

# Improving machine learning models for gut microbiome classification problems

and democratizing data science along the way

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## Preface

This is a Quarto book.

To learn more about Quarto books visit <https://quarto.org/docs/books>.

# 1Introduction

example reference (Schloss et al. 2009)

2OptiFit: an improved method for fitting amplicon sequences to existing  
OTUs

### 3 Democratizing data science with open curricula and user-friendly software tools

#### 4Predicting *C. difficile* infection severity from the taxonomic composition of the gut microbiome

## 5 Discussion



## References

Schloss, Patrick D., Sarah L. Westcott, Thomas Ryabin, Justine R. Hall, Martin Hartmann, Emily B. Hollister, Ryan A. Lesniewski, et al. 2009. “Introducing Mothur: Open-Source, Platform-Independent, Community-Supported Software for Describing and Comparing Microbial Communities.” *Applied and Environmental Microbiology* 75 (23): 7537–41. <https://doi.org/10.1128/AEM.01541-09>.