

COMMUNITY OVERVIEW

The National Microbiome Data Collaborative (NMDC) is composed of any microbiome researcher doing work in the USA, at any career stage, who works on the microbiome or with microbiome data across scientific domains. It aims to make the high volume of microbiome data seamlessly findable, accessible, interoperable, and reusable. Approximately 150-200 members meet in an invite-only Slack group with subgroups focused on different scientific domains (for example, agricultural microbiome, soil microbiome, human gut microbiome, etc.), different areas of expertise (bioinformatics, microbial ecology, etc.), or their different career stages. Officially launched in July 2019, the community is led by Lawrence Berkeley National Laboratory and includes three other U. S. Department of Energy national laboratories (Los Alamos National Laboratory, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory). Community funding comes from non-competitive government funds and the most active participants are the 10-15 Champions.

- DATA SCIENCE
- KNOWLEDGE GENERATION
- SOFTWARE SUSTAINABILITY
- STANDARD SETTING
- SKILLS DEVELOPMENT
- INFRASTRUCTURE DEVELOPMENT
- PROFESSIONAL DEVELOPMENT
- ACADEMIA-POLICY INTERFACE

► Website: microbiomedata.org

COMMUNITY BASICS



175 core members
within a broader community of 700

These numbers are an estimate



Equally online and in
person



National (US)



Partly open, anyone may
request to join but access
restricted to members only



Infrastructure organization

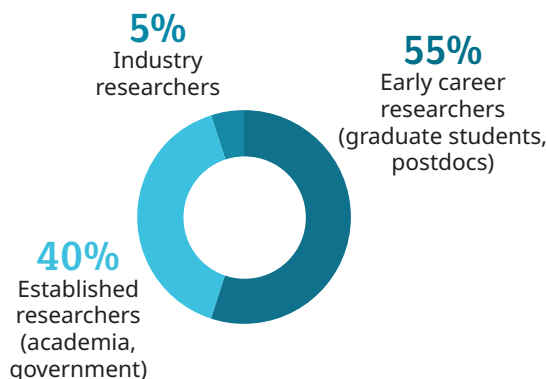
COMMUNITY STRUCTURE

Community Management

Community management is provided by 1 FTE **Scientific Community Engagement Manager** and .1 FTE **User Engagement Lead**. Additionally, 4 **staff** (at .05 - .25 FTE each) at other national laboratories are part of the community engagement team.



Members



Community Configuration

microbiome research community

Scientific domain subgroups

Expertise-based subgroups

Career stage subgroups

The National Microbiome Data Collaborative

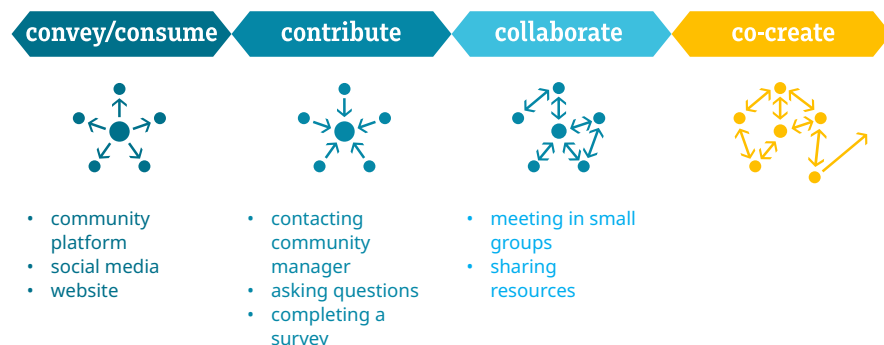
doi: [10.5281/zenodo.4015231](https://doi.org/10.5281/zenodo.4015231)

PROGRAMMING

The CSCCE Community Participation Model describes four modes of member engagement that can occur within a community: CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE. All modes may be present at once, with some members interacting in multiple modes - or a community may have member engagement that falls into only some of the modes described. The model enables the mapping of community member behaviors to programming and other infrastructural support that the community manager, convening organization, or funder may provide to the community. For more information, see the [CSCCE community participation model](#).

IN THIS COMMUNITY

Online activities include discussions in Slack, group emails, working groups, and committee meetings. Offline activities include workshops and conferences.



OUTPUTS & EVALUATION

✓ **Success looks like the concept of FAIR data becoming household among microbiome researchers and sharing data before publication becoming the norm.**

Evaluation and Reporting

- Reports for leadership or funders
- Community member interviews

Challenges

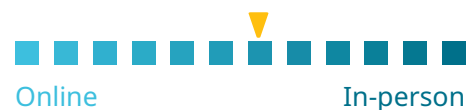
- Low member activity
- Slow community growth

Opportunities

- New events
- New working groups
- New funding stream
- New program
- Diversify digital engagement

Successes over the last year

- **Growth** – adding new members
- **Growth** – adding additional sub-communities or working groups
- **Engagement** – increased activity of members (commenting or attending)
- **Productivity** – co-creating community outputs
- **Engagement** – in-person event
- **Financial** – new funding stream



COMMUNITY TOOLBOX

Communications

- | | |
|-----------|---------|
| Email | Twitter |
| Slack | Zoom |
| MailChimp | |

Productivity

- | | |
|--------------------|------------------|
| Google Drive tools | Google Analytics |
|--------------------|------------------|

FUNDING

100%
Non-competitive
government funds



Funding Streams

- 100% non-competitive government funds

*Members can apply for **Travel stipends to internal events and community leader / ambassador stipends** through the microbiome research community.*