



MICROBIOME

# WG3 Meeting report

31th August 2022



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# WG3 Update Alberto

- **Two separate experiments with 10x and LOSO CV**
- **brutal ML approach with multiple models (Hunga-Bunga)**
- **Performance gains from metadata in both cases**
- **best classifier depends on metric**
- **Batch effects for Indian healthy cohort PRJNA397112**



# WG3 Update Andrea

- **multiview models approach**
- **combines different preprocessings/sequencing techniques/omics etc.**
- **models are trained in iterations**
- **weights are given to the samples to influence their impact on the next iteration**
- **Significant boost in AUC  $\sim 0.7 \rightarrow > 0.99$**



# WG3 SOP discussion

- **recommendations for**
  - **Automl (CV)**
  - **metadata to include**
  - **Batch effect corrections (splitting data?)**
  - **goal metric**



# WG3 Outlook

- **Roadmap for publication**
- **Collection of trained models/metrics**
- **extract recommendations**
- **possible cooperation/ joint paper with other WG (WG1?)**

