professional Conferences More Accessible for Disabled People: Guidance from Actual Disabled Scientists](#)
- ➔ [Accessible Conference Guide](#) (Trewin et al., 2019)
- ➔ [ADA: Meeting on a Level Playing Field](#)
- ➔ [Perkins School for the Blind: Make Your Meeting Accessible](#)
- ➔ [Rethinking inclusion and disability activism at academic conferences: strategies proposed by a PhD student with a physical disability](#) (De Picker 2018)

2. **Ensure that the meeting location and venue are inclusive, safe, and accessible** for all participants.

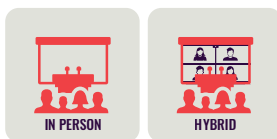
## Accessibility Checklist when Choosing a Meeting Venue and/or Platform

### 1) Venue



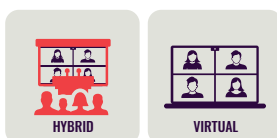
- ✓ All entrances, rooms, doorways, hallways, podiums, and platforms are accessible for people with reduced mobility and in wheelchairs, and the venue meets ADA accessibility standards. All buttons for automatic doors are functioning properly.
- ✓ Any aisles are kept clear.
- ✓ All rooms have accessible seating, space for wheelchairs, and seats accessible for people of different body sizes.
- ✓ All rooms are equipped with microphones and appropriate presentation technology.
- ✓ Gender-inclusive and wheelchair-accessible bathrooms are available and convenient.
- ✓ There are enough rooms to create designated prayer, quiet, and lactation rooms.
- ✓ The rooms are close enough that all participants, including those with reduced mobility, have sufficient time to transition between rooms.
- ✓ There is sufficient wifi bandwidth for video streaming, remote captioning, using screen readers, and fully including hybrid attendees.
- ✓ The dining staff are able to accommodate all requested dietary restrictions, if applicable.
- ✓ There are multiple styles of hotel accommodations (single & multiple occupant options) and wheelchair-accessible rooms, if applicable.
- ✓ Participants can identify what genders they feel comfortable rooming with, if applicable.

### 2) Multiple Venues



- ✓ Transportation is provided between venues and is accessible to people in wheelchairs.
- ✓ The path between venues has curb cuts and pedestrian signals with audio cues.
- ✓ The breaks between events are long enough that all participants, including those with reduced mobility, have sufficient time to transition between venues.

### 3) Platform



- ✓ The platform is accessible for the planned meeting duration and number of participants.
- ✓ Upon sign-in, participants can enter names and pronouns that are automatically displayed to others.
- ✓ The platform allows participants to turn on auto-generated captions and pin multiple screens (e.g., the keynote speaker and an ASL interpreter).

# DURING THE MEETING: INCLUSIVE FACILITATION AND CREATING SPACE

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 has a sense of belonging and can thrive in the space.
- ✓ Center human experiences and relationship building.

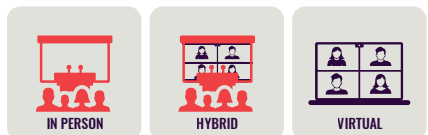
After careful planning, organizers are responsible for implementing a meeting in which attendees feel a sense of belonging and can thrive. While the planning process can lay the groundwork for an inclusive space, there are many actions organizers take during a meeting to realize their goals for equity and inclusion. Organizers must set the desired tone for the event from the outset, stay adaptive to meet attendee needs, and respond to feedback as quickly as possible to ensure a successful, innovative, and safe event.

Facilitation is often paramount to meeting goals for equity and inclusion. Whether in an in-person, hybrid, or virtual space, facilitators can greatly enhance attendees' experiences by balancing group power dynamics during discussions and adopting a human-centered program design. Facilitators ensure that meetings start, proceed, and end with a purpose and impact. Including facilitators in the planning of a workshop can ensure the event will flow as intended.



Participants themselves are also integral to an inclusive meeting environment. Participants have the power to break down exclusionary practices by socializing beyond their existing networks, creating balanced exchanges in dialogue (learning to “step up and step back” in discussions), being active learners, and adhering to codes of respectful and inclusive conduct.

## 1. INTRODUCTORY TALKS OR COMMENTS CAN TEE UP AWARENESS, DISPOSITIONS, AND SKILLS.



Introductory talks from meeting organizers are important for establishing a welcoming and inclusive environment from the outset of the meeting. Introductory talks can emphasize ground

rules, the formal Codes of Conduct, mechanisms for reporting violations, and expectations of respectful participation.

- (a) **Inclusive values.** Center belonging and inclusion at every stage of a meeting.
- i. Exclusionary culture and practices degrade the well-being of scientists from marginalized communities and result in the loss of innovation, creativity, and efficacy of science and science-informed solutions ([Marín-Spiotta et al., 2020](#)).
  - ii. Regardless of where individuals are in their careers, there is always more to learn—within discipline, across disciplines, and across research and practice. The meeting is a co-learning space.
  - iii. Participants should be able to request accessibility measures during registration and at a meeting with ease.
- (b) **Code of Conduct.** Verbally acknowledge and draw attention to the Code of Conduct. Attendees should have already agreed to honor the Code of Conduct (see [Planning](#) section). A copy of the Code of Conduct should be easily accessible, through a QR code in the agenda or a copy included in the meeting packet (whether printed or virtual).
- (c) **Group Agreements/Ground Rules.** In addition to a Code of Conduct, organizers and facilitators can establish group agreements. In larger meetings, co-organizers will likely set these in advance. In smaller meetings, it can be a unifying practice to facilitate collective agreement around them. Either way, they are important to emphasize at the meeting outset.



GROUP AGREEMENTS CAN HAVE GREAT VALUE  
IN DAILY PROFESSIONAL ACTIVITIES AND  
MEETINGS.

### RELATED RESOURCES

Examples of inclusive group agreements and/or ground rules

- ➔ Counter your affinity bias—leave your comfort zone and reach out to people.
- ➔ Alternate using your voice and making space for other voices.
- ➔ Give credit appropriately.
- ➔ Disagree respectfully and constructively.
- ➔ Use pronouns proactively.
- ➔ Practice self-care when needed.
- ➔ Listen to understand, not to respond.
- ➔ If you have concerns for yourself or others, talk to the organizers.



- (d) **Facilitation.** Introduce the meeting facilitator(s), and describe how facilitation will take place. Clearly note expectations around time constraints and discussion dynamics (see [Inclusive & Equitable Facilitation](#) section below for more).
- (e) **Meeting Outcomes.** Share upfront with participants what the intended outcomes and deliverables of the meeting will be, and how participants will have opportunities to contribute to those (see [Guidance for Meeting Deliverables](#) section below for more).
- (f) **Provide daily introductory remarks** to reinforce for participants how to engage in a respectful and inclusive way.

## 2. LAND AND LABOR ACKNOWLEDGMENTS CAN BE DELIVERED AS A PART OF BROADER EFFORTS TO DEVELOP AUTHENTIC RELATIONSHIPS WITH AND SUPPORT IMPACTED COMMUNITIES.



THIS APPLIES TO DAILY PROFESSIONAL ACTIVITIES AS WELL.

- (a) **Indigenous land acknowledgments** serve as a valuable reminder of not only historical contexts of land acquisition, but also the continued ways colonialism affects individuals and institutions. Land acknowledgments should not be performative or passive shows of activism but rather tied to broadened understanding and solutions ([Small 2020](#)). For in-person meetings, land acknowledgments can serve as an entrée to educate attendees about the nations attached to the land the meeting is taking place on and about the past and present methods preventing Indigenous people from acting on their sovereignty rights ([Daniel 2019](#)).
  - i. Explicitly encourage attendees to learn about and meaningfully contribute to the Indigenous communities local to them. This can include encouraging attendees to contribute to the local Indigenous people from their resources (money, time, academic and political power, and influence) ([Daniel 2019](#)).



LEARN ABOUT THE CULTURE AND HISTORY OF YOUR LOCAL INDIGENOUS COMMUNITIES, THEIR NEEDS AND INTERESTS, AND WAYS IN WHICH YOU COULD SUPPORT THEM.

- ii. Build relationships with local Indigenous communities. When appropriate:
  - ▶ Invite community members to speak about the relevance and importance of your event theme to their community ([Small 2020](#)).
  - ▶ Invite Indigenous scholars to present at your event and compensate them at or above market rate ([Small 2020](#)).

### RELATED RESOURCES

For additional information on land acknowledgments in academic and meeting contexts

- ➔ Native Governance Center: [A guide to Indigenous land acknowledgment](#)
- ➔ Native Land Digital: [Land and Treaty Information](#)
- ➔ Native Land Digital: [Territory Acknowledgement](#)
- ➔ [Why land acknowledgments aren't worth much \(opinion\)](#) (Small 2020)
- ➔ [2018 Keynote: Dr. Lori Patton Davis](#) (8:00 - 15:00), conference example

- (b) **Labor acknowledgments** can be given to recognize the impact and importance of how the unpaid, nonconsensual labor of enslaved people contributes to scientific efforts, your resources as an organization, and the resources of the meeting location. Meeting organizers are encouraged to create short-term and long-term plans for addressing racism and anti-Blackness at scientific meetings and broader fields.

### RELATED RESOURCES

Examples of labor acknowledgments in academic and meeting contexts

- ➔ Diverse Education: [On Labor Acknowledgements and Sacrifice of Black Americans](#) (Stewart 2021)
- ➔ Whitney McGuire [extended event labor acknowledgment](#)
- ➔ Reparation 4 Slavery [short labor acknowledgment](#)

- (c) **From acknowledgment to compensation.** Event organizers can include a budget line for a percentage of the cost to rent the event venue and donate it to Indigenous group(s) whose land the event is taking place on, or to groups that support formerly enslaved people(s).

### 3. INCLUSIVE AND EQUITABLE FACILITATION OF PRESENTATIONS AND DISCUSSIONS IS CRITICAL.



Trained facilitators can not only ensure that meetings achieve their desired outcomes, they also make sure that the process used to achieve those outcomes is collaborative and inclusive. A good facilitator designs an interactive meeting process, engages everyone in the room, facilitates meaningful interaction, honors the contributions of all participants, ensures that all meeting participants can do well in the space, and facilitates collaborative learning opportunities and relationship-building, regardless of the meeting format (i.e., in-person, remote, or hybrid). Facilitators can strategically break important content into shorter, bite-size pieces, summarize important points, and provide discussion prompts so that participants can engage and learn more meaningfully ([Seeds for Change 2009](#)).



PROFESSIONAL SOCIETIES CAN PROVIDE FACILITATION TRAININGS FOR MEMBERS.



FACILITATION RELIES ON PARTICIPANT COOPERATION.

- (a) **Make everyone welcome from the meeting outset.** Facilitators can make a meeting more inclusive and welcoming by addressing participants by their names as they enter a meeting.
- (b) **Disperse power in and beyond presentations.**
  - i. [Power dynamics](#) can manifest in meetings in a variety of ways.



How do people hold power and privilege in **virtual** meetings?

- 1) Access to fast internet, computer, camera
- 2) Privacy/designated work space
- 3) Navigating software and meeting platforms efficiently
- 4) Abilities: not many online platforms are designed with accessibility needs in mind
- 5) Seniority privilege: those who are in positions of power may feel more entitled to speak up and voice their opinions. ([Atewologun & Sealy, 2014](#))
- 6) Relational privilege: those who already know folks on the call may feel more comfortable speaking up and participating.



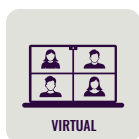
How do people hold power and privilege during **in-person** meetings?

- 1) Seniority and relational privilege are also applicable here.
- 2) Consider the accessibility of your venue, seating, and presentations, and how that affects privilege in the meeting context.
  - (a) Is your meeting space accessible for folks with reduced mobility (elevator/ramp access to the building), in wheelchairs (is the table an accessible height)?
  - (b) Are presentations accessible for those with low vision (do you have large print copies of presentation slides/handouts), with colorblindness (do your slides/handouts have sufficient color contrast)?
  - (c) Is seating comfortable for folks of different body sizes?

- ii. Ensure speakers adhere to time limits. When speakers push their time limits, it often comes at the expense of time allotted for subsequent speakers and discussions. “Those who speak have the power.”
  - ▶ A notable exception: time limits should be amended to accommodate those with disabilities, or when Indigenous elders and speakers from oral traditions are presenting.
- iii. Create a structure where everyone who presents will have the attention of others. This can be especially relevant for poster presentations, where meeting organizers can help to ensure an audience by arranging a scheduled poster walk-through.
- iv. Harness the power of side conversations. At in-person meetings, many ideas and collaborations are catalyzed in conversations that happen outside of formal meeting sessions—over meals, on field trips ([Greene et al., 2021](#)), during breaks, etc. Build in mechanisms through which participants can share these offline-generated ideas and opportunities with the broader group of attendees.



- v. Consider these points when virtual:



- ▶ Always start the meeting with introductions.
- ▶ Honor people's privacy (i.e., if you are recording a session, let folks know ahead of time).
- ▶ Safety mechanisms (i.e., if you feel unsafe or something negative happens during the meeting, establish mechanisms to report incidents). (See Step #11 below)
- ▶ Make sure key points are recorded in a shared document.
- ▶ Establish multiple ways for participants to express questions and concerns (i.e., type in the chat, unmute to speak, etc.).

### RELATED RESOURCES

Virtual considerations for inclusion

- ➔ Aspiration Tech: [Power Dynamics and Inclusion in Virtual Meetings](#) (Arellano 2020)

- vi. Consider the following points when in person:



- ▶ Set clear goals and meeting expectations.
- ▶ Establish multiple ways for participants to answer or ask questions (raising your hand to speak, writing a question on a notecard to be asked by the moderator, use an [interactive tool](#) to engage with your audience).
- ▶ Schedule additional opportunities for early stage scientists and/or underrepresented groups to network with each other.

(c) **Q&A sessions, group discussions, roundtables, consultation events.** Facilitators of Q&As and discussions play a critical role in making sure discussions aren't dominated by a small number of vocal participants (see [AAAS Moderator Guidance](#)). Ask: Who talks? In what order? For how long? Train moderators and facilitators to intentionally elicit multiple perspectives from multiple types of meeting participants.

- i. **Ordering questions equitably.** Be mindful of who is chosen to ask the first question, as this will set the stage for the discussion. Consider offering early career scientists the first opportunities to ask questions. Ensure protocols so that virtual participants in hybrid events are given equitable voice.



- ▶ When soliciting questions from participants in a hybrid event, consider having all participants ask questions in the same modality (i.e., all submit through an online form or chat). Read each question aloud before answering to make sure all participants can hear the question (e.g., avoid a situation where people in person are asking questions aloud but not into a microphone, making it hard for virtual attendees to hear the question).
- ii. Invite those who may not speak right away to share their views or ask questions.
- iii. Return time to people (especially women and BIPOC folks) who are interrupted.
- iv. Build out non-verbal ways to contribute to meeting discussions, particularly where there are strategic discussions (e.g., boards and committee meetings).



- ▶ Virtual tools have blossomed to make this possible across in-person, virtual, and hybrid meeting modalities.
- ▶ Create opportunities for attendees to reflect internally and share through interactive exercises.
- ▶ Consider using a text-based question submission platform for audience members to ask questions anonymously to be read by the moderator, in addition to (or instead of) traditional verbal question-asking. You may wish to let the audience upvote questions (e.g., [sli.do](#), Mentimeter).
- v. For in-person meetings, utilize microphones during Q&As, even when in relatively close proximity.



- vi. Consider using tools such as those in the Talk Science Primer ([Michaels & O'Connor 2012](#), p.11; also see [Gee & Gee 2007](#)) that have been shown to expand equitable participation in science learning environments.

**(d) Create shared language.**

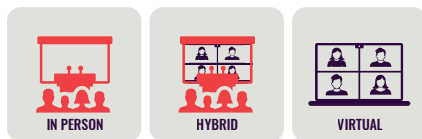
- i. Encourage speakers and participants to minimize jargon as much as possible. Even when attendees hail from similar disciplines, understanding of jargon and acronyms varies by career stage, geography, and language.
- ii. Have a visible board where terms, acronyms, etc. can be added in real time by the facilitator/moderator, and ask speakers to define them up there.

- (e) **Asynchronous participation** can benefit those with disabilities, with caretaking responsibilities, from incompatible time zones, who are linguistically diverse, who have limited resources, and myriad other personal or professional reasons. When creating an equitable space for sharing asynchronous feedback and/or making decisions, consider:



- i. Prior to the meeting, collect feedback and ideas from those who cannot attend the meeting.
- ii. Prior to the meeting, develop a list of questions to share with the group ahead of time. For example, creating a shared Google Jamboard or Miro board can build collaboration, critical thinking, and creativity. Collaboration boards can be viewed and updated by participants who are both present and not present.
- iii. Give participants that aren't able to attend ample time to review shared notes and make comments. Decision-making and contributions to strategic discussions (e.g. roundtables/consultation events) can include asynchronous contributions (via Miro, Jamboard or survey).
- iv. Record notes in various ways to continue participation and discussion later (i.e., record via Zoom (if virtual), create a shared google document, hand out additional resources to learn more).

## 4. AGENDA PACING IS KEY.



Facilitators need to think about timing and intensity, content, and engagement in a meeting.

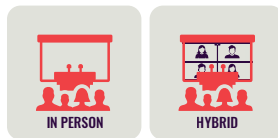
Although face-to-face meetings can run all day, virtual meetings can be tiring more quickly, so virtual or hybrid meetings need to be shorter.

- (a) **Stay responsive to participant needs.** The [Planning Section](#) reviews the importance of setting a human-centered agenda that employs a variety of session structures and activities, balancing between presentations and engagement. During the meeting itself, facilitators and organizers should stay attuned to what activities are most engaging to participants and what approaches are most effective for eliciting a diversity of contributions.

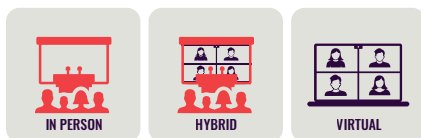
- (b) **Breaks, breaks, breaks.** Build in enough breaks during virtual and in-person meetings. Meeting fatigue is real, especially in [virtual meetings](#).



- i. As a rule of thumb, if a meeting lasts for 1–1.5 hours, no break is necessary, though creating a time to stretch or change positions can reinvigorate engagement. For a meeting that lasts 2–2.5 hours, a break for at least 10 minutes should be scheduled. Set aside at least 15 minutes in break time for a meeting that lasts three hours.
- ii. For a virtual meeting that requires more than three hours, facilitators should consider hosting the meeting over a period of two days, including formal breaks as well as natural pauses after delivery of content.
- iii. Scheduling [designated breaks](#) allows for participants, moderators, and facilitators to:
  - ▶ Engage better and focus during the meetings
  - ▶ Recharge and de-stress
  - ▶ Take breaks for breastfeeding or other personal needs
  - ▶ Increase the level of productivity
  - ▶ **Provide enough time and space** for the group to discuss, ask questions, and make decisions along the way.
  - ▶ For in-person conferences that have a high number of international participants, think about jet lag and find ways for them to be fully present. This may include building in additional breaks, especially on the first day after travel.



## 5. LEAD ACTIVITIES TO HELP PARTICIPANTS CONNECT.



Meetings are where professional connections are made and working relationships built — everyone should be included in this exchange. Informal times to network are important for idea generation and career advancement, especially for early career participants and scientists from marginalized communities ([Xu & Martin 2011](#)).





## PROFESSIONAL SOCIETIES CAN LEAD ACTIVITIES TO BUILD COHESION AMONG EXISTING AND PROSPECTIVE MEMBERS, AND SET GOOD INCLUSIVE PRACTICES FOR COMMUNITIES TO FOLLOW.

- (a) **Put thought into introduction activities.** Instead of asking participants for name and title (which can play into and exacerbate power dynamics), ask for name and how they would like to be referred to. This can provide an opportunity for participants to share nicknames or pronouns if desired. Other options include asking for “an insight into what grounds somebody in their work,” or “something interesting about me you couldn’t tell from just looking at me.” Another approach can be speed connecting exercises (goal: get participants to talk to one another).
- (b) **Provide group meals or tea times** (with options that [accommodate dietary restrictions](#)).
- (c) **Plan affordable, accessible, safe group outings or field trips.** Provide an array of group activities with appeal to diverse interests, including options sans alcohol. Ideally these group events can be inclusive of participants’ families or planned at times that don’t overlap with caretaker “pinch points” (such as morning and bedtime routines).
  - i. A note about at Happy Hours: while events that include alcohol are common ways of attracting participation in formal or informal sessions, they are problematic and exclusionary for many (e.g., those who are sober, do not drink for religious reasons, are pregnant, are on certain medications), and they can be venues for increased harassment. ([Greene et al., 2021](#))

### RELATED RESOURCES

Considerations for planning safe field trips and offsite engagements

- ➔ Safety and Belonging in the Field: A Checklist for Educators (Greene et al., 2021)
- ➔ [Black girls speak STEM: Counterstories of informal and formal learning experiences](#) (King & Pringle, 2019)
- ➔ Ten steps to protect BIPOC scholars in the field (Anadu et al. 2020)
- ➔ [Safe fieldwork strategies for at-risk individuals, their supervisors and institutions](#) (Demery & Pipkin, 2020)

- (d) **Provide career development/mentorship opportunities** for specific groups (i.e., early career scientists, underrepresented groups, etc.). Encourage workshop participants to explore opportunities for post-workshop mentorships with those they met in the workshop.

## RELATED RESOURCES

STEM mentorship examples

- ➔ [Collaboration with AAAS Sea Change](#)
- ➔ [Mentoring Physical Oceanography Women to Increase Retention](#) (MPOWIR)
- ➔ [Climate Linked Atlantic Sector Science](#) (CLASS)
- ➔ [Science, Technology, Engineering and Math Student Experiences Aboard Ships](#) (STEMSEAS)
- ➔ [Inclusive Graduate Education Network](#) (IGEN)

- (e) **Offer opportunities to learn about diversity, equity, and inclusion** as they relate to the meeting topic and stakeholders.

## 6. DEVELOP AND SHARE CLEAR GUIDANCE FOR MEETING DELIVERABLES.



Meeting organizers should be candid about meeting outputs, including criteria for authorship, roles, responsibilities, and target audiences ([Frassl et al. 2018](#)).



THOSE WHO FUND MEETINGS CAN ASK FOR MECHANISMS FOR INCLUDING PARTICIPANTS IN POST-MEETING DELIVERABLES IN PROPOSALS AND REPORTING.

- (a) **Announce meeting output and deliverables** at or before the beginning of the workshop, if known. Give clear expectations (if known) for each task/contribution.
- (b) **Consider non-traditional meeting outputs.** In addition to sharing findings with scientific colleagues through academic papers and reports, what other outputs are needed by stakeholders and/or impacted communities? What strategies can be used to co-develop deliverables with those communities?
- (c) **Allow ample time for participants to volunteer** contributions to outputs (not “spur of the moment” commitments). Quiet or less-confident voices may be more likely to volunteer in lower-pressure settings (e.g., circulate a sign-up survey).

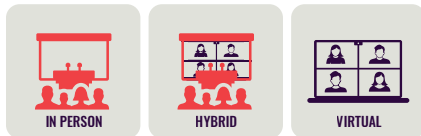
(d) **Employ best practices for responsible and ethical research.**

### RELATED RESOURCES

Employ ethical & responsible research practices during meeting output development

- ➔ National Science Foundation [Responsible and Ethical Conduct of Research](#)
- ➔ San Francisco Declaration on Research Assessment
- ➔ UK Research Concordats & Agreements
- ➔ AGU Scientific Integrity and Professional Ethics
- ➔ The Oceanography Society
- ➔ The Climate and Traditional Knowledges Working Group: [Guidelines for Considering Traditional Knowledges in Climate Change Initiatives](#)
- ➔ American Anthropological Association: [Principles of Professional Responsibility](#)
- ➔ Southwest Network for Environmental and Economic Justice (SNEEJ): [Jemez Principles for Democratic Organizing](#)

## 7. COLLECT CONSTRUCTIVE FEEDBACK FROM PARTICIPANTS.



- (a) Evaluate meeting goals to advance diversity, equity, inclusion, and justice from the start to the end of the workshop process (see [Assessment](#) section).
- (b) Ensure that feedback is incorporated into planning the next event and taken on board by organizers, even if it is hard to hear.



THOSE WHO FUND EVENTS CAN REQUIRE GRANTEES TO INCLUDE EVALUATION OF DEIJA GOALS IN REPORTING REQUIREMENTS.

## ASSESSMENT

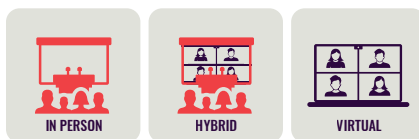
A critical component in ensuring that scientific spaces and meetings are truly inclusive, equitable, and accessible to all is to hold ourselves accountable and assess how well we did at all stages of the meeting (before, during, and after).

Proper evaluation and assessment should be incorporated in any event or meeting and does not have to be extensive or costly. It should be conducted in good faith and with the intent to learn and improve practices for future events. Assessments should be culturally appropriate and follow recommended practices and examples provided in this Guide.

## GOALS

- Make any assessment and evaluation efforts culturally sensitive and appropriate.
- Assess whether DEIJA goals were met during the meeting.
- Assess ways in which a meeting cultivated a culture of collaboration.
- Identify and share what worked well and where things fell short.
- Make changes during the ongoing meeting and at future events based on assessment results.
- Share results with all interested parties and be transparent about efforts, shortfalls, and lessons learned.

## IN PRACTICE



### Before the meeting

- (a) Set measurable DEIJA goals that are specific to your event or meeting such as:
  - i. Representation of different identities, career stages, or institutional affiliations in different sessions
  - ii. Quantity and quality of interactions in sessions (who speaks?)
  - iii. Feelings of safety or belonging at the event
  - iv. Effective reporting structures to address any concerns
- (b) Establish pre- and post-survey questions to assess DEIJA goals. Use culturally appropriate assessment methods and actionable questions that will help the organizers improve future events.
  - i. Understand and control for bias (including confirmation, sampling, and social desirability biases).
  - ii. Use well-designed surveys.
    - A. How to decrease bias and increase clarity in survey questions ([Sufi et al., 2018](#)).
- (c) Identify who will conduct the assessment and with what tools. If results are to be published, seek Institutional Review Board (IRB) approval.

## FORMATIVE AND SUMMATIVE EVALUATION

**Formative evaluation** is typically conducted during the development or improvement of a program, meeting, or event.

**Summative evaluation** involves making judgments about the efficacy of a program, meeting, or event at its conclusion.

### During the meeting

- (a) Conduct surveys as agreed in the planning stage. Larger events might have pre-meeting and post-meeting surveys as well as short daily surveys (formative evaluation) to help address any ongoing concerns and capture views reactively. Make sure surveys are accessible to everyone, and build in enough time for people to complete them. Don't assume everyone has time in the evenings after a meeting to fill out a survey!
- (b) Consider collecting data on participant engagement (e.g., who asks questions ([Davenport et al., 2014](#)), how often do different people speak, how well did session chairs facilitate engagement with all attendees for inclusive participation).
- (c) Respond to issues identified through daily surveys/feedback (formative evaluation) as soon as they are flagged. Addressing issues during the meeting can help protect the positive environment you've worked to create and mitigate harm experienced by participants. If there is a problem, act!
- (d) To maximize survey completion, consider building in time at the end of the meeting for participants to take post-surveys before they leave.

### After the meeting

- (a) Conduct any post-surveys and analyze all survey data (summative assessment). Questions to include:
  - i. Which DEIJA goals were met? Which goals were not met?
  - ii. What worked well from the organizers' perspective? What fell short?
  - iii. What did and did not work from participant perspectives?
  - iv. Do participants have suggestions for improvement?
- (b) Articulate issues to be addressed at future meetings and what will be done differently. For example, if a specific demographic was missing at the meeting, ask why and what will be done to address that omission in the future. Also note who (i.e., which demographic group(s)) attends once and does not come back for future meetings.

- (c) Share assessments with all interested parties, including organizers, attendees, those who have funded events, and leadership. Disseminate findings in publications, if desired, and share publicly, if possible. Provide a summary of what the organizers/evaluators learned, followed by a concrete set of next steps or what they will do based on what they learned.

### **ADDITIONAL ASSESSMENT RESOURCES**

- ➔ [Ten simple rules for measuring the impact of workshops](#) (Sufi et al., 2018)
- ➔ American Association for Public Opinion Research: [Best Practices for Survey Research](#)
- ➔ Get Feedback: [The Ultimate Guide to Conference and Event Surveys](#)
- ➔ MeetingPlay: [17 Questions to Ask in Your Virtual Post-Event Survey](#)
- ➔ American Evaluation Association: [Cultural Competence in Evaluation](#)

# TEN SIMPLE RULES FOR MEASURING THE IMPACT OF WORKSHOPS

Source: [Sufi et al., 2018](#)

See guide for discussion around each step.

- 1) Set effective goals
- 2) Balance time, effort, and costs
- 3) Create metrics purposefully
- 4) Understand and control for bias
  - a. Including confirmation, sampling, and social desirability biases
- 5) Use well-designed surveys
  - a. [How to decrease bias and increase clarity in survey questions.](#)
- 6) Ask about participants' "confidence"
  - a. Recognize a decrease in confidence does not mean a failure to learn; as participants learn what they do not know, they may become less confident even as their knowledge is increasing
- 7) Ask about specific skills
- 8) Gather feedback before, during, and after
  - a. **Before (at registration):** demographic data, learning expectations, what they hope to discuss during the workshop, and what their (perceived) existing competencies are in the subject
  - b. **During (if a multi-day event):** progress toward objectives, how the conference is going
  - c. **At the end (last session):** goals, how they want to use what they have learned, how they would like to change some aspects of their current practice as a consequence of attending the workshop, create an action plan
  - d. **After:** feedback, achievement of learning goals
  - e. **Much after (4–6 months):** impact of the workshop, what the participants learned at the workshop, how they have applied this knowledge to their work, what impact the knowledge and network has had on their working life and practices
- 9) Harness gamification to test participants' skills
  - a. "Asking the participants to play a game alleviates the features of standardized-testing environments that can cause anxiety. Games can show whether they have understood core concepts
- 10) Measuring those who did not attend
  - a. Track referrals to future conferences
  - b. Track use of conference hashtags
  - c. Track citations for conference papers

# SUGGESTED QUESTIONS FOR ASSESSING INCLUSIVITY OF YOUR CONFERENCE/EVENT

Source: Adapted from [AJ Lauer, 2020](#)

Below is a list of suggested questions for assessing how inclusive your conference or event is. They cover a range of qualities of an inclusive conference, from safety to belonging, and are designed to provide conference committees with information that can be implemented for future events. For example, if scores are low for how welcoming the conference is to people with disabilities, make an effort to address accessibility at future events. Or, if responses indicate that the ethics policy is unclear or unavailable, make certain to publicize or clarify the policy in future years.

- 1) Please rate how welcoming [conference] is for [a list of identities based on the demographics collected in the survey (e.g., white women, white men, women of color, men of color, people with disabilities, international attendees, caregivers, lgbtqia+, etc.)]: (not welcoming, somewhat welcoming, welcoming, very welcoming, don't know)
- 2) Please rate the extent to which you agree or disagree with the following statements about [conference] : (strongly disagree, disagree, somewhat disagree, somewhat agree, agree, strongly agree, don't know)
  - a. Diversity and inclusion is a core value of [conference].
  - b. [Conference] provides a clear policy on ethics and expected behavior.
  - c. [Conference] provides effective response to reports of discrimination and exclusionary behavior.
  - d. [Conference] helps attendees of different cultures and backgrounds to interact.
  - e. [Conference] solicits and values new ideas from all attendees.
  - f. I am comfortable bringing up issues at [conference] without fear that it will negatively affect my career.
  - g. I feel a connection to [conference].
  - h. All attendees at [conference] are held to the same standards of behavior.
  - i. Attendees at [conference] have an equal opportunity to participate in career-advancing activities such as presenting talks/posters, attending networking events, etc.
- 3) How likely are you, if at all, to recommend attending [conference] to a friend who asks? (very unlikely, somewhat unlikely, neutral, somewhat likely, very likely)



# ACKNOWLEDGMENTS

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