Genetics Society

Vision for Inclusive Conferences

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The GSA Equity & Inclusion Committee Genetics Society of America Equity and Inclusion Committee v1.1, January 2023 Andrew Arsham S

Jessica Aguilar C. Eduardo Guerra Amorim Olumuyiwa Igbalajobi Stephen Klusza Brianah McCoy Rebecca Tarvin Sarah Bay Anna Allen Matthew Hahn Aimee Jaramillo-Lambert Lesley MacNeil Alana O'Reilly Quan Yuan

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Goals of This Document

To provide guidance to governing bodies on:

- Choosing an organizing committee and (co-)chair(s)
- Encouraging and supporting organizers' equity and inclusion goals
- Adequately preparing organizers for the work ahead

To provide guidance to organizing committees on:

- Setting the scientific program (to include DEI/philosophy of science/future of genetics)
 - ---- Choosing an inclusive slate of invited/keynote/plenary speakers
 - --- Choosing an inclusive group of session chairs
 - → Planning DEI scholarship sessions that do not compete with scientific sessions
- Practicing inclusion throughout all aspects of the meeting

This document will not address conference site selection (including physical site accessibility), fee structure/principles, overall logistics, abstract submission mechanics, or registration mechanics as they are out of scope and remain the responsibility of other groups (conference staff, Conference Committee, and Finance Committee).

This document has been prepared by GSA's Equity and Inclusion Committee, which comprises members of GSA scientific communities supported by staff. **It should serve to normalize and cultivate inclusion across all GSA conferences and to provide a foundational level of information from which to work.** It will be updated to grow and change alongside us.

Background and Rationale

We seek to create an affirmative vision for GSA conferences in which equity, accessibility, and inclusion are foregrounded at each step of planning alongside scientific content, education, and professional development. Just as we consider the budget impact of various decisions, we should also consider inclusion: What people or groups do specific policies or decisions exclude? Have we done everything we can to increase access? Are there places we can do more? What kind of environment and culture are we creating?

Since inclusion is often grouped with diversity, equity, and accessibility, we've provided these short definitions:

- Diversity refers to the composition of a group of people and means the group is non-homogenous—all members do not have the same identity or same background. Diversity comprises race, ethnicity, gender, sexual orientation, socioeconomic status, disability status, religion, language, etc. For scientific conferences, it also includes institution type, organism of study, field of study, career stage, geography, etc.
- Equity means providing support with the goal of leveling the playing field. Equity is not the same thing as equality, though sometimes the terms are used interchangeably. In an equitable situation, individuals from various backgrounds are provided the tools to succeed in a way that is specific to their needs.
- Inclusion means ensuring that all individuals, regardless of background or identity, are actively welcomed, and perceive a sense of belonging in a given environment. Inclusion is the necessary partner to diversity.
- Accessibility is the practice of ensuring that all individuals have equal access to information, activities, and environments, regardless of differences in age, ability, culture, socioeconomic status, physical attributes, or other characteristics. Ensuring accessibility promotes inclusion.

"What people or groups do specific policies or decisions exclude? Have we done everything we can to increase access? Are there places we can do more? What kind of environment and culture are we creating?"

Choosing Organizing Committee Chairs

Conferences are one of the defining activities of scientific communities; if equity and inclusion are among the long-term goals of the community, they should be intentionally and specifically integrated into the conference planning process, which begins with organizer selection. Historically, this process has been opaque, inconsistent, and prone to bias. The GSA Equity and Inclusion Committee supports governing bodies in reimagining these processes and is happy to share resources, aid in drafting new materials, and participate in whatever manner is most useful.

Organizing committees and invited speakers should represent the broad scope of research and education activities of the community and should actively work to expand our understanding of merit to include geneticists working at minority-serving and non-research-intensive institutions. How can we learn from our colleagues who do not necessarily fit the traditional profile of invited speaker or session chair? How can we shift that definition to include broader work (work done outside of high-profile, traditionally "productive" research labs) and to support more scientists in more places (both geographically and at non-R1 institutions, PUIs, MSIs, HBCUs, TCUs, community colleges, etc.).

To continue GSA's progress towards the shared goal of inclusive science, governing bodies are encouraged to:

- Select organizing committees of at least four people (including a chair) so that more points of view can contribute to the vision for conferences
- Select the entire conference organizing committee as a group rather than appointing a chair who then selects the rest of the committee; alternatively, governing bodies could work with the chosen chair to designate the rest of the committee
- Select a broadly representative committee by considering inclusion in the selection process
- Consider including conference organizer succession planning in the process (how is information collected/stored/turned over to the next group, etc.)
- Explicitly assign one or more organizers to the role of equity lead—to focus attention on inclusion throughout the process—while being mindful of tokenizing or "minority taxing" members of underrepresented groups
- Invite an early career scientist to join the organizing team
- Set the expectation that all conference organizers should have received some level of DEIrelated training (whether through their institution or otherwise)
- Provide additional equity and inclusion training
 - → GSA now has an ongoing arrangement with Shari Dunn, CEO of <u>ITBOM™ Training</u> and <u>Consulting</u>, providing access to e-learning modules on diversity and inclusion for conference organizers

Governing bodies might also consider the benefits of implementing a transparent and wellpublicized nomination process that would:

- Create a diverse pool of current and future organizers, including many who have the skills and interest but might not be as well known to the community;
- Identify early career scientists eager to bring fresh energy to the conference planning process, as well as scientists from minority-serving institutions;
- Solicit brief statements from nominees about their goals for the conference to add substance to the selection process;
- Facilitate clear, transparent, inclusive, and well-documented conference planning;
- Pay dividends in other leadership areas since this nomination process would identify a wide variety of potential organizational leaders.

We also recommend that organizing committees complete a short write-up at the conclusion of their conferences to highlight what worked and what didn't from these guidelines and from the approach they took. This will help create accountability and continuity from one group to the next and will allow for updating the information in this document.



INTENTIONALITY

To best cultivate an inclusive environment at GSA conferences, all parties responsible for planning and programming those conferences must work together to communicate, to be intentional, to be open, to educate themselves, and to prepare.

Choosing Invited/Keynote/Plenary Speakers

- All speakers must abide by the GSA Conferences <u>Code of Conduct</u>; we encourage selection of researchers whose actions, behaviors, and reputation are in line with the values of GSA as expressed in the CoC
- Organizers can consider asking for nominations for keynote or plenary speakers in different content areas or topics
- Because creative and meritorious research, teaching, and mentorship occur at all institution types and locations by scientists at all career stages, invited speakers should be selected from a diverse pool of candidates broadly representative of the GSA community with respect to seniority, disability, gender, race/ethnicity, institution type, geography, nationality, area of study, etc.
- Organizers should create a diverse list first, then discuss specifics
- Organizers should try to ensure that at least half of the plenary slots are made up of people who have not given one in the prior two or three meetings
- Organizers can consult <u>referral lists</u>, when available, to broaden the pool of scientists considered beyond the organizers' own network

Choosing Session Chairs

- Organizers should prioritize identifying and including session chairs from non-research intensive and minority-serving institutions—not only R1 scientists
- For sessions with two or more chairs, at least one chair should be a first-timer and/or early career scientist
- Organizers should include training/resources for all session chairs on:
 - --- General responsibilities and how-tos
 - --- Correct name pronunciation (<u>namedrop.io</u> is a useful tool) and pronoun usage
 - ---> Facilitating inclusive discussion
 - --- Enforcing time limits
- If session content is selected by the session chairs, they should refer to the above section for guidance on an inclusive selection process
- Organizers might consider a variety of mechanisms to prioritize questions from early career scientists, including verbal prompts and use of online and/or anonymous formats, even for in-person attendees

Background and Rationale

In line with a public commitment made in 2020, **all GSA conferences must include DEI scholarship programming in a non-concurrent session**. Placing DEI programming in a noncompeting time slot serves two purposes: 1) attendees do not have to choose between DEI topics and a scientific talk; 2) it is a signal that these topics are foundational to doing good science and thus are central to any scientific conference. Diversity, equity, and inclusion work must become as foundational to the practice of science as doing experiments and writing papers and should be featured whenever scientists gather to share their work. Our goal is to ensure that scholars and practitioners in the area of equity and inclusion are featured in a plenary session at each of our conferences. DEI scholarship sessions are intended to highlight and share emerging theory and practice that creates a more inclusive scientific enterprise—not to specifically recruit speakers from diverse backgrounds.

Once a Session Chair (or other person responsible for the DEI session(s)) is appointed by the organizers, the E&I Committee can work with that person to assemble the programming. Potential activities to facilitate programming include: identifying and inviting speakers; soliciting abstracts (from within and potentially outside of the community); planning a workshop, plenary, or other type of session; assigning abstracts to oral or poster presentations.

Approaches to Programming

Organizers should first decide on the **number** and **type** of DEI sessions. If organizers choose to program more than one DEI-focused event at a single conference, only one needs to be in a non-competing time slot.

In an ideal future, conferences will receive abstracts designated for a DEI session, and organizers can program a session from submitted abstracts. However, most DEI practitioners do not submit abstracts to science conferences, and most scientists do not submit abstracts about their DEI-related work to scientific conferences. Therefore, robust multi-channel communication from organizers is critical to ensure a strong pool of DEI abstracts. Organizers, DEI leads, DEI session chairs, GSA staff, and the GSA DEI committee should work together from the earliest stages of planning to optimize communication around DEI sessions using e-mail blasts, social media posts, and personal networks.

Possible approaches to programming include:

- Dedicated all-conference DEI sessions with invited speakers
 - The potential exists for tokenization of minoritized speakers and for a siloed/insular group of "usual suspects." But a wide range of high-profile educators, administrators, program officers, directors of graduate and undergraduate studies are often excited to speak to practicing scientists about their work.
- Dedicated all-conference sessions selected from submitted abstracts
 - Abstract-driven sessions help send the message that building an inclusive scientific community future is everyone's responsibility.
 - Scientists implementing DEI efforts alongside their research may not consider themselves DEI experts or scholars, so organizers are encouraged to experiment with wellunderstood terms like "broader impacts," "inclusive mentorship," "training outcomes," etc. in their communications. Some conferences may find it useful to group Educational and Equity Initiatives under the same abstract category to help encourage submissions.
 - Organizers could consider encouraging people to include broader impacts as part of their science talks.
 - → To expand the pool of abstracts with DEI content, organizers/GSA staff could include a DEI checkbox for scientific or educational abstracts that model inclusion.
 - Organizers could consider including DEI speakers alongside scientific content in allconference sessions.
- Concurrent sessions from submitted abstracts (if a non-competing session is also programmed)
- Workshops or panel discussions
 - Workshops or panel discussions promote interaction, sharing of effective practices, and community building. Organizers could consider inviting workshop proposals alongside abstracts. Such a session could include short presentations, discussion prompts, and deliverables. Potential topics include:
 - » DEIA 101: An introduction to diversity, equity, inclusion, and accessibility concepts
 - » Inclusive mentoring practices
 - » Inclusive lab management practices
 - » Recruiting and supporting students from diverse and/or minoritized backgrounds
 - » Building a diverse, inclusive lab environment
 - » Preparing students from PUIs/MSIs for grad school
 - » Bystander training/how to intervene to promote equity
 - » Interrogating the racist and eugenecist history of genetics

No matter the approach, speakers from outside the community itself should be considered. There are a few practical considerations at play for outside speakers:

- Speakers who have no other investment/interest in the meeting may not want to pay abstract, registration, and travel fees just to speak.
- Requiring speakers to pay for registration and travel can also exclude individuals with caregiving responsibilities, disabilities, and financial barriers.
- Organizers should discuss with GSA conference staff how to address barriers to invited speakers.
 - --- In the past, GSA has waived abstract fees for DEI sessions.
 - → Other possible solutions include complimentary registrations to invited speakers from outside the community, virtual/remote participation of outside speakers without conference registration, special consideration for travel awards, and/or establishing a fund or sponsorship for DEI speakers.

Practicing Inclusion Throughout All Aspects of the Meeting

True inclusion cannot be achieved without a variety of efforts working together toward a common goal. Expanding diversity and representation in leadership and highlighted speaking positions is important, but it must be backed by a culture of inclusion. Here are a few items to consider:

- Unfortunately, there is a long-standing history of harassment in academia and at conferences. The culture built at each conference can either deter harassment or allow it, so organizers should take care to purposefully build a safe environment and to communicate safeguards effectively.
 - → GSA Code of Conduct

 - ---- Anti-Harassment Policy for AAS & Division Meetings & Activities
- The wide availability of alcohol at scientific meetings has become a topic of discussion as alcohol can contribute to an unsafe environment. Organizers should consider suggestions to de-emphasize alcohol's role in scientific conferences. (See <u>here</u> for more information.)
 - → "Because conferences are both professional and social events, organizers must determine where to draw the line with alcohol availability. Several of those surveyed suggested that conference organizers could put less emphasis on alcohol-related events and implement measures to prevent attendees from engaging in inappropriate behavior. For instance, organizers could limit drink tickets to one or two per person per event and not offer a cash bar or 'bring-your-own' policy. Respondents also noted that more non-alcoholic options should be available for attendees."
- Practicing <u>inclusive language</u> in all conference communications, including email, social media, posted signage, and public comments, is a small effort that makes a large difference.
- Online and hybrid options are a powerful tool for inclusion and should be used to create new opportunities for meaningful participation by more community members.
- Organizers should consider ways to encourage senior attendees to make space for more junior scientists to ask questions and to be actively welcoming toward them.
- While conference site accessibility is outside the scope of organizer responsibility, there are ways to increase accessibility within the conference itself. For example, organizers could consider providing requirements for figure accessibility in presentations and posters to make them visually accessible to all. Conference staff will attend to things like the availability of accessible seating, the presence of closed captioning where possible, etc., but organizers can and should take an interest in these topics. See the **Resources** section for more information.

Resources

Reading List and Tools

ADVANCEGeo Partnership Community Resources. https://serc.carleton.edu/advancegeo/resources/index.html

Bar-Ziv, R., Coleman, F., Donovan, E.J., Evans C.S., Ko'omoa-Lange, D.L., M. Martínez-Montemayor, M.M. Toward a More Inclusive Conference: A Practical Guide for Trainees, Mentors, and Program Organizers. American Society for Cell Biology Career Navigator. 20 October 2021. https://www.ascb.org/publications-columns/career-navigator/toward-a-more-inclusive-conference-a-practical-guide-for-trainees-mentors-and-program-organizers/

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Pendergrass, A., Zelikova, J., Arnott, J., Bain, H., Barnes, R., Baron, J., Dutt, K., Gay-Antaki, M., Haacker, R., Jack-Scott, E., Lauer, A.J., Morris, A., Morrison, D., Nunez, A.-M., Steltzer, H., Thompson, L. Inclusive Scientific Meetings: Where to Start. Office of Academic Affairs & Diversity at Lamont-Doherty Earth Observatory (LDEO), Columbia University in the City of New York. March 2019.

https://diversity.ldeo.columbia.edu/sites/default/files/content/AGCI%20NCAR%20Inclusive%20 Meeting%20Guide.pdf Sarabipour, S., Khan, A., Seah, Y.F.S., Mwakilili, A.D., Mumoki, F.N., Pablo J. Sáez, P.J., Schwessinger, B., Debat, H.J., Mestrovic, T. Changing scientific meetings for the better. Nat Hum Behav 5, 296–300. 15 March 2021. https://doi.org/10.1038/s41562-021-01067-y

- Sarabipour, S., Schwessinger, B., Mumoki, F.N., Mwakilili, A.D., Khan, A., Debat, H.J., Sáez, P.J., Seah, S., Mestrovic, T. Evaluating features of scientific conferences: A call for improvements. bioRxiv 2020.04.02.022079. 18 January 2021. https://doi.org/10.1101/2020.04.02.022079
- Dey, G. Scientific conference reform: scientists respond to Sarabipour et al. 2020. The Node. 28 April 2020. <u>https://thenode.biologists.com/scientific-conference-reform-scientists-respond-to-sarabipour-et-al-2020/education/</u>
- Dey, G. The scientific conference is failing. Let's replace it with something better. preLights. 28 April 2020. <u>https://doi.org/10.1242/prelights.19630</u>

Referral List Examples

500 Queer Scientists https://500queerscientists.com/

500 Women Scientists https://500womenscientists.org/ #BlackInGenetics https://www.blackingenetics.com/

Diversify EEB https://diversifyeeb.com/

American Society for Cell Biology https://www.ascb.org/career-development/ speaker-referral-lists/ Diversify Plant Sci https://rdale1.shinyapps.io/diversifyplantsci/

Accessibility Guidance For Visual Media

Buckland, K. Accessibility in PowerPoint: Presentations and dyslexia. BrightCarbon. 9 August 2017.

https://www.brightcarbon.com/blog/powerpoint-presentations-and-dyslexia/

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Crameri, F., Shephard, G.E. & Heron, P.J. The misuse of colour in science communication. Nat Commun 11, 5444. 28 October 2020. <u>https://doi.org/10.1038/s41467-020-19160-7</u> Summerbell, E. How to make scientific figures accessible to readers with color-blindness. American Society for Cell Biology. 6 September 2019.

https://www.ascb.org/science-news/how-to-make-scientific-figures-accessible-to-readers-withcolor-blindness/

Previous GSA Conference DEI Programming

- TAGC20 Diversity, Equity, and Inclusion Session
 - → Session Chair: Nadia Singh, University of Oregon
 - Inclusive PhD admissions: An evidence-based self-education process for faculty, staff and trainees. Scott Barolo, University of Michigan Medical School
 - → The Diversity Preview Weekend: A graduate student-led initiative to promote diversity, equity and inclusion in higher education. Andrea Darby, Cornell University
 - Bridging Worlds for Diversity and Inclusion: Social Science with Biology Education Research Through the iEMBER Network. Gary McDowell, Lightoller LLC
 - Inclusion of cultural dietary practices in genetics research diversifies the scientific workforce and addresses health disparities. Jennifer Alexander, Fox Chase Cancer Center
 - → For Us, By Us, but Not All of Us: building our own Indigenous biobank as a better way to ensure research equity. Krystal Tsosie, Native BioData Consortium
- Dros21 Equity and Inclusion Plenary Session
 - Session Chairs: Nadia Singh, University of Oregon Michelle Arbeitman, Florida State University
 - → <u>Kids Conquering Cancer: Celebrating culture to reduce health disparities</u>. Alana O'Reilly, Fox Chase Cancer Center
 - --- Managerial Engagement to Promote DEI in STEM. Mala Htun, University New Mexico
 - ---- Two Decades of Diversity Recruiting: Lessons Learned. Nancy Street, UT Southwestern
 - NIH Efforts to Cultivate and Support a Diverse Research Workforce. Kenneth Gibbs, National Institute of General Medical Sciences
- Dros21 "Practicing innovative inclusion: tools to advance research excellence"
 - → <u>Call for abstracts</u>
 - Session Chairs: Jennifer Alexander, Fox Chase Cancer Center Andrew M Arsham, Bemidji State University
 - IndigiData: empowering Indigenous genomic and data science education. Krystal Tsosie, Vanderbilt University
 - Use of an Inclusive Summative Assessment Increased Deep Learning and Reduced Test Anxiety in an Undergraduate Molecular Cell Biology Course. Kimberly Mulligan, California State University, Sacramento

- → Telling our story: Integrating Culturally Inclusive Practices into the STEM classroom to Cultivate a Sense of Belonging Among Underrepresented Groups. Vida Mingo, Columbia College
- Initiating and sustaining early and sustained undergraduate research programs as a mechanism for access, inclusion and academic success. Joyce Fernandes, Miami Univ
- Choose Development! A multi-level mentored summer undergraduate research program to diversify STEM. Richard Behringer, MD Anderson Cancer Center
- Increased Diversity of Post-graduate STEM Training and Careers Requires Intervention and Support Early in Undergraduate Education. Pamela Harvey, University of Colorado Boulder
- → Expanding and Unclogging the Pipeline: Programs that Increase Faculty Diversity in STEM. Fernando Vonhoff, University of Maryland Baltimore County
- Worm21 "Building an equitable scientific community: lessons from C. elegans researchers involved in DEI initiatives"
 - → *C. elegans* researchers share the work they're doing to address the lack of diversity within our field at various scientific stages. This session aims to include talks from individuals working at increasing diversity at the undergraduate research level through the professoriate. Our intention is that this session will generate communication within the community, spur individual ideas and actions, and express our plans to continue facilitating these conversations at future Worm meetings. We hope that highlighting these topics communicates that building a diverse, equitable, and inclusive scientific enterprise should be a priority for all scientists, and we want to give our community concrete ideas to take back to the classroom and the lab.
 - → Session Chair: Anna Allen, Howard University
 - → The Pipeline CURE: lowering institutional barriers to research by reiteratively incorporating original *C. elegans* experiments throughout a biology curriculum. David Katz, Emory University
 - Strategies to improve equity in faculty hiring. Needhi Bhalla, University of California, Santa Cruz
 - → Building intentional networks and partnerships within and across scientific societies to reach true diversity, equity, and inclusion in STEM. Pamela Padilla, Univ North Texas
- Fungal22 Diversity, Equity, and Inclusion Discussions
 - → GSA Engagement hosted two Diversity, Equity, and Inclusion discussions at Fungal22. The first was an in-person discussion with around 20 participants. The discussion was partially moderated by Jessica Vélez, but participants were encouraged to start a discussion and lead the conversation. Topics included successful initiatives, personal experiences, and the reality of financial support for DEI initiatives.
 - The second discussion was virtual and had around 6 participants. The discussion ranged from GSA's DEI initiatives, ideas for increasing diversity at conferences and organizations, and discussions of multiple diverse populations.

- Dros22 Equity & Inclusion Plenary Session
 - Session Chairs: Andrew Arsham, Bemidji State University Rachel Smith-Bolton, University of Illinois Urbana-Champaign
 - --- Collective Action for Institutional Transformation. Shaila Kotadia, Stanford University
 - Strategies at UCSF for addressing barriers in science that disproportionately affect people from marginalized groups. Todd Nystul, UCSF
 - → NINDS Strategies for Enhancing the Diversity of Neuroscience Researchers. Marguerite Matthews, NINDS
- PEQG22 Invited Keynote
 - → <u>Coding and data science programs for every biology student</u>. Pleuni Pennings, San Francsico State University
- Yeast22 DEI Discussions: Improving Inclusion in Science
 - → Session Chair: Tracy Johnson, UCLA
 - Panelists: Alexa Novales, UCLA
 Dan Pollard, Western Washington University
 Gustavo Silva, Duke University
 Jacob Steenwyk, Vanderbilt University and UC Berkeley