



Building community at scientific events

A guidebook for organizing events with the intention of building community – authored by the CEFP2019 project team, CA²L²M events.

Chiara Bertipaglia, Ann Meyer, Arne Bakker, Leslie Hsu, Liz Guzy and Megan Carter



Table of Contents

Chapter 1: Introduction	1
Key definitions	2
About the authors	2
Acknowledgements	3
Recommended citation	3
Chapter 2: Choosing your event	4
Introduction	4
Definitions of each event type	4
Special considerations	5
Chapter 3: Event logistics	7
Introduction	7
General recommendations	7
Conferences and symposia	8
Small meetings and retreats	11
Webinars	12
Workathons	13
Resources	14
Chapter 4: Event content	16
Introduction	16
General principles for in-person meetings	16
Conferences and symposia	22
Small meetings and retreats	22
Webinars	23

Workathons	24
Chapter 5: Community-in-practice	26
Introduction	26
Plan early and often	26
Support new attendees	27
Plan and protect networking time	28
Know your audience	28
Preserve event content	29
Be transparent	29
Start well	29
Host inclusive webinars	29
Facilitation is key	30
Resources	30
Chapter 6: Diversity, equity, inclusion, and accessibility (DEIA)	32
Introduction	32
General principles for both in-person and virtual meetings	32
Conferences and symposia	36
Small meetings and retreats	37
Webinars	38
Workathons	39
Resources	40
Chapter 7: Event metrics and evaluation	41
Introduction	41
Metrics and evaluation for community building	41
Using metrics to facilitate change	43
Conferences and symposia	43
Webinars	44

Workathons	44
Social media	45
Resources	45
Appendix	47
CEFP 2019 Event Management Project Team Introduction & Questions	47
Links from the text	49

Chapter 1: Introduction

Communities gather at events, big and small, in-person and online. In planning these events, community managers are tasked with making a myriad of choices. Some of these choices may seem small at the time, but nearly all can have a large impact on the overall success of that event, including how attendees feel about each other and the community as a whole, during and after the event. One well-executed event can mean the difference between an attendee feeling at-home in a community and an attendee never coming back. More than that, it can mean ideas shared, collaborations formed, and progress made on issues that may have been too daunting for the individual to tackle on their own. How do community managers ensure that the events they organize truly foster and nurture their communities, leaving their community members more engaged and more connected with each other and with the community as a whole? This guide looks at how the choices made in organizing events contribute to building and nurturing a sense of community amongst attendees, as well as increased community member engagement and connectedness. Specifically, it discusses considerations with respect to the following areas:

- **Choosing your event:** This chapter discusses how to decide what type of event is right for your purposes.
- **Event logistics:** This chapter focuses on things that can be done in preparation for community-building at different types of events. For things that happen during the event, see Chapter 4: Event Content.
- **Event content:** This chapter provides an overview on critical program components, ranging from agenda structure to designing welcoming spaces, that help build and nurture community at in-person as well as online events.
- **Community-in-practice:** This chapter shares wisdom from a number of community managers who have experience in building and fostering community at virtual and in-person meetings.
- **Diversity, equity, inclusion, and accessibility (DEIA):** This chapter focuses on issues of Diversity, Equity, Inclusion, and Accessibility that are fundamental to address to build and nurture community at scientific events.
- **Event metrics and evaluation:** This chapter discusses specific metrics related to community-building at your event. These metrics will help you measure success, identify areas for improvement, and follow up to facilitate change in your community.

This manual is by no means an exhaustive resource. It is meant to serve as a first resource for those who have an interest in planning and convening meetings that foster and nurture community, including but not limited to scientific community managers, recognizing that people in this role may have a wide variety of job titles and work with very diverse communities. This manual is also not exhaustive in terms of the types of events that it discusses. Here, we focus specifically on:

- Conferences and Symposia;
- Small Meetings and Retreats;
- Workathons; and
- Webinars.

Key definitions

In this manual, we use the term community a lot, so let's start off by being very clear by what we mean:

- **Sense of Community:** the feeling that members have of belonging, the feeling that the members matter to one another and to the group, and a shared faith that their needs will be met through their commitment to be together. A sense of community involves a connection between individuals and between individuals and a broader organization that is based on sharing common goals. [adapted from [McMillan and Chavis \(1986\)](#)].
- **Event type:** For definitions of event types please see Chapter 2: Choosing Your Event.

About the authors

This manual is authored by a team of scientific community managers who were part of the 2019 [Center for Scientific Collaboration and Community Engagement](#) (CSCCE) Community Engagement Fellows Program (CEFP), formerly hosted by the American Association for the Advancement of Science (AAAS). CEFP 2019 was funded by the Alfred P. Sloan Foundation. This manual is intended to contribute to the stated goal of the CEFP to “collect and disseminate knowledge about building strong collaborations and communities.”

- *Chiara Bertipaglia* is the Assistant Director of Scientific Programs at Columbia University's Zuckerman Institute of Mind Brain Behavior. Her mission is to create a professional STEM environment that is welcoming, safer, diverse and inclusive for the community of neuroscientists (PhD students, postdocs and faculty members). Twitter: [@ChiaBertipaglia](#). ORCID: <https://orcid.org/0000-0002-3001-6252>
- *Ann Meyer* is an advisor at Ontario Genomics. She works with researchers in academia, industry, not-for-profits, and government to get genomics research funded while growing, supporting, and connecting the genomics community in Ontario. Twitter: [@meyer_ann](#), [@ontariogenomics](#). ORCID: <https://orcid.org/0000-0003-1469-3170>
- *Arne Bakker* is the Director of Meetings and Community for Science at the Chan Zuckerberg Initiative. He and his team organize meetings for the science grantees that CZI funds as well as for other partners and collaborators, with the specific aim to build and support collaborative scientific communities. Twitter: [@ah_bakker](#). ORCID: <https://orcid.org/0000-0003-1944-6515>
- *Leslie Hsu* is the coordinator of the Community for Data Integration. She coordinates a community of scientists, data practitioners, programmers, and program managers to advance data science and data integration goals. Twitter: [@hsu000001](#), ORCID: <https://orcid.org/0000-0002-5353-807X>
- *Liz Guzy* is the Program Manager for the University of Washington Interdisciplinary Center for Exposures, Diseases, Genomics and the Environment (EDGE) and the Superfund Research Program. She helps connect researchers from across disciplines to work together to better understand environmental health issues and prevent disease. Twitter: [@ecogenetix](#), [@uw_srp](#) ORCID: <https://orcid.org/0000-0001-6561-2751>
- *Megan Carter* is the Community Director for the Earth Science Information Partners (ESIP). She supports collaborations among Earth science data professionals from across the federal, private,

and academic sectors on numerous common data challenges. Twitter: [@ESIPfed](#). ORCID: <https://orcid.org/0000-0002-1549-1581>

Acknowledgements

The authors would like to thank the following people and organizations for their contributions to this document. The Alfred P. Sloan Foundation generously funded the CSCCE Community Engagement Fellows Program in 2019. Arielle Bennett, Toby Hodges, Serah Rono, and Jen Shook reviewed the text and provided valuable feedback. Amber Budden, Stefanie Butland, Andy Leidolf, Naomi Penfold, Allen Pope, and Emmy Tsang shared their insights and experiences for various chapters. Both the 2017 and 2019 cohorts of CEFPP Fellows have been great colleagues. Finally, this work would not have been possible without Lou Woodley, who guided and inspired us all throughout this Fellowship. Her vision for professionalizing the Scientific Community Engagement field has provided us with a home.

Recommended citation

“Building community at scientific events” by Chiara Bertipaglia, Ann Meyer, Arne Bakker, Leslie Hsu, Liz Guzy, and Megan Carter is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) [license](#).

Cite as: Center for Scientific Collaboration and Community Engagement. (2020) Building community at scientific events. Bertipaglia, Meyer, Bakker, Hsu, Guzy, and Carter doi: [10.5281/zenodo.3838154](https://doi.org/10.5281/zenodo.3838154)

Contact the CSCCE for other permissions by emailing info@cscce.org. The CSCCE logo is a trademark of CSCCE. It and other images in this guide are not licensed under these terms and may only be used when you use “Building community at scientific events” in its original form. Please attribute any modified use of this material as “Adapted from an original by the Center for Scientific Collaboration and Community Engagement (CSCCE) under a CC BY-NC-SA 4.0 [license](#): [10.5281/zenodo.3838154](https://doi.org/10.5281/zenodo.3838154).”

Chapter 2: Choosing your event

Introduction

This chapter provides our working definitions of each event type and focuses on the why and why not of choosing an event type.

Definitions of each event type

The definitions below are broad and generic but are helpful to establish what we mean in this manual when we discuss the different event types. Example themes are given for each meeting type.

CONFERENCE

An event that brings together many individuals (normally more than 200) to learn about and discuss the latest research in a particular field or area of interest. Conferences have a broad focus, usually span multiple days, and may have multiple concurrent sessions. Conferences are typically held annually or biennially and are typically in-person events. An example of a conference theme would be “Science as a Tool to Tackle Climate Change.”

SYMPOSIUM

An event that is similar to conferences but smaller (normally fewer than 200 participants) and more focused on a specific issue within a broader field or topic area. An example of a symposium theme would be “Mitigating Effects of Climate Change in the Oceans.”

SMALL MEETING

An event that brings together fewer people (normally 30-100) than a symposium to focus on specific topics within a particular field or area of interest and are typically shorter than conferences. Small meetings can run annually, biennially, or can be assembled as needed. An example of a small meeting theme would be “Science to Combat Microplastics in Oceans.”

RETREAT

An event that generally brings together individuals who work in the same department or organization in a location different than where they normally work to share progress, address challenges, and foster team building. An example of a retreat theme would be “Educational Outreach Group Meeting.”

WORKATHON

An event that brings together members of a community to work on solutions for specific problems of interest to the community. Workathons typically span one to two days and normally require participants to form small teams to tackle a problem or an aspect of a larger problem being addressed by the workathon. Workathons can run annually or can be one-time events. Workathons

can have many different names, often depending on the type of work or problem they involve. Such names include hackathons, collaborationfests (cofests), jamborees, and sprints. An example of a workathon theme would be “Creating Science Tools for a Sustainable Future.”

WEBINAR

These virtual events are short in duration (one to two hours) and typically feature one or more speakers presenting on a specific topic. Webinars can be part of a series and have a recurring, set time or they can be single occurrences. An example of a webinar theme would be “2019 Changing Climate Report.”

In this manual, conferences and symposia will be treated as one entity and small meetings and retreats will be treated as another, since they have similar features and requirements.

	Conference	Symposium	Small Meeting	Retreat	Workathon	Webinar
Size	>200	100-200	30-100	30-100	<100	<100
Attendees	Interested members of a large community	Interested members of community	Most of small community OR sub-committee OR working group	Sub-committee OR working group OR department	Interested members of a large community	Interested members of a large community
Focus	Field or area of interest	Topic within field or area of interest	Topic within field or issue	Issue or challenge within community	Specific problem or problems	Single specific topic
Amount of information to share	High	Medium to high	Medium	Medium	Low to medium	Low
Source of information	Many presenters	Many presenters	Small number of presenters	Small number of presenters	Small teams	One or a few presenters
Duration	Several days	1 or 2 days	1 or 2 days	1 or 2 days	1 or 2 days	1 or 2 hours
Perceived sense of community	Low	Low to medium	Medium to high	High	High	Low to medium

Table 2.1:

Common features distinguishing event types – these are general guidelines.

Special considerations

Conferences are typically events which bring together most interested members of a (large) community in-person to share the latest news, research, and developments as well as provide networking opportunities to community members. Conferences also offer the opportunity to have concurrent or satellite meetings for working groups/committees and workathons. If only a minority of your members would benefit from the information presented at the conference, you should

consider a different event type such as a symposium (see Chapter 7: Event Metrics and Evaluation for how to use surveys to influence changes in event type).

Small meetings or retreats allow subgroups of your community to come together to share, learn about, and/or address specific topics and challenges within your community. These focused events generally offer more opportunities to connect with other community members and are more intimate than conferences and symposia. Some retreats or small meetings are arranged for the explicit purpose of building and nurturing community, such as departmental retreats. You should consider a different event type, such as a birds-of-a-feather session¹ during a larger conference, if your community is large and many members who could offer valuable insight would be excluded from a small meeting/retreat due to the limited number of people a small meeting/retreat is intended to accommodate.

Workathons provide time and space for community members to develop or build solutions to problems or challenges important to the community. A workathon is a poor choice for your community if the problems to solve are manufactured or superficial, the solutions won't have impact or meaning, the skills required for the workathon are outside your community's expertise, and if the problems are too large to work on within a short timeframe.

Webinars offer a way to share information with your community without having to gather your community in-person. While webinars typically do not foster or nurture connections between individual members of your community, they do allow individuals within your community to share expertise. Webinars can be recorded and shared with community members to benefit the community over a longer period of time. You should consider a different event type, such as a conference or small meeting, if you have many sources of information or presenters, your community is so geographically dispersed that time zones become a problem (unless you are able to offer the webinar at several different times), or if you serve a community where the physical infrastructure for communication is often problematic and unreliable (even if this is only the case for a subset of your members).

¹ An informal discussion group based on a shared interest and without any fixed agenda.

Chapter 3: Event logistics

Introduction

This chapter focuses on things that can be done **in preparation** for community-building at different types of events. For things that happen **during** the event, please see Chapter 4: Event Content.

General recommendations

Here are some general tips and tricks, followed by tips that are specific to the event type you may be organizing. Please refer to Chapter 2: Choosing Your Event for the definitions of event type and size used throughout this manual.

SET GOALS

Identify the purpose of your event. This will help you better program the event and make decisions about whom to invite to best reach those goals. The book [“The Art of Gathering: How We Meet and Why It Matters”](#) by Priya Parker provides many examples about how to do this. Parker states:

“When we understand why we gather, to acknowledge, to learn, to challenge, to change - we learn how to organize gatherings that are relevant and memorable.”

KNOW YOUR ATTENDEES

What are the different types of people who you expect will attend? (For example, research scientists, data managers, software developers.) What are they hoping to get out of the meeting? Gathering this information could be done in the form of a pre-planning survey, event registration form or preparatory emails. Plan for activities that will cover all of the groups and not exclude anyone. There may need to be specific focus on the diversity of the group and elements that bring the groups together to best inform the logistics and content aspects of the event.

CHOOSE AN APPROPRIATE VENUE

Aim to create a memorable experience when choosing a venue for your event. Consider how attendees will interact in the space and how they will use both the structured (meeting rooms) and unstructured (hallways/foyers) spaces. If the event is a working meeting, choose and set up the physical location in a way that encourages attendees to "jump into interaction mode." This includes considering separate tables for small groups instead of a classroom style (desks in rows) set up, and making sure the venue is large enough for attendees to rearrange themselves and move around. Be sure to also consider the accessibility components of the venue (see accessibility sections below).

SET UP DIGITAL SPACES

Posting event materials and setting up a shared note space gives the event lasting presence and acts as a place people can go to look up links and retrieve more detailed information where needed. Be

sure to ask participants to use this space before, during and after the event to help encourage co-creation among members and show member's input is valuable to the event. Setting up a digital space where participants can interact in real time such as a Slack channel or establishing a hashtag can help people interact more freely and continues the discussion after the event is over.

FIGURE OUT FOOD AND DRINK

Providing food and drinks during breaks will provide [casual networking opportunities](#) and prevent people from needing to search for their own. Note that some types of workshop funds (such as from U.S. government agencies) have very strict rules about when food or beverage can be purchased. If this applies to you, you may want to look into partnering with other organizations and have them cover the food costs in return for things like sponsorship, a plenary talk, or other collaborative efforts. You can use metrics (See Chapter 7: Event Metrics and Evaluation) and the established evidence for the importance of refreshments at breaks as part of your requests for financial support for refreshments. You can use community-building milestones like anniversaries or accomplishments to help support the need for refreshments.

Conferences and symposia

PROGRAMMING

- Create a Code of Conduct to ensure participants feel safe and respected. A code of conduct should include: which behaviors are not tolerated, what consequences come from those behaviors, behaviors that are encouraged, where to go for help if something happens and you decide to report it, and what information to include in the report. Consider high visibility for your Code of Conduct on the website and refer to it often during the event. A good example is the [AAAS meeting code of conduct](#). Establishing respect is the first step to building community!
- In addition to a Code of Conduct, Community Participation Guidelines (CPGs) also talk about expected (positive) behaviors. One idea is to display them on a poster, so when participants feel that some interactions are becoming less constructive, they can refer to the guidelines and bring the interaction back on course and keep it positive. Participation guidelines can be helpful not only for events, but also for how you want and expect the whole community to behave at all times. A good example of these CPGs is from [Mozilla](#).
- Consider the number of participants, venue size and overall objectives in deciding the best style of meeting for your community i.e. "[traditional](#)" vs. "[unconference](#)". Traditional meeting styles typically promote a one-directional flow of information and don't always lend themselves to engaging participants. Chapter 4: Event Content discusses engagement tactics for traditional conference formats.
- To add some variety in presentation styles, consider asking multiple community members to co-present together and have them develop their presentation together (see Chapter 4: Event Content).
- Explore an "[unconference](#)" approach: a participant-oriented meeting where attendees decide on the agenda, discussion topics, workshops, and, often, even the time and venues.
- Aim to develop a balanced agenda (types of topics, background of speakers, etc.)

- Have participants help plan sessions (especially trainees or first-time attendees) so they help ensure they get what they want out of the event and feel a sense of contribution.
- If the event will be held in a location unfamiliar to you or your community, reach out to local members of the community to plan some social and/or volunteer activities for participants to learn about and connect with local people and issues.
- Consider hiring a professional meeting planner who can manage the details so you as a community manager can focus on more of the programming and the attendee experience. Many organizations have established events teams that can help you with this.

ACCESSIBILITY

More details about this topic can be found in Chapter 6: Diversity, Equity, Inclusion, and Accessibility (DEIA).

- Choose a location so spaces are accessible and inclusive. This goes beyond just physical accessibility for [people with disabilities](#); it also includes: gender neutral restrooms, lactation and pumping rooms with live streaming, quiet spaces for neuroatypical individuals and for people who need a reserved space to pray. Consider using the shared digital space to gather contributions to the agenda, location, special considerations and attendee engagement tactics.
- In the event invitation/registration process or shared digital space, be sure to ask attendees about pronouns and food allergies/customs, and whether they will need translation services, childcare, or transportation.
- When planning for refreshments, consider if you will offer alcohol during the conference. There are many logistical and accessibility considerations involving alcohol including: abiding by the local venue's alcohol regulations (alcohol license, need for police officer for size of attendees, checking IDs/age restrictions), having licensed bartenders serve drinks, limiting the number of hours the bar is open, offering a variety of fun, non-alcoholic beverages to remove the emphasis on alcohol, and limiting the number of complimentary drinks (if allowable) through drink tickets.
- Provide childcare/familycare for those that need it and be open to feedback from those that use it. Identify if the venue has the structural resources needed to support families such as nice and comfortable nursing spaces; sinks and refrigerators in pumping rooms; lockers; access to renting hospital-grade pumps. Be sure to make attendees know that breastfeeding is allowed in conference spaces and that there are clear anti-harassment policies about it! If you experience operational or financial barriers to offering onsite care, explore offering reimbursement or financial aid for at-home or local daycare. Allow caregivers access to the conference for free, allow babywearing and babies at presentations.
- Consider using conference technology to help improve planning, navigation and connection at the event:
 - Use an online conference management program like [Sched](#), which gives users lots of customization options like: schedule-builders for attendees, mobile app to navigate the event, identify networking sessions, auto-printing signs for break-out rooms, give real time feedback, and help generate post-event reports. These capabilities are especially helpful to organizers in better tracking and managing their events. These digital amenities also help attendees navigate and feel more connected at large events.

- Provide an app to navigate the event (program, networking sessions, etc), which makes people feel less lost in huge spaces. Example: [ASCB-EMBO meetings](#)
- Don't forget to also provide some print options of these materials for attendees that don't have smartphones or have trouble with technology.
- Provide options for people to connect and participate remotely, including recording of talks for those that need to watch or listen at a later time. Be sure to consider the intensive AV and translation needs this will require. [Google Slides](#) could be used for real-time captioning for those attending remotely with hearing or vision impairments.
- Be sure you have uploaded all relevant meeting materials and shared notes section to your shared community digital space (GitHub, Google Docs, Slack, etc.)
- Be sure to provide adequate microphone arrangements for the size of room sessions will be held in.
- For visual presentations at both in-person and online meetings, it's important not to assume that everyone has the same ability to see and read. Prepare [guidelines](#) following [Universal Design Principles](#) and [Inclusive Design Principles](#) for ALL presenters to follow! For both in-person and online presentations, consider arranging an automated speech recognition system (e.g. Microsoft Translator, Google Slides), complemented with a function that allows attendees to obtain a transcript of the presentation. See also Chapter 6: Diversity, Equity, Inclusion, and Accessibility (DEIA).

COMMUNICATION

Many attendees connect with each other before events. Things that can help these meaningful connections/communications happen are:

- Publishing a list of participants beforehand, including Twitter handle (if participants opt in to agree that you can share their name/handles publicly.)
- Create [interactive business cards/name badges](#) using [Twitter](#) or [Blendology](#), this allows for people to tap phones/badges to instantly exchange contact information with a timestamp.
- Set up a Slack channels or WhatsApp groups for events or various activities at the event. Consider using sub-groups in specific languages so participants can connect with other participants who are native speakers and can build closer relationships and communicate more comfortably.
- Develop a social media policy. Decide if the default is 'open sharing unless presenters explicitly say otherwise' or 'no sharing before asking'. If you go for the former, consider including social media info (ex.: Twitter handles) of participants. A good example is the [AAAS meeting social media policy](#). *More details about this can be found Chapter 6: Diversity, Equity, Inclusion, and Accessibility (DEIA).*
 - Consider using language like:
 - We encourage participants to use our dedicated hashtag: #XXXXX.
 - When posting about the symposium online, please communicate with respect and consideration for all attendees and their research, staff, and vendors, as we value diverse views and perspectives.

- If symposium speakers or those presenting posters do not wish to have their research shared on social media, they should make an announcement at the beginning of their presentation. We ask that attendees respect presenters' wishes if they indicate that information presented is not to be shared.
- Reach out to first time participants to welcome them and ask them what they are looking to get out of the event, what they look forward to contributing, and if they have any concerns or questions.
- Hire a photographer (be sure to get appropriate consent from attendees) to capture inclusive photos of attendees actively participating to retain and attract new attendees. Some ideas for getting appropriate consent to being photographed are: include a release in your registration requirements, put up signage in areas where the photographer may be taking photos to notify participants that by being in that area they consent to having their photo taken, provide a way for attendees to clearly signify they do not want to be photographed, provide verbal confirmation for illiterate participants or participants who do not read/write/speak English, and provide special consent language for minors.

Small meetings and retreats

PROGRAMMING

- Send a pre-retreat survey. This will help you learn what your attendees desire to get out of this.
- Assign responsibility for parts of the agenda to different attendees so everyone has a stake in the outcome of the event. Responsibilities could include: researching, organizing, or moderating a session.
- Aim to create an informal environment. Examples: organize seating in an inward (face-to-face) layout, schedule lots of breaks to allow for one-on-one follow up and indoor or outdoor breaks, create some "soft seating" spaces (contains comfortable furniture that can be easily moved around to accommodate the user's needs or desires for a customizable layout).
- Use different engagement tactics (open forum for vocal input, post-its for written input, and emailed follow-up) so everyone feels comfortable participating in their preferred style.
- Prepare a list of questions or activities to use when the group needs help refocusing on the topic.
- Consider using the lunch hour as a light working session or group activity so that you don't lose people's focus and momentum. However, providing downtime is important to avoid burning people out and to accommodate time for attendees to take care of other things. So, weigh your agenda accordingly.
- [Organize a range of social events](#) and don't simply rely on self-organizing for these things to happen (hikes, tours, team competitions etc.) Be sure to plan a celebratory lunch or dinner after the hard work to rejuvenate team spirit and reflect on what the team has accomplished together.

ACCESSIBILITY

More details about this topic can be found in Chapter 6: Diversity, Equity, Inclusion, and Accessibility (DEIA).

- Consider hosting small meetings/retreats outside of your normal office building to help limit distractions and put people in a new environment so they can focus on working as a team.
- Choose location so spaces are accessible and inclusive.
- Be sure to help with accommodations for those that will find participating in an off-site event difficult (transportation, mother rooms, childcare for extended hours required etc.)
- Provide options for people to connect and participate remotely, including recording of talks for those that need to watch or listen at a later time. Be sure to consider the intensive AV and translation needs this will require.

COMMUNICATION

- Set up a Slack channel for event and be sure to post all follow up material here.

Webinars

PROGRAMMING

- In the agenda, if relevant and applicable, allow for community announcements. An example is a short "report out" or announcement section that anyone in the community can contribute to in advance and present a slide.

ACCESSIBILITY

- Be mindful of time zones for webinars and record them so they're accessible later for those who can't join.
- Choose a platform that allows meaningful communication. Based on the number of participants: can everyone speak? Can everyone type in? Can everyone opt to turn their camera on? A sense of community and belonging can be fostered more if people can see each other's faces, for instance. Seeing the speaker's face can also aid understanding for non-native speakers. The best platform allows attendees to call in via phone, to not have to download an app, to join easily even from areas with poor wifi, to have the option of separate virtual breakout rooms, and have the ability to record. Platforms also differ in chat functionality, the option to raise a virtual hand to speak, and max number of participants. Some commonly used platforms are Zoom, WebEx, and GoToMeeting, with Zoom being a popular option for meeting the considerations above. Wikipedia has a comprehensive [webinar platform comparison](#).

COMMUNICATION

- Set up ways for participants to easily contribute to the conversation, ask questions, and interact, especially anonymously, which often leads to more interactions. For example, [sli.do](#) allow anonymous participation for polls or questions. However, it also allows for people to enter their name if they wish. Other good options are [GoogleDocs](#), [Hack.md](#), [Cryptopad](#), and [Etherpad](#).
- If setting up polls, ask questions that let the participants understand who else is in the call - this could be a question about their duties, geographical location, newness to the group, etc.

- Assign someone to monitor the chat and be responsive to questions.
- Prepare some pre-formed questions in case nobody wants to be the first person to speak during the question period.
- Allow for awkward silence, counting to 8 or 10 before moving on may allow time for more people to decide to speak.
- Recorded webinars that people can watch at their leisure (tend to) get higher total view numbers than live-only webinars, but the latter result in more conversations. You should decide ahead of time whether it's more important for conversations to happen in real-time, or that people can consume the output passively in the future. This will differ depending on the goal of the webinar.
- Decide beforehand what your preference is with regards to muting of microphones and/or cameras. As an admin, you usually can set a video conference to have mic/video turned off, so you should think about what would work best for your community. You should have a dedicated person assigned to microphone management, who can mute/unmute participants where needed. Make sure the group also knows beforehand what the expectations are around when people can unmute, whether they should use a "raise hand" option, and when to speak vs. type in chat.

Workathons

PROGRAMMING

- Connect the workathon goals to existing community needs - one way to do this is to poll the community about challenges they face and skills they want to develop, then organize participatory events around those topics.
- Consider the diversity of skills of your participants, and design the agenda to bring those skillsets together. Depending on your goals and audience, beware of being unfriendly to those who are less familiar or experienced with particular tools/skills e.g. computer programming/coding. Devise an ice-breaker or introduction to allow participants to learn about each other's diverse skills.
- Consider if you want elements of competition or not. Competition may not be useful for collaboration and open innovation.
- Commit time and resources to attract the "best" participants. Here, "best" may mean that participants are the best for building a diverse and productive event. Identify who you want to gather, and market the application to those groups.
- Prepare for action
 - Create an open place for people to submit ideas for projects and circulate learning material. You will want to consider what platform is best for your audience. GitHub works well for those familiar with it, but may be difficult for those who do not use it regularly. This breaks the usual power dynamics dictated by the mostly unilateral flow of information from organizers to participants. In this setting everyone contributes ideas/notes. This gives people time to start thinking in advance about how to make the best time of the workathon and get their contributions recognized as part of the

“agenda”. Eliminating barriers to information encourages community building. (More details can be found in Chapter 4: Event Content).

- Give people the opportunity to start thinking about ideas and meeting people before the event. For example, before the meeting you could distribute a Google doc of ideas, launch the Slack channel, and send a few email prompts to get started.
- Make instruction packs for each team that includes the important materials, resources, and logistical information such as instructions, emergency numbers, and a checklist of what to bring.
- Ask each participant to introduce themselves in a slide deck before the event.

ACCESSIBILITY

- Basic utilities need to be available from the start of the event and sufficient to cover the number of sessions or participants. This will ensure that time is not spent frustrated trying to get essential services and instead can be spent discussing and building things with other members. Items under basic utilities include bandwidth needs of WiFi, Cloud storage needs, access to power, and whiteboards.
- Though not a replacement for a Code of Conduct, sometimes a less formal "top tips for participation" (see [here](#)) can be very useful.

COMMUNICATION

- Consider an introduction webinar before the event. This is particularly important for people to get a briefing on key topics for the workathon and to bring everyone to the event prepared to start learning from each other. This is also a good way to introduce key concepts and members of the community (a [good example from OpenCon](#)).
- Email new attendees before their first workathon to say hi and welcome them -- it gives new members one name they know before the event. (An example [welcome email to new attendees](#) to an unconference.)
- If you require attendees to download software or data, or to familiarize themselves with relevant material, send this out at least a week in advance and encourage them to do a small amount of preparation. This ensures that everyone can hit the ground running and make the most of the limited time together. ([Read more here.](#))
- Plan to write an event report (and/or work with participants to share their reports) to give the event lasting presence and act as a place where people can go to look up links and retrieve more detailed information where needed.

Resources

ADDITIONAL READING FOR PARTICULAR TYPES OF EVENTS

- Budd A, Dinkel H, Corpas M, Fuller JC, Rubinat L, Devos DP, Khoueiry PH, Förstner KU, Georgatos F, Rowland F, Sharan M, Binder JX, Grace T, Traphagen K, Gristwood A, Wood NT (2015) [Ten Simple Rules for Organizing an Unconference](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1003905

- Chautard A, Hann C (2019) [Developing Inclusive Conferences](#) *University of Oxford*
- Corpas M, Gehlenborg N, Janga SC, Bourne PE (2008) [Ten simple rules for organizing a scientific meeting](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1000080
- Ponomarenko J, Garrido R, Guigó R (2017) [Ten Simple Rules on How to Organize a Scientific Retreat](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1005344
- Fadlelmola FM, Panji S, Ahmed AE, Ghouila A, Akurugu WA, Entfellner J-BD, Souiai O, Mulder N, H3ABioNet Research working group as members of the H3Africa Consortium (2019) [Ten simple rules for organizing a webinar series](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1006671
- Huppenkothen D, Arendt A, Hogg DW, Ram K, VanderPlas JT, Rokem A (2018) [Hack weeks as a model for data science education and collaboration](#). *Proceedings of the National Academy of Sciences* doi: 10.1073/pnas.1717196115
- McInerney GJ (2016) [Ten Simple Rules for Curating and Facilitating Small Workshops](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1004745
- Pavelin K, Pundir S, Cham JA (2014) [Ten simple rules for running interactive workshops](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1003485
- Tauberer J [How to run a successful hackathon](#)

ADDITIONAL READING AROUND CHILDCARE

- Calisi RM and a Working Group of Mothers in Science (2018) [How to tackle the childcare-conference conundrum](#). *Proceedings of the National Academy of Sciences* doi: 10.1073/pnas.1803153115
- Henderson E (2018) [Creating inclusive conferences for academics with caring responsibilities](#). *University of Warwick*
- [List of childcare friendly organizers and fellowships, #academicmum](#)
- [Summary of responses to inquiries regarding conference child care and other family friendly policies](#), Shared by Arne Bakker (CZI)

ADDITIONAL READING AROUND INCLUSIVE EVENTS

- Fleming N (2019) [How to organize a conference that's open to everyone](#). *Nature* doi: 10.1038/d41586-019-02253-9
- [Planning an inclusive and accessible event \(PDF download\)](#). *Union of Concerned Scientists*
- Thomas H, Hirsch A (2016) [A Progressive's Style Guide \(PDF download\)](#).

MORE

- Woodley L (2014) [All together now: Event formats for networking](#). *Social in silico*
- Sharan M, Hodges T (2019) [Report from the first Bio-IT Hackathon](#)
- Bacon, Jono (2012) [The art of community: Building the new age of participation](#). *O'Reilly Media, Inc.*

Chapter 4: Event content

Introduction

The way you structure content at events plays a critical role in how your community members come together. There's a big difference between meetings with mostly presentations from a central stage and those that have breakouts and co-working time, and that difference lies mostly in how participants engage with each other. Chapter 3: Event Logistics has already covered many aspects of the planning process. In this chapter, we want to dive deeper into how you can think about critical program components, ranging from agenda structure to designing welcoming spaces, that help build and nurture community at in-person as well as online events.

General principles for in-person meetings

In-person meetings are a great way of facilitating the process of building community. Both the overall tone of meetings and the shared experiences of meeting participants can play a big role in establishing the culture of your community--even if it is a mostly online community. Lou Woodley describes it as follows in [this blog post](#):

“Meeting face to face isn't only good for building trust and understanding, and getting things done. Having shared experiences to reference back to is also important for a sense of community spirit. [...] Sharing these types of experiences can build a sense of community identity among attendees and also spark conversations and generate momentum ...”

STRUCTURING YOUR AGENDA

Opening

- Be intentional about what you will cover during the opening session of your meeting.
- The opening is a great opportunity to highlight the community aspect of the group that is coming together. Those involved in opening and welcome speeches can reaffirm what defines the community, specifically call out the importance of interacting with the community, meeting new people and embracing the diversity of the crowd, and highlight program components that allow the community to come together and share experiences.

Presentations

- Most in-person meetings will have presentations. When thinking about your agenda, it's important to consider the direction of information throughout the meeting (i.e. talks vs dialogue vs breakout). Presentations on a main stage tend to be one-directional: a presenter will speak, and the audience will listen. At scientific meetings you see this *'sage on a stage'* format quite often. Sure, great and engaging topics can lead to useful follow up conversations, but one-directional presentations tend to have low engagement. Here are some things to consider when scheduling presentations:

- Prompt presenters to engage with the audience through dialogue during their presentation.
- Instead of simply including a slide asking for 'Questions?' at the end, ask presenters to include broader discussion topics as part of their talk.
- Require researchers to include slides listing '*Expertise they have to offer*' to the community, and '*Collaborations or resources they are looking for*' from the community. This has great potential for follow up conversations throughout the rest of the meeting, and can be an effective way to start collaborations.
- Offer presenters the option to use engagement tools such as real-time audience polls, and asking questions via Slack or meeting apps.

Additional sessions

- In addition to presentations, it's important to schedule agenda items that have multi-directional communication built in from the start. A meeting with only presentations, can probably also be held in virtual space. Some suggestions to leverage the fact that your community is meeting in-person include:
 - Panel discussions with a moderator.
 - These sessions tend to be more dynamic than presentations: when the moderator actively engages the audience, this gives the opportunity for lots of discussion and engagement with the attendees.
 - Breakout sessions with smaller groups of participants.
 - Splitting the participants in smaller groups allows for deeper discussions than most plenary sessions.
 - Breakout sessions lend themselves particularly well for 'ongoing discussions': you can leave a slot unassigned at the start of the meeting to fill with a topic that emerges during the meeting.
 - Offering an open co-working space during breakout sessions, where participants can work and/or talk with each other is also a good way to allow for maximum engagement during your meeting.
 - Poster Sessions
 - Poster sessions are an excellent way to get attendees to connect with one another. However, many times these sessions can be overwhelming. For presenters, there is also the challenge as to when they get to see other posters. Some ideas on how to work around this are:
 - Divide the poster presenters in two groups, where each group presents at a particular time.
 - Schedule 30-second or 1-minute 'poster pitches' during the meeting, where presenters briefly explain their poster on the main stage.
 - Create a poster scavenger hunt, that makes sure participants see all areas of the poster sessions, including remote corners. You can offer a prize for those who complete it successfully. Questions you can think of are:

- How many posters are displayed in section X?
- What is the most common word in the titles of posters 1-20?
- Which poster do you like the most?
- Which background color is used the most?
- Which disciplines/geographical locations are represented most frequently?
- Alternatively, you can organize guided poster walks, where an attendee (senior PI for example) chooses several posters to visit, and takes a group of attendees along.
 - Workshops
 - Providing relevant trainings at your meeting can be a powerful connector. Topics can range from tools that the community uses frequently, to professional development trainings for members.
 - Starting a meeting with workshops can also serve as a good icebreaker where attendees get to know each other better throughout the workshop exercises.
 - Demo sessions of tools and technologies that people use and/or develop
 - This type of session can be effectively scheduled during a networking session and/or reception, making the reception more dynamic and less focused on drinks.

Additional thoughts and considerations can be found [here](#).

Format

- Length of talks and sessions
 - You have a lot of power in the dynamics of a meeting through planning the format thoughtfully. One way to do so is to control the length of talks and sessions. A frequent complaint of meetings is that talks go over time, cutting into breaks and/or social time. When this happens, a meeting tends to become much less engaging. Therefore, consider the length of presentations carefully. How long will the speakers need to get their message across? How many talks can you fit into one session without the likelihood of going over time? How will you control time in general?
 - A good rule of thumb is to have a solid break at least every 90-120 minutes. If building community at your event is important, then make sure not to pack the schedule too tightly. It's rare that someone complains that there was too much time to connect with other attendees.
- Q&As
 - As mentioned before, presentations have the tendency to be one-directional. However, Q&A sessions are by definition two-directional and therefore allow for dialogue to happen. Consider carefully how you will run the Q&A during your meeting. Also see

Chapter 6: Diversity, Equity, Inclusion, and Accessibility (DEIA) for more context on Q&A sessions.

- It is usually better to have someone moderate than have the presenter do it themselves, since it will help to ensure that a range of perspectives are heard (presenters don't always scan the whole room). A moderator can also help with not having the same few people ask all the questions by prioritizing people who have not asked something before. Moderating is not always easy, but [this blog](#) has some tips on how to come prepared. An added bonus of a moderator, is that it gives the opportunity to highlight or elevate a community member as well.
- To ensure that junior voices are heard, you can implement the rule that a PhD student or postdoc has to ask the first question.
- Finally, make sure that you don't let Q&A sessions run over time, especially if a presenter took longer than their allotted time slot. It takes a strong moderator to do so, but suggesting that the discussion should be continued during the break is usually worth it. The blog above has some tips on this as well.

PARTICIPANT-DRIVEN PROGRAMMING

Emerging topics

- As mentioned in the preceding section, keeping space in the agenda for emerging topics is a good way to increase engagement, by making sure the meeting content is current and relevant to your audience. You can do this by leaving a few breakout session topics open until after the meeting has started and you know which topics keep coming up during Q&A, by scheduling a panel session around '*emerging topics during the meeting*', or by keeping a whole presentation session open at the end for attendees to present on topics that come up during the meeting. Rather than deciding on these topics yourself, including a way for attendees to vote on which topics shall be covered makes the whole experience more relevant.

Report outs

- Report outs are an effective way to inform the whole audience on what was discussed during smaller sessions. It is important to give good guidelines on how you would like these report outs to happen: how long presenters have, whether they can use slides or not, if there is a specific structure to the report out, and if there are any follow up actions are all good questions to answer beforehand.

Unconference

- The most active form of participant-driven programming is through hosting a so-called [Unconference](#): a meeting where the whole agenda is decided by the attendees. You provide the framework and rough timelines, but the participants take control of the content.
- The topics are generated at the start of the meetings, or sometimes just the day before a session. In most unconferences, attendees suggest topics and formats, followed by all attendees voting on which topics they want to include in the meetings (usually via sticky notes).

- Lou Woodley states in [a blog on event formats](#) the following considerations for an unconference:

“Don’t expect that by organising or sponsoring the event you’ll necessarily get a big input into the programme! Sometimes the organiser will set a broad topic for the event, but an unconference is really a great opportunity to listen to the passions and projects of a community (or at least its more vocal members). Sessions can be variable in quality and style, but the “high energy” participation and serendipitous networking aspects often results in new friendships and future collaborations on other projects.”

- Some other considerations for unconferences can be found [here](#).

UNSTRUCTURED TIME

Breaks, receptions and dinners are important moments for the community to connect with each other. Different from the structured components of the agenda listed above, these unstructured sessions give an opportunity for attendees to seek out and connect with community more freely.

Length of breaks

- The length of breaks is a crucial consideration on the success of your unstructured time. You want to ensure that participants have enough time to grab refreshments (keep the potential time spent in lines in mind), have a bathroom break *and* can talk to each other.
- At the same time, most meeting organizers have more content available than there is space for, so there can be pressure to cut on breaks to allow for more content. This is generally not the right choice with community building as a goal in mind. After all, you want to allow attendees the opportunity to *follow up* on the great topics they just heard about and this usually happens during breaks.
- A good rule of thumb is to have 30-minute coffee breaks (even during small meetings!), 60- to 90-minute lunch breaks (depending on the size of your meeting) and never have breaks shorter than 20-minutes.

Structuring your unstructured time

- Most breaks and receptions are unstructured in the sense that you don’t control the topic or flow of things. However, there is merit to add some structure to (some of the) breaks to increase networking. This can especially help attendees who might not actively seek out conversations such as introverts and non-native speakers, or those who are intimidated to speak to more senior attendees.
 - You can set up themed tables during your lunch break. Example themes include tables set around career-stage, community-specific topics, potential collaboration topics, etc. At large meetings, you can also create whole lunch rooms based on specific topics.
 - You can include demo-sessions during receptions and lunches, where community members showcase tools and technologies.

- You can add community-specific question-cards and conversation-starters to tables to get the discussion started.
- Creating the right physical space to host your unstructured time is important as well. Couches and chairs facing each other or small tables with few chairs are not the most inviting for welcoming new people to participate. They tend to signal that the group is ‘full’. Rather, make sure to create a flexible environment, with open areas with space to sit and linger and high-top tables to ensure a welcoming atmosphere. Most venues will allow to move their furniture when you ask.
- As an organizer you can also play an active role as *greeter* when people enter a space for the first time. By welcoming them and explaining how the space works (*‘There is the bar, food can be found over there, and if you’d like to sit, there are some tables with chairs upstairs’*), you can take some of the common anxiety of entering a new space away.
- Keep the ‘Pacman rule’ in mind and encourage your attendees to use it: when standing as a group of people, always leave room for one person to join your group. Physical empty space in a group is one way to give people explicit permission to join. This also makes the environment more inclusive and welcoming. After someone joins the group, the group should now readjust to leave another space for a new person.

SOCIAL ACTIVITIES

Social activities create the opportunity for your community to do things together that are not necessarily related to the topic of the meeting. Some meetings organize social activities as part of the program, others give tips on what activities are available when the meeting is not in session and let attendees self-organize. In either case as an organizer, you can help build community by thinking of what social activities the attendees could do.

Lowering the bar for participation

- You can provide ideas for social gatherings after “formal” events are over, such as suggesting nearby bars, restaurants, museums, shops, etc. You probably know the meeting location and surrounding area better than most attendees.
- You can have sign-up sheets posted for certain activities, so that attendees can go as a group.
- Designating a point person for an activity can also help. This person can lead the group and answer questions.
- When organizing the activities as part of the meeting, make sure there is a variety of activities to partake in. Plan both active (hike) and leisure (museum visit) activities during the day for example.

Timing of social activities

- Most social activities take place after the formal program is over, i.e. in the evening. However, creating space in the agenda for afternoon activities opens up a whole new set of activities that attendees can do, such as hiking, sports, museum visits, etc.

- Especially if your meeting is 3 days or longer, it is a good idea to schedule one afternoon free for social activities. If you have a packed agenda, you can schedule scientific programming after dinner on this day too, such as a keynote speaker.

Participant-driven activities

- Just as the unconference is meant to drive your meeting agenda by the attendees, you can also include social events that are driven by your own community:
 - Ask local community members what type of activity they suggest.
 - Ask your community if anyone wants to lead an activity, such as an afternoon walk, yoga session, trivia quiz, etc.
 - You can even organize a talent showcase one evening, such as is done at the [NCORE conference](#).

Alcohol

- A lot of social activities (as well as dinners and reception) include alcohol. When organizing these activities, it is important that participants don't feel pressured to drink if they don't want to. You can play an important role in setting the right stage by working directly with the hotels, bars and restaurants where activities take place.
 - Ask the bar to display non-alcoholic beverages in equal fashion as alcoholic options, either printed on the menu or physically displayed on the bar.
 - When a bar offers a 'signature drink', have them serve a 'signature mocktail' alongside it.
 - Ask the bar to serve sodas in a glass, with a stirrer. Some people find this more comfortable than drinking out of a can.

Conferences and symposia

At Conferences and Symposia, a lot of people usually want to present and give a talk. But, as discussed above, listening to talks all day is not the best way to build community, and depending on the size of the community, not everyone can always give a presentation. One way to solve this and to cut down on the number of presentations is by grouping multiple community members into one presentation slot and ask them to present together. This also can lead to great pre-meeting engagement as they develop their presentation together (see Chapter 3: Event Logistics).

Small meetings and retreats

Smaller meetings are especially well-suited to have sessions led by community members. Even if you don't structure the meeting as an Unconference (described above), this is still a great way to have multiple voices from your community heard.

Icebreaker activities are great ways for the group to get to know each other. While at Conferences and Symposia, networking activities usually are the way to meet participants due to the size of those

meetings, the more intimate size of small meetings and retreats make it easier for people to connect. Some examples of effective community icebreakers can be found here:

- [Twitter thread from Malvika Sharan](#)
- Butland, S (2018) [Sharing the Recipe for rOpenSci's Unconf Ice Breaker](#)
- Woodley L (2014) [All together now: Event formats for networking](#). *Social in silico*

Webinars

Webinars are shorter than in-person meetings but tend to happen more frequently. As such, the content is spread out over a longer period in comparison. This gives you the opportunity to adjust content as you learn more about your community, how members engage with each other, and what topics are important to them.

We recognize that it's inherently difficult to guarantee active engagement in an online event. Indeed, the challenge of organizing a good community-driven webinar is to set it up as if you want to recreate the in-person experience. A webinar shouldn't just be a dry recording of a presentation; there should be a clear benefit of joining live. This benefit is mostly given by the continuing possibility of discussion on the topic (before, during, and after). Below are some tips on how to choose content in a way that is community-driven:

- Ask the community directly, either at in-person meetings or through surveys, what content they are interested in.
- Look at ongoing and past discussions in the community, for example what was the most engaged discussion during an in-person meeting or what topics get the most traction on your online forum. Use that as a starting point for developing webinar topics.
- Connect directly with (emerging) leaders amongst your community members to determine content that the community will find valuable.

STRUCTURE

Webinars can be structured in 3 different ways, according to how evolved the community is:

1. Staff to community

- This is the most one-directional way of hosting a webinar, and least likely to foster community. You can use this for when you want to give broad updates to the community and share general information via a presentation.
 - For this format, it's critically important that you spend time thinking how the staff engages with the attendees throughout the presentation: what prompts do you use to facilitate discussion and get community members to ask questions and talk amongst each other?
 - The webinar format allows for more personal and direct contact with the community compared to email, but make sure to ask yourself what components you are adding that make it worthwhile for the community to attend. This format can run the risk that the content can better be conveyed via email or newsletter.

2. Staff facilitated featuring the community
 - In this format staff hosts the webinar, but community members are prominently featured as presenters and/or panel members.
3. Fully run by community
 - This is the most engaging format of the three, where community members organize and run the entire webinar.

For all the above 3 formats, see the topic on Direction of Information flow on page one of this chapter for additional ideas that can also apply to an online audience.

Workathons

Workathons tend to be smaller than Symposia and Conferences, and more interactive and collaborative than small meetings and retreats. In addition to the General principles for in-person meetings at the start of this chapter, you should keep the following principles in mind as well that can help building community during your event.

Setting the stage

- State clearly what the meeting is and what it is not at the beginning. Set the goals and anticipated outcomes at the start (hopefully with attendee participation) and share expected behaviors.
 - Printing simple participation guidelines and making them very visible throughout the physical space is a useful way to remind people that you want people to feel free to be themselves, express themselves, be creative and interactive. As an example, the ‘top tips for participation’ from the 2018 eLife Sprint can be found [here](#).
 - Sharing the aspiration at the start on how you plan to report out more broadly about the work that will be done, can work as an additional motivator for the group.
 - Since people will actively work together throughout the workathon, it’s incredibly important that people know who is who in the room. Make sure to spend enough time at the beginning to allow everyone to introduce themselves.
 - You can ask participants to create one slide with a photo of themselves and briefly present on what they can offer and what they hope to receive from the others in the room.
 - The icebreakers mentioned under small meetings and retreats can be good ways to introduce participants to each other as well.

Agenda

- It is important that the workathon is not exclusively focused on working time. To be effective, working time needs to be interspersed with mingling time. An example of how this can be done is [the brainhack from ohbm](#).
- Similarly, it is important to give participants space within the event time boundaries to stop and reflect and absorb. After blocks of working time, participants can report out on their work to

the whole group. This allows the whole group to be up-to-date on the progress that is being made, as well as challenges that are being faced. Getting feedback from the broader community can help projects forward. For certain workathons this might also be a good time to allow participants to switch projects.

Collaborative work

- Shared note taking (i.e. via Google Drive) and shared communication channels (i.e. via Slack) are effective ways for participants to stay connected during the meeting, especially if groups are working in different physical spaces.
- Be intentional in keeping the groups small, which helps with establishing an engaged group dynamic. Larger groups tend to split up into smaller hack teams anyway. Being intentional about the groups beforehand can therefore help with productivity.
- Inviting participants to create public content such as a blog and/or whitepaper with the workathon outcomes ensures that people in the community have a takeaway, even if they were not present (and you have something that summarizes the outcomes).
- Remind participants that everyone has their own expertise, and that part of the goal is not only to create a product, but also to learn from others.

Chapter 5: Community-in-practice

Introduction

Staying true to the collective theme of this manual, *building community at events*, we have chosen to structure this chapter around insights we collected through interviews with CEFPP community members that have first-hand experience with fostering community at all of these types of meetings: Conferences/Symposia, Small Meetings/Retreats, Webinars, and Workathons. Please see the appendix for a copy of the interview questions. You are also welcome to use this as a template and modify it to suit your specific needs.

Below are some key points and themes that emerged from the interviews we conducted. We believe that, although these are some of the most important considerations a Community Manager should take into account when planning an event, they are by no means the most important nor is this an exhaustive list. Many of these topics are discussed in more detail in other chapters of this manual.

Plan early and often

Andy Leidolf, Executive Director of the [Society of Freshwater Sciences](#), commented about his previous experience planning large in-person events with upwards of 1,000 attendees, "*Start planning early!*"

For in-person events, venues may be booked years in advance, just as the calendars of attendees may fill up very quickly. You may find people want to know a year or more in advance where and when your meeting will be. On top of that, contracts and negotiation (nevermind designing an agenda, inviting speakers, moderating community-contributed breakout session submissions, etc.) can take much longer than expected.

For webinars, planning may not need to be started years in advance, but should take into account getting the event into attendee calendars before they are booked solid and when you will know enough about webinar content to be able to generate an enticing advertisement/invite.

Leidolf also recommended that Community Managers or other organizers consider carefully whether they can afford a professional meeting planner for in-person events. For him, hiring a professional meeting planner has taken a large burden off of his shoulders, allowing him to focus on content programming. It should be noted that hiring professional meeting planners can sometimes result in marked up pricing for venues and vendors. When considering whether to hire a professional meeting planner, you may also want to consider how changeable your events are. For example, are you constantly looking for a new venue in a new location each time or do you have established relationships with venues and vendors that you continue to revisit? In some cases, if funds are available, you may wish to hire a Meetings Director as a regular staff member for your organization.

When planning an event, it is important to have community representation in the process of planning, promoting, and improving future events. This could be a formal committee, where members might be considered partners with staff in creating a vision for the events, as well as

ensuring that they align with event themes and are inclusive, engaging, and informative for the community. Leidolf noted that having a formal committee has been important to him and he noted that it is helpful to include members that are local to the event location that are familiar with cultural and other local considerations.

Support new attendees

Stefanie Butland, Community Manager at [rOpenSci](#), emphasized that Community Managers should, *“Help new attendees recognize they belong at your event.”*

Pre-Event (In-person): For an event with about 45 first-timers, Stefanie has had success personally welcoming new attendees prior to the event through one-on-one video chats preceded by a brief survey. Although this might take a lot of effort, Stefanie has found the experience worthwhile. She has been able to field questions prior to the event, even gaining some insights that helped her improve the event. She was able to alleviate first-timers’ feelings of impostor syndrome and help to connect them to others in the community with similar interests.

During In-person Events: Another particularly strong theme that emerged from all interviews was the importance of icebreakers early on at the event. When done well, icebreakers can help people to feel comfortable quickly and make connections with others. Icebreakers can make people feel really vulnerable, though, so they should always start off with a demo and a frivolous question with no risk.

Online: Stefanie recommended encouraging attendees to use webcams whenever possible, as well as having well-orchestrated brief introductions from everyone.

Naomi Penfold, Associate Director of ASAPbio and community manager of the ASAPbio ambassadors program highlighted, *“The community manager should have a very direct role in welcoming participants and making sure they get to interact”*.

Naomi commented about her previous learnings as [eLife Sprint](#) organizer while she was Innovation Officer at eLife: *“Consider how to ensure that anyone you’ve invited who broadens the diversity of your community is supported to participate once at the event: being the one person who is black, queer, atypical, not familiar with the domain or topic, etc. in a room full of people who feel at home even if they’re new may only add to any discomfort and may actually be exploitative”*.

Naomi also emphasized that the *“community manager should intentionally reach out to members who are typically underrepresented in the field, and invite them”*.

At [eLife Sprint 2018](#) we operated an application-selection-invitation process because this was our first event, and we wanted to give the best chance of success by curating the people who attended - both in terms of the skills they would bring, but also in terms of diversity demographics, ideas, passion and mix of existing and new contributors to the general open source open science community. [...] My advice would be to: Identify who you want to gather,

and market the application to those groups. [Do this] proactively and reactively: leave enough time with open applications to monitor current application demographics and change marketing accordingly to hit gaps. [For instance] we were looking for developers, designers, researchers, and people with general knowledge and influence in the domain [of interest]. We knew our reach to designers and female developers was particularly low and we needed to find ways to reach these people. This is something that was really hard to do: one thing I'd try more in the future would be to go to their spaces, build relationships and trust, and then once trusted, ask if they'd be interested to join in with my community.

Emmy Tsang, Innovation Community Manager at eLife, who has just organized and run the [eLife Sprint 2019 edition](#), was very intentional to make those community members who are not code savvy feel like they can participate: “reach out to those specific communities, lay out clearly why they should participate and what they would gain”.

Plan and protect networking time

Allen Pope, Executive Secretary of the [International Arctic Science Committee](#) said that one of the most important elements for building community at in-person events is to, “*build opportunities for serendipitous connections.*”

A successful meeting is often considered such by participants because of the connections or collaborations formed with other meeting attendees. Of all of the emerging themes, this one was probably the one that was mentioned most. This can involve both structured and unstructured time and take the form of networking time, socials, and more.

Know your audience

It's important to design your event to meet the expectations of your community. A good way to better understand these expectations and the skills your community members can contribute is by conducting a pre-event questionnaire. Design the questionnaire to best capture the goals, expectations, expertise and learning/social styles of your attendees so you can best design a successful event.

Stefanie Butland, [reflected on the usefulness of her pre-event questionnaire](#): “The questions encouraged participants to reflect in advance. The example answer snippets we provided gave them ideas from which to seed their answers and in some cases gave them permission to show some vulnerability. The answers to the question, *List three things you hope to get from the event were so heartening.* Beautiful, but in a different way, were answers to the question, *Do you have any concerns about your readiness to participate?* People expressed real concerns about impostor syndrome, their perceived ability to contribute “as much or as well” as others, and feeling “outclassed by all the geniuses present”. These responses prompted me to reassure people that they were 100% qualified to participate, and opened an opportunity to listen to and address specific concerns.”

Amber Budden, Director of Learning and Outreach at the [National Center for Ecological Analysis and Synthesis](#), emphasized the importance of ensuring events feature “topics guided by the community.”

Budden stated, “We want to represent the needs of the community and make sure that the community ideas are reflected when developing activities. We are empowering the community to inform the progress of the organization, that is community building!”

Preserve event content

Because both in-person and virtual events require significant effort and result in outputs that others may benefit from, event content (recordings, presentations, notes, report-outs, etc.) should be made available after the event. For events with breakout sessions, multiple interviewees noted the importance of allowing for report-outs where others can learn what happened and was discussed. Some Community Managers have found it useful for breakout session attendees to note 3 key takeaways from their session. These takeaways can be compiled into a single document with takeaways from every session. Following an in-person event, community managers may even choose to host an online event to summarize content from the meeting. This could take the form of very brief lightning talks presented by community members.

Be transparent

Implementing transparency is an important part of building trust with your community. Establishing a code of conduct for your event openly and honestly communicates the expectations, acceptable behaviours, and other important community values. It also informs members how to report abuse of the code of conduct. Andy Leidolf states, “The [code of conduct](#) helps state what is expected of community members and what they expect of the organization. It’s important to have all attendees read, acknowledge and agree to this meeting code of conduct before the event. Be sure the organizers promote the code of conduct in the welcome remarks to help create a welcoming and safe environment and help prevent violations in the first place.”

Start well

Beginning the event with a well-defined mission - strong purpose, clear reason why you are there helps set the right tone for your event (explore the book “[The Art of Gathering](#)” by Priya Parker which talks more about this). Pay particular attention to the content you put first, like plenary sessions, to make sure you set the right tone for your event.

Host inclusive webinars

Online events such as webinars virtually connect people from all over the world, thus preparation is imperative for making sure they run smoothly. Be sure to select a good time, record and post on the same day. After the event, make sure all the materials are available. Amber Budden, recommends “Be sure to transcribe the discussion forum as it is the mechanism for additional questions. To accommodate questions from those attendees that were unable to watch the webinar live, make the discussion forum available for 48 hours after and encourage speakers to go back and respond to these questions.” If a discussion forum is important for your community, be sure to choose a platform that enables this.

Megan Carter, Community Director at [Earth Science Information Partners \(ESIP\)](#) recommended preparing for a webinar by writing a script, practicing it and making sure you stick to it. Even the most seasoned meeting facilitator can get thrown off by technical difficulties, so it's important to know the software and practice ahead of time with guest speakers that may not have used your web-conferencing software before. When you do encounter technical difficulties, make a note somewhere of what happened and what you did to solve it so that you and others can avoid or tackle it more quickly next time.

Facilitation is key

Amber Budden, recommended that Community Managers “go through facilitation training” prior to in-person events. Other interviewees also emphasized that a strong facilitator is needed for virtual events as well. Good facilitators can navigate difficult situations, including making sure everyone feels like they have a chance to speak and no one person dominates the conversation.

Resources

The Community Managers we interviewed offered many resources on planning events and suggestions of organizations and events to check out that, in their opinions, really do a standout job at fostering community at events.

Please note this is not an exhaustive list and many other resources on this topic are mentioned throughout this manual.

ORGANIZATIONS

- [CSCCE Community Engagement Fellows Program](#)
- [Mozilla Science Foundation](#)
- [R-Ladies](#): global organization promoting participation in R community for women and other underrepresented genders (they have online Slack groups)
- [Society of Freshwater Sciences](#)
- [rOpenSci](#)
- [ASAPbio](#)
- [International Arctic Science Committee](#)
- [Earth Science Information Partners \(ESIP\)](#)

MEETINGS

- [Society of Freshwater Science annual meeting in Salt Lake City, UT](#)
- [eLife Innovation Sprint](#)
- [Earth Science Information Partners \(ESIP\)](#)

PEOPLE

- Kari Jordan from [The Carpentries](#)
- Julia Stewart Lowndes from openscapes.org
- Patricia Cruise from [DataCite](#)

Chapter 6: Diversity, equity, inclusion, and accessibility (DEIA)

Introduction

This chapter focuses on issues of Diversity, Equity, Inclusion, and Accessibility (DEIA) that are fundamental to address to build and nurture community at scientific events.

As community managers organizing both in-person and virtual events, it is crucial to keep in mind and value the breadth of diversity amongst our community members. Making them feel included should be one of our priorities: people are unlikely to feel a sense of community and identify as members of such community if they don't feel welcome and respected, in other words, included.

In this chapter we strived to highlight issues related to [DEIA](#) which are crucial to build and nurture community at events.

General principles for both in-person and virtual meetings

WHO PLANS THE EVENT?

When planning a diverse, equitable, inclusive, and accessible community event, consider appointing a dedicated committee that will consider DEIA aspects. Ensuring a diverse set of perspectives among your committee is crucial, therefore committee members should be selected based on DEIA principles. You can involve community members in this committee by opening a call for positions, as well as by actively inviting underrepresented individuals. Remember: as a community manager, you have the power to put principles of DEIA into practice.

#REPRESENTATIONMATTERS AT ALL LEVELS

As community managers we should embrace and apply the principle that representation matters at all levels. This means involving at all levels those people who represent a wide range of diversity (gender identity and expression, ethnicity, sexual orientation, age, nationality, etc.).

Here are some of our best practices:

- Make an effort to diversify the range of invited speakers. Pay particular attention to who says what (who gives the keynote? Who facilitates discussions? Who moderates panels? Who gives voice to others? Who asks the questions?). Read this [post](#) by [The Hopper Fund](#) for good suggestions as to how to invite diverse speakers.
- Be aware of the risk of [tokenizing speakers](#) (for example, having one person of color on the program or panel to speak on behalf of all people of color, or to cross off having “diverse speakers” on a checklist).

- To make your event fully participatory, strive to encourage everyone to ask questions and to give them a practical chance to do so. Since it can be quite intimidating to raise your hand and ask a question out loud in front of an audience, an online system to submit questions is an option to consider, together with a “thumbs-up” function for individuals to “share” and upvote questions. Regardless of whether this system is an option or not, the role of the moderator handling the Q&A session is crucial. This person should be committed to ensure inclusivity of those who ask questions. For example, the moderator could explicitly select questions from individuals whose voices are usually underrepresented in the field, or a rule could be spelled out that the first question should be asked by young individuals (see page 18 of [this document](#) by Alice Chautard and Dr. Claire Hann, from the University of Oxford).

CODE OF CONDUCT

For community members to feel safe and entitled to participate, it is imperative to draw up an official Code of Conduct to share beforehand (preferably during registration time), and ask everyone to abide to it. A code of conduct should state:

- which behaviors will not be tolerated.
- what consequences can come from those behaviors.
- where to go for help if you see something and decide to report it.
- what action(s) will be taken against those who modeled intolerable behaviors.

COMMUNITY PARTICIPATION GUIDELINES

Besides a code of conduct, community managers should also take care of providing a set of participation guidelines, where they establish a set of expected positive behaviors.

More details about code of conducts and community participation guidelines can be found in Chapter 3: Event Logistics.

ACCESSIBLE PRESENTATIONS

The more diverse a community is, the richer the experience of being part of it is. However, with diversity comes the responsibility of being culturally sensitive.

- When does the event happen?
 - Choose [dates](#) that do not conflict not only with Christian religious holidays, but also with other holidays.
- Visual presentations
 - As community managers we shouldn't assume that everyone has the same ability to see/read visual presentations, at both in person and online meetings. Prepare [guidelines](#) following [Universal Design Principles](#), [Inclusive Design Principles](#), and [Accessibility Tools](#) for the presenters to follow so that their slide deck is accessible for all: these should include readable font sizes (especially according to the AV system if in-person meeting), and color blind friendly color schemes. For both in-person and online presentations,

consider arranging an automated speech recognition system (e.g. Microsoft Translator), complemented with a function that allows to obtain a transcript of the presentation.

- Oral presentations
 - Community managers should make conscious choices of using [inclusive and respectful language](#) about age, disability, economic background, gender and sex, race and ethnicity, etc., as well as coaching presenters about it.
- Multilingual communities
 - In communities where members speak more than one language, issues of [language justice](#) (equality among languages) arise. Consider arrangements like: staffing the event with culturally sensitive multilingual personnel; running parallel sessions in different languages; supporting an on-the-fly translation system with wireless headphones.

More details about presentations can be found in Chapter 3: Event Logistics and Chapter 4: Event Content.

INCLUSION

- Where does the event happen geographically?
 - As community managers we like to claim that we welcome members with a diverse range of nationalities. However, when we run in-person meetings to which everyone world-wide is in principle invited, we should pay particular attention to the geographic location that we pick. Check the [passport index](#) of the meeting host country: who are you excluding based purely on this choice? Have you considered the issue of [privileged passports](#)? If you truly are ready to welcome individuals from any place in the world, have you taken actions to facilitate their travel arrangements (including visas)?
 - Another issue to consider is whether the land where you are hosting the in-person event was once property of an Indigenous population. It is best practice to include an [Indigenous Land Acknowledgement](#) to the opening remarks of an event, where the organizers recognize an Indigenous community's ancestral ties to the land on which the event is taking place.
- Travel support
 - If your community includes individuals from any place in the world, and you are committed to welcoming them at the in-person event, consider finding sponsors to offer travel support to those in need. Especially if funding is tight, to make sure financial resources are funneled in the right direction, you might ask for letters of reference stating that no resources are indeed available to allow participation of the individual (unless the travel support is granted).
- Virtual attendance
 - If, despite all the good intentions, for logistics reasons the event takes place in a geographic location that doesn't allow a fully inclusive in-person participation, and travel support is not available, community managers can work with the IT team to organize a system for virtual attendance. This can range from setting up a live streaming platform, to arranging virtual presentations, in the case in which presenters themselves cannot be there in person.

- Participants' pronouns
 - Gender pronouns are part of people's core identity. Community members who are addressed with the wrong pronouns are going to feel disrespected and excluded, and may feel oppressed and victims of an act of microaggression. Therefore, during the event registration process, it is a good idea to include the option of specifying which pronouns each person prefers to be addressed with (please note that the option of not disclosing should always be there). It is also worth providing [resources](#) for people to consult on why they are asked to share their pronouns. In regard to this, consider choosing locations where disclosing one's gender identity is not risky.
- Family care
 - During the past few years a lot has been [written](#) about how to include individuals with family care responsibilities (not just children) in scientific events, actively going against traditional habits that would be marginalizing. Enabling these community members to actively join and enjoy community events means on one hand to provide practical support for them to continue to have their loved ones taken care of (structurally, operationally, and financially), and on the other hand to also organize content who might bring them together and share. While the former aspect is covered in detail in the logistics chapter, where all the different options to provide family care support are described, the latter is covered in the 'content' chapter.

More details about providing family care options can be found in Chapter 3: Event Logistics.

RECEPTION

- Food
 - Preferences/restrictions very often, if not always, reflect much more than mere inclinations. Not providing options for everyone automatically means excluding certain individuals from participating in your event, hindering any community building efforts you may be after. Besides providing appropriate amounts of clearly labeled vegetarian, vegan, gluten-free, and kosher servings, it is very appreciated if the caterer clearly states food ingredients too. Moreover, you can also think about arranging receptions around specific events that have to do with food customs, such as Ramadan for example. These can be occasions to learn about different cultures and share traditions while supporting certain community members.
- Drinks
 - Be aware of what kind of environment you may be unintentionally creating when alcohol is served. Besides the fact that many individuals may not want to drink alcohol because of taste, cultural concerns, pregnancy, or alcohol dependence, individuals from underrepresented backgrounds may feel more vulnerable when large amounts of alcohol are served and some uncontrollable behaviors from overrepresented groups may arise. It is always a good idea to provide "equally appealing non-alcoholic beverages" besides just juice and sodas, to show that you value individuals who don't consume alcohol equally to those who do. In some circumstances you may consider running completely alcohol-free events. Work with the caterer to display non-alcoholic beverages

equally well as alcoholic beverages (both on menus and at the bar), and instruct the catering staff to pour non-alcoholic beverages in glasses (rather than serve cans of soda), and to not automatically pour/refill a glass, but rather always ask first.

More details about receptions can be found in Chapter 3: Event Logistics.

Conferences and symposia

ACCESSIBILITY

- Virtual sessions at large in-person meetings
 - Arranging virtual sessions requires appropriate AV/IT support. Virtual sessions can take the form of:
 - Live streaming and recording of talks (give accessibility to those who *attend* remotely).
 - Remote Q&A (give accessibility to those who *attend* remotely). See page 20 of [this](#) resource.
 - [Virtual lightning talks](#), with facilitation of peer-to-peer discussion (give accessibility to those who *present* remotely).
 - Virtual posters (presenters upload the poster file together with a recorded video of the presentation).
 - Staff members may be in charge of channeling everything that happens in real time live to the remote participants. Depending on how big the event is, this could either be organized by sessions, or it might be feasible only for small events.

INCLUSION

- Networking among huge crowds
 - It might be quite overwhelming for anyone to be among big crowds for large periods of time, with the constant reminder that “networking is the most important thing you can do at a conference”. As community managers, we should also look after those community members who struggle to express themselves during typical networking opportunities, such as receptions. We can arrange:
 - A “[traffic light badge system](#)”, whereby individuals can make it clear whether they are happy to network, prefer to be approached by others rather than ‘making the first move’, or if they would like some quiet space.
 - (a) Quiet room(s), where people can find some relief from the noise and the pressure to meet new people. Similarly, (a) prayer room(s) should be arranged.
 - “Flying solo coffee mixers”: opportunities to make networking less awkward for people attending conferences on their own (also relevant to small meetings and retreats).

- “New members breakfast” or “First time attendees welcome” to meet new community members in a space where you are not the only newcomer and those uncomfortable feelings get diluted in the group.
- Opportunities for people who share interests/background to meet and share
 - Often times scientific communities are made up of several subcommunities, defined by common interests/background. Community managers should consider ways of nurturing these subcommunities at large in-person events by designing *ad hoc* opportunities where people with common interests/background can network. An example might be coupling breaks with such opportunities, like reserving a room for graduate students, or early career researchers to bond over lunch/breakfast.
- Safer spaces
 - Unfortunately, it is not uncommon for episodes of harassment and microaggression to happen at large in-person events. Therefore, it is important to provide [safer spaces](#) (actual rooms) where people can meet members of their subcommunity/group they identify with, either exclusively or inclusively, to get some time away from the pressures of the crowd and decompress.

Small meetings and retreats

At in-person events that are smaller than conferences and symposia, it might look like the job of the community manager is easier, as they have to manage a smaller number of people indeed. However, this idea can be quite misleading, as in those contexts the manager actually should really try their best to connect with people on a personal level and make sure everyone feels included, safe and respected in the community.

DIVERSITY

As previously mentioned, making sure that diversity is represented at all levels is crucial. However, the community manager should not underestimate what actions need to be taken to practically support the participation of the individuals who broaden the diversity of the community. Being the only person, or the only few people, from an underrepresented group in a room might make these individuals feel tokenized, even exploited.

The community manager should have a very direct role in welcoming all participants and making sure there are ways for all of them to interact safely and inclusively.

EQUITY AND INCLUSION

- Unconferences
 - Community managers are encouraged to involve community members in leading entire sessions. The feeling of participation that comes with co-creation can greatly fuel the sense of belonging to the community. However, community managers have the responsibility of making sure that sessions are facilitated using anti-oppressive

facilitation methods, that is to say, ensuring that the group is empowered as a whole. This ranges from sharing appropriate resources to coaching facilitators beforehand.

More details about receptions can be found in Chapter 3: Event Logistics.

- Shared notes
 - Shared documents where everyone can put notes from the meeting are an empowering tool that community managers can set up to encourage co-creation among members. In fact, it sends the message that everyone's input is valuable.

Webinars

Online communities, more than communities who meet in person, are more likely to include a wide variety of diversity, because of lack of geographic constraints. Therefore, when planning online meetings, which often take the form of webinars, some issues of inclusion should be especially taken into account.

INCLUSION AND ACCESSIBILITY

- At what time does the event happen?
 - Community managers should keep an updated record of the time zones of the community members, and be mindful of these when planning the time of the webinar. We know it's not always possible when the geographic locations span countries all over the world, but ideally nobody would have to wake up or go to bed unreasonably early/late to participate in the webinar. In extreme cases community managers have two options: record the webinar so that members can watch it later at their leisure, or running multiple copies of the same event to accommodate everyone's time zone. The latter still offers benefits of interaction, in that watching a recorded video doesn't allow to ask questions or comment (with the small exception of scenarios where early-on questions submission is made available).
- How are Q&As handled?
 - The option of submitting questions *anonymously* beforehand, as well as during the webinar, may help everyone to find the courage to speak up. Rules about remote questions submission and selection should be transparent to give everyone an equal chance: it is hard to operate equitably in this context of anonymity, however the Q&A moderator (the one who is likely to select questions) would greatly benefit from [cultural sensitivity](#) training.
- Which language is used?
 - Given the completely on-line nature of these meetings, and the length, which is usually way shorter than in-person meetings such as conferences, symposia, retreats, with some good logistical organization, it should be possible to run multiple copies of the same event in different languages. Ideally community managers will have collected demographic information on the primary spoken language of community members, thus they should be able to evaluate which languages other than English it is appropriate to engage the members with.

- Which platform do you use?
 - Choose a webinar platform that may not constitute a technological barrier for some less technology-prone community members. For example: the platform shouldn't require downloading an app, but should rather allow to quickly and easily connect, also via phone call.

FOSTERING BELONGING AND ACTIVE PARTICIPATION

What can be done to address the challenge of making people connect with the disadvantage of not being in the same place?

- Camera option
 - Allowing the option of turning on the camera, thus seeing other community members' faces, helps foster a sense of belonging. Indeed some individuals may see themselves represented in other people, and this will likely nurture their inclination to be a part of the community as they will feel included.
- Microphone option
 - Allowing the option of turning on the microphone to either ask a question by voice (not through the chat) or to provide a comment is a way to foster participation.

More details about how to sort AV/IT details for webinars can be found in Chapter 3: Event Logistics.

Workathons

INCLUSION

In this document, we intentionally chose to talk not about hackathons, but workathons. A workathon is a project-based defined time (ranging from hours to days) where people come together in person to work on specific projects, that they typically do not work on. This can involve pre-defined problem sets, interdisciplinary project teams, sprints, etc. The projects tackled during these events do not necessarily involve *only* technology projects, or at least they also involve other aspects collateral to technology, meaning that there is space for a wide range of expertise and backgrounds to collaborate and offer input. Similar community events go by the name of 'create-a-thons', or 'do-a-thons'. As community managers, choosing the appropriate name for these events is quite important from an inclusion point of view. Traditionally, hackathons are considered events built for expert programmers or professional coders: when advertising an event under this name, members of traditionally underrepresented groups in these fields, who lack confidence and suffer from impostor syndrome exactly due to lack of representation, may not register. In the attempt of attracting and retaining a widely diverse range of community members, consider [choosing an inclusive name](#) and addressing the points highlighted below.

- Intentional reach-out
 - As a first step, community managers should not assume that all participants come from the same background and have the same skills. If community managers want to attract a diverse set of participants, they have to be very intentional in reaching out to them, by

sending personal invitations or contacting other community managers to spread the voice in specific subcommunities. Using inclusive language in the FAQs is also a way to encourage participation from individuals who don't usually attend workathons.

- Community Participation Guidelines
 - Besides a code of conduct, community managers should also take care of providing a set of participation guidelines. One of the points to clarify upfront is that workathons are not 'overnighters': organizers should send the message that they are aware that they are working with professionals who have families.

FOSTERING BELONGING AND ACTIVE PARTICIPATION

Given the nature of workathons (projects are submitted beforehand by community members, are subsequently screened and selected by the organizers, and are ultimately led by the community member project leaders, with other members' participation), there is an intrinsic potential for fueling collaboration and co-creation, which are two strong community pillars. Emmy Tsang, PhD, Innovation Community Manager at eLife says "workathons are an extremely powerful way of empowering people, because they work on something together as a team. The commitment level is high, hence the sense of belonging also increases".

However, how can you make sure there is truly inclusive participation by everyone, and no weird power dynamics occur among those who collaborate at the tables? To address this, community managers should start from solid and enforceable code of conduct and participation guidelines. They can also use help from some "community champions" who they know are mindful people and they trust (see "intentional reach-out"). Finally, dedicated facilitation and support can be provided by the staff to address this point.

More details about workathons can be found in the content and logistics chapters.

Resources

To our knowledge, this is a good list of comprehensive guide books on how to tackle issues of DEIA at events (they are hyperlinked in this chapter).

- Chautard A, Hann C (2019) [Developing Inclusive Conferences](#) University of Oxford
- 500WomenScientists [Guide to organizing inclusive scientific meeting](#)
- Aexwlchan's [ideas for inclusive/accessible events](#)
- OpenCon [Diversity, equity, and inclusion learnings & next steps. An opencon report on conference planning](#)
- OpenCon [Diversity, Equity, & Inclusion - Organizer, Speaker, & Participant Diversity](#)
- The Hopper Fund [Do better at conference diversity](#)
- Calisi RM and a Working Group of Mothers in Science (2018) [How to tackle the childcare-conference conundrum](#). *Proceedings of the National Academy of Sciences* doi: 10.1073/pnas.1803153115

Chapter 7: Event metrics and evaluation

Introduction

This chapter discusses metrics and evaluation related to community-building at your event. These metrics will help you measure success, identify areas for improvement, and follow up to facilitate change in your community. Our goal is for you to achieve a healthy sense of community at your events and elsewhere in your community.

Metrics and evaluation for community building

The metrics we discuss in this chapter are things you can measure about your community that will give you useful information for managing and engaging your members. One common pitfall when choosing metrics is that there is not a clear sense of what information is gained or what action can be taken to improve.

Metrics are often categorized into *quantitative* and *qualitative* (see Figure 1). While quantitative metrics can show measurable change in numbers, qualitative metrics are useful as story-telling devices and can also help to facilitate change in community building. Another way to categorize metrics is into *solicited* and *unsolicited* metrics, where solicited metrics are obtained by asking participants for responses while unsolicited metrics are things that happen and can be measured without participant response. When planning your evaluation, having a balance of quantitative and qualitative, and solicited and unsolicited metrics will help you to cover different needs. Some metrics can be collected before the event and presented at the event, while others can be collected post-event and included in reports or other presentations.

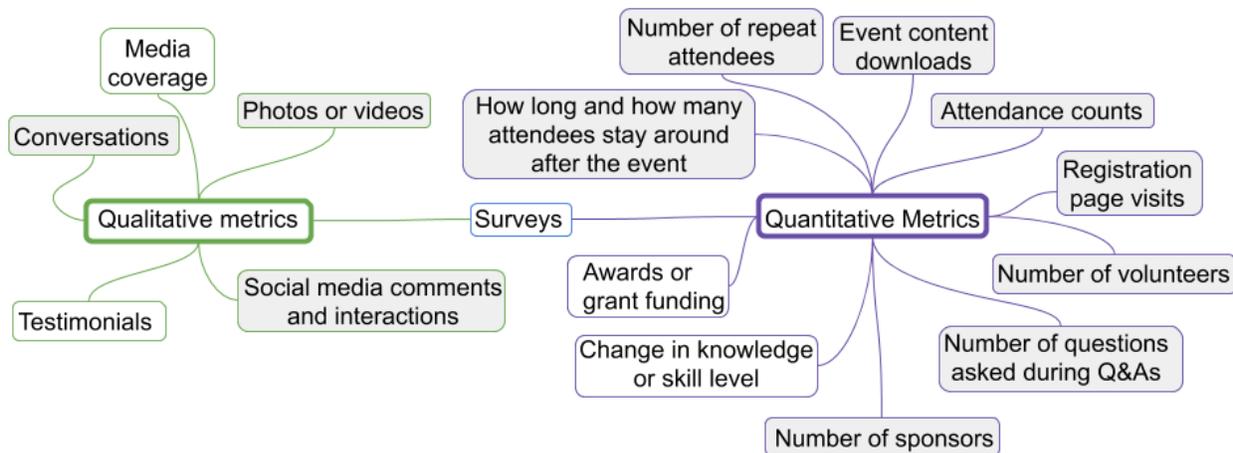


Figure 7.1: Examples of qualitative versus quantitative and solicited versus unsolicited metrics and sources

Unsolicited metrics and sources are shaded in grey.

(Derived from Columbia University's Zuckerman Institute Community Playbook, by Chiara Bertipaglia.)

SOLICITED METRICS IN SURVEYS

Follow-up surveys can provide useful information on event effectiveness and if you've reached the goal for putting on the event. When [designing a survey](#), in addition to the actual survey questions, you may want to consider when and how frequently to send out the survey (for example, the last day of the event versus the Monday after the event, and how many reminders to send). It may be tempting to include as many questions as possible but follow-up surveys should be short and should only include questions that provide the information that the community manager is most interested in and needs the most - keep it short, sweet, and informative. Question consistency, or repeating questions for multiple events, can reveal trends or changes for recurring or annual events. This allows tracking change over time, which can be powerful. Comparison of pre-event (see Chapter 3: Event Logistics) and post-event surveys can also yield concrete information about the impact of the event.

INFORMATION GAINED FROM SOLICITED METRICS

Questions from surveys are most effective if they are formulated to give you a specific piece of information that may lead to an action. The table below shows the difference between the question included on a survey and the information you gain as a community manager.

Question(s) to ask community	Information gained
How many people did you meet for the first time at the event? (Can offer options: none, 1, 2-5, 6-10, >10) During the networking breaks, did you make a meaningful connection (i.e., someone you intend to follow up with after the event)?	Do we need to facilitate more interaction / intentional collisions at our in-person events?
If you met less than two new people, what do you think is the reason for that? <ul style="list-style-type: none"> Not enough time. I already knew everyone. I was intimidated by the other attendees/everyone seemed to already know each other and I didn't want to interrupt their conversations. 	Do we need to consider including activities or mechanisms to encourage new connections to be made, instead of making breaks longer?
Did you meet someone at the event with whom you intend to collaborate on a future project?	Are our events occasions where community members can make meaningful connections?
Was there enough unstructured time for interacting with other event attendees? (Can offer options: more, less, just about right)	Do we need to consider modifying our agenda to allow for more informal community building?
Did you participate in the (X) activity? (Where X is an optional activity such as participating in an audience poll using an app, or creating a member profile) If not, why not? (free text)	Do we need to do a better job lowering the barrier of participating in our community-building activities?
On a scale of 1-5, (1 is least, 5 is most) mark how much you agree with the following statements. <ul style="list-style-type: none"> I feel that my skillset is similar to other participants. I feel that my interests are similar to other participants. 	Are there specific perceptions that inhibit trust or community building at our events?
On a scale of 1 to 5 (with 1 being not at all and 5 being a great deal): <ul style="list-style-type: none"> Has this event felt inclusive to you? (Examples: gender neutral restrooms, lactation room, format to ask questions at the end of the talks, availability of quiet room, accessibility of locations) To what extent do you feel this event represents the diversity in our community? 	Are we meeting our DEI commitments?
Anything else you'd like to share with the event organizers? (free text)	At least one free text box allows participants to clarify any previous responses as well as bring up any other topic that you may not have thought to ask, sometimes leading to actionable information.

Using metrics to facilitate change

Once you have your information, the following are steps you can take that will help you improve the sense of community at your events.

ACTIONS

- Metrics information can be brought to **your community**.
 - Using the information gained in questions such as "Did you participate in the (X) activity?", you can modify your communication strategy to emphasize specific opportunities. For example, if you need to increase participation in your community-building activities, you can send a pre-event email detailing what activities are happening, how participants can join, and what they gain by joining.
 - Sharing the information from the survey back to your community and the actions taken because of their feedback builds trust between your community members and you, the community manager. This will also encourage your members to fill out future surveys and to provide honest feedback.
- Metrics information can be brought to **sponsors**.
 - You can ask sponsors for increased funding for particular activities. For example, if the participant response was that there wasn't enough time for informal networking, and the event being surveyed did not have an adequate budget for good refreshments at all of the breaks, you could report the survey response to ask for additional funds for refreshments in order to keep participants in the same area and with unscheduled time, or to ask for lunch to be covered if it was not.
- Metrics information can be brought to the **board of directors** (or other advisory group).
 - To allocate more funds for community events or be leveraged to push for a change in event type or format. For example, if the current event format is keynote speakers and short presentations with limited audience interaction and you want to switch to a format with panels or led discussions, you can use your metrics to show that your community is feeling unengaged and that a change is needed.
- Metrics information can be brought to the next **event organizing team**.
 - To inform them of how the agenda or activities might need to be modified to build a better sense of community. For example, if many respondents felt that they were not similar in skillset or interests with the rest of the community, presentations and activities that highlight and benefit from the diversity of participant skills and interests can be planned. The feedback can be used to form and solicit help for specific committees. e.g., an interaction committee, whose purpose is to make sure there are adequate opportunities for participant interaction.

Conferences and symposia

The larger size and topical-nature of conferences and symposia lead to specific types of community-building metrics.

- **Example unsolicited metrics**
 - For annual or repeating events, the number of first time attendees shows growth and vitality of community.
 - Session attendance: by tracking who attended what sessions, you get an idea of the popularity of topics, and what topics may spark good community discussions or attract more community participation. It will also show which topics are of more interest to new members versus long time members.
- **Example solicited metrics**
 - Job title or geographical region: If you know your participant pool has diversity in different categories, such as job descriptions (e.g., research scientists, software developers, data managers) or other categorization (e.g., branches or subgroups of the community), simply asking for participants to categorize themselves and presenting the results can help members understand who makes up the community, and who they might want to seek out. This could be done at registration and shown to participants before they arrive at the event.
 - The very direct "What topics should we discuss further at future events?" will yield useful information for planning future invited speakers or discussions. You can mention that the topic suggestion came from the post-event survey, especially if it was mentioned by multiple attendees, to let them know you are listening to their feedback.

Webinars

The online format of webinars leads to different types of community-building metrics.

- **Example unsolicited metrics**
 - Participant lists and join and leave times. For example, are many people leaving during or after a particular segment?
 - Number of responses to questions from community members. Example: A person asks the webinar audience for collaborators on an upcoming proposal. The requests can be recorded on a community forum and responses tracked to see how effective this type of request for collaboration is.
- **Example solicited metrics**
 - During-event polls: Having live polls during the event allows participants to let people know more about the other attendees and ask questions that solicit ideas for future topics.
 - Post-webinar feedback: "Would you like to participate in future discussions on this webinar topic?" Community managers may use these lists to seed future events.

Workathons

Workathons give your community members opportunities to work together to find and build solutions to specific problems. They are great for sparking relationships within small project groups and provide the full group of participants the sense of having a shared purpose.

- **Example unsolicited metrics**
 - The number of attendees at the workathon will provide a sense of how important the focus problem area is to your community.
 - Participant engagement within the work teams and how well teams are working together, measured through on-topic conversations and progress on team goal(s) shows if the ability and skills to create solutions exists within your community.
- **Example solicited metrics**
 - Rating on a Likert scale “I felt the overall problem/reason for the workathon was a good fit for our community” will give insight into participant buy-in with the workathon. Note that participants might feel that the problem/reason for the workathon is a good fit but actual engagement during the workathon or with the workathon may be low. This could be a problem with communication around the workathon.
 - Questions about group member behaviors matching behaviors desired in the community provide information on perceived expectations versus reality. This provides insight on how well you as a community manager are communicating what is and isn’t acceptable member behavior.
 - Rating on a Likert scale “I felt I was a valuable member of my group” - members who feel valued and included are more likely to participate in future events and to encourage others to participate as well.
 - Choice of Yes/No/Maybe: “I intend to continue working with my group members in the future” - Questions like this allow you to measure the number of meaningful connections made at your event that may lead to future collaborations.

Social media

Social media yields many different types of data that can be analyzed for a sense of community. It's a good idea to provide a hashtag for your event so that you can quickly locate and evaluate what the attendees are saying with respect to community. You can then separate the positive and negative comments and extract lessons for future events. You can also identify highly active members and invite them to participate formally, or share specific tweets/posts back to the community (at the event or at a later time) to show what fellow members are saying. Some links to check out are [Community Metrics to Track](#) (Hootsuite) and [How to Measure the ROI of Social Media for Events](#).

Resources

METRICS FOR EVENTS (MORE BROAD THAN JUST COMMUNITY-BUILDING)

- Jen (2018) [Event metrics: measuring the success of your events](#). *The Events Calendar*
- Stephen Kim (2017) [20 important KPI's for measuring event success](#). *The Bizzabo Blog*
- Omnience (2018) [The event success metrics you need to wow your boss](#). *Event Manager Blog*
- Sierra Taylor (2019) [7 Ways event data can improve your conference](#). *Ex Ordo*

- Sufi S, Nenadic A, Silva R, Duckles B, Simera I, de Beyer JA, Struthers C, Nurmikko-Fuller T, Bellis L, Miah W, Wilde A, Emsley I, Philippe O, Balzano M, Coelho S, Ford H, Jones C, Higgins V (2018) [Ten simple rules for measuring the impact of workshops](#). *PLoS Comput Biol* doi: 10.1371/journal.pcbi.1006191

METRICS FOR WEBINARS (MORE BROAD THAN JUST COMMUNITY BUILDING)

- Melissa Hugel (2019) [5 metrics for measuring webinar success](#). *WorkCast*
- Jodi Harris (2012) [Key metrics to maximize webinar opportunities](#). *Content Marketing Institute*
- Sam Holzman (2019) [10 metrics to measure B2B \(business to business\) marketing webinars](#). *Zoominfo Blog*
- BigMarker (2017) [Are your webinars successful? Tracking and decoding webinar metrics](#). *Medium*

Appendix

CEFP 2019 Event Management Project Team Introduction & Questions

As part of the CSCCE Community Engagement Fellows Program (CEFP), a team of scientific community managers is researching elements that foster community at in-person and online meetings. We invite you to participate in a ~30 min virtual interview to gather your thoughts on important elements for fostering community at meetings. You can elect to be interviewed or simply provide written responses to the questions below. The project team is seeking to learn from scientific community managers of all sorts, recognizing that no one person has all the answers and there is no one-size-fits-all approach to fostering community. We hope that with your help, we will produce a living document that can be shared more broadly.

IMPORTANT: Please read the following paragraph before continuing. This is about your consent for how we will use the data you provide.

After this survey has closed, the responses collected will be summarized and shared in December 2019 with members of the CEFP. Your responses may also be shared as part of the guide that our project team is compiling. Please specify whether we have your permission to share your comments with attribution to you or whether you prefer your comments be shared anonymously.

What do we mean when we say a sense of community? McMillan and Chavis (1986) define sense of community as “the feeling that members have of belonging, the feeling that the members matter to one another and to the group, and a shared faith that their needs will be met through their commitment to be together.” For the purposes of this survey we will use this definition, but add that we also believe a sense of community involves a connection between individuals and between individuals and a broader organization that is based on sharing common goals.

- Name (Optional)
- Email (Optional)
- Tell us
- What type of meetings do you most often plan and convene?
 - Conferences
 - Small meetings/retreats
 - Webinars
 - Workathons
 - Other (please specify)
- For each of the meeting types you selected above, please specify how frequently you plan and convene these types of events? (e.g., once a month, once a year, twice a year)
 - Free text

- For each of the meeting types you selected above, please specify what your target audience size is.
 - 0-10
 - 10-50
 - 50-200
 - 200+
- What elements of an in-person meeting do you think foster a sense of community? (free text)
 - Of these, which do you feel to be most effective for fostering community in an in-person meeting? (free text)
- What elements of an online meeting do you think foster a sense of community? (free text)
 - Of these, which do you feel to be most effective for fostering community in an online meeting? (free text)
- Do you attempt to measure success at fostering community at your meetings?
 - If so, what methods or metrics do you use to measure your success at fostering community at meetings?
 - If so, how do you follow-up on feedback received?
- On a scale of 1-5 where 5 is very strongly, how greatly does your organization prioritize community-building as a goal for meetings? Explain.
- On a scale of 1-5 where 5 is very confident, how confident are you in your ability to build community during meetings? Explain.
- What are you most interested in learning about with respect to running events that foster community?
- What other lessons or tips do you have for fostering community at in-person meetings?
- What other lessons or tips do you have for fostering community at online meetings?
- What resources are you aware of on these topics of fostering community at in-person or online meetings?
- Is there someone who stands out to you in their ability to foster community at in-person and/or online meetings? If so, would you be willing to share their contact information so that we can reach out to them.
- Are there specific meetings that you think have been very successful at fostering community? If so, can you tell us more about it and/or provide a link to a meeting website?
- Is there anything else you would like to share with us?

Links from the text

CHAPTER 1

- McMillan DW and Chavis DM (1986) [Sense of community: A definition and theory](#). *Journal of Community Psychology* doi: 10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I
- [Center for Scientific Collaboration and Community Engagement](#)

CHAPTER 3

- [Mozilla Community Participation Guidelines](#)
- Butland S (2017) [The Value of Welcome, part 2: How to prepare 40 new community members for an unconference](#). *rOpenSci*
- Parker P (2018) [The Art of Gathering: How We Meet and Why It Matters](#). *Riverhead Books* ISBN1594634920

CHAPTER 4

- Woodley L (2014) [Lovely 2 C U – the importance of in-person events #okfest14](#). *Social in silico*
- Woodley L (2014) [All together now: Event formats for discussions](#). *Social in silico*
- Brotherhood A, Morales A, van Herwaarden A (2017) [How to chair a scientific conference session \(and not look like a fool!\)](#) *Preventing disease and ill health*
- Wikipedia [Unconference](#)
- Woodley L (2014) [All together now: Event formats for more practical sessions](#). *Social in silico*
- [OpenCon 2018 Unconference](#)
- Butland, S (2018) [Sharing the Recipe for rOpenSci's Unconf Ice Breaker](#)
- Woodley L (2014) [All together now: Event formats for networking](#). *Social in silico*
- [Copy of eLife Sprint 2018 // Participation guidelines](#)
- [OHBM Brainhack website](#)

CHAPTER 5

- Butland S (2017) [The Value of Welcome, part 2: How to prepare 40 new community members for an unconference](#). *rOpenSci*
- [Society for Freshwater Science Code of Conduct](#)
- Parker P (2018) [The Art of Gathering: How We Meet and Why It Matters](#). *Riverhead Books* ISBN1594634920

CHAPTER 6

- [American Alliance of Museums definition of Diversity, Equity, Inclusion, and Accessibility](#)
- [eLIFE Innovation Sprint Diversity and Inclusion Statement](#)
- [The Hopper Fund, “Do better at conference diversity”](#)

- [How to Make Your Presentations Accessible to All](#) The Web Accessibility Initiative
- Thomas H, Hirsch A (2016) [A Progressive's Style Guide \(PDF download\)](#)
- [Universal Design Principles for Presentations and Meetings](#)
- [Inclusive design principles](#) Microsoft
- [Accessibility Tools and Resources for Designers and Developers](#)
- [How to Build Language Justice](#) Antenna
- [Tips on reducing biased and oppressive language](#) Chad Loder on Twitter
- [Religious Observances Calendar](#) Drexel University
- Sophia Kunthura (2019) [Many conferences aren't very diverse. One thing to fix: the microphone.](#) *San Francisco Chronicle*
- [Passport Index](#)
- Bathsheba Okwenje (2019) [Visa applications: emotional tax and privileged passports](#) *LSE Blog*
- [Creating agents of social change](#) *LSpring* (about Indigenous Land Acknowledgments)
- Emily Henderson (2018) [Creating Inclusive Conferences for Academics with Caring Responsibilities - Guidance for Conference Organisers](#) *University of Warwick*
- (2019) [Planning an Inclusive and Accessible Event](#) *Union of Concerned Scientists*
- OpenCon [Diversity, equity, and inclusion learnings & next steps. An opencon report on conference planning](#)
- [New Directions in the Humanities](#)
- [Anti oppressive facilitation methods](#) *Aorta (Anti Oppression Resource & Training Alliance)*
- Dabbah M (2016) [What is Cultural Sensitivity?](#) *Red Shoe Movement*
- Sharan M and Hodges T (2019) [Report from the first Bio-IT Hackathon \(2019\) and future plans](#) *Bio-IT Community Blogs*
- [WisCon, Safer Spaces](#)
- [Resources on Personal Pronouns](#)
- [Virtual presentation at in-person meetings](#)

CHAPTER 7

- Hodges T (2019) [Crafting effective community surveys.](#) *CSCCE Blog*
- [Community Metrics to Track](#) Hootsuite
- Whelan B (2016) [How to measure the ROI of social media for events.](#) *EventBrite Blog*