



GEM3

Genes by Environment
Modeling · Mechanisms · Mapping

Module Name: Mammal Microbiomes

Institution: Boise State University

Principle Investigator(s): Amy Ulappa, amyulappa@boisestate.edu

Summary:

The aim of this module is to

1. Understand the relevancy of linking genomes to phenomes to understand physiology leveraging knowledge of collaborative research projects in the gut microbiome of herbivores
2. Demonstrate basic analyses of microbiota data
3. Determine if and how communities differ by variables of interest.
4. Perform various measurements characterizing microbial community diversity, composition, and structure

This module has been used in BSU's Mammalogy (ZOO 421) course.

Contents:

- Video: [Microbiome Analysis R Tutorial](#)
- Tutorial: Microbiome Tutorial
- Presentation: The Microbiome
- Lab: Mammal Microbiome R Online Module
- Folder: Data

This folder contains the following:

- R File: Microbiome_tutorial.R
- Data File: classified_rep_seqs.qza
- Data File: feature_table.qza
- Data File: rooted_tree.qza
- Spreadsheet: moose-metadata

Notes:

- Video currently require a Boise State login. If you use this module, arrangements will be made for you to access it.
- Please contact the project PI or the GEM3 PUI Liaison for assistance in deploying this module in your course.

Questions? Contact the PI or the GEM3 PUI Liaison, Stephanie Sevigny, stephanieseigny@boisestate.edu

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