TOOLKIT TO DESIGN MORE ACCESSIBLE SCIENTIFIC MEETINGS AND CONFERENCES

MARCH 2023

Ensuring a conference is accessible, equitable, and inclusive

begins early in the planning process, should be ongoing during the conference, and continues after the conference ends. With versions tailored to scientific conference organizers and conference presenters, this toolkit intends to be used to promote accessible, equitable, and inclusive conference experiences. While not all suggestions may be necessary, applicable, or possible for every conference, this toolkit assists to facilitate increased accessibility and inclusion. Many of the recommendations provided are based on universal design, design principles that maximize inclusion.

This toolkit provides guidelines to enhance accessibility, as proactively thinking about the inclusion of individuals with disabilities ensures a more accessible experience for all participants. Not all individuals with disabilities have a visible disability or will disclose their disability. Although this toolkit focuses on individuals with visual impairments in our examples, the needs of people with other types of disabilities, such as physical disabilities, learning disabilities, or psychological disabilities, must be considered. An expansion of this toolkit to include these perspectives is underway.

The Resource List at the end of the toolkit has a wealth of information to assist conference organizers, conference presenters, and attendees.

Funding for the development of this toolkit was provided by a grant from the National Institute of Health (R13EY032418) awarded to Dr. Bonnielin Swenor at the Johns Hopkins University Disability Health Research Center disabilityhealth.jhu.edu/.





During 2022, members of the International Network of Researchers with Vision Impairments and Their Allies (INOVA) designed this toolkit to support conference organizers, presenters, and attendees.

▶ Natalie Martiniello, PhD, CVRT

Postdoctoral Fellow, Department of Psychology, Concordia University CRIR/Institut Nazareth et Louis-Braille du CISSS de la Montérégie-Centre

▶ John-Ross (JR) Rizzo, M.D.

Ilse Melamid Associate Professor of Rehabilitation Medicine, Department of Rehabilitation Medicine

Health System Director, Disability Inclusion

New York University Grossman School of Medicine

L. Penny Rosenblum, PhD

Research Professor Emerita, University of Arizona Owner, Vision for Independence LLC

▶ Bonnielin Swenor, PhD, MPH

Director, Johns Hopkins Disability Health Research Center Associate Professor, Johns Hopkins School of Nursing The Wilmer Eye Institute, Johns Hopkins School of Medicine Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

► Mahadeo Sukhai, PhD

Canadian National Institute for the Blind, Research Department;

Queen's University, Faculty of Health Sciences, School of Medicine, Department of Ophthalmology

OCAD University, Inclusive Design Program

Ontario Tech University, Faculty of Business and Information Technology

▶ Walter Wittich, PhD FAAO CLVT

Associate Professor, School of Optometry Université de Montréal

▶ Yueh-Hsub Wu, M.S.

Department of Psychology University of Minnesota

Thank you to Caroline Cerilli, Research Coordinator, Johns Hopkins Disability Health Research Center for her assistance in the final editing of this toolkit.

Funding for the development of this toolkit was provided by a grant from the National Institute of Health (R13EY032418) awarded to Dr. Bonnielin Swenor at the Johns Hopkins University Disability Health Research Center disabilityhealth.jhu.edu/.

Scientific Conference Toolkit For Organizers

BEFORE THE CONFERENCE

Learn About Accessibility

- Prioritize the perspectives of people with disabilities and disability inclusion experts during the planning process.
- Seek guidance from disability rights, disability justice, and disability-led organizations and invite them to join your team.
- Use disability-inclusive language, such as avoiding the term handicapped.
- Review other resources for creating accessible and inclusive events.
- Identify companies that provide braille transcription, CART (Communication Access Realtime Translation) and ASL (American Sign Language) services.

Consider The Venue

When selecting and preparing a venue, consider the following aspects:

- Ensure the proximity of the conference venue to restaurants, airports, hotels, and accessible transit between these points.
- Ensure steps are high contrast or add brightly colored tape to increase visibility as well as tactile indicators.
- Seek a venue that has adjustable window coverings and lighting in rooms so that throughout the day adjustments can be made to decrease glare and improve contrast.
- Place a solid color runner over stairs that have a busy carpeted pattern to reduce visual crowding or complexity.
- Position meeting rooms in close proximity to reduce navigating between sessions.
- Include signage in a consistent location outside of each room and provide signage in braille and large print with a high contrast and easy to read font.
- Provide a service dog relief area that is convenient for participants to access as close as possible to the venue and ensure information about this area is communicated in the conference materials.
- Have a designated table or reserved seating for participants with disabilities, including seats in the front row and spaces for wheelchair users.
- Do not place AV equipment in the middle of aisles or walkways. If this cannot be avoided use a high contrast tablecloth, high contrast tape on the floor, or other methods to draw attention to the equipment. Have the equipment attended to by staff and place it out of the way when not in use.

- Place high contrast tape on microphones, remotes, and other equipment to increase its visibility. Use tactile stickers to support usability.
- Use white or other light color tablecloths to make black AV and other equipment more visible.
- Work with venue staff to ensure that microphone speakers do not have a buzz and that sound is amplified throughout the space.

Orient Venue Staff

As early as possible, provide the conference venue staff with an orientation on how to support the needs of participants with disabilities. Topics for this orientation may include:

- Ask staff to identify themselves by name and role before speaking to and asking questions of a guest.
- Instruct staff to provide clear verbal directions instead of relying on visual cues (e.g., "The elevator is behind you and across the lobby on the far left side. You'll need to tap your key card on the black device above the call button.")
- Demonstrate sighted guide technique and when to offer assistance. Time to offer assistance includes when the guest is checking into their hotel room and navigating to and around the venue. If the guest accepts an offer for a human guide, staff members should use best practices, including never taking someone's arm to pull or push them, standing next to the person not in front or behind them, and allowing the person to hold the guide's arm above the elbow.
- If offering to provide sighted guide assistance to an individual who uses a guide or service dog, staff should always speak directly to the person. A service dog should never be petted or distracted while working.
- When serving food, announce that a plate is being placed in front of the guest. As appropriate, the clock method can be used to describe the location of items on the plate. For example, "The vegetables are at 12 o'clock and the chicken is at 2 o'clock."

Improve Registration

- Ensure registration forms are compatible and useable with different screen readers (e.g., JAWS, VoiceOver, NVDA).
- Minimize visual clutter on the registration form.
- Ask all registrants if they have any accommodation requests (e.g., braille, large print, documents in electronic format, orientation to the venue, sign language interpreting, CART service).
- Ask participants their preferred method to contact them (e.g., text, email) to follow up about accommodation requests.

Information To Share Prior To The Conference

Create a virtual shared folder, for example using Dropbox or Google Drive, to share conference materials in accessible formats (e.g., images labeled, slide content in list format, text descriptions of maps, and ideally converting all files to accessible PDFs). Materials to include are:

- Conference schedule(s).
- List of phone numbers and email addresses for conference organizers, including who to contact for assistance with accessibility requests.
- List of participants so that individuals can connect with each other more easily.
- Map of the venue, including written directions for specific destinations from key starting points (e.g., hotel registration, bank of elevators). Destinations may include the location of the keynote, the cafeteria, the dog relief area, the exhibit hall, and the hallway where breakout sessions are located.
- Map of exhibit hall and where poster sessions are located, along with a written description of this information.
- List of nearby restaurants with relevant accessibility information for those eateries. For example, whether the restaurant is wheelchair accessible and whether braille menus are available.
- Presenter slides and posters. Although some presenters and exhibitors will not submit their materials ahead of time, upload materials as they become available during or after the conference.
- Accessible transportation options to the venue including estimated cost and where to find each option at the airport, train station etc.
- If applicable, information on how to travel to the meetings (e.g., walking directions, cost of Lyft, location of organizer provided bus and schedule).
- Label all folders and files logically and consistently (e.g., by session number, speaker last name, title of the presentation).
- If using a physical bulletin board for participants to leave messages, use an electronic format for the bulletin board, for example a Google Doc.
- Include instructions for submitting accessible files (e.g., PowerPoint slides, Google Slides) as part of the presentation submission guidelines shared with all presenters.

DURING THE CONFERENCE

Support Access During Presentations

- Prior to the presentation, provide presenters with a telephone number to call or text for assistance with technology.
- If paper copies of materials are provided, prepare copies in large print (18-point font) or braille based on participant needs.
 - If you have made copies of the presenter's handouts to be distributed during the session, offer to deliver these to the presentation room rather than requiring the presenter come to a location to pick them up.
- Allow presenters to use their own equipment (e.g., laptop, tablet) which may have software that is familiar and improves access (e.g., screen readers).
- Give presenters freedom to position their equipment where it works best for them, including the podium or at a table.
- Give presenters the option of a hand-held microphone or a mounted microphone.
- Provide support during the session, for example having staff assist with calling on audience members with their hand raised or assisting presenters in locating the stage and returning to their seat afterwards.

Exhibit Halls And Poster Sessions

- In the shared drive provide:
 - A map of the layout for the exhibit hall and/or poster session
 - A written description of the layout of the exhibit or poster session space
 - Exhibitors, vendors, and poster presenter materials
- Provide large signs at eye level for each exhibitor/vendor/poster.
- Have individuals at the entrance who can assist participants in locating a specific vendor/exhibitor/presenter or accompany them through the space and aid as requested.
- Encourage exhibitors/vendors/poster presenters to have a QR code participants can scan to get accessible electronic information that is on display and/or have large print, braille, or flash drives with information.
- When possible, provide several feet between posters to allow participants to hear what is being said by the presenter.

Name Tags

- Print name tags with first names in a large font (i.e., 72 point) and full names under in a smaller font (i.e., 24 point).
- Use a font style that is easily read such as Verdana or Arial.
- Use high contrast, such as white font on black background or black font on white background.
- Color code name tags by use of lanyards or stickers (e.g., staff red, presenters blue, vendors green, attendees purple).
- Organize name tags on a registration table in alphabetical order.
- Assist participants to locate name tags at the registration table.

Orientation To The Venue And Specific Spaces

- Prior to the conference provide a map of the venue so participants can review it ahead of time. Include a written description of the map.
- As appropriate, describe the layout of rooms to participants in advance. For example, "On the wall opposite the entrance are 5 tables with vendor exhibits. Closest to the front of the room is Vendor A, next Vendor B, etc."
- As appropriate, provide information about what is on the table during meals. For example, "Waitstaff will be bringing your plated chicken, potatoes, and broccoli. There is a basket of bread and plate of butter on the table."

Conference Participant Experience

- During transitions between sessions and at the start of each day of the conference, have individuals stationed at key locations to assist participants as requested.
 For example, have one or two staff outside of each presentation room to assist with directions or escort attendees.
- Have cordless microphones as an option for audience questions and comments.
- Consider using a remote-sighted assistance service, to allow participants to connect to a live agent for remote assistance with navigation during the conference.
- Provide opportunities for participants to sign up to go to meals together and/or take part in social activities.
- Designate a location for participants who would like to partner up with others so they can meet. Include this information in material sent out to participants prior to the conference and at registration. Both participants who would like to provide support to others and those needing support should be encouraged to go to the designated meeting location at specific times (e.g., at mealtime, prior to the opening session). Conference organizers should be on hand to assist with pairing up participants as needed.

- Avoid placing signs on easels that can easily be knocked over. Make best attempts to avoid the use of stanchions, as they are trip hazards.
- Encourage participants to provide business cards in large print and braille or provide contact information electronically.
- If sharing conference event information on social media, ensure content is accessible, including adding alt text for all non-textual elements, for example image descriptions for photos, graphs, logos, etc.
- Provide CART in all presentation sessions.

AFTER THE CONFERENCE

- Ask participants about their experience with accessibility in post-conference surveys and use this data when planning future conferences.
- Ensure that post-conference surveys are accessible, including using multiple choice or open-ended questions instead of table formats.
- Ensure electronic materials from all presenters and exhibitors have been collected and uploaded to the conference shared folder.

 Many of the recommendations provided are based on universal design, design principles that maximize inclusion.

Scientific Conference Toolkit For Presenters

Before Your Presentation

- Keep slides simple, uncluttered, and consider providing a handout of detailed information.
- When designing slides:
 - Use an easy-to-read font (e.g., Verdana, Arial).
 - Use properly marked headings to allow compatibility with screen reader software.
 - Use a 28-point font or larger.
 - Use a dark background (e.g., black, dark blue) and white font or a light background (e.g., white, pastel color) with black font.
 - Provide descriptions of all images or data sources (e.g., tables, graphs, pictures). When using Microsoft products for example, right click on the image and select the edit alt text option.
- When presenting data, use different colors, rather than shades of the same color.
- Have videos audio transcribed and provide close captioning.
- Describe information and data being presented visually.

During Your Presentation

- Adjust the room lighting to maximize visibility of the screen (e.g., close window coverings, dim lights in front of room).
- Begin your presentation by providing a visual description of yourself (e.g., "I'm a middle age black woman with blue-rimmed glasses wearing a purple dress.").
- State the title of each slide so that attendees following along using a device, large print, or braille will know which slide you are currently on.
- Describe images on your slides (e.g., "The table provides the 10 most common etiologies of study participants with diabetic retinopathy, macular degeneration, and glaucoma making up 65% of etiologies.").
- When you describe visual information on your slides, do not say "For those who can't see..." or "Since some of you can't see...".
- Rather than pointing at an attendee to indicate it is their turn to speak, ask a question, or make a comment, acknowledge them by what they are wearing and where they are sitting in the room (e.g., "The person in the red dress in the second row has their hand raised. What would you like to share?").

- When asking for a show of hands state how many people raised their hands (e.g., "About half of you have experience with this type of data.").
- If an individual is using an ASL interpreter, speak directly to the conference attendee not to the interpreter.
- If presenting a poster or visiting a poster, initiate the conversation by identifying yourself by name.

After Your Presentation

• Ensure your final presentation slides and other supplemental materials have been provided to the conference organizer in an accessible, electronic format.

This toolkit provides guidelines to
 enhance accessibility, as proactively
 thinking about the inclusion of individuals
 with disabilities ensures a more
 accessible experience for all participants.

Resource List

Toolkits And Guides

A Planning Guide to Accessible Conferences from the Council of Ontario Universities: http://www.accessiblecampus.ca/wp-content/uploads/2016/12/A-Planning-Guide-for-Accessible-Conferences-1.pdf

American Sign Language (ASL) Toolkit:

Planning for Interpretation, A Guide for Facilitators

https://fireadapted.org/resource/planning-for-asl-interpretation-a-guide-for-facilitators/

Disability Inclusion Toolkit from the Ford Foundation:

https://www.fordfoundation.org/work/learning/research-reports/disability-inclusion-toolkit/

Disability Style Language Guide (National Center on Disability and Journalism): https://ncdj.org/style-guide/

Guidance For Creating Accessible Materials

Creating Accessible Documents (CAST):

https://aem.cast.org/create/creating-accessible-documents

Creating accessible PowerPoint Presentations (Microsoft):

https://support.microsoft.com/en-us/office/make-your-powerpoint-presentations-accessible-to-people-with-disabilities-6f7772b2-2f33-4bd2-8ca7-dae3b2b3ef25

How to Write Alt-Text and Image Descriptions (Perkins School for the Blind):

https://www.perkins.org/resource/how-write-alt-text-and-image-descriptions-visually-impaired/

Testing Web Content for Accessibility (WebAIM):

https://webaim.org/resources/evalquickref/

WebAIM (articles and services):

https://webaim.org/

Accessible Signage And Business Cards

Clear Print Accessibility Guidelines (CNIB):

https://cnib.ca/sites/default/files/2018-07/CNIB%20Clear%20Print%20Guide.pdf

List of Braille Producers that can create documents and business cards (Braille Literacy Canada):

https://www.brailleliteracycanada.ca/en/resources/producer-list

Recommendations on Color and Contrast:

https://visionaware.org/everyday-living/home-modification/contrast-and-color/

Organizations

American Council of the Blind:

https://www.acb.org/

Association for Education and Rehabilitation of the Blind and Visually Impaired:

https://aerbvi.org/

Association of Medical Professionals with Hearing Loss (AMPHL):

https://www.amphl.org/

Braille Literacy Canada:

https://www.brailleliteracycanada.ca/en

CNIB:

https://www.cnib.ca/en?region=on

ILRU (Independent Living Centers):

https://www.ilru.org/home

National Federation of the Blind:

https://nfb.org/

Screen Readers And Remote-Sighted Assistance

Aira:

https://aira.io/

Be My Eyes:

https://www.bemyeyes.com/

What is a Screen Reader (Axess Lab):

https://axesslab.com/what-is-a-screen-reader/

Selecting Colors And Improving Contrast

Guide on How to Improve Contrast on Stairs:

https://www.youtube.com/watch?v=8kphKOzzLeE

Sighted Guide And Guide Dog Etiquette

Techniques for guiding people who are blind or have low vision:

https://visionaware.org/everyday-living/essential-skills/an-introduction-to-orientation-and-mobility-skills/sighted-guide-video/

Blindness and guide dog etiquette (Guide Dogs for the Blind):

https://www.guidedogs.com/explore-resources/general-information/blindness-and-guidedog-etiquette