

Welcome to STAMPS 2025!

Welcome and Orientation from
Amy Willis & Titus Brown

Slides at github.com/mblstamps/stamps2025/wiki
Or under “Schedule > Tu 15 July”

Land Acknowledgement

The STAMPS team shares the Marine Biological Laboratory's acknowledgement that we are working on the traditional and sacred land of the Wampanoag people, whose history, language, traditional ways of life, and culture continue to influence this community.

This land acknowledgement is an intentional act to counter the erasure of indigenous people and to demonstrate respect for their sovereign rights.

<https://mashpeewampanoagtribe-nsn.gov/timeline>

mbl.edu/about/diversity-inclusion/land-acknowledgement-statement

Scope and overview

- Many folks get excellent training in generating microbiome data from their local group
- But then...?
- The goal of STAMPS is to bridge the gap between data generation and knowledge generation
- STAMPS offers interdisciplinary training in bioinformatics and statistics to practitioners of modern molecular microbial ecology and microbial genomics.

Learning goals

The objective of this course is to give you the **knowledge** and **skills** to analyze and interpret a broad variety of microbial genomics datasets. We will

- Develop foundational skills for working with modern microbiome sequencing data
- Discuss specific bioinformatic and statistical tools
- Practice executing software commands, decoding errors, and writing reproducible workflows
- Build perspective about evaluating tools and understanding caveats
- Empower you to *ask & answer* questions you have of your own data
- Create a framework and a network

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- Build
- Em
- Cre

The goal is not to “learn all the things”,
but to leave with some insights,
and more questions

Course format

- Hands-on, active learning
- Mix of lectures, tutorials and practice
- Lots of time for questions and interactions
 - This is the whole point of a 35 person, in-person workshop!
- Materials available during and after the course
- Learn from *each other* as well as instructors and TAs

History


- 2011 - 2017
 - Mark Welch-Sogin (founding) administration
 - Vision
 - Get developers and users talking, interacting
 - Hands-on labs (!!!)
 - Everything is new
 - Hub for education, collaboration, dialogue
 - Identification of need and home

“Since the 2011 inaugural STAMPS course, strategies and techniques for microbiome analyses have attracted the interests of computer scientists, bioinformatics experts and statisticians who often have different and sometimes conflicting perspectives on best practices. Discussions about how to optimize microbiome analyses in many ways mirror conflicting views thirty years ago surrounding the use of cladistics versus phenetics in the “proper” analyses of molecular evolution data [10]. The Workshop in Molecular Evolution first offered at the MBL thirty years ago provided a forum for resolving those differences. The Molecular Evolution workshop persists at the MBL training students with a consensus approach that relies upon statistically robust technologies. We envision the STAMPS workshop will have a similar impact on microbiome science and understanding human biology.”

History

- 2018 - 2022
 - Pop-Teal administration
 - No STAMPS 2020, 2021 🤔
 - Vision
 - Navigate more developed field
 - Increase emphasis on *practice*
 - Professional skills
 - Increase participation, active learning

History

- 2023 +
 - Brown-Willis administration
 - Vision
 - Reduce emphasis on pipelines, favor custom
 - Bring you closer to data
 - Increased emphasis on shotgun sequencing
 - Explicit emphasis on culture of inclusion
 - AW: encourage unshackling from tools' capabilities
 - ...
 - Introduction of paper planes activity 

Activity

- Confirm we can use Slido to get real-time input
- slido.com/3428221

Learning environment

The objective of this course is to give you the **knowledge** and **skills** to analyze and interpret a broad variety of microbial genomics datasets.

How do we create a learning environment where we can achieve this goal together?

Learning environment

What **norms** and **ground rules** would you like to set for **yourselves and each other**?

Submit your responses at slido.com/3428221 (hit refresh)

In small groups, please introduce yourselves, chat with your group about your ideas for norms, and **submit your responses individually via the link**.

We will regroup in 4 minutes.

Learning environment

What **norms** and **ground rules** would you like to set for **the instructional team**?

Submit your responses at slido.com/3428221 (hit refresh)

In your small groups, please discuss.

We will regroup in 2-3 minutes.

I will compile our norms and add them to our Wiki.

Code of Conduct

In addition to our norms, which are a set of shared expectations, we also have a formal code of conduct, which all STAMPS attendees are expected to agree to.

The Quick Version

STAMPS is dedicated to providing a harassment-free experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, or religion (or lack thereof). **We do not tolerate harassment in any form.** Sexual language and imagery is not appropriate for any STAMPS venue. STAMPS events are neither a dating scene nor an intellectual contest.

If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact Amy Willis or Titus Brown immediately. If either is the cause of your concern, please see the MBL's Equal Employment Opportunity Coordinator at 508-289-7378 or eeo@mbledu.

<https://github.com/mblstamps/stamps2025/wiki/Code-of-Conduct>

Course logistics

- Course schedule: 9-noon, 2-5, 7-10ish
 - Restrooms
 - Water
 - Breaks
 - Room security
-
- If there's something you need, let us know!

Other Logistics

- Social events
 - Social coordinators: [María and Hugo](#) — send ideas/requests their way!
 - Options for activities: anytime outside course schedule!
 - Evening social events
 - Alcohol policy
 - Alcohol contributions — venmo.com/u/CTitus-Brown
- Day off
- Ticks - check yourself nightly
- Illness protocols - masks, testing, quarantine

- If there's something you need, let us know!

Course communication

- Wiki
 - <https://github.com/mblstamps/stamps2025/wiki>
- Slack
 - Announcements, links, help, and chatter
 - Email Amy/Titus if you can't get connected
- Social media
 - #stamps2025
- Getting help on workshop exercises
 - Neon and pink stickies
 - We will collect topic-adjacent/opposite questions on slido - details to come!

An ode...

- ... to Mike Lee



Questions...?

Introductions

- Let's meet each other!
 1. Write your **name**, and **what you work on in 3 words or fewer**, on a sticky note
 2. Read your sticky note to the group. Also, say aloud **one thing you're proud of that you made**.
 3. Place your sticky on the board

Let's keep in mind our norms — respecting identities, perspectives and backgrounds; actively listening and including...

Next up...

- Break time? 🍪
- Ben, for a history of sequencing x microbiome science...