



VANDERBILT
UNIVERSITY®

Microbiome Initiative

MICROBIOME BOOT CAMP SERIES

Time: Friday, October 23rd, 2020, 9AM-4PM

Max number of participants: 25

Registration Deadline: October 16th, 2020

- **Purpose: Hands-on microbiome study design, analysis, and interpretation**

The 4th annual Vanderbilt Microbiome Initiative (VMI) Boot Camp series will kick off with an introduction to the importance of proper experimental design, analysis, and interpretation of microbiome sequencing data. This one-day Zoom workshop will include an introduction to experimental fundamentals and concepts and feature hands-on introductory analysis of data using QIIME2, a comprehensive suite of command-line based tools for all stages of analyzing amplicon sequences from microbial communities. The workshop is designed for researchers and clinicians who wish to incorporate any microbiome sample and electronic medical records analysis into their research, and it assumes little prior knowledge of microbiomes, computer coding, or next generation sequencing (*command-line experience is advantageous but not required*).

- **Deliverables**

Upon completion of this boot camp, participants will understand the factors that go into designing a microbiome study. Hands-on QIIME2 tutorials will provide participants with the confidence to take raw sequencing data through quality control and processing, to test fundamental biological or clinical hypotheses with available tools, and to critically interpret results. Further, we hope participants will appreciate the ethical implications of microbiome research in humans and have a better understanding of microbiome resources available both within and outside of Vanderbilt.

- **Requirements**

This workshop will be held on Zoom. Participants should have access to Zoom.

Participants are requested to follow the instructions for installing QIIME2 prior to the boot camp: <https://docs.qiime2.org/2020.8/install>

- **Organizers**

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| Seth Bordenstein | Director of VMI, Professor of Biological Sciences and Pathology, Microbiology, and Immunology |
| Rob Markowitz | PhD student, VMI, Boot Camp Co-Director |
| Elizabeth Mallet | Postdoctoral Scholar, VMI, Boot Camp Co-Director |

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Registration: Please send your name, title, school, and department to **Rob Markowitz**, Robert.H.Markowitz@Vanderbilt.edu, to receive a pre-course survey and Zoom meeting link.