

1 **TITLE: Building a Queer- and Trans-Inclusive Microbiology Conference**

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3 Rachel Gregor,<sup>1\*^</sup> Julie Johnston,<sup>2^</sup> Lisa Shu Yang Coe,<sup>3#</sup> Natalya Evans,<sup>4#</sup> Desiree  
 4 Forsythe,<sup>5</sup> Robert Jones,<sup>6#</sup> Daniel Muratore,<sup>7#</sup> Bruno Francesco Rodrigues de  
 5 Oliveira,<sup>8#</sup> Rachel Szabo,<sup>1#</sup> Yu Wan,<sup>9#</sup> Jelani Williams,<sup>#10</sup> Callie R. Chappell,<sup>11\$</sup>  
 6 Shayle B. Matsuda,<sup>12\$</sup> Melanie Ortiz Alvarez de la Campa,<sup>13\$</sup> Queer and Trans in  
 7 Microbiology Consortium, JL Weissman,<sup>5,10\*^</sup>

8

- 9 1. Massachusetts Institute of Technology, Department of Civil and Environmental  
 10 Engineering, Cambridge, MA, USA  
 11 2. Georgia Institute of Technology, School of Civil and Environmental Engineering,  
 12 Atlanta, GA, USA  
 13 3. New York University Abu Dhabi, Division of Science, Biology Program, Abu Dhabi,  
 14 UAE  
 15 4. University of California, Santa Barbara, Santa Barbara, CA, USA  
 16 5. Schmid College of Science and Technology, Chapman University, Orange, CA,  
 17 USA  
 18 6. U.S. Army Engineer Research and Development Center, Cold Regions Research  
 19 and Engineering Laboratory, Hanover, NH, USA  
 20 7. Santa Fe Institute, Santa Fe, NM, USA  
 21 8. Fluminense Federal University, Department of Microbiology and Parasitology,  
 22 Biomedical Institute Niterói, RJ, Brazil  
 23 9. Imperial College London, Faculty of Medicine, Department of Infectious Disease,  
 24 London, UK  
 25 10. University of Southern California, Department of Biological Sciences, Los Angeles,  
 26 CA, USA  
 27 11. Stanford University, Department of Biology, Stanford, CA, USA  
 28 12. Daniel P. Haerther Center for Conservation and Research, John G. Shedd  
 29 Aquarium, Chicago, IL, USA  
 30 13. Brown University, Department of Molecular Microbiology & Immunology,  
 31 Providence, RI, USA

32

33 \*Corresponding: rgregor@mit.edu (RG), jw4336@terpmail.umd.edu (JLW)

34 ^Authors contributed equally. Author order was determined both by additional roles as  
 35 corresponding authors and by increasing seniority (due to differing preferences for first/last  
 36 position based on career stage)

37 #Authors contributed equally and are listed alphabetically

38 \$Authors contributed equally and are listed alphabetically

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42 **ABSTRACT**

43 Microbiology conferences can be powerful places to build collaborations and exchange scientific  
44 thought, but for queer and transgender (trans) scientists they can also become sources of  
45 alienation and isolation. Many conference organizers would like to create welcoming and  
46 inclusive events but feel ill-equipped to make this vision a reality, and a historical lack of  
47 representation of queer and trans folks in microbiology means we rarely occupy these key  
48 leadership roles ourselves. Looking more broadly, queer and trans scientists are systematically  
49 marginalized across scientific fields, leading to disparities in career outcomes, professional  
50 networks, and opportunities, as well as loss of unique scientific perspectives at all levels. For  
51 queer and trans folks with multiple, intersecting, marginalized identities, these barriers often  
52 become even more severe. Here, we provide concrete, practical advice to help conference  
53 organizers in the microbial sciences design inclusive, safe, and welcoming conferences, where  
54 queer and trans microbiologists can flourish.

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## 56 INTRODUCTION

57 Microbiology conferences serve as opportunities for microbiologists to engage with colleagues,  
58 learn new research, and build community. For queer and transgender<sup>1</sup> (trans) microbiologists,  
59 the excitement of attending a conference is often tempered by previous experiences of  
60 exclusion and discrimination in professional spaces. Over the past year, initiatives have been  
61 developed by queer and trans community members to improve conditions at conferences,  
62 including at the 2022 Marine Microbes Gordon Research Conference (GRC) and International  
63 Society of Microbial Ecology (ISME) 2022 meeting, as well as through in-person and virtual  
64 meetings organized by the Society Champions group in the Microbiology Society. Here, we, a  
65 team of queer and trans scholars and microbiologists involved in these initiatives,<sup>2</sup> contribute  
66 our experiences navigating professional conferences to provide guidance on making these  
67 spaces more inclusive. While many conference organizers have been enthusiastic about these  
68 grassroots efforts, and some of the suggestions below have already been implemented, we aim  
69 to provide a more comprehensive guide which may serve as guidance across disciplines. Our  
70 goal is to continue these conversations, so they permeate throughout all levels of leadership  
71 and ensure the success of the next generation of microbiologists.

### 72 **Why focus on queer and trans scientists?**<sup>3</sup>

73 The attrition of queer and trans trainees from the sciences is well-documented – lesbian, gay,  
74 bisexual, queer, trans, and/or gender nonconforming (LGBTQ+) undergraduates are 8-10% less  
75 likely to persist in science, technology, engineering, and math (STEM) than heterosexual and/or  
76 cisgender students (1, 2). Many studies have revealed that STEM environments are often  
77 heteronormative, anti-feminine, and toxically competitive (3–5), and LGBTQ+ students face  
78 significant marginalization and increased depression, exhaustion, and general stress relative to  
79 their peers (6). For queer and trans scientists with other intersecting identities, for example

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<sup>1</sup> We use queer as a term meant to include all people of marginalized sexualities and genders who are not heterosexual and/or cisgender (i.e., a person's gender aligns with the sex assigned to them at birth). We recognize that acceptable labels vary across individuals and over time and that no one word or acronym best captures the diverse identities and experiences within our community. We highlight trans and nonbinary identities in particular as a further marginalized community within an already marginalized community.

<sup>2</sup> See SI for positionality statement.

<sup>3</sup> While we focus on queer and trans folks, we understand this community encompasses a large array of intersecting identities that face additional and unique challenges. Community members who are part of marginalized races and ethnicities or are disabled, for example, may experience different and additional barriers in conferences that should be further considered by the organizing committee. These topics cannot be fully given the length of discussion they deserve within the allotted space for this perspective.

80 relating to disability, first-generation student status, socio-economic status, and/or marginalized  
81 race or ethnicity, these various axes of marginalization can compound (7), leading to feelings of  
82 invisibility (8, 9). While our discussion below centers around queer and trans scientists, our  
83 recommendations have significant benefits across multiple identities such as quiet spaces for  
84 neurodiverse attendees, and local climate resources on race and ethnicity. Increasing inclusivity  
85 efforts benefits everyone.

86 Scientific conferences provide opportunities for scientific and professional education, as well as  
87 networking that is critical to career growth. However, discrimination on the basis of gender and  
88 sexual orientation continues to permeate professional spaces in the sciences, preventing queer  
89 and trans scientists from fully engaging in conferences without compartmentalizing or censoring  
90 their identities (10–13). Furthermore, a “just-focus-on-the-science” culture prevalent in these  
91 spaces dissuades marginalized groups from vocalizing the issues they face, thus stifling  
92 progress towards inclusivity and diversity (14). This status quo need not persist and is damaging  
93 to the field. Below, we outline practical suggestions for organizing committees to implement  
94 before, during, and after conferences, in order to create an environment that is safe and  
95 welcoming for queer and trans scientists (Table 1).

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98 **Table 1. LGBTQ+ Inclusivity Checklist.** See relevant sections of text for further discussion of  
 99 each point.

Item	Description
Organizing Committee	<ul style="list-style-type: none"> <li>● Stay up to date on fundamental inclusivity practices (see Appendix I)</li> <li>● Recruit a diverse organizing committee from the outset of planning</li> <li>● Ensure that there is a designated contact for any accessibility and inclusion questions or concerns</li> </ul>
Venue Selection	<ul style="list-style-type: none"> <li>● Consider financial barriers for attendees when choosing a venue</li> <li>● Consider the history of specific businesses in being welcoming</li> <li>● Consider if all-gender restrooms are already available at the venue, or if the venue will allow their designation during the conference</li> <li>● Consider the venue's accessibility features for people with disabilities</li> <li>● Consider the venue's COVID-19 policies and willingness to implement COVID safety precautions</li> </ul>
Local Climate	<ul style="list-style-type: none"> <li>● Create materials explaining any potential safety concerns for attendees around, e.g., transphobia, racism, ableism, and misogyny. Even locations that are popularly viewed as queer and trans friendly often have the potential to quickly become unsafe.</li> <li>● Seek out guidance from local scientists from representative groups around these issues, including whether it is advisable to hold a conference in a given location</li> </ul>
Registration Design	<ul style="list-style-type: none"> <li>● Do not require name submission to be legal name, but if legal name must be collected provide an additional field for name since these may not overlap for all attendees</li> <li>● Provide fill-in-the blank pronoun options</li> <li>● Ensure name and pronouns collected are printed correctly on all conference materials</li> <li>● If collecting gender or demographic information, ensure privacy and transparency about how data will be used</li> </ul>
Information Disclaimer	<ul style="list-style-type: none"> <li>● Create a brief guide explaining when registration information will be used for housing or attendance statistics</li> </ul>
Code of Conduct	<ul style="list-style-type: none"> <li>● Design a code of conduct with community input and highlight that code during opening ceremonies</li> <li>● Make sure the code of conduct has specific steps for enforcement with appropriate resources to enact this enforcement</li> <li>● Be explicit in the kind of conduct that will not be tolerated at this conference</li> </ul>

Confidential Reporting	<ul style="list-style-type: none"> <li>• Advertise how to confidentially report potential harassment and potential follow-up actions</li> <li>• Hire staff with expertise and training in handling confidential and sensitive reports</li> <li>• Ensure there is a direct and actionable plan for participants' safety in cases of harassment</li> <li>• Have explicit policies and mechanisms protecting those reporting offenses from retaliation</li> </ul>
Name-Tags	<ul style="list-style-type: none"> <li>• Provide pronoun pins or badge ribbons, including "fill-in-the-blank" style ones</li> </ul>
Shared Housing	<ul style="list-style-type: none"> <li>• Provide some single rooms, optional self-identification for queer and trans participants, and exchange contact information between roommates ahead of the conference</li> <li>• Suggest and provide links to find alternate, affordable accommodations if single rooms are not available at the official conference lodging</li> <li>• Let participants pick their roommates when possible and do not restrict different-gender pairings</li> <li>• Plan ahead for any issues of discrimination or harassment by designating a point of contact and reserving spare rooms</li> </ul>
Gender Neutral Language	<ul style="list-style-type: none"> <li>• Use gender neutral terminology and avoid strictly binary language (see Table 2)</li> <li>• Proofread all forms and practice introductions, including name pronunciations.</li> <li>• Avoid "ladies and gentlemen"; see Table 2 for alternatives</li> </ul>
Gender Neutral and Gendered Bathrooms	<ul style="list-style-type: none"> <li>• Advertise the location of all-gender bathrooms</li> <li>• Ensure all single stall restrooms are marked as gender neutral</li> <li>• Advertise that all attendees are welcome to use the restrooms that align with their gender and that no individual should ever be harassed or required to provide documentation of their gender identity in order to access restrooms</li> </ul>
Quiet Space	<ul style="list-style-type: none"> <li>• Reserve a dedicated room at the conference venue to relax in silence</li> <li>• Dim the lights and minimize sounds. Bonus to add pillows or blankets for comfort and to provide water and snacks</li> </ul>
Mentorship	<ul style="list-style-type: none"> <li>• Create an identity-based mentorship pairing option where there is the option to match queer and trans mentor/mentee pairs</li> </ul>
Conference Workshops and Networking Events	<ul style="list-style-type: none"> <li>• Create programming and designate funding for specific groups of marginalized attendees to gather, form networks of support, and plan together</li> <li>• Provide funding for existing affinity groups and organizations</li> <li>• Provide networking spaces that enforce COVID safety precautions (e.g., masking, social distancing)</li> </ul>

Follow-Up Statistics	<ul style="list-style-type: none"><li>• Compile transparent reports on conference attendance and inclusivity efforts and impacts</li><li>• Reference past years to demonstrate progress and improvement goals</li><li>• Make all reports and aggregated statistics publicly available</li></ul>
Use an Intersectional Approach	<ul style="list-style-type: none"><li>• Do not take the experiences of white queer and trans participants as the default or universal experience of all queer and trans participants.</li><li>• Recognize that attendees with multiple, overlapping marginalized identities may face distinct challenges in your field/at your venue</li><li>• Acknowledge that within the queer community there is a great diversity of experiences that cannot and should not be reduced to a single perspective</li></ul>

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102 **I. BEFORE THE CONFERENCE**

103 **Venue and location**

104 Costs, legal protections, and cultural norms are important considerations in selecting an  
 105 inclusive conference venue. High-cost venues disproportionately discourage queer and trans  
 106 attendees, who are more likely to face financial precarity (15, 16). Countries continue to pass  
 107 egregious new anti-LGBTQ+ laws (18, 19), including in the USA where anti-trans legislation is  
 108 being passed at a record rate (20, 21).<sup>4</sup> This fact challenges the status quo that prioritizes the  
 109 USA, Canada, the UK, and EU as ‘queer friendly’ locations and ignores significant subregional  
 110 variations in legal, racial, and socioeconomic challenges. Ultimately, this view neglects ongoing  
 111 safety concerns, excludes participants from low- and lower-middle income countries who  
 112 already face disproportionate financial barriers due to visa requirements, and maintains  
 113 hierarchy between colonizers and colonized.

114 Consult with local queer and trans organizations during planning for nuanced and informed  
 115 views regarding legislation and safety risks queer and trans attendees may face and present  
 116 this information to attendees before the conference.<sup>5</sup> Offer travel awards for queer and trans  
 117 attendees with additional priority to international and/or lower socioeconomic status attendees.  
 118 Ensure venues have appropriate accessibility features (e.g., ramps, quiet rooms, elevators etc.)  
 119 – this intersectional issue affects many queer and trans adults, who experience an increased  
 120 proportion of disabilities and chronic illnesses<sup>6</sup> (17).

121 When explicit laws and policies put queer and trans attendees in danger, seek alternative  
 122 venues. However, do not uncritically avoid entire regions based on ‘queer friendliness’ rankings,  
 123 as this abstracts away from important local variability and reifies racist biases.

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<sup>4</sup> See the ACLU map of attacks on LGBT rights in the USA: <https://www.aclu.org/legislative-attacks-on-lgbtq-rights?state=AZ>

<sup>5</sup> An excellent example of this practice can be seen here in the website for the 2022 Conference on Empirical Methods in Natural Language Processing, which took place in Abu Dhabi, UAE: <https://web.archive.org/web/20221202162458/https://2022.emnlp.org/blog/EMNLP-2022-Abu-Dhabi-LGBTQ+-Visitor-Considerations/>

<sup>6</sup>This study frames disability as an “public health epidemic”, which is a problematic stance on disability based on the medical model. Regardless, the information regarding prevalence of disability in the LGBTQ+ community is important due to its scarcity of reporting in other primary literature.

## 126 **Steering Committee Preparation**

127 The steering committee should be a diverse group of individuals with a range of perspectives,  
 128 including queer and trans members. In particular, create space for queer and trans organizers of  
 129 color, since white voices represent a small and biased fraction of the community. Conference  
 130 organizers, session leaders, and support staff should explicitly discuss the issues outlined here  
 131 as well as basic queer and trans inclusion training (Appendix I), sensitivity training, and gender  
 132 inclusive language training (Table 2) (22, 23). Ensure that there is a point person clearly  
 133 indicated on the conference website to be contacted for any accessibility and inclusion needs  
 134 and concerns.

## 135 **Registration and demographic data**

136 *Names:* There should always be an option to provide a name separately from “legal names” due  
 137 to litigious barriers for trans and queer people to update their names. Always include a “name”  
 138 option accompanied by text indicating that it will be used in conference materials, printed name  
 139 badges, and registration. If a legal name is required, e.g., for visa purposes, or if a professional  
 140 name or ORCID is required for published conference proceedings, include these as separate  
 141 options accompanied by explanations.

142 *Pronouns:* An optional space (never required) to provide fill-in-the-blank pronouns during  
 143 registration offers flexibility for trans and nonbinary attendees to choose how to present  
 144 themselves and encourages cis attendees to acknowledge their own gender.<sup>7</sup> Pronouns should  
 145 be carried over to conference materials. Pronoun stickers/badges with fill-in-the-blank options  
 146 can be made available for attendees to write-in pronouns. Pronouns are independent of gender  
 147 and should not be assumed.

148 *Demographic data:* While collecting data on gender identity and sexuality can provide insight  
 149 and visibility for the LGBTQ+ community (24), outing queer and trans scientists can put them at  
 150 significant personal and professional risk. Therefore, consider which demographic data is  
 151 necessary and explicitly state the intended purpose of the data and how it is disseminated, and  
 152 provide safeguards for anonymity and data storage.

153 Fill-in-the-blank fields are best for reporting gender and sexuality and avoids “othering”  
 154 terminology (25, 26); if categories must be pre-determined, provide the option to check multiple

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<sup>7</sup> See here for a guide on how to learn and use correct pronouns for your peers (additional guides are in the SI): <https://www.american.edu/ocl/cdi/pronouns-guide.cfm>

155 boxes. Remember that “Transgender” should not be listed as a gender in and of itself (*i.e.*, trans  
156 women are women and trans men are men).

### 157 **Accommodations**

158 Registration paperwork should outline procedures for housing (if available) which includes  
159 single rooms and self-organized pairs/groups, regardless of gender, to accommodate trans and  
160 nonbinary attendees (27–29). Reserve spare rooms and provide a contact for queer and trans  
161 attendees who may face discrimination or harassment on the basis of cohabitation. Additionally,  
162 offer to assist disabled attendees find accessible lodging.

### 163 **Virtual and hybrid options**

164 Virtual and hybrid conferences reduce socioeconomic and environmental costs and increase  
165 accessibility for many marginalized groups, including queer and trans scientists (30). Similar to  
166 in-person conferences, it is critical to follow best practice guidelines for creating and maintaining  
167 welcoming virtual spaces (31), including a clear code of conduct (32), timely responses to  
168 unacceptable behaviors, and participants' consent to posting materials on the conference's  
169 official social media (33). Conference organizers should also maintain a reactive support team  
170 to ensure participants' profiles are correctly displayed and address other technical issues, and  
171 the conference safety team should be trained to recognize and respond to virtual forms of  
172 harassment.

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174 **Table 2.** *Common examples of gender-exclusive language that can be replaced with gender-*  
175 *inclusive alternatives. We acknowledge that these words and phrases are commonly used in*  
176 *countries in North America and Europe and in predominantly English-speaking communities;*  
177 *evolving gender-inclusive language practices may vary by region and culture. Additionally,*  
178 *linked resources for additional languages can be found here:*

179 [https://nonbinary.wiki/wiki/Gender\\_neutral\\_language](https://nonbinary.wiki/wiki/Gender_neutral_language).

Commonly used exclusive language	Inclusive alternatives	Additional notes
<ul style="list-style-type: none"> <li>• ladies and gentlemen</li> <li>• men and women</li> </ul>	<ul style="list-style-type: none"> <li>• everyone</li> <li>• colleagues</li> <li>• participants</li> <li>• attendees</li> <li>• audience</li> </ul>	<p>Avoid making and voicing assumptions about any individual's gender or the gender composition of an audience when addressing or referring to people.</p> <p>Cis and trans women are women, and cis and trans men</p>

	<ul style="list-style-type: none"> <li>members</li> <li>people</li> <li>folks/folx</li> <li>team</li> <li>you all</li> </ul>	are men. It is invalidating and unnecessary to distinguish between cis and trans people when referring to their genders unless i) the conversation intentionally involves discussing or acknowledging trans and gender nonconforming communities, or ii) an individual self-identifying as trans or gender nonconforming chooses to discuss their identity.
<ul style="list-style-type: none"> <li>either gender</li> <li>both genders</li> <li>the opposite gender</li> <li>the other gender</li> </ul>	<ul style="list-style-type: none"> <li>any or no gender</li> <li>all genders</li> <li>another gender</li> <li>a different gender</li> </ul>	Agender people do not identify as women, men, or some combination thereof, but instead do not have a gender at all. Genderfluid and non-binary people do not clearly fall into this binary and may identify as multiple genders.
<ul style="list-style-type: none"> <li>wife/husband; girlfriend/boyfriend</li> <li>maternity/paternity leave</li> <li>pregnant women</li> </ul>	<ul style="list-style-type: none"> <li>partner; spouse</li> <li>parental leave</li> <li>pregnant people</li> </ul>	Referring only to “women” in the context of parental leave and pregnancy excludes trans men and non-binary/gender-nonconforming people. These suggestions are for when speaking in general terms. Individuals may, of course, refer to themselves and their relationships using the terms that are most appropriate for them.
<ul style="list-style-type: none"> <li>ladies’/men’s room</li> </ul>	<ul style="list-style-type: none"> <li>restroom</li> <li>bathroom</li> <li>WC</li> <li>toilet</li> </ul>	
<ul style="list-style-type: none"> <li>preferred/chosen pronouns/gender/name</li> <li>“What are your preferred pronouns?”</li> </ul>	<ul style="list-style-type: none"> <li>pronouns, gender, name</li> <li>“Which pronouns do you use?”</li> </ul>	<p>Describing someone’s pronouns, gender, or name as “preferred” or “chosen” is invalidating, implying that respecting someone’s gender identity is optional rather than necessary.</p> <p>If someone’s pronouns are unknown, it is okay to use “they/them/theirs” as gender-neutral options before learning which pronouns they use, rather than defaulting to gendered pronouns based on someone’s appearance.</p>
<ul style="list-style-type: none"> <li>“As women/men, we...”</li> </ul>	<ul style="list-style-type: none"> <li>“In my experience, as a ____, I...”</li> </ul>	When sharing a personal experience with the intent of connecting with an audience, a speaker can avoid voicing incorrect assumptions about the identities and experiences of the listeners by using an alternative phrasing like this one.

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## II. DURING THE CONFERENCE

### Atmosphere and Language

Create a welcoming space and set the tone during opening ceremonies by establishing the code of conduct and accommodations that include queer and trans participants. Organizers and session leaders should consciously use gender-inclusive terminology (Table 2) and avoid assuming attendees' genders. These meaningful actions establish gender-inclusive norms for everyone. Conference materials should include resource guides so that community members are up to date on inclusive practices (Appendix I). Be mindful when speaking broadly about gender diversity, especially when topics may or may not be limited to particular groups (e.g., 'pregnant scientists' is more inclusive than 'cis women'). It is important to consider that not all attendees will be familiar with this language, particularly those who are not native English speakers, and to provide support and patience in the process of adopting these terms.

### Physical spaces

*All-gender restrooms:* All-gender restrooms should be available and accessible to persons with disabilities. Clearly mark these restrooms in conference maps, apps, and during opening session announcements. Similarly, non-gendered lactation spaces should be made available to those currently breastfeeding. Reinforce that all attendees are welcome to use the restrooms that align with their gender and that no individual should ever be harassed or require documentation of their gender identity to access restrooms.

*Quiet spaces:* On-site dedicated quiet spaces are vital to help attendees cope with socially stressful situations and maintain professionalism without leaving the venue. Everyone can benefit from quiet spaces, including marginalized groups such as queer and trans scientists who often face microaggressions in professional settings (34) or neurodiverse attendees who are overstimulated. Encourage everyone to use quiet spaces to recenter and recharge, while establishing it is not a workspace.

*Family policies:* Family-inclusive policies (e.g., attendance passes for spouses, childcare) must include same-sex partners and non-nuclear family structures. Due to the lack of LGBTQ+ legal recognition in many places, documentation for accommodations should not be required.

## 212 **Networking and Mentorship Programs**

213 Develop a network of scientists with shared backgrounds for early career researchers to find  
214 support and advice and help create community in marginalized groups, which is linked to  
215 stronger scientific identity and retention in STEM (35, 36). Networking can be facilitated by  
216 planning queer and trans social and professional events, and including specific groups such as  
217 queer and trans People of Color.<sup>8</sup> (35, 36). Privacy can be a concern for attendees who  
218 participate in these events; therefore, ask for photo consent and clearly state whether photos  
219 will be taken and publicized. Consider off-site events at inclusive spaces for attendees' safety  
220 and privacy.

221 Mentorship programs help trainees and first-time conference attendees take full advantage of  
222 their experience (37). We recommend optional identity-based mentorship, which can be  
223 arranged before a conference, to promote increased trust and authentic engagement between  
224 mentors and mentees (38). A notable example is Binning Singletons (37) at American Society  
225 for Microbiology's Microbe conference, which fostered a high percentage of LGBTQ+  
226 participants leading to dedicated LGBTQ+ meetups at future events.<sup>9</sup>

## 227 **Safety**

228 Queer and trans participants are particularly vulnerable to identity-based and sexual  
229 harassment (28, 39–41); therefore, simple and clear reporting systems must be made  
230 accessible. These mechanisms and policies should be described in the conference materials,  
231 opening session, and information desk, and include anonymous reporting (for example, through  
232 a conference app or webform). The outcomes of both confidential and non-confidential reporting  
233 mechanisms should be made clear, as well as mandated reporting requirements.

234 Reporting mechanisms are especially important for events with alcohol, which increases the  
235 likelihood of inappropriate behavior and harassment. Consider hosting alcohol-free events for  
236 safety and to benefit sober participants, and always provide multiple non-alcoholic options at all  
237 events.

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<sup>8</sup> In 2021-2023, LGBTQ+ events have been held at: Marine Microbes GRC, ISME, American Society for Microbiology (ASM) Microbe, the Australian Society for Microbiology (ASM) Annual National Conference, the Australian Microbial Ecology (AusME) annual meeting, the Society for Integrative and Comparative Biology, the Microbiology Society Annual Conference, and the World Microbe Forum.

<sup>9</sup><https://fems-microbiology.org/femsmicroblog-networking-at-online-conferences-for-early-career-scientists>

238 Designate a crisis response team with sensitivity to marginalized communities' experiences, that  
239 includes queer and trans individuals with varied identities. Consider hiring a third-party mediator  
240 to handle code of conduct violations. Do not equate police presence with safety, as the queer  
241 and trans communities are often the subjects of police harassment (42). Additionally, monitor  
242 social media and conference hashtags for harassment of specific conference attendees or  
243 marginalized groups.

#### 244 **COVID-19 Safety Precautions**

245 Minimize the risk of COVID-19 and other transmissible illnesses and provide an inclusive space  
246 for disabled and immunocompromised attendees with precautions like hybrid attendance (43),  
247 masking, venues with outdoor spaces and dedicated networking spaces with air purifiers  
248 (additional resources in Appendix I).

### 249 **III. AFTER THE CONFERENCE**

#### 250 **Survey Data**

251 Demographic data collection should follow the best practices outlined above. Free-form  
252 responses are particularly valuable, especially explicit questions about queer and trans  
253 experiences, to gain insight into the effectiveness of any inclusion initiatives. Share an  
254 aggregate narrative report of survey results, while preserving participants' anonymity. Keep in  
255 mind that small sample sizes may make anonymity impossible, in which case the small sample  
256 sizes themselves should be noted.

#### 257 **Transparent Reporting**

258 Generate a comprehensive post-conference report to fundamentally evaluate progress, identify  
259 challenges, hold organizers accountable, and track ongoing efforts. Public reports which  
260 highlight and describe attendance and inclusive programming (e.g., mentorship, events) will  
261 encourage prospective queer and trans participants to attend future conferences.

262 Permanent structures within organizations are especially effective for implementing change and  
263 gaining feedback. For example, the Microbiology Society has a Members Panel<sup>10</sup> that voices  
264 issues from marginalized groups, including the LGBTQ+ community. These sub-groups advise

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<sup>10</sup><https://microbiologysociety.org/why-microbiology-matters/council-governance/standing-panels/members-panel.html>

265 and participate in events' organizing committees, oversee past implementation, and track  
266 progress, and should be given structural power and/or compensation when possible.

## 267 **CONCLUSIONS AND OUTLOOK**

268 We emphasize necessary policies and practices which support the increasing proportion of  
269 early-career researchers who present themselves authentically in professional communities.  
270 Many efforts are already underway by conference committees providing better conference  
271 experiences for marginalized groups, and we urge others to strive for the same. We highlight  
272 two pieces of advice that conference organizers should keep in mind: First, you need to have a  
273 diverse organizing committee representing the groups you wish to include. These community  
274 members should be included as valued members from the very beginning of the planning  
275 process, not as a last-minute addition. Second, recognize that people with multiple, overlapping  
276 marginalized identities may face unique and magnified challenges that other attendees may not,  
277 especially when intersecting identities vary by cultural context (e.g., inequality of queer and  
278 trans People of Color can be magnified country-to-country) (7). Inclusivity strategies need to be  
279 designed around the experiences of the most marginalized, not limited to white queer and trans  
280 participants, to broaden inclusion at conferences.

## 281 **ACKNOWLEDGMENTS**

282 All authors are members of the Queer and Trans in Microbiology Consortium. The Queer  
283 and Trans in Microbiology Consortium also includes the following persons: Anna C. Fagre  
284 (Colorado State University); Steven A. Frese (University of Nevada, Reno); Maria Hamilton  
285 (University of Georgia); Maurizio Labbate (Australian Society for Microbiology); McK Mollner  
286 (University of Maine); Itumeleng Moroenyane (Stellenbosch University); Leonardo Pacciani-Mori  
287 (University of California, San Diego); Gonçalo J. Piedade (NIOZ Royal Netherlands Institute for  
288 Sea Research and University of Amsterdam); Sammy Pontrelli (ETH Zurich); Rahmeen  
289 Rahman (Imperial College London); Heema Kumari Nilesh Vyas (The University of Sydney);  
290 Mica Y. Yang (Stanford University); Anna C.B. Weiss (University of Southern California); Olivier  
291 Zablocki (The Ohio State University).

292 All authors thank the GRC, ISME, and Microbiology Society leadership for their support  
293 and for providing a platform for these conversations to take place. We thank the following  
294 colleagues for their feedback on the manuscript: Jana S. Huisman, Vilhelmiina Haavisto,

295 Elizabeth N. Rudzki, and Pedro Humberto Lebre. RG is grateful to Lauryn McNair and the  
296 Rainbow Lounge at MIT for early input.

297 JJ is grateful for the support of the American Society for Engineering Education eFellows  
298 Postdoctoral Research Fellowship funded through the National Science Foundation (grant  
299 #EEC-2127509). RG and JLW are grateful for support from the Simons Foundation Marine  
300 Microbial Ecology Postdoctoral Fellowships (RG: 653410; JLW: 653212). RG is grateful for the  
301 support of the Center for Chemical Currencies of a Microbial Planet Postdoctoral Fellowship  
302 (National Science Foundation, OCE-2019589; this is the NSF Center for Chemical Currencies of  
303 a Microbial Planet (C-CoMP) publication #023). DM is funded by the SFI Omidyar Postdoctoral  
304 Fellowship. YW is an Imperial Institutional Strategic Support Fund Springboard Research  
305 Fellow, funded by the Wellcome Trust and Imperial College London. YW thanks the support  
306 from the National Institute for Health Research Health Protection Research Unit in Healthcare  
307 Associated Infections and Antimicrobial Resistance at Imperial College London in partnership  
308 with the UK Health Security Agency, in collaboration with Imperial Healthcare Partners,  
309 University of Cambridge and University of Warwick. The views expressed in this publication are  
310 those of the author(s) and not necessarily those of the NHS, the National Institute for Health  
311 Research, the Department of Health and Social Care or the UK Health Security Agency, or the  
312 US federal government and its agencies.

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