

## Scientific Life

# Guidelines for organizing accessible and inclusive research retreats

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**Research retreats are elements of scientific graduate training programs. Although expected to provide strong educational value, some students are reluctant to attend. Here, we identify participation barriers and provide guidelines for retreat design that minimize obstacles and establish an inclusive environment to improve attendance and enrichment for all attendees.**

### Rethinking retreats

Research retreats are elements of scientific graduate training programs. In these settings, faculty and students exchange ideas centered around investigative interests. Retreats are often the first opportunity for many students to share their achievements outside of their own research group. Such interactions have strong educational value; they provide opportunities to identify future research directions, build networks, and enrich scientific communication. Nonetheless, some students are hesitant to attend research retreats. If retreats are educationally and socially valuable, why might highly motivated students choose not to attend? Leadership might interpret reticence as disengagement or a misalignment of priorities; however, unanticipated barriers might underlie reluctance. For example, inadequate accommodations might cause discomfort and discourage attendees' participation. Engaging the community to learn

reasons behind reluctance should reduce impediments and improve participation.

Here, we describe unanticipated challenges that attendees encountered in a retreat held by University of Iowa Medical Scientist Training Program (MSTP). These experiences motivated us to put accessibility and inclusion at the forefront of retreat design. We share guidelines that emphasize consideration of ability and disability to advance the design of program retreats.

### The unanticipated

The MSTP yearly research retreat was held at an off-campus site in a large banquet room chosen without consideration of accessibility. During introductory ice-breaker games, participants were required to respond to oral prompts with physical movement. Although most attendees participated, others displayed discomfort, especially those with hearing limitations or decreased mobility. Poor acoustics, physical space restrictions, and suboptimal visual clarity in the banquet room amplified difficulties. Similar obstacles continued during the scientific program, limiting attendee participation. Exclusion was unintended, but occurred, nonetheless. To address such unforeseen conditions that impact inclusion, we developed a process to overcome barriers (Figure 1). Disabilities are prevalent in the general population [1]; thus, universal design is essential to minimize burdens of self-disclosure [2]. Regardless of ability, all attendees benefit from a retreat environment that is welcoming and comfortable.

### Recommendations for inclusive organizing

We provide guidelines for planning an inclusive retreat. These arose from discussions with local diversity, equity, and inclusion experts, and evolved with student experience and feedback.

#### Designate organizing committee

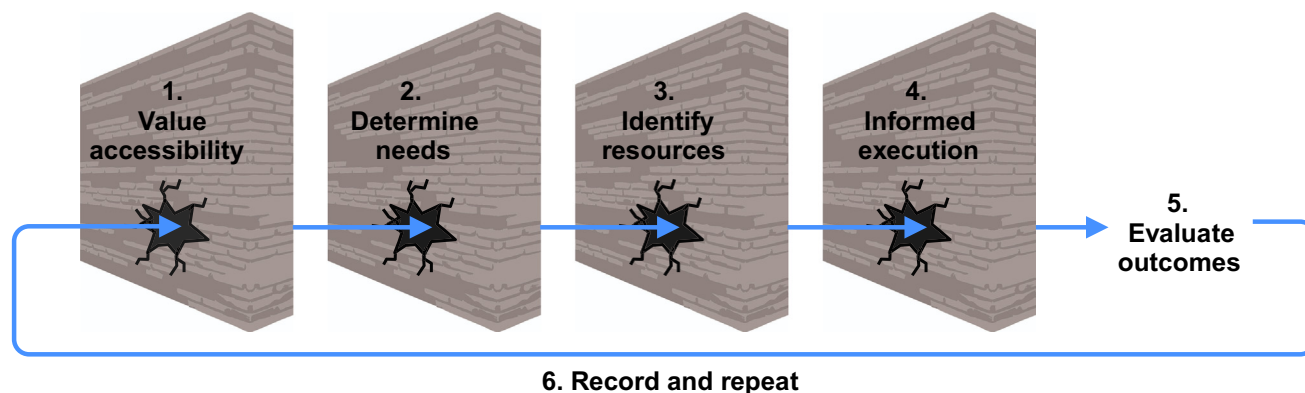
Organizing committees are central to inclusive retreat design. They identify venues,

develop schedules, and invite internal and external participants. As such, their composition should represent the breadth of expected attendees. Student leadership is key, with chosen students having diverse training experiences, research areas, and social attributes. Once assembled, a retreat chair should be identified to serve as the key contact person.

Committees should meet regularly. During in person and/or remote meetings, members should share documents that include past records, discussion notes, and action items. Student and program leadership should work together to ensure alignment with educational and inclusivity goals. Nonetheless, the organizing committee should have sufficient autonomy to implement new ideas to keep events fresh and exciting.

#### Complete early planning steps

- (i) Identify date and time. For annual events, consistency of timing allows attendees to plan schedules accordingly. For inclusivity, dates should avoid religious and federal holidays, recognize academic requirements such as exams, and be mindful of external responsibilities such as childcare.
- (ii) Choose a venue. Organizing committees must visit sites under consideration in person to ensure accessibility. If an off-site location is desired, organizers should consider cost and availability of parking for drivers and proximity to public transportation for non-drivers. Entrances should have even surfaces, ramps, and elevators. Ample, flexible seating is best to accommodate individuals with larger bodies and assistive devices such as wheelchairs. Audiovisual capabilities should be robust in presentation spaces, and lighting should be adjustable, as viewing is compromised by too bright or too dark lighting. Optimal poster space should accommodate both posters and movement, and include sound dampening features



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Figure 1. Overcoming barriers to accessibility. A workflow of six steps that reflect the process of improving inclusion and accessibility in retreat design.

such as carpet [3]. Restroom capacity and types should be evaluated, such as wheelchair accessible, single use, and gender neutral.

- (iii) Define meeting characteristics. Organizers should determine numbers and types of oral presentations (short or long, internal or external speakers), number and length of the poster sessions, inclusion of networking or community building events, frequency of refreshments and breaks, and menus for meals.
- (iv) Distribute expectations and seek input. With an eye towards inclusion, organizers should seek feedback. At least a month before the event, a general agenda, meal menus, information about the venue (map, directions, parking, public transit), and participant requirements should be distributed to expected attendees. Organizers should query attendees about preferred names and pronouns for name tags, needs relevant to scheduling and participation, such as transportation assistance, space (lactation room), and dietary restrictions. A feedback deadline should be provided to permit organizers time to address gaps or conflicts. Organizers should be respectful of responses and ensure confidentiality.
- (v) Finalize and distribute the program. Once feedback is received, the schedule

of events should be adjusted and finalized. An ideal program integrates varied session types and includes sufficient time for attendees to transition between activities and address personal needs. Within oral sessions, attention should be given to speaker order. Commonly, first-time speakers present earlier to reduce jitters and aid audience expectations, whereas invited speakers often present last. Oral presentations and poster sessions should include time for questions and be followed by breaks, as attention tends to wane after 10–15 min [4]. The finalized program should be distributed with information about on-site materials, changes to the agenda, accessibility information, and recommendations for attire, as well as a code of conduct that describes prohibited behaviors and consequences of any violation.

- (vi) Provide instructions to presenters. Oral presenters should be informed about the length of talks and question-answer periods. Poster presenters should be given poster dimensions and set-up instructions. It is helpful to include guidelines for successful presentations [5,6].
- (vii) Delegate responsibilities. Committee members should be equitably assigned specific duties during the retreat. These duties include greeting, leading

discussions, coordinating catering, setting up, and breaking down the event.

#### Host the retreat

- (i) Registration table. An entry table should be staffed to welcome attendees and provide early visibility of the organizing committee. Signs should be posted to direct attendees to hard-to-locate tables. Event information and name tags should be distributed. Name tags should include preferred names and pronouns, printed in large bold capitalized block font (40-point Arial).
- (ii) Acquaint speakers with session and test equipment. Before sessions, discussion leaders should ensure that audiovisual technology is working by testing the system. Also, discussion leaders should acquaint speakers with the audiovisual equipment (pointers, microphone), the time allotted for the talk and for questions, and how time-remaining signals will be given.
- (iii) Conduct the sessions. The retreat chair should provide welcoming remarks that include logistical information such as the location of rooms and bathrooms, an overview of the schedule, identification of the organizing committee, and recognition of key contributors. Next, discussion leaders should introduce themselves and explain how the session will be run. They should provide

reminders of how to be a good audience member (silence phones, put away electronic devices) and provide guidance about the question-answer period. For example, they might request holding questions until the end of the presentation, especially in cases of short talks. If the audience is silent following a presentation, discussion leaders should be prepared to ask the first question. Questioners should use microphones, and the audience should be monitored to prevent one member from dominating. Finally, discussion leaders keep the session on time. The retreat chair closes the meeting with final thoughts and thanks.

#### Evaluate the retreat

- (i) Solicit feedback. Shortly after the retreat, anonymous electronic surveys should be sent to assess participant experiences.
- (ii) Compile results. The committee should write a brief report summarizing successes and areas for improvement, with an eye towards accessibility and inclusivity. This document should reflect perspectives of the committee and survey results.
- (iii) Share outcomes with leadership. The final report should be shared with program leadership, to provide institutional memory and information for subsequent organizing committees.

#### Lessons learned

MSTP retreats have been greatly impacted since implementing inclusivity guidelines. Examples of strategies are summarized in Table 1. Implementation meant that the organizing committee took on new responsibilities, which increased members' time commitments. More venues were inspected and many were eliminated due to lack of accessible meeting rooms or poor technical capabilities. Duties of the discussion leader increased, especially during oral sessions. With this additional effort, there were immediate positive effects. Attendees reported an improved understanding of what to

Table 1. Examples of putting accessibility into practice

Accessibility domain	Example	Resources/actions to implement
Sensory	Auditory	Podium and portable microphones Hearing loop (T-coil) platforms American Sign Language interpreters Closed captioning Ample space between posters for discussion Choose a poster session space with sound dampening features, like carpeting
	Visual	Large font sizes Reserve seating at front of room
Physical	Dietary	Accommodate food restrictions Specialty foods clearly identified
	Navigation	Maps of all venues Public or provided transportation Paved walkways and elevators Ample space between posters for movement
	Body inclusivity	Americans with Disabilities Act-compliant and single-use or gender-neutral restrooms Lactation room availability Armless, moveable, and larger seating options Seating around poster session Gender and size-inclusive apparel
Social	Culture/family	Avoid all religious, cultural, and federal holidays Require attendance only during working hours Provide childcare or welcome families to events during non-working hours

expect and appreciated having ample opportunity to request accommodations. They also recognized improved consideration of needs compared with previous retreats. In summary, efforts toward accessibility were successful and appreciated.

As graduate programs diversify their student populations, they must also commit to providing inclusive training environments. Therefore, efforts should be made to limit barriers to participation at program retreats. Our experience suggests that implementation of guidelines for accessible and inclusive research retreats improves participation, enhances educational value, fosters community building, and increases the overall enjoyment of attendees.

#### Acknowledgments

The authors recognize assistance of Jessica L. Jensen, Barbara L. Lewis, Linda M. Varvel. This publication is supported by T32 GM139776.

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<https://doi.org/10.1016/j.tibs.2023.12.003>

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