

# *Mycobacterium marinum*

Bioinformatics final spring 2025

Holly Moffett

GENOME SECTION REPORT



# FastQC

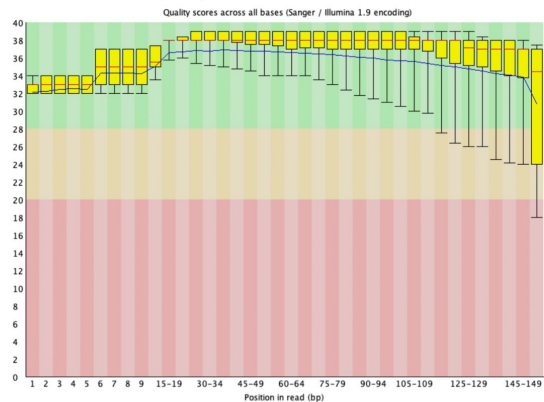
## FastQC Report

Mon 28 Apr 2025  
SRR32309086\_1.fastq

### Summary

- ✓ Basic Statistics
- ✓ Per base sequence quality
- ✓ Per tile sequence quality
- ✓ Per sequence quality scores
- ✗ Per base sequence content
- ✗ Per sequence GC content
- ✓ Per base N content
- ⚠ Sequence Length Distribution
- ✓ Sequence Duplication Levels
- ⚠ Overrepresented sequences
- ✓ Adapter Content

### ✓ Per base sequence quality



Produced by [FastQC](#) (version 0.12.1)

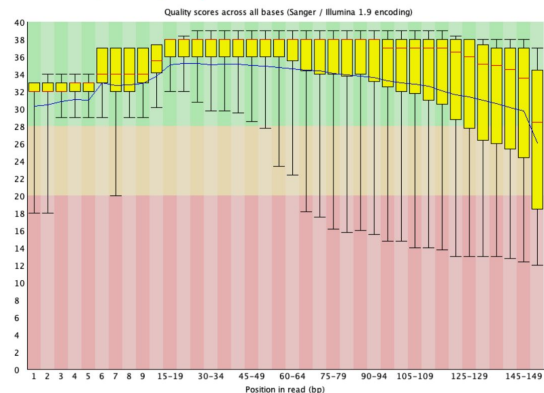
## FastQC Report

Mon 28 Apr 2025  
SRR32309086\_2.fastq

### Summary

- ✓ Basic Statistics
- ✓ Per base sequence quality
- ✓ Per tile sequence quality
- ✓ Per sequence quality scores
- ✗ Per base sequence content
- ✗ Per sequence GC content
- ✓ Per base N content
- ⚠ Sequence Length Distribution
- ✓ Sequence Duplication Levels
- ⚠ Overrepresented sequences
- ✓ Adapter Content

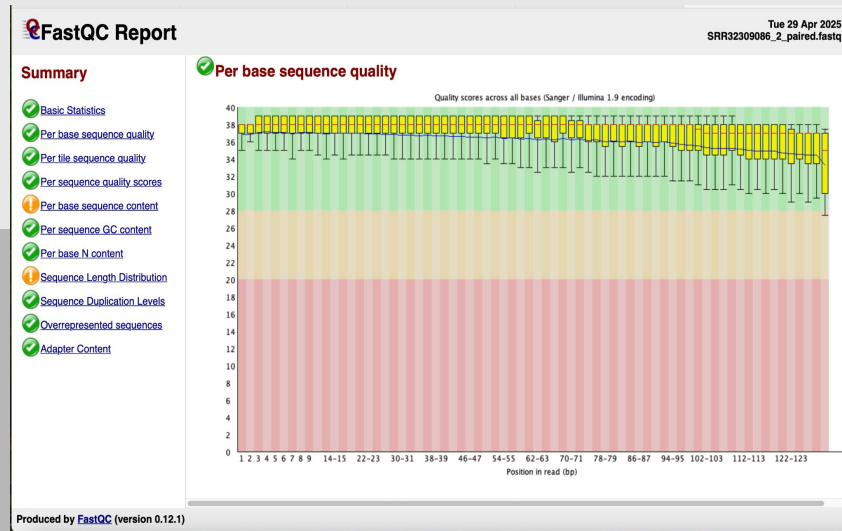
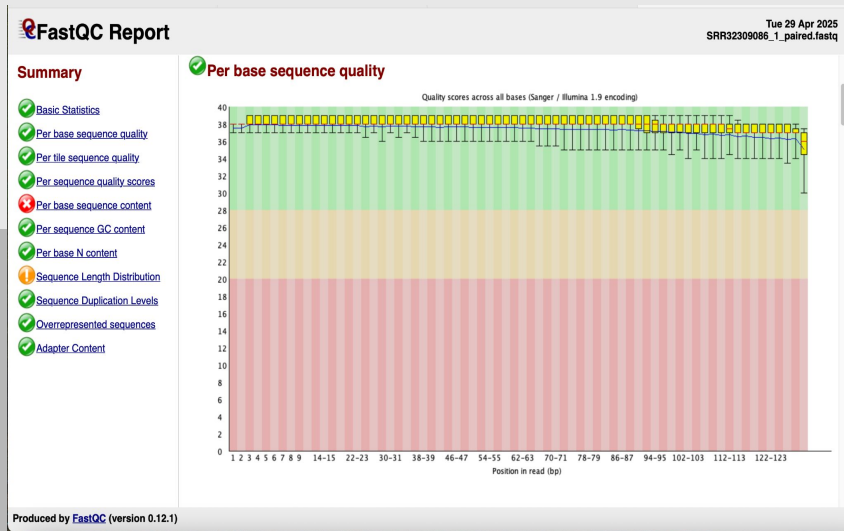
### ✓ Per base sequence quality



Produced by [FastQC](#) (version 0.12.1)

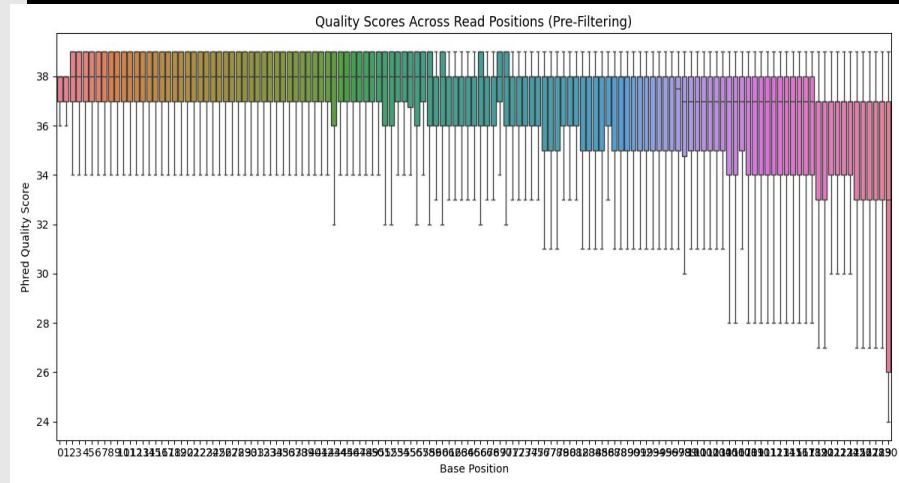
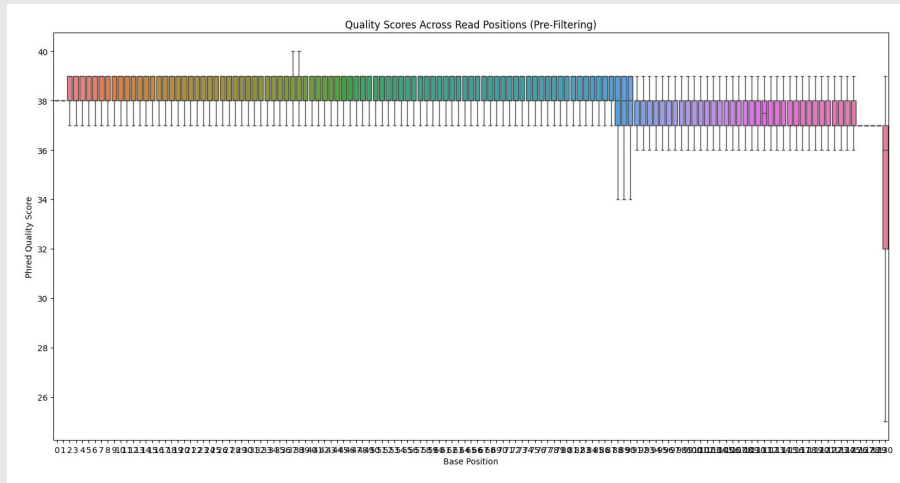
# CheckM2 contamination: 1.72%

# FastQC post Trimmomatic



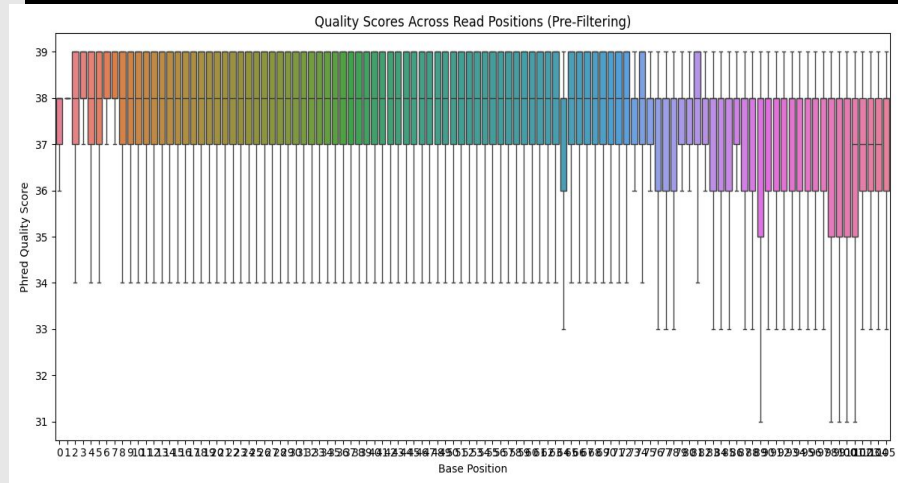
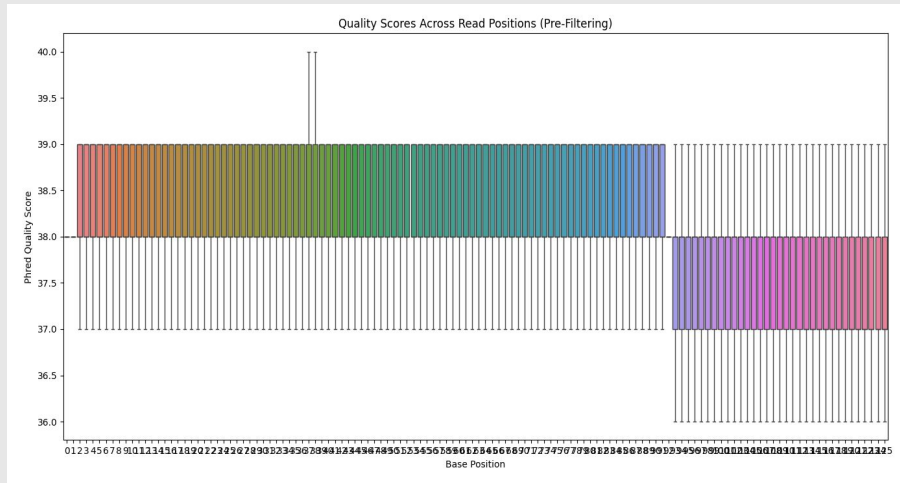
CheckM2 contamination: 1.44%

# Python visualization



CheckM2 contamination: 1.44%

# Python visualization post fastp



CheckM2 contamination: 1.23%

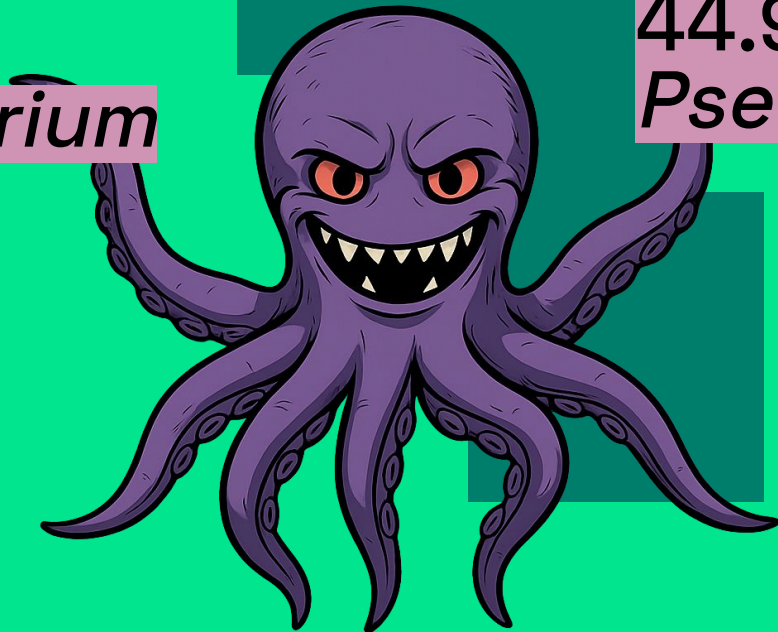
# Kraken2 report

54.71%

*Mycobacterium*

44.90%

*Pseudomonadota*



CheckM2 contamination: 1.23%

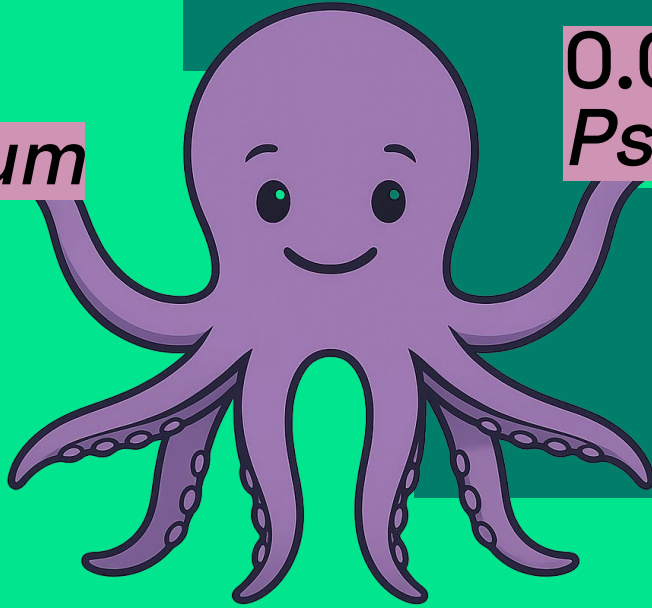
# Kraken2 report post align + filter

99.76%

*Mycobacterium*

0.08%

*Pseudomonadota*



CheckM2 contamination: 1.88%

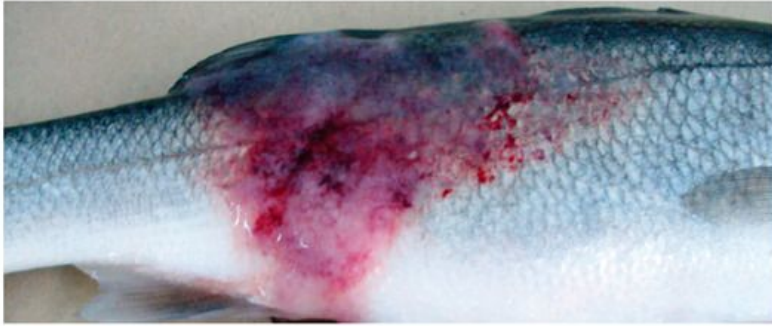
# CONTENT WARNING

ㄱㅇ.ㅇ.ㅇ look away





# *Mycobacterium marinum* infections in fish and humans



Delghandi, M. R., El-Matbouli, M., & Menanteau-Ledouble, S. (2020). Mycobacteriosis and Infections with Non-tuberculous Mycobacteria in Aquatic Organisms: A Review. *Microorganisms*, 8(9), 1368. <https://doi.org/10.3390/microorganisms8091368>



Tsiolakkis, G., Lontos, A., Filippas-Ntekouan, S., Matzaras, R., Theodorou, E., Vardas, M., Vairaktari, G., Nikopoulou, A., & Christaki, E. (2023). *Mycobacterium marinum*: A Case-Based Narrative Review of Diagnosis and Management. *Microorganisms*, 11(7), 1799. <https://doi.org/10.3390/microorganisms11071799>

# RAST SEED Viewer (Final Assembly) and SWISS-MODEL of RbpA

