 Welcome!  
We will start at 11:32 PT.  
Please introduce yourself and  
your project in the chat!

# Audience building for open source projects

Julia Lowndes, Openscapes  
[@juliesquid](#)

# Workshop plan

## First 40 mins:

- Presentation
  - Advice and starting resources
  - Examples with Openscapes
- 3x short, silent activities interspersed

## Last 15 mins:

- Discussion
  - Share questions and experiences
  - How can we approach this together?
- Please (re)write your questions in the chat at that time & I'll moderate

End at 12:25 PT

*\* I'll be watching the chat during the activities and discussion*

*\* Please upgrade to the latest version of Zoom (Zoom > Check for Updates)*

## COMMUNICATION

*Define your audiences to  
create meaningful messaging  
and web presence*

## COMMUNITY BUILDING

*Welcome folks to participate  
and contribute, leveraging  
existing channels*

## SUSTAINABILITY

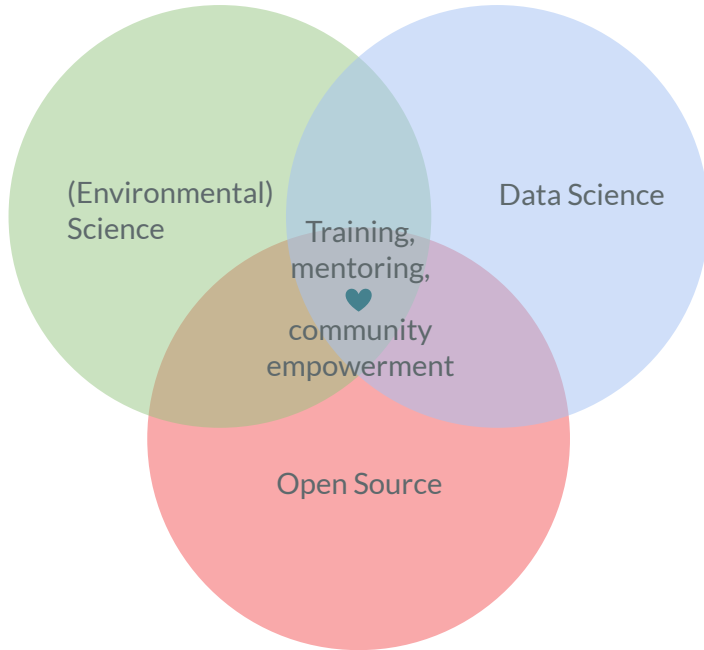
*Build resilience through  
strategic planning, governance,  
and onboarding team members*

*OVERARCHING THEMES  
openness • inclusion • maintenance*

### *PROCESS:*

- iterative*
- reinforcing*
- overlapping*

# Hi, I'm a marine ecologist and open source project founder



Julia "Julie" Stewart Lowndes, PhD, [jules32.github.io](https://jules32.github.io)



Senior Fellow, National Center for Ecological Analysis & Synthesis, University of California Santa Barbara

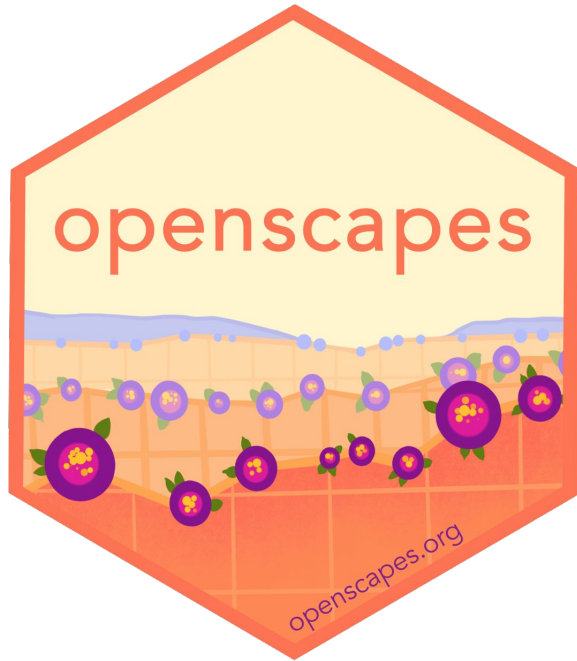


Open Community Member, entryway through R



Mozilla Fellow 2018-2019, founded Openscapes





**Openscapes** helps researchers reimagine data analysis and develop open data science leadership skills

**Openscapes Champions** is a remote mentorship program that cultivates collaborative and inclusive research teams

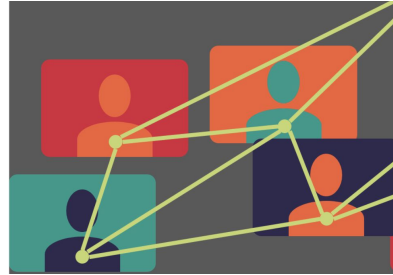
# Main resources that frame my thinking



Working on distributed teams CC BY-SA 3.0 Mozilla

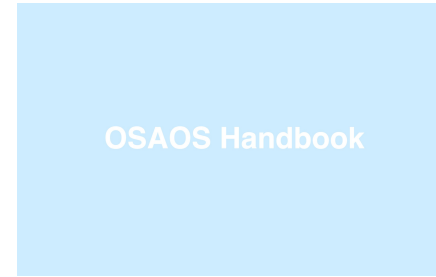
## Mozilla Open Leaders

[Open Leadership Training Series](#)  
[Open Leadership Framework](#)  
[Work Open, Lead Open \(#WOLO\)](#)  
[Movement building from home](#)



## Scientific Gateways Community Institute

[sciencegateways.org](#)  
[Focus Weeks](#)  
[Case studies](#)



## Open Source Alliance for Open Scholarship

[Handbook](#)

## COMMUNICATION

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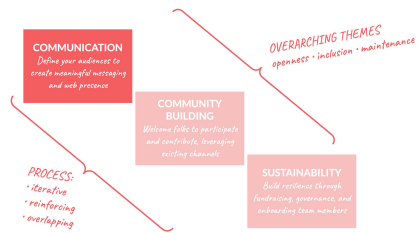
**OVERARCHING THEMES**  
*openness • inclusion • maintenance*

## SUSTAINABILITY

*Build resilience through strategic  
planning, governance, and  
onboarding team members*

### PROCESS:

- iterative*
- reinforcing*
- overlapping*



# Audience

Defining your audiences and understanding their needs helps you communicate in ways that resonate.



# Define your primary & secondary audiences

**Primary audience:** users (most likely) \*

- What *kind* of researchers?

**Secondary audiences:** allies

- What *kind* of decision-makers, funders?

**Understand your audiences**

- Who are they?
- What are their values, motivations, challenges?
- How does their participation help you?
- How do you prioritize them?

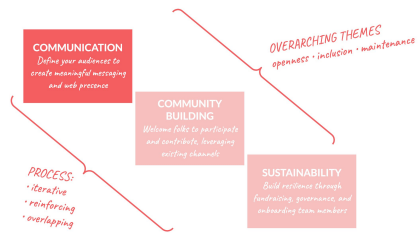
\* *Two-sided market (eBird, Etsy)*

**How are your audiences already connected?**

**\*Mapping the research software ecosystem\*** Karthik Ram & James Howison's Workshop: Wednesday

References & Resources

- [Audience First](#) – SciFund
- [Focus Weeks](#) – Scientific Gateways Community Institute (SGCI)
- [eBird Case Study](#) – Ithaca Case Studies in Sustainability (download)



# Messaging

Crafting a clear message that describes the value of your work in inclusive language helps you reach your audiences.

---

# Craft your value proposition

What value do you provide? Why is it important?  
If your project disappeared, who would care?

Reframe your message for different audiences \*

- Think about motivations, entryways
- Iterate on a as-needed basis

Use inclusive language, as if all your audiences are all in the same room together

*\* Messaging will mature as your program and understanding of audience needs evolve*

## Value proposition

[MY PROJECT].....

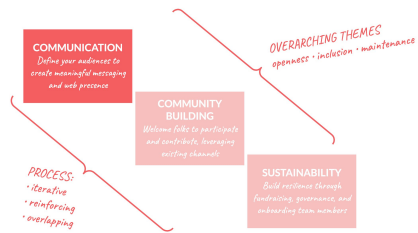
will help [WHO?].....

do [WHAT?].....

by [HOW?]

## References & Resources

- [Focus Weeks](#) – Scientific Gateways Community Institute (SGCI)
- [Message Box](#) – COMPASS



# Web presence

Using different web platforms helps you engage your audiences early.

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# Present your project openly online

“Can you send a link?” - be able to say yes.

Use light-weight, existing platforms, and cross-link – website doesn't need to come first

- Docs and Issues on GitHub
- Guest blogs
- Forums

Plan your website – start simple & purposefully

- Think incrementally, and about maintenance

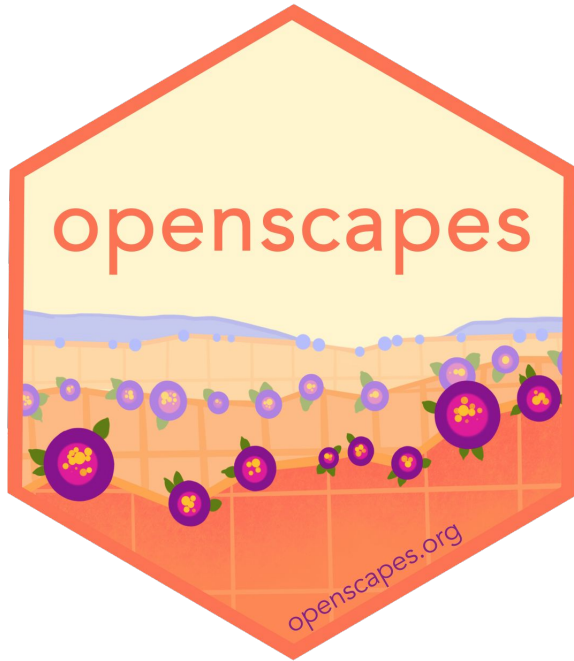
Share updates as you progress. Create teaching materials too –

**\*\*Creating open computational curricula\*\***

Kari Jordan's Workshop: Wednesday

## References & Resources

- [Open Leadership Training Series](#) – Mozilla
- [Open Leadership Framework](#) - Mozilla
- [Work Open, Lead Open \(#WOLO\)](#) – Abby Cabunoc Mayes



## COMMUNICATION

Example of defining the primary audience, messaging, and open web presence

# OPENSAPES

## Primary audience (so far): environmental scientists

- who don't approach data analysis openly/reproducibly/collaboratively
- who want to help upskill their teams



*Two-sided market: mentees and mentors*

## Secondary audiences – ally communities:

- Open source, open science, open data
- Data science, software development
- Training, mentoring, coaching, community
- Team science, collaborative science
- ...

### Openscapes value proposition (rework)

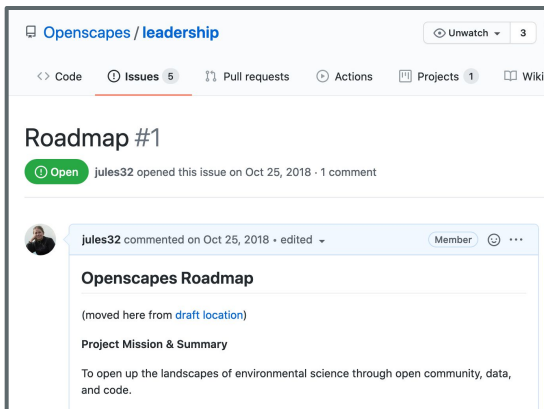
Openscapes.....

helps researchers.....

reimagine data analysis and develop open data science leadership skills.....

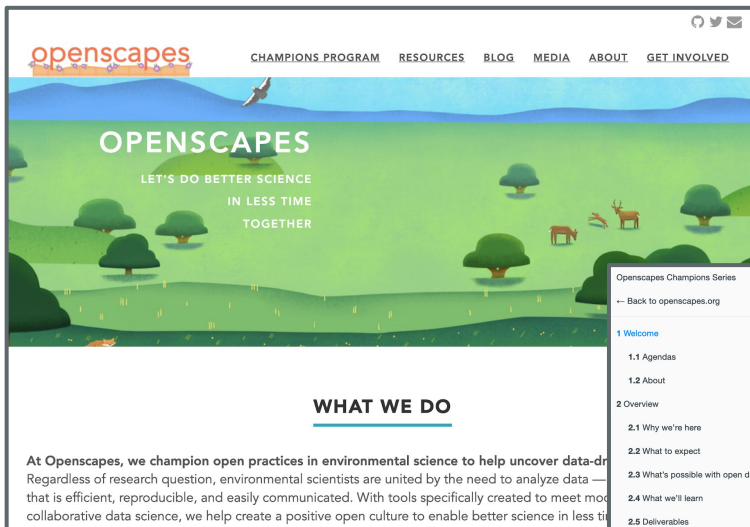
through a remote mentorship program that cultivates collaborative and inclusive research teams

## Fall 2018: GitHub Org, Issues & READMEs, blogging on Medium

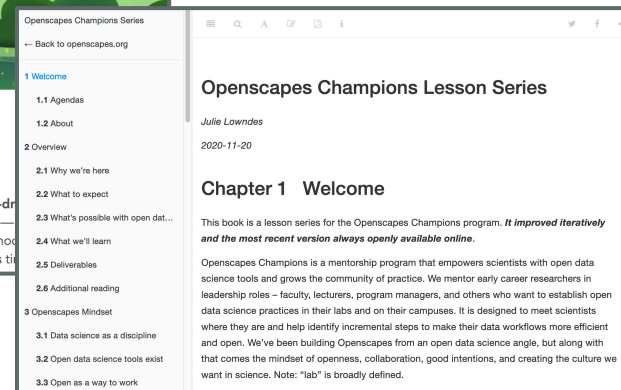


## Winter 2019+: Website, Champions Lesson Series

- Created with R+GitHub (blogdown & bookdown)
- Messaged for primary audience, serves secondary too
- As we mature, updated communications
  - Blog posts are regular enough
  - Added Media page



web: [openscapes.org](https://openscapes.org),  
series: [openscapes.org/series](https://openscapes.org/series)





Activity (30 sec)  
Write in the chat

What is a potential next step for you in terms of communication (audience, messaging, web)?

## COMMUNICATION

*Define your audiences to  
create meaningful messaging  
and web presence*

## COMMUNITY BUILDING

*Welcome folks to participate  
and contribute, leveraging  
existing channels*

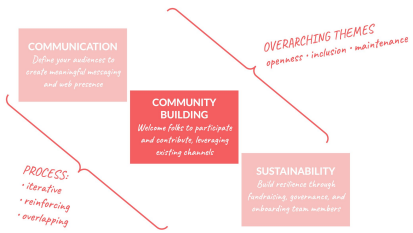
*OVERARCHING THEMES  
openness • inclusion • maintenance*

## SUSTAINABILITY

*Build resilience through  
strategic planning, governance,  
and onboarding team members*

### *PROCESS:*

- iterative*
- reinforcing*
- overlapping*



# Power of Welcome

Creating a welcoming community helps diverse folks feel included, valued, and safe. This helps enable enduring participation and contribution

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# Build Welcome into norms into your project

## Be deliberate & purposeful

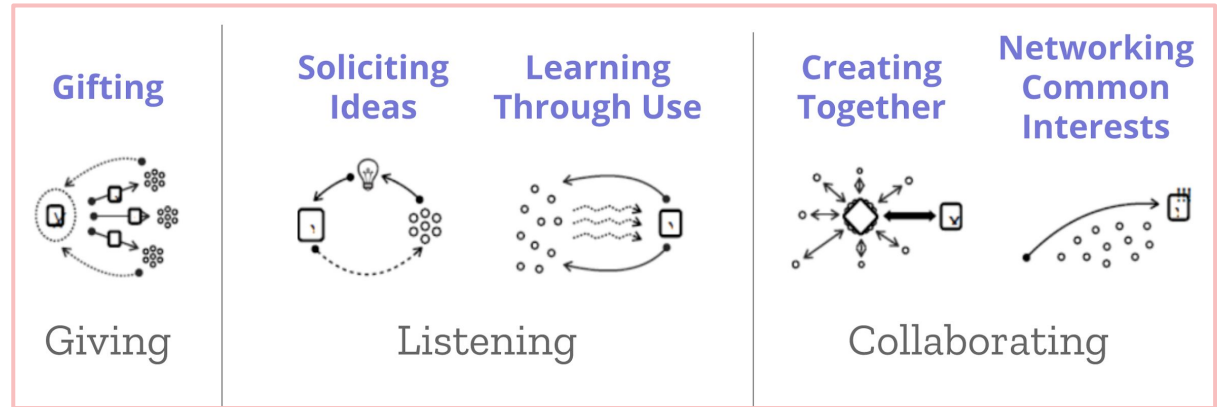
- Language you choose
- Behavior you model
- The actions you take

## Code of Conduct

- Values forward
- Public & highly visible
- Reporting channels

## Working open as a way to shift power

5 Open source practices that can shift power:

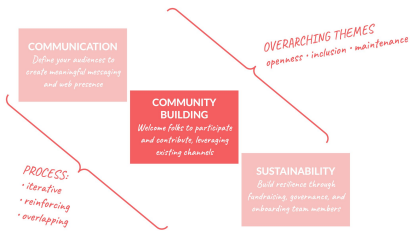


## References & Resources

- [Inclusion & Governance checklist](#) – Mozilla
- [Value of Welcome](#) – Stef Butland
- [rOpenSci's CoC](#), [Mozilla's CPG](#)

## Biased by default: Exploring Discrimination in Research Code

Abby Cabunoc Mayes' Keynote at #BCC2020



# Contributing

Having clear channels for folks to contribute helps create buy-in and champions to support your project

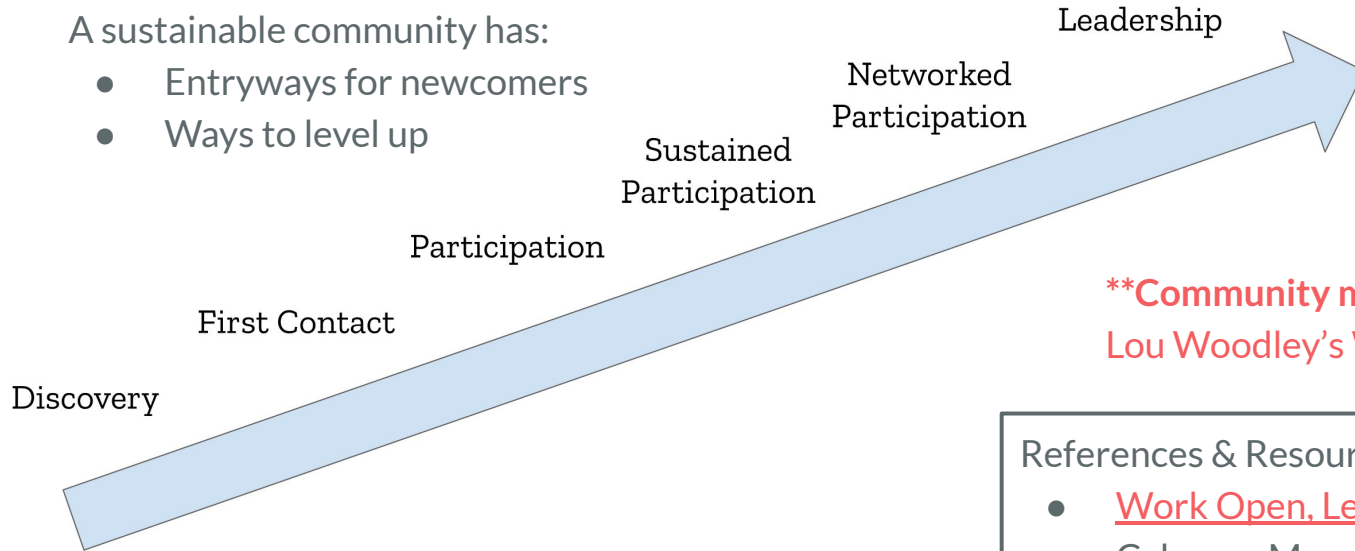
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# Create clear entryways to engagement

## Mountain of engagement

A sustainable community has:

- Entryways for newcomers
- Ways to level up



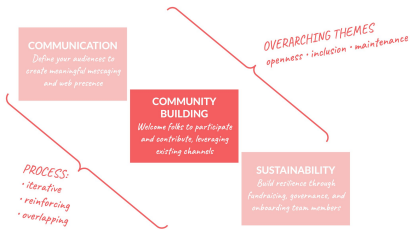
**Clear value exchange.** How can you create champions and support your community at each level?

**\*\*Community management\*\***

Lou Woodley's Workshop: Thursday

## References & Resources

- [Work Open, Lead Open \(#WOLO\)](#) – Abby Cabunoc Mayes
- [Biased by default](#) – Abby Cabunoc Mayes
- [Open Leadership Framework](#) – Mozilla
- [Architecture of Participation](#) – Tim O'Reilly



# Channels

Leveraging existing communication channels helps your community stay in contact synchronously and asynchronously

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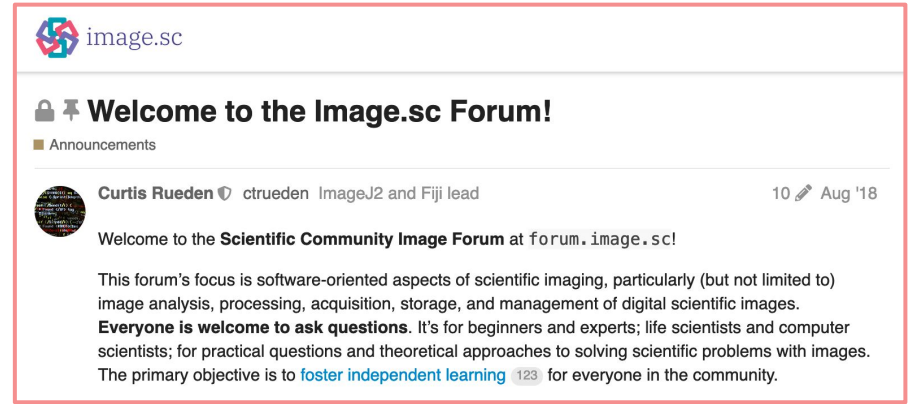
# Help your community connect with you and each other

## Updates and events

- Async: e-Newsletters, blog posts, videos
- Sync: Community calls, workshops, conferences

## Convening your community – where is your audience? Leverage existing channels

- Social media – Twitter, Facebook, Instagram, Mastodon
- Slack, Gitter
- Community forums

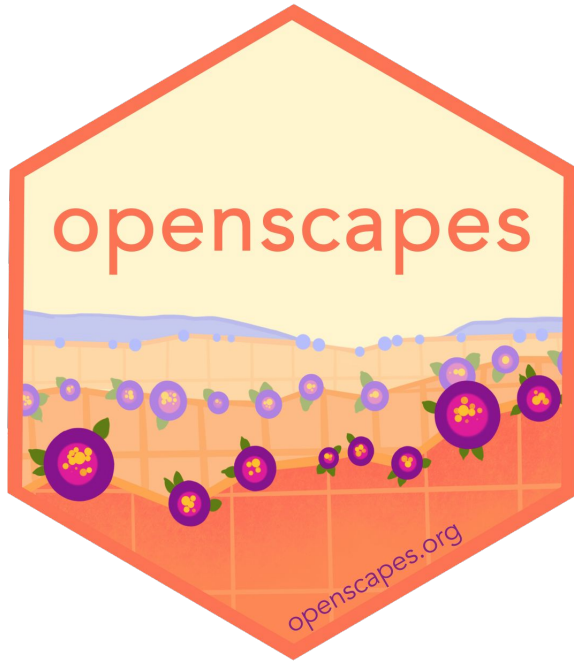


The screenshot shows a forum post from the 'image.sc' website. The post is titled 'Welcome to the Image.sc Forum!' and is categorized as an 'Announcement'. It was posted by Curtis Rueden, with a user profile picture and a circular avatar. The post text reads: 'Welcome to the Scientific Community Image Forum at forum.image.sc! This forum's focus is software-oriented aspects of scientific imaging, particularly (but not limited to) image analysis, processing, acquisition, storage, and management of digital scientific images. Everyone is welcome to ask questions. It's for beginners and experts; life scientists and computer scientists; for practical questions and theoretical approaches to solving scientific problems with images. The primary objective is to foster independent learning for everyone in the community.' The post has 10 replies and was posted in August 2018.

## References & Resources

- [Using Twitter](#) – SciFund Challenge
- [Slack Quickstart Guide](#) – CSCCE
- [ImageSC Forum](#)



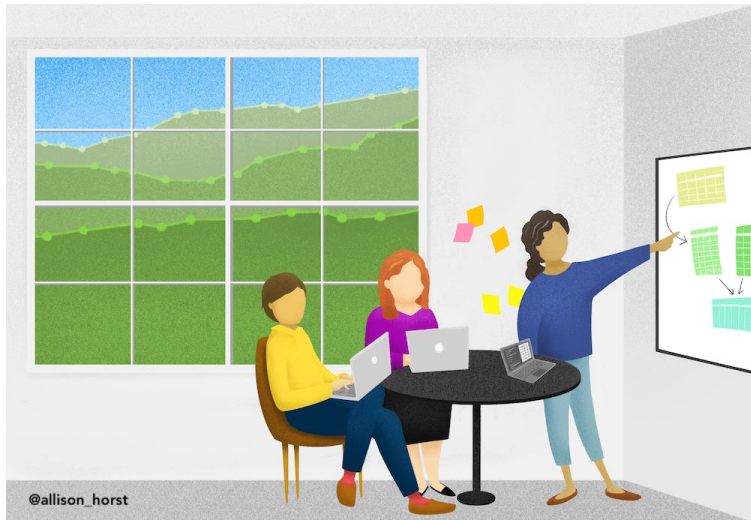


## COMMUNITY ENGAGEMENT

Example of first focusing on welcome, and still building contributing plan and channels



- **Welcome:** art and storytelling
  - Entryways to talking about data
  - Vulnerabilities in reframing analysis as collaborative
- **Channels:** (pinned) GitHub repos, Twitter, department seminars, conference talks, journal articles
- **Mountain of Engagement:** challenging for me. 2021 focus on “sustained participation”



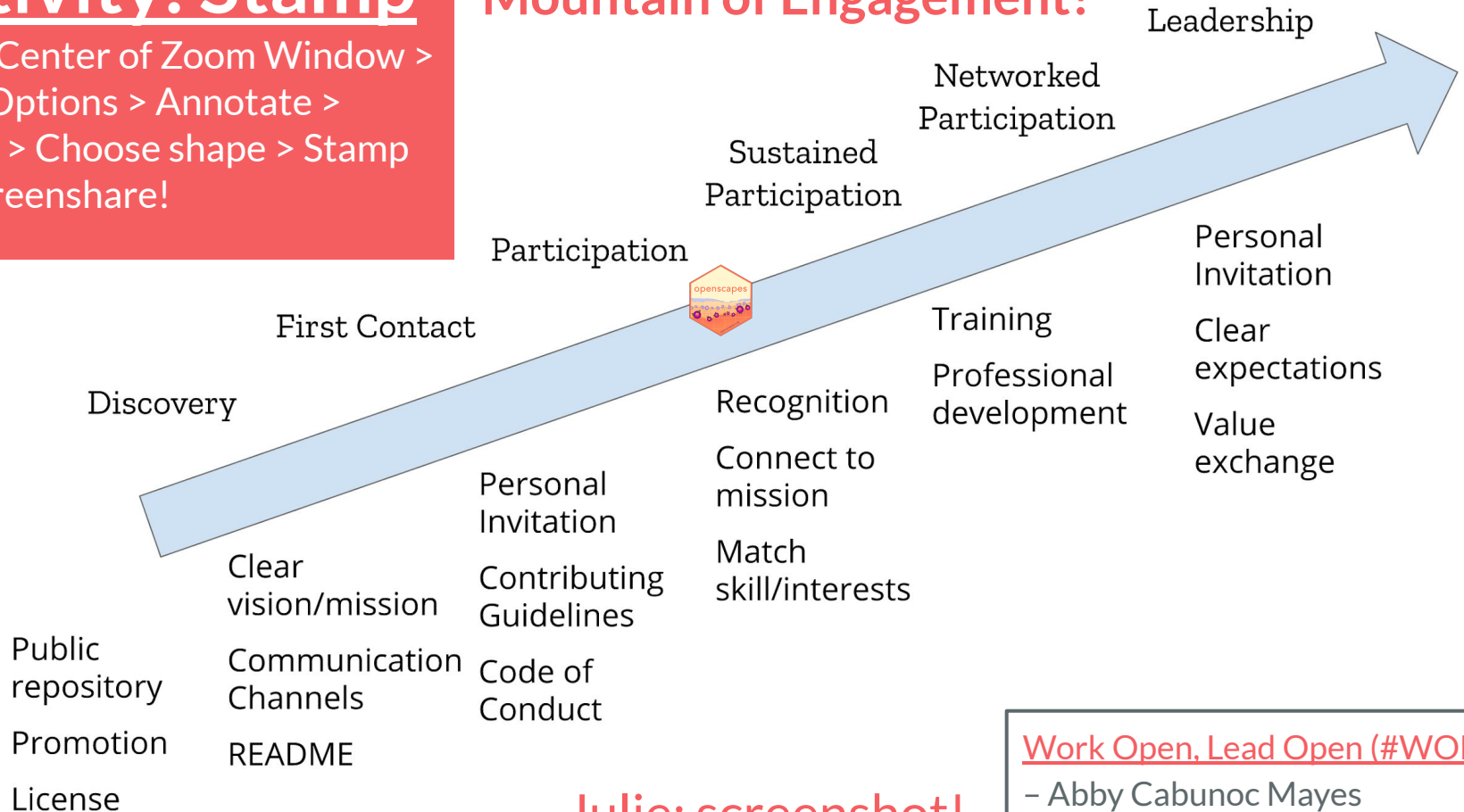
A screenshot of the Openscapes GitHub repository page. The page shows the repository name "Openscapes" with a logo. Below the name are navigation tabs: "Repositories 17", "Packages", "People 1", "Teams", "Projects", and "Settings". The "Pinned repositories" section is visible, containing six repository cards. Each card shows the repository name, a brief description, and statistics like stars and forks. The pinned repositories are: "series" (Lesson series for the Openscapes Champions program, 1 star, 1 fork), "slides" (Some slide decks from Openscapes presentations, 4 stars, 1 fork), "supercharge-research" (Article in Nature's Career Column: Supercharge your research: A 10-week plan for open data science, 2 stars), "website" (Code for openscapes.org, 3 stars, 9 forks), "how\_we\_work" (Examples of "how we work" docs from the Openscapes community), and "seaside-chats" (Examples of Seaside Chats (data-centered meetings) from the Openscapes community).

github: [@openscapes](https://github.com/openscapes), Twitter: [@openscapes](https://twitter.com/openscapes); [openscapes.org/media](https://openscapes.org/media)

# Activity: Stamp

Top & Center of Zoom Window >  
View Options > Annotate >  
Stamp > Choose shape > Stamp  
the screenshare!

## Where is your project in the Mountain of Engagement?



[Work Open, Lead Open \(#WOLO\)](#)

- Abby Cabunoc Mayes

Julie: screenshot!

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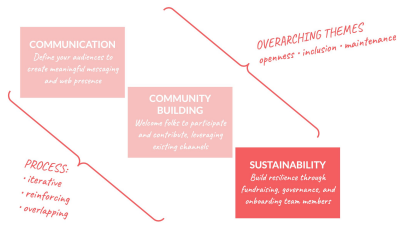
**OVERARCHING THEMES**  
*openness • inclusion • maintenance*

## SUSTAINABILITY

*Build resilience through  
strategic planning, governance,  
and onboarding team members*

### PROCESS:

- iterative*
- reinforcing*
- overlapping*



# Strategic planning

Approaching strategic planning through the lens of community helps you build meaningful connections while you learn.

---

# Focus your strategy on learning and people

Read about & talk to groups that work in your space

- Learn about the funding landscape
- Learn about business models & approaching multiple revenue streams
- Build relationships, allies

A strategic plan is also about:

- Mission statements
- Goal setting, identifying smaller pieces of your project
- Budgeting and personnel
- Timelines

Don't approach this alone! Learn with others

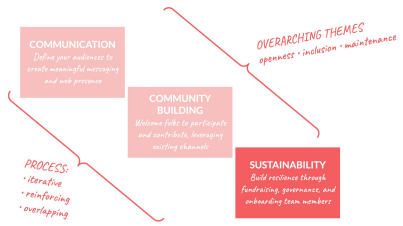
**The Joint Roadmap for Open Science Tools (JROST) Conference Dec 14-16 2020**

Register:

[investinopen.org/community/jrost-2020-conference](https://investinopen.org/community/jrost-2020-conference)

References & Resources

- [OSAOS Handbook](#) – Bentley et al 2018
- [Focus Weeks](#) – Scientific Gateways Community Institute (SGCI)



# Governance

Clearly defining the decision-making process early on helps as the project grows.

---

# Governance is important internally and externally

## Sharing vision and responsibility

- Key to growing your project
- The “bus factor”
- Existing models to learn from (OSAOS)
- When? Depends, but too early > too late

## Governance is also about:

- Legal considerations
- Financial management
- Data handling, privacy

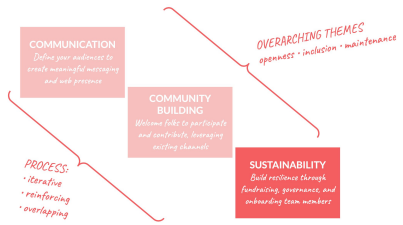
## Questions to ask yourself as you consider when to create a governance plan (OSAOS):

- What is the current form of governance?
- Who are the current decision-makers?
- What's working? What's not working?

## References & Resources

- [Inclusion & Governance checklist](#) – Mozilla
- [Modeling threats to your open project](#) – Danielle Robinson 2019, Code for Science and Society
- [OSAOS Handbook](#) – Bentley et al 2018





# Onboarding

Planning ahead and documenting internal processes helps streamline knowledge transfer when others join your internal team.

---

# Think of onboarding for Future You & Us

## Onboarding (Wikipedia):

*“the mechanism through which new employees acquire the necessary knowledge, skills, and behaviors in order to become effective organizational members and insiders”*

## What will make your life easier when

- You need to return to something after weeks/months/years
- You need to help someone else take responsibility?

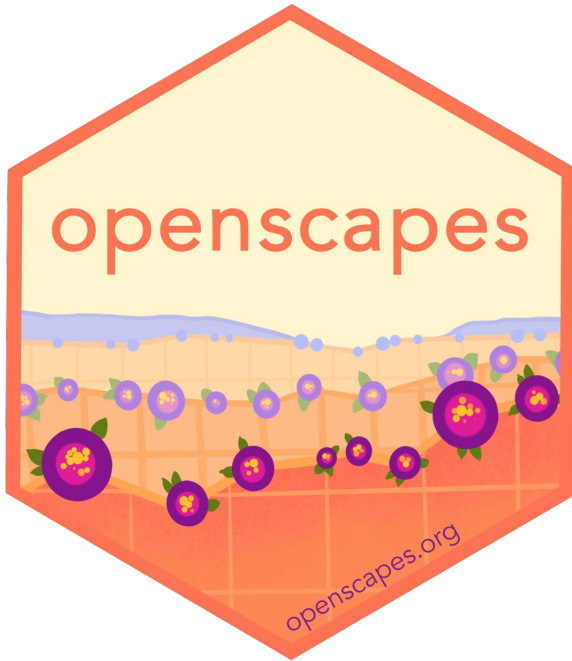
## Build documentation for how to run your project

- Internal READMEs, HowTos
- Organization and permissions

“Bus factor” critical here too

## References & Resources

- [Onboarding, Software peer review](#) – rOpenSci











## SUSTAINABILITY

Example of focusing on onboarding, and ongoing efforts for strategic planning and governance

**Onboarding:** Focused on onboarding myself, and also towards growth

- Google Doc, GitHub repos & issues
- Modeled from Mozilla Open Leaders

 Openscapes_Cohort1 [ Leads_Cohort1 ]
 Openscapes_CohortCalls [ Public ]
 Openscapes_CohortCalls_Archive [ Cohort1 ]
 Openscapes_Workshop [ NOAA NEFSC ]
 ChampionshipPlans 
 EmailLog-Cohort1 

*Indicate permissions [in brackets]*

*Draft/archive emails in a single doc for re-use*

### Strategic Planning:

- Learn from development & budgeting folks, funders
- I've made mistakes (30-slide pitch deck 🤖)
- Emerging business model: Combo of fee-for-service, grant funding, sponsorships, partnerships
- Still in process of securing funds beyond initial seed funding

**moz://a**

GORDON AND BETTY  
**MOORE**  
FOUNDATION

**Governance:** Will be focusing on this in 2021 as my team grows!

## Activity

Write in the chat

How could you use help with sustainability (strategic planning, governance, and onboarding)?

## Discussion

Please write in  
the chat

 Please write /hand

If you'd like to unmute to  
share verbally

End time: 12:25 PT

What questions do you have?

What experiences/resources  
do you want to share?

How can we approach this  
together?

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### *PROCESS:*

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 **Thank you so much!**

I'm looking forward to connecting further during the conference and beyond!

# Audience building for open source projects

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