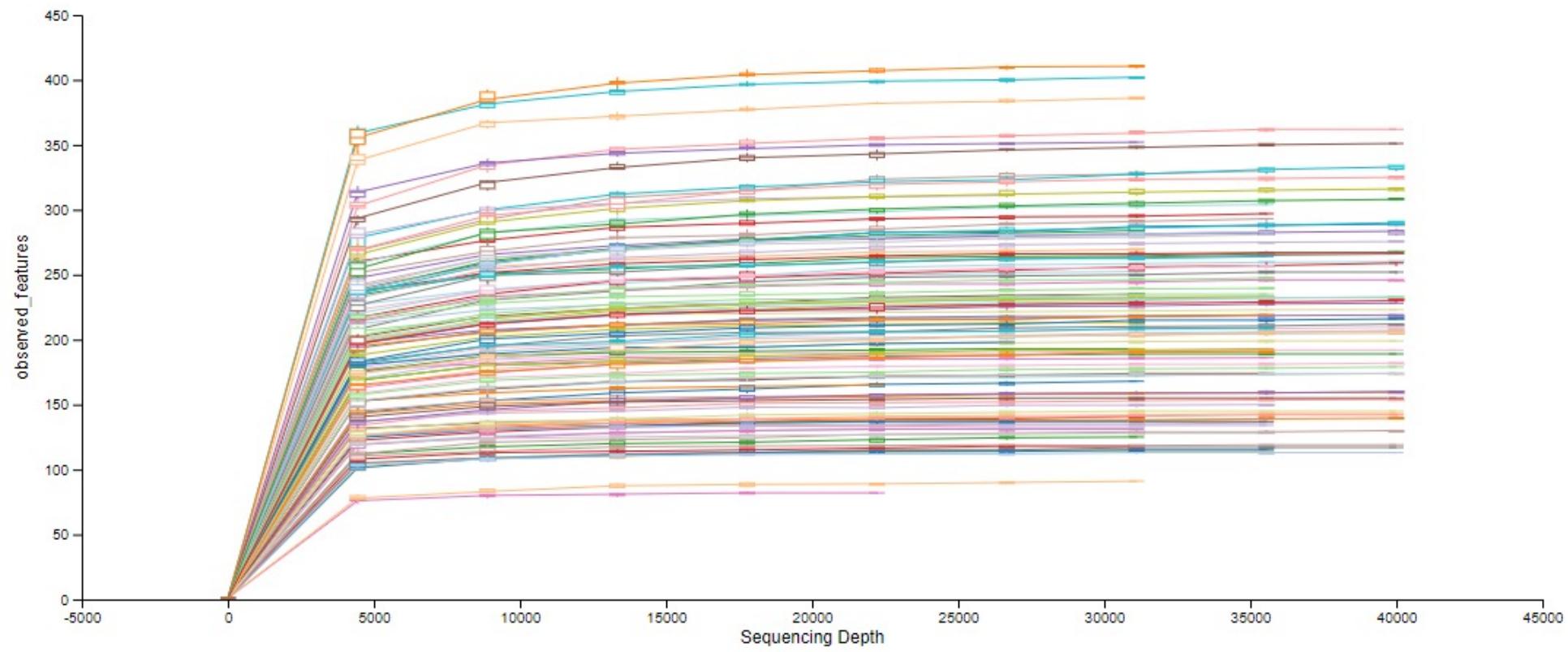
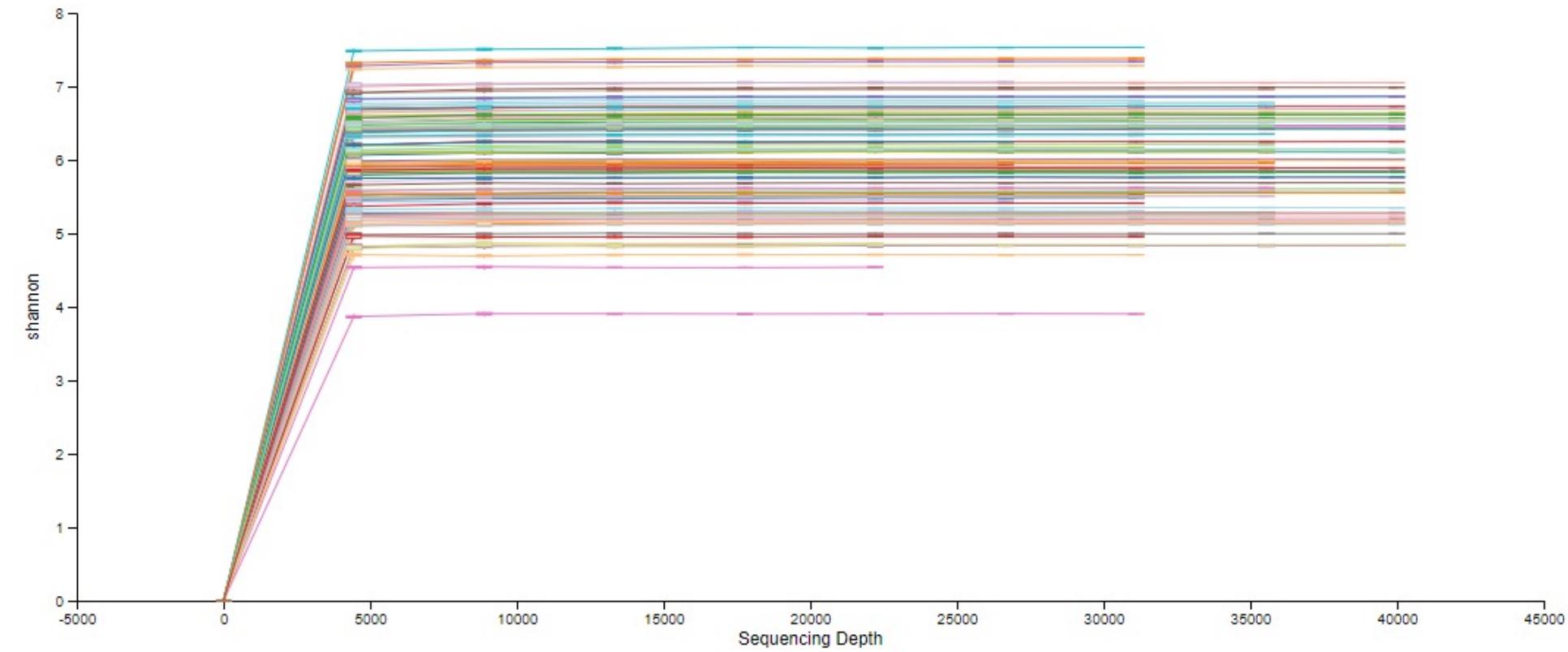


Supplementary Figure S1

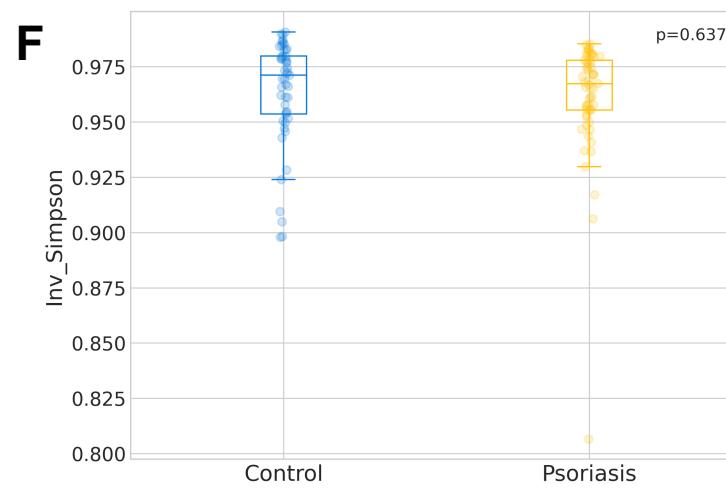
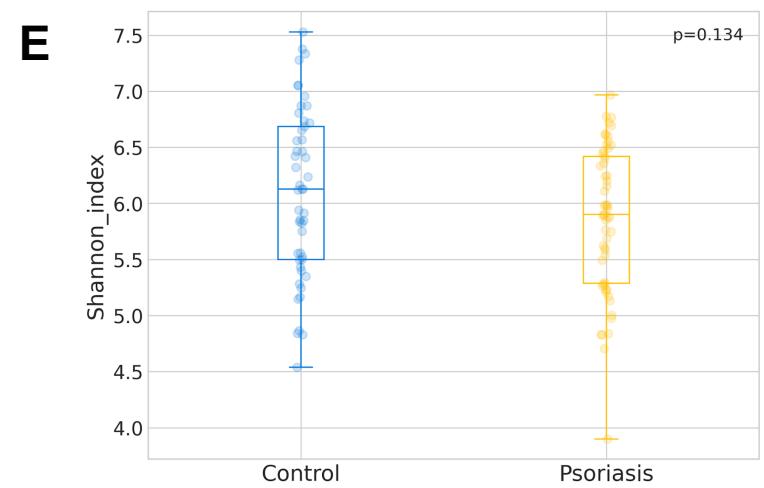
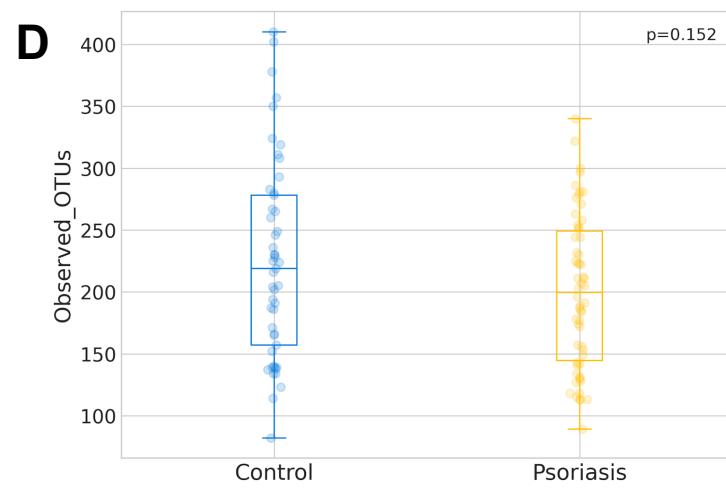
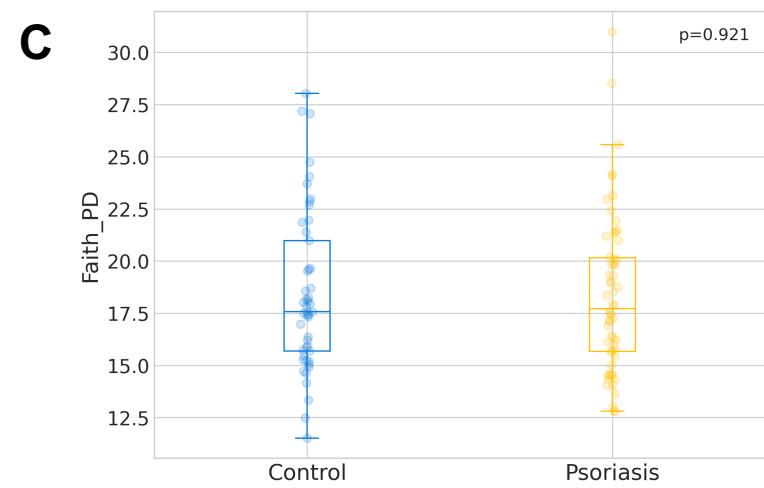
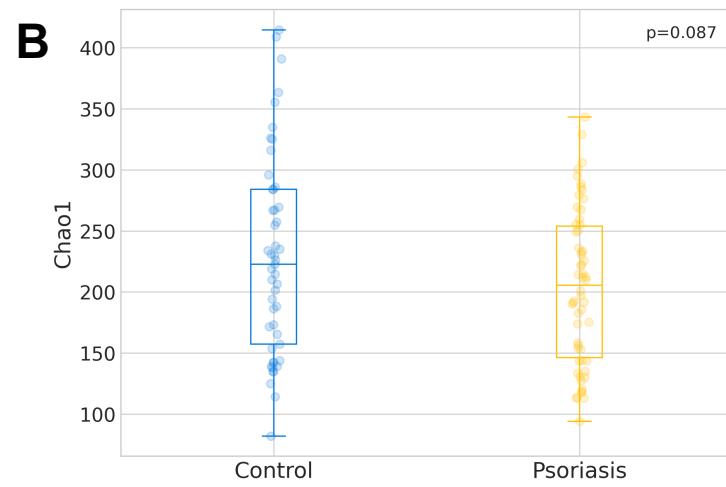
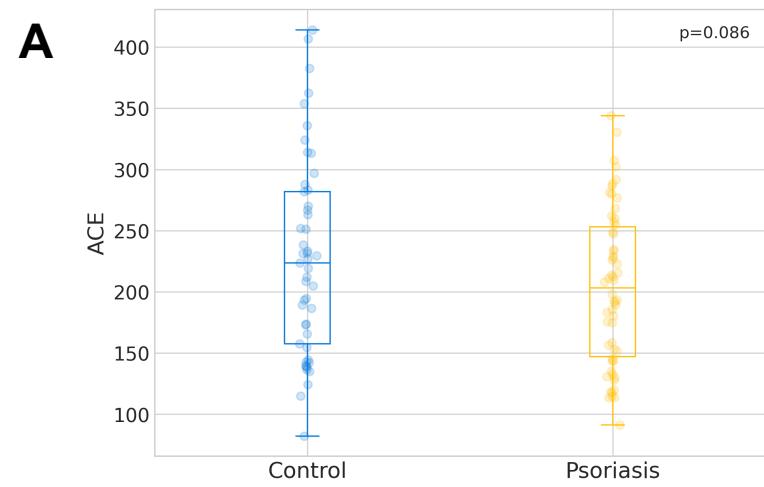
A



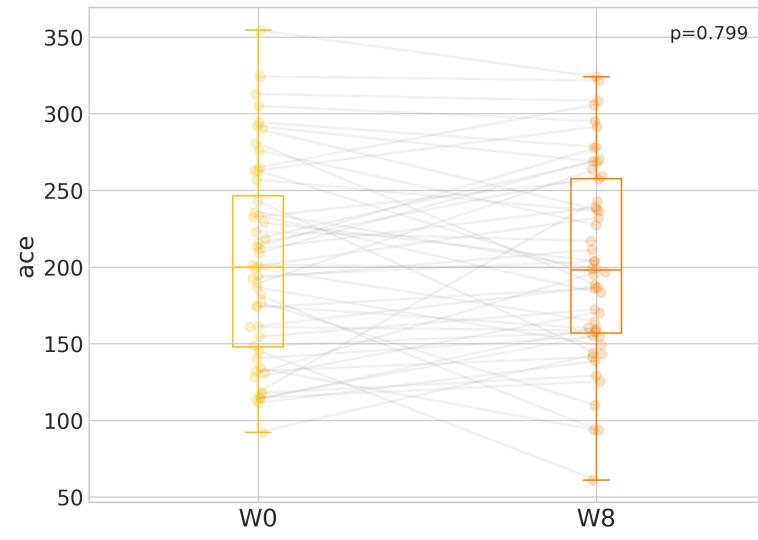
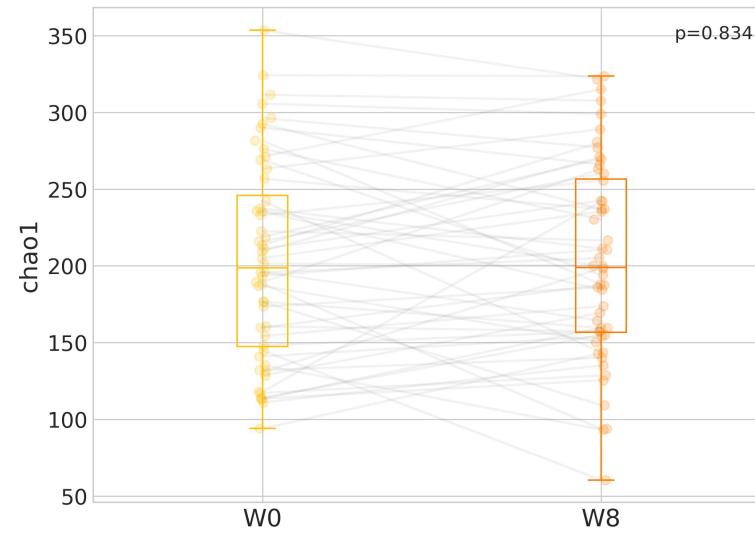
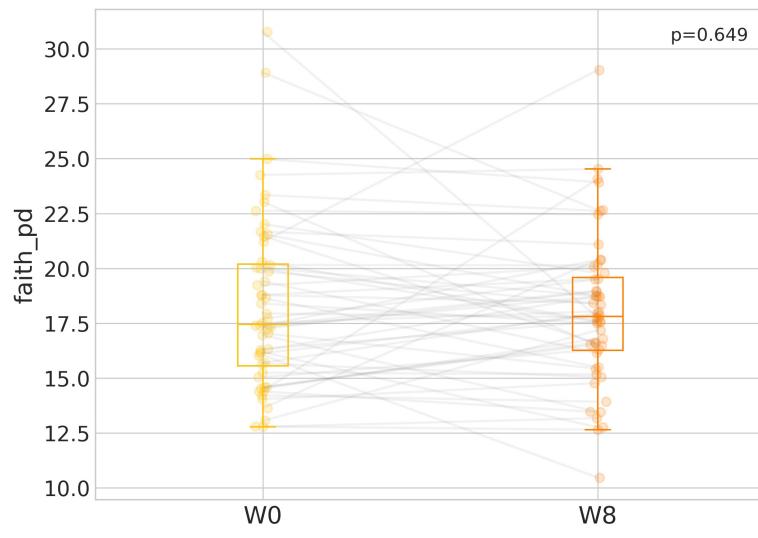
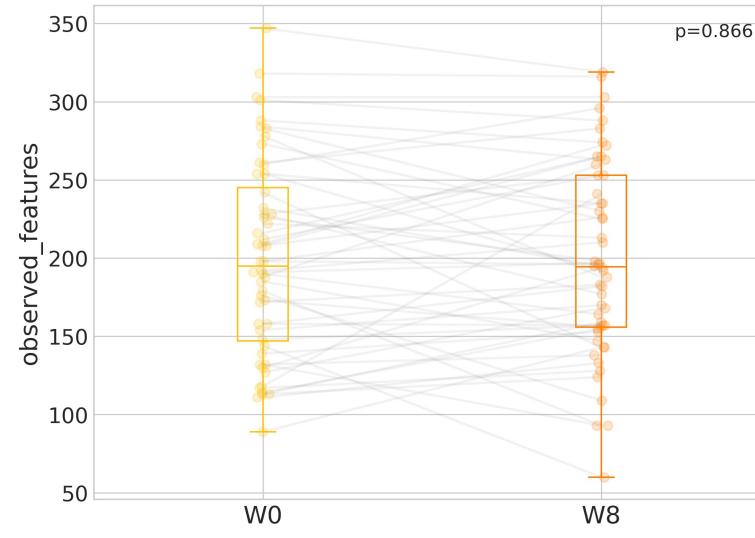
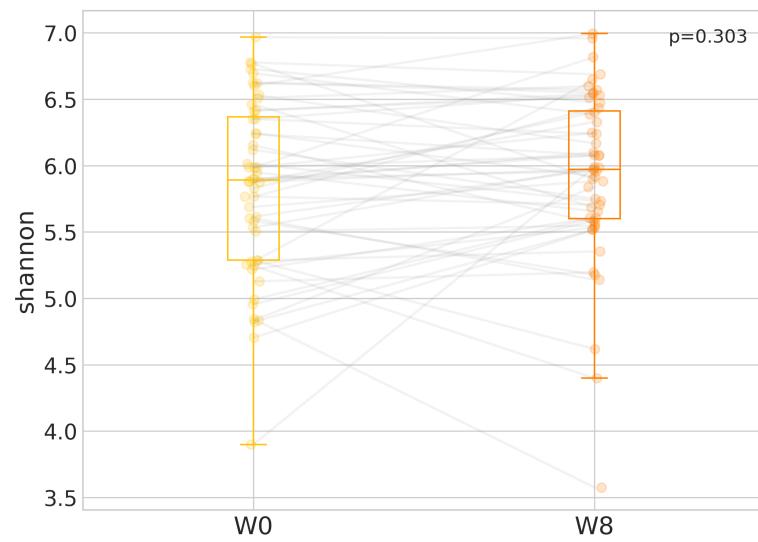
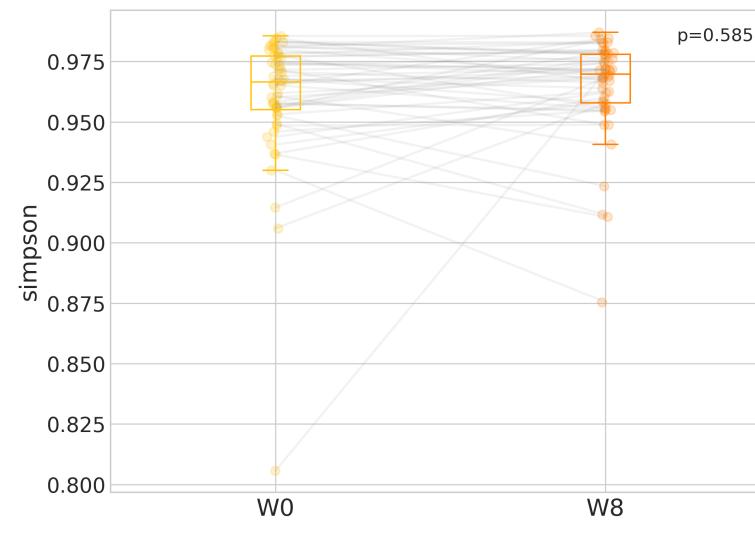
B



Supplementary Figure S2

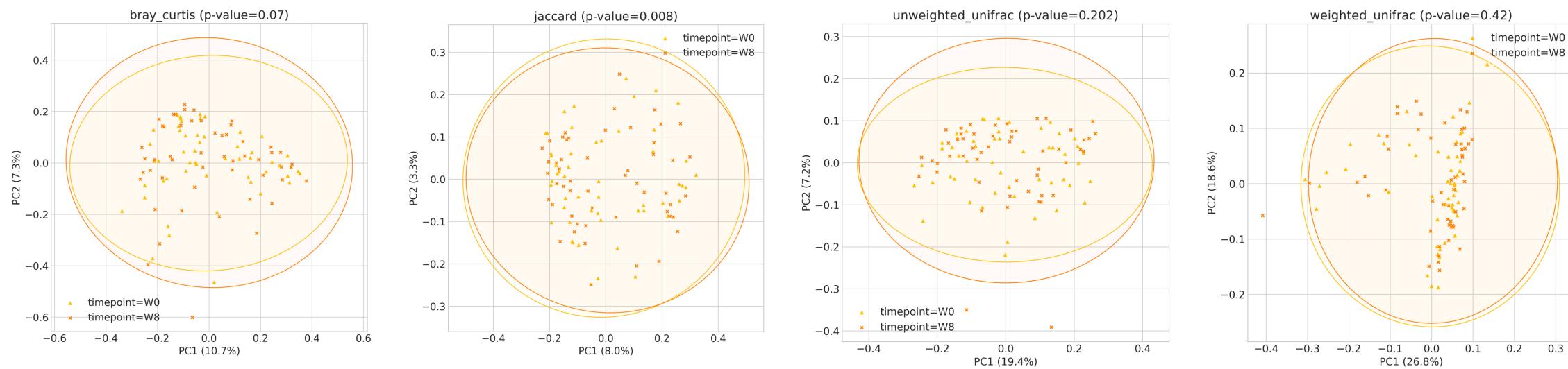


Supplementary Figure S3

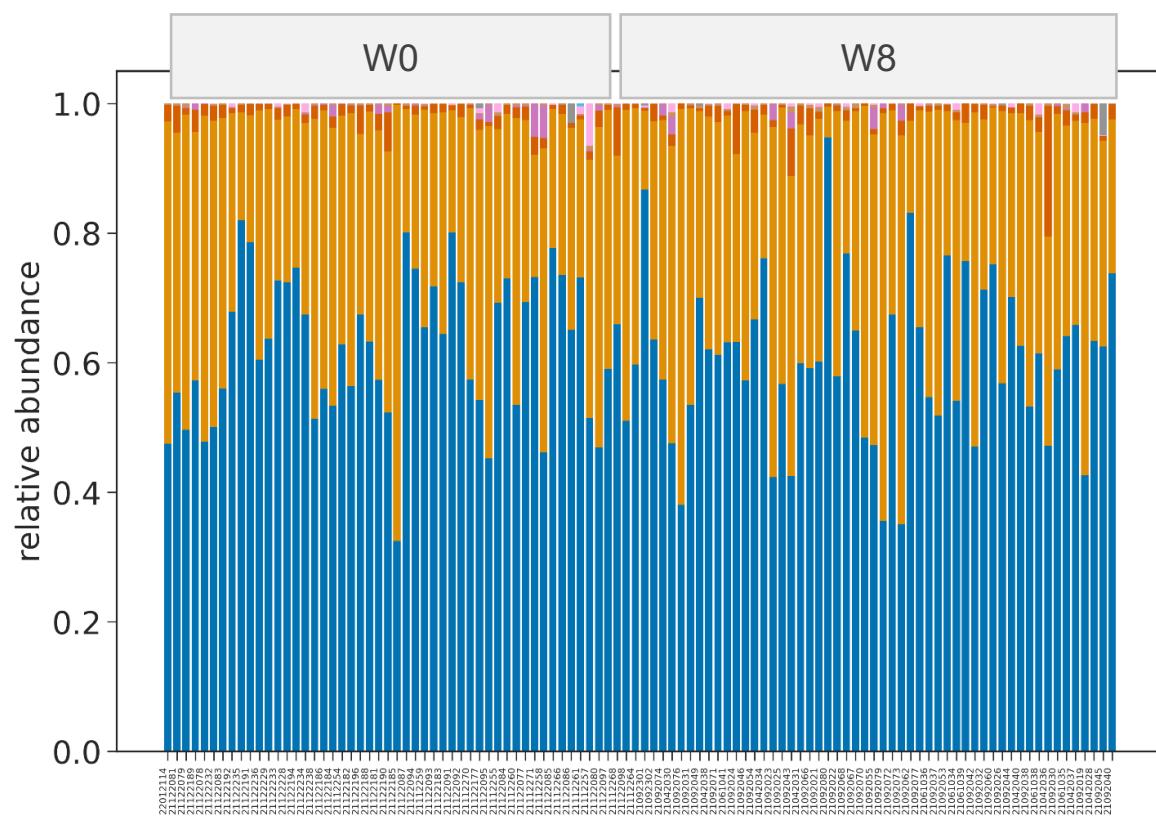
A**B****C****D****E****F**

Supplementary Figure S4

A

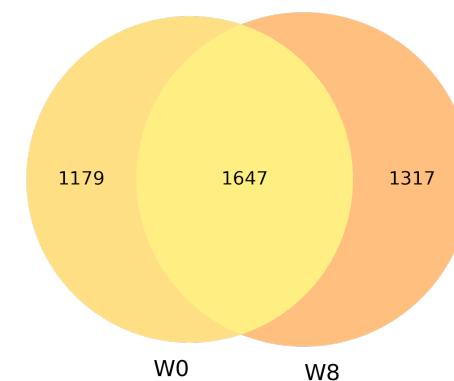


B

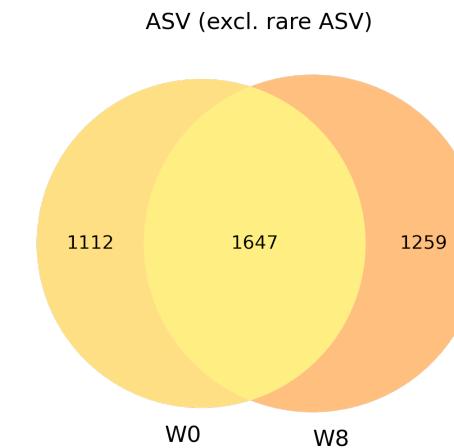


- d_Bacteria;p_Campilobacterota
- Unassigned;_
- d_Bacteria;_
- d_Archaea;p_Euryarchaeota
- d_Bacteria;p_Synergistota
- d_Bacteria;p_Cyanobacteria
- d_Bacteria;p_Verrucomicrobiota
- d_Bacteria;p_Desulfobacterota
- d_Bacteria;p_Fusobacteriota
- d_Bacteria;p_Proteobacteria
- d_Bacteria;p_Actinobacteriota
- d_Bacteria;p_Bacteroidota
- d_Bacteria;p_Firmicutes

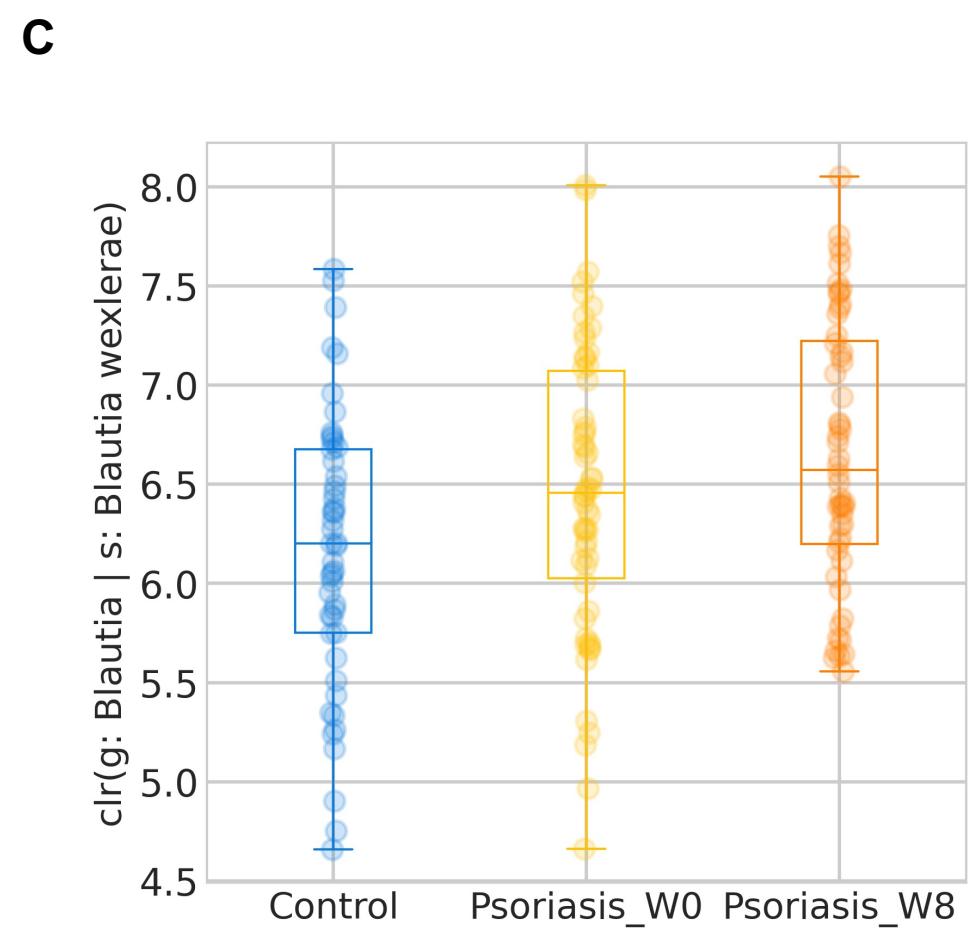
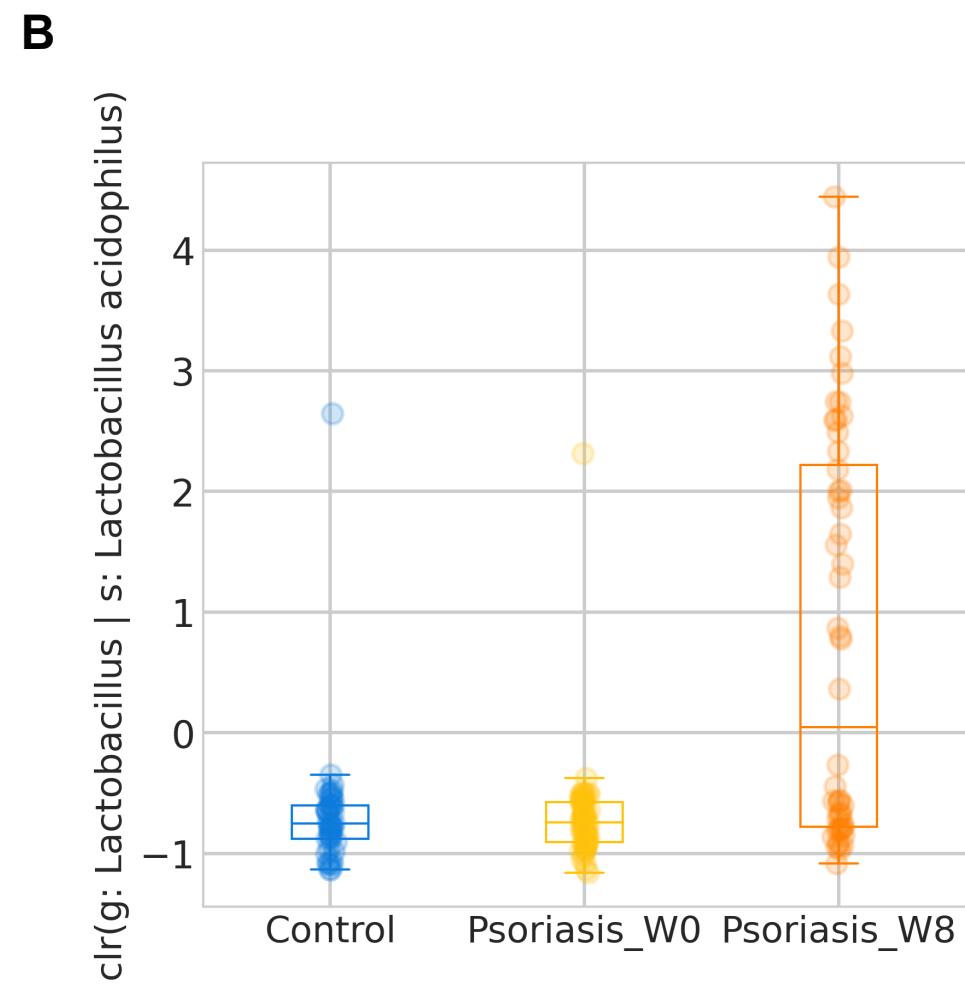
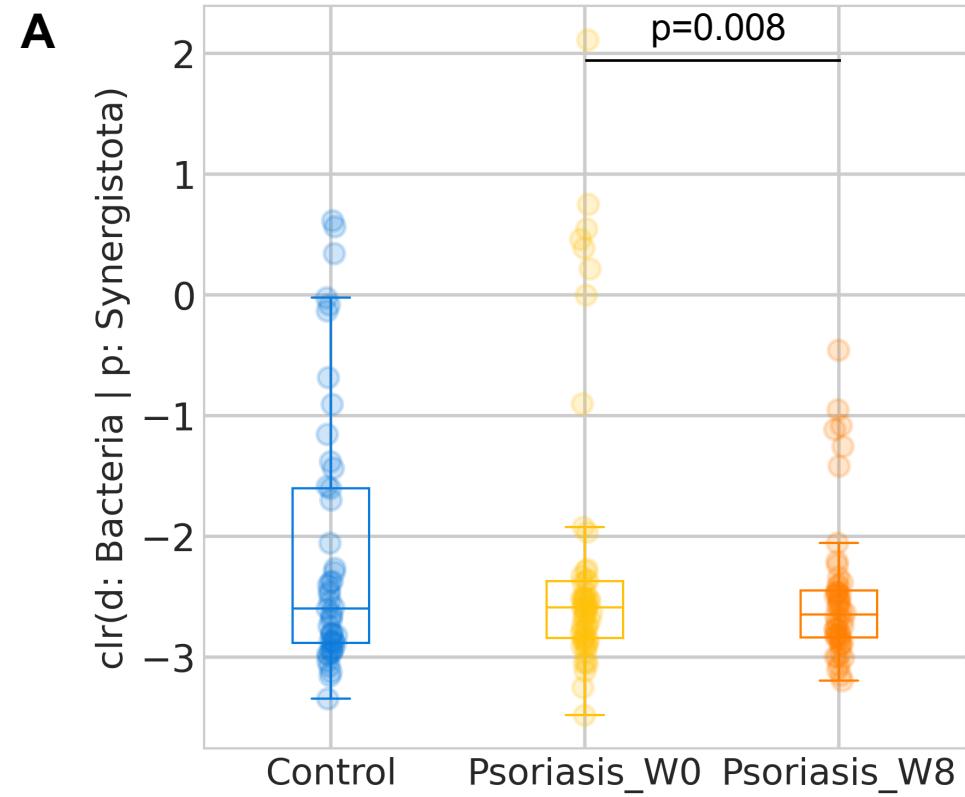
C



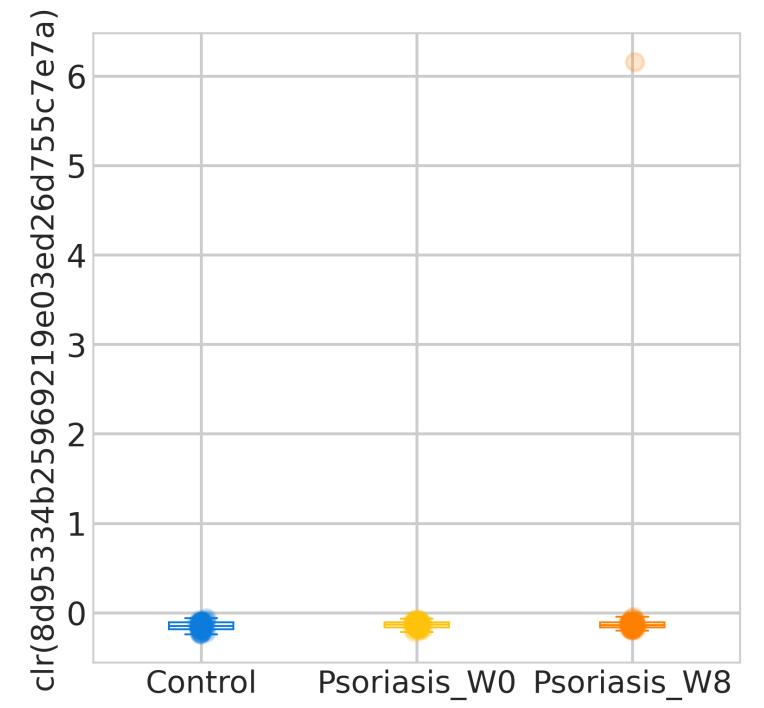
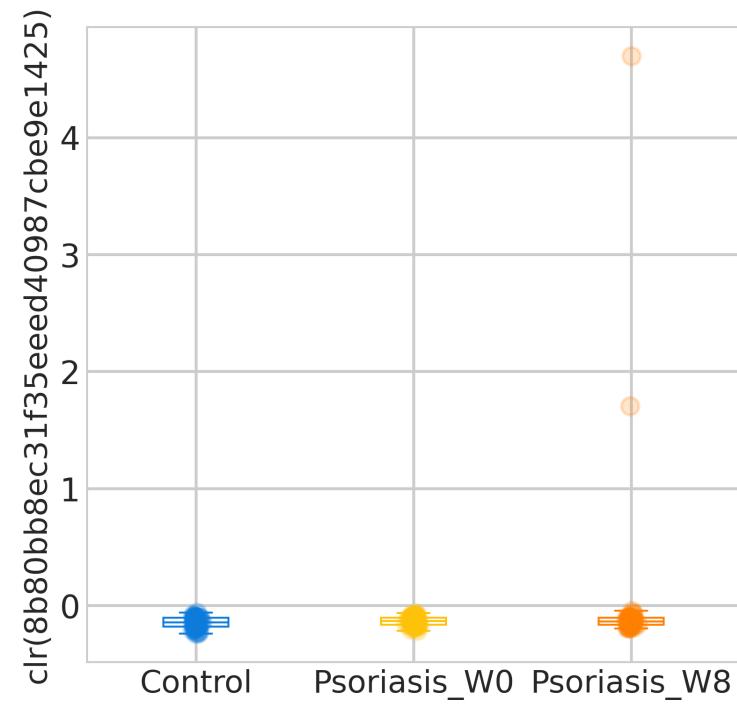
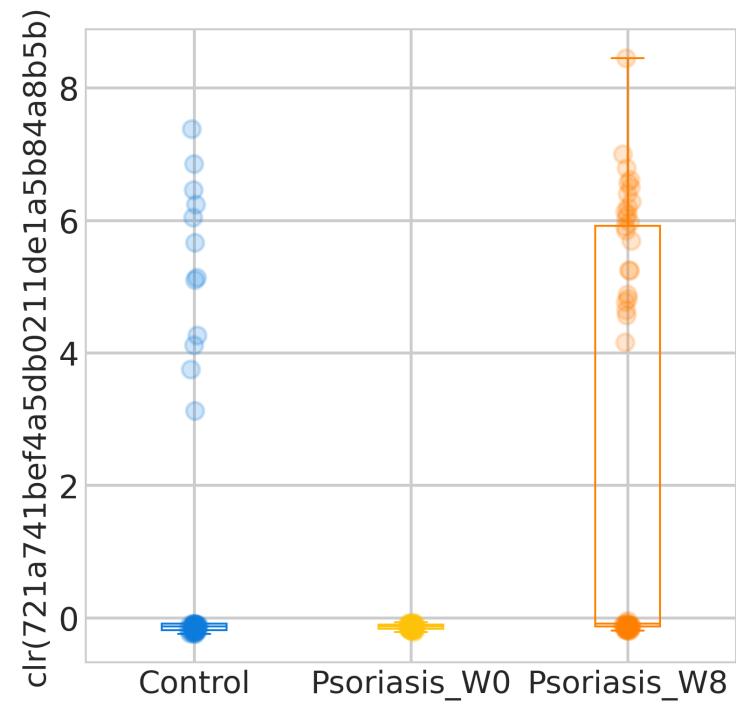
D



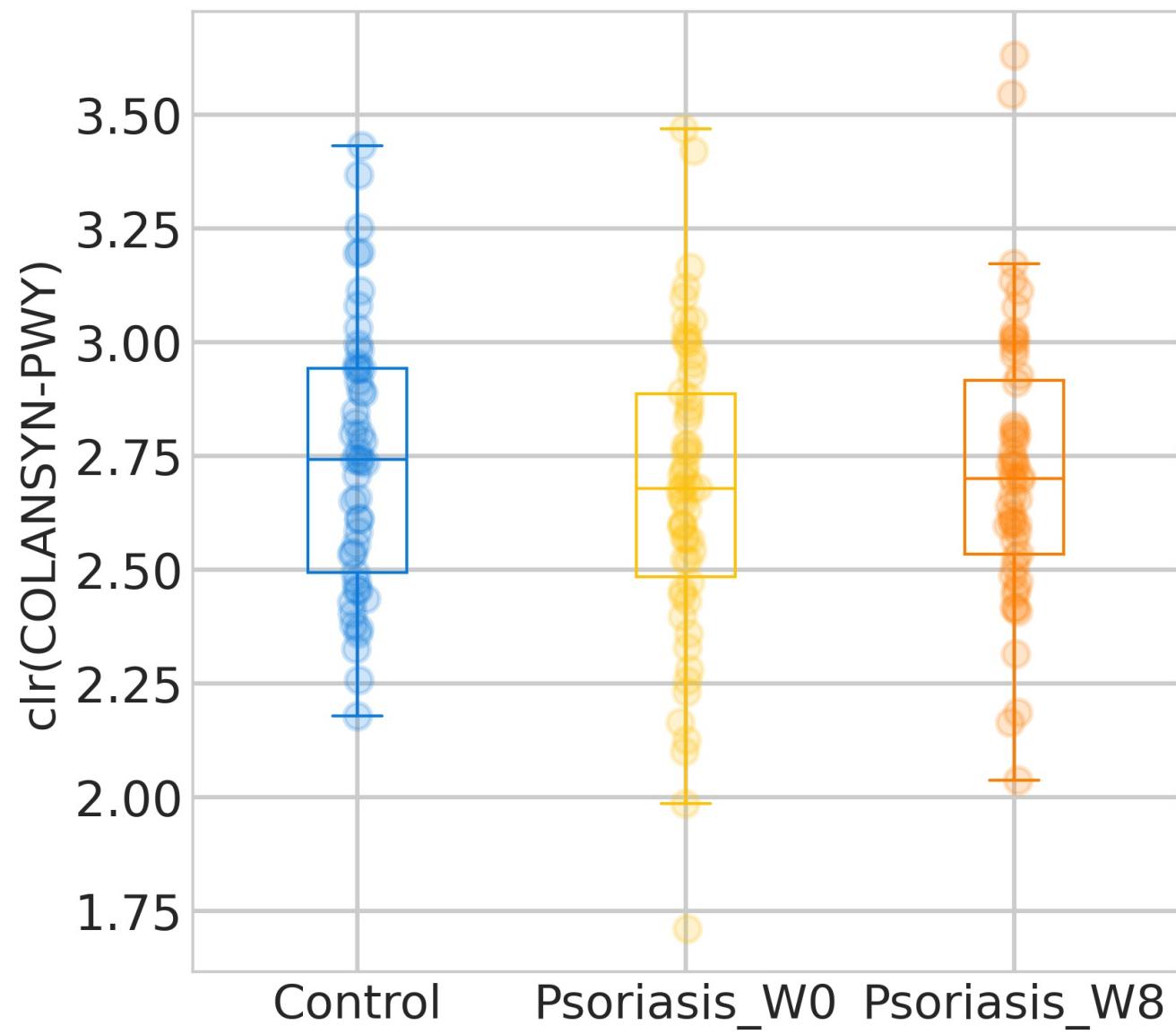
Supplementary Figure S5



Supplementary Figure S6

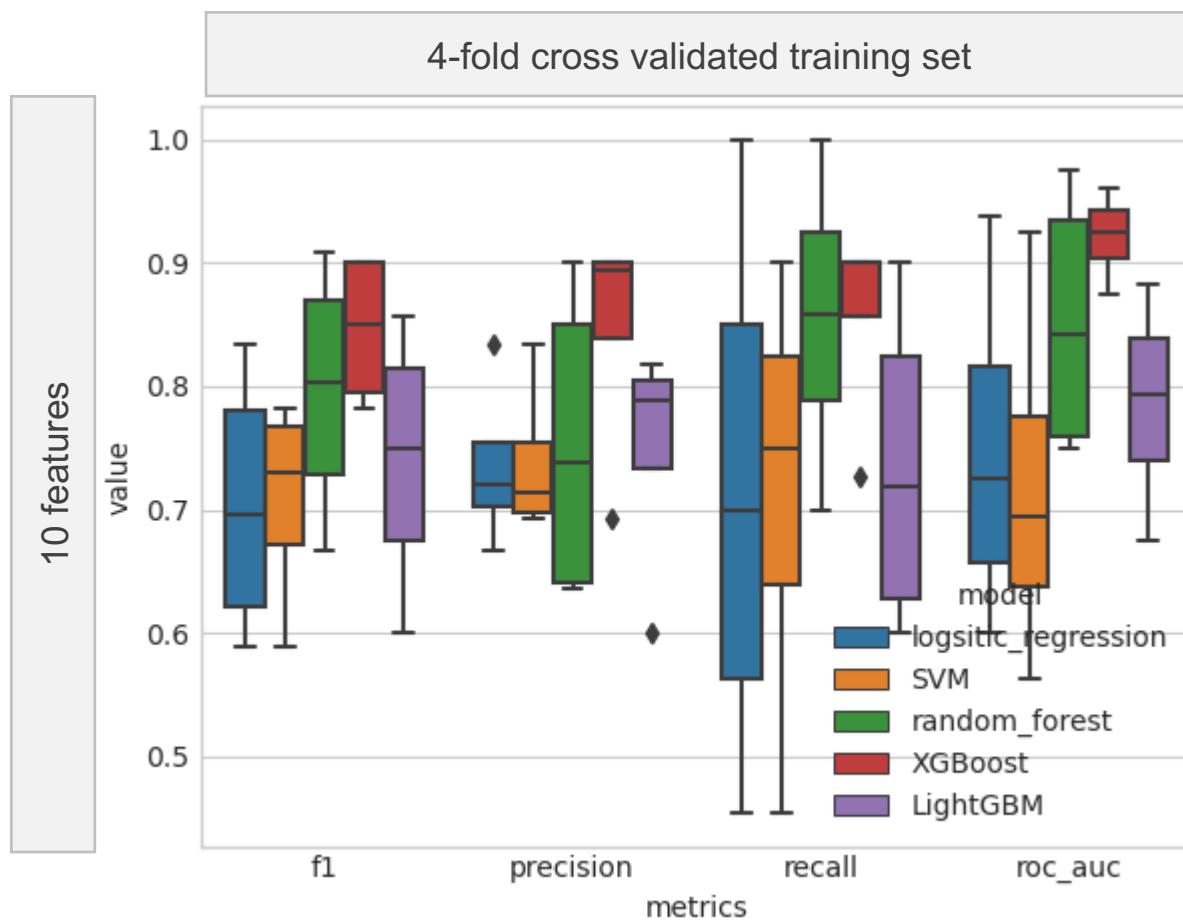


Supplementary Figure S7



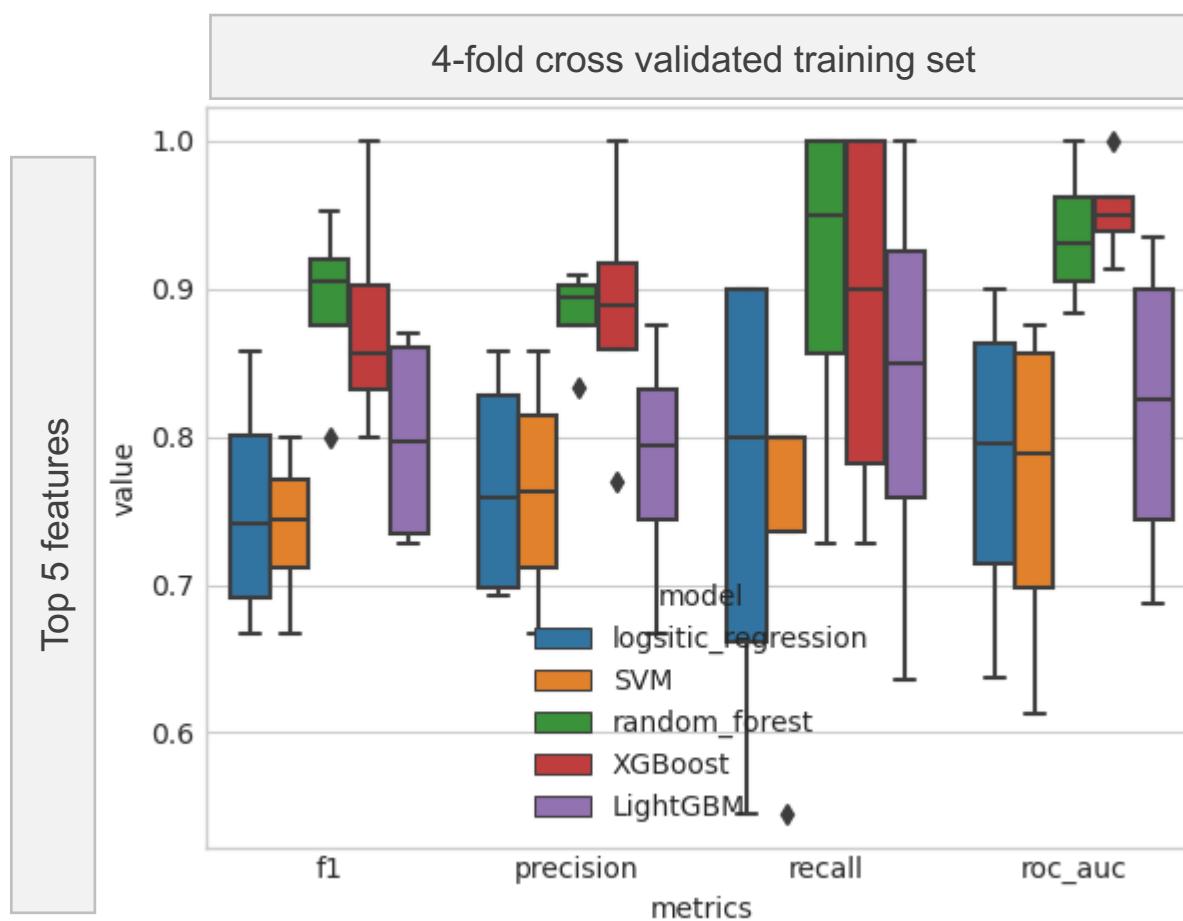
Supplementary Figure S8

A



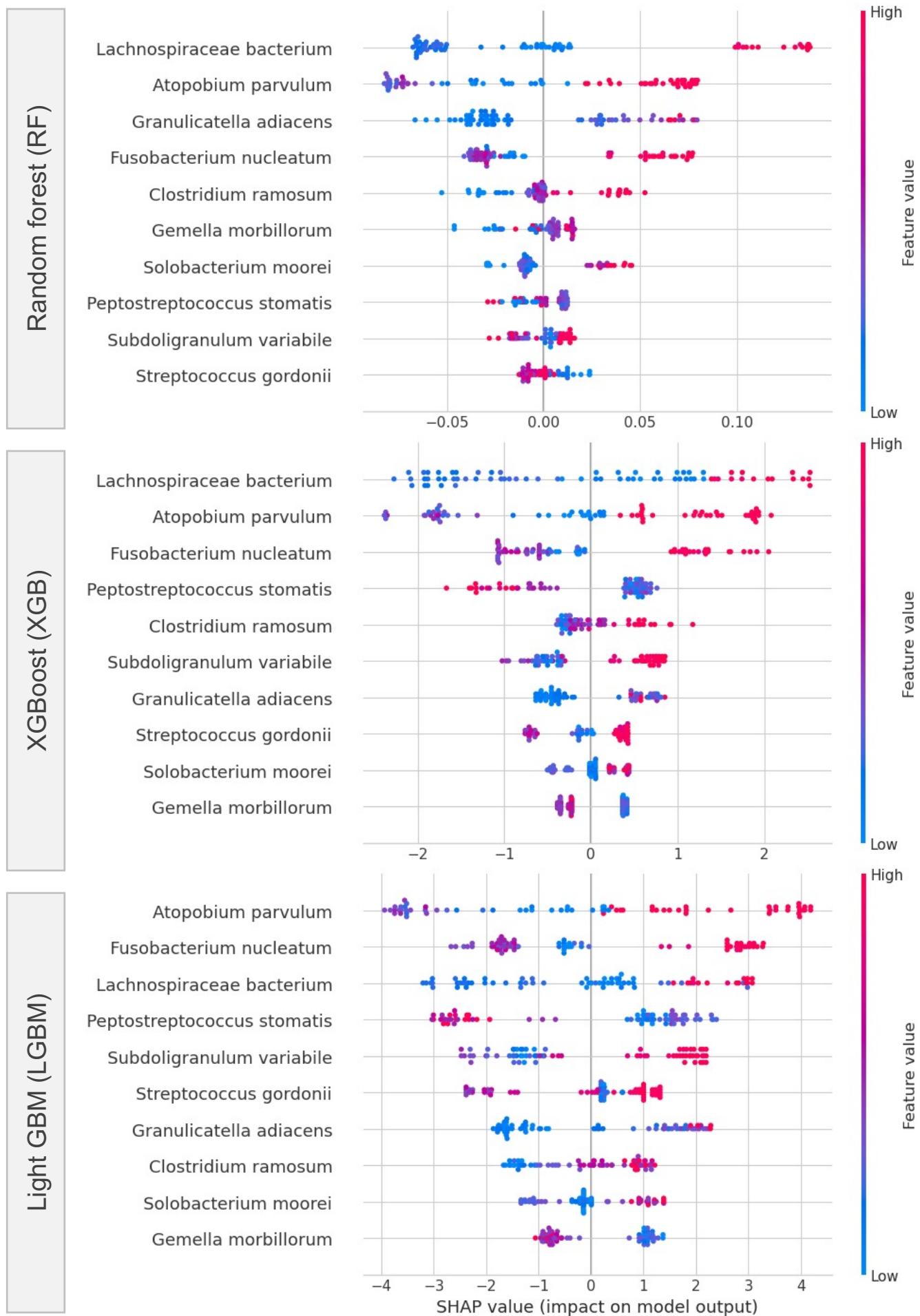
25% held out test set				
	F	Precision	Recall	AUROC
LR	0.78	<u>1.00</u>	0.64	0.82
SVM	0.83	<u>1.00</u>	0.71	0.86
RF	<u>0.89</u>	0.92	<u>0.86</u>	<u>0.88</u>
XGB	0.86	0.86	<u>0.86</u>	0.83
LGBM	<u>0.89</u>	0.92	<u>0.86</u>	<u>0.88</u>

B



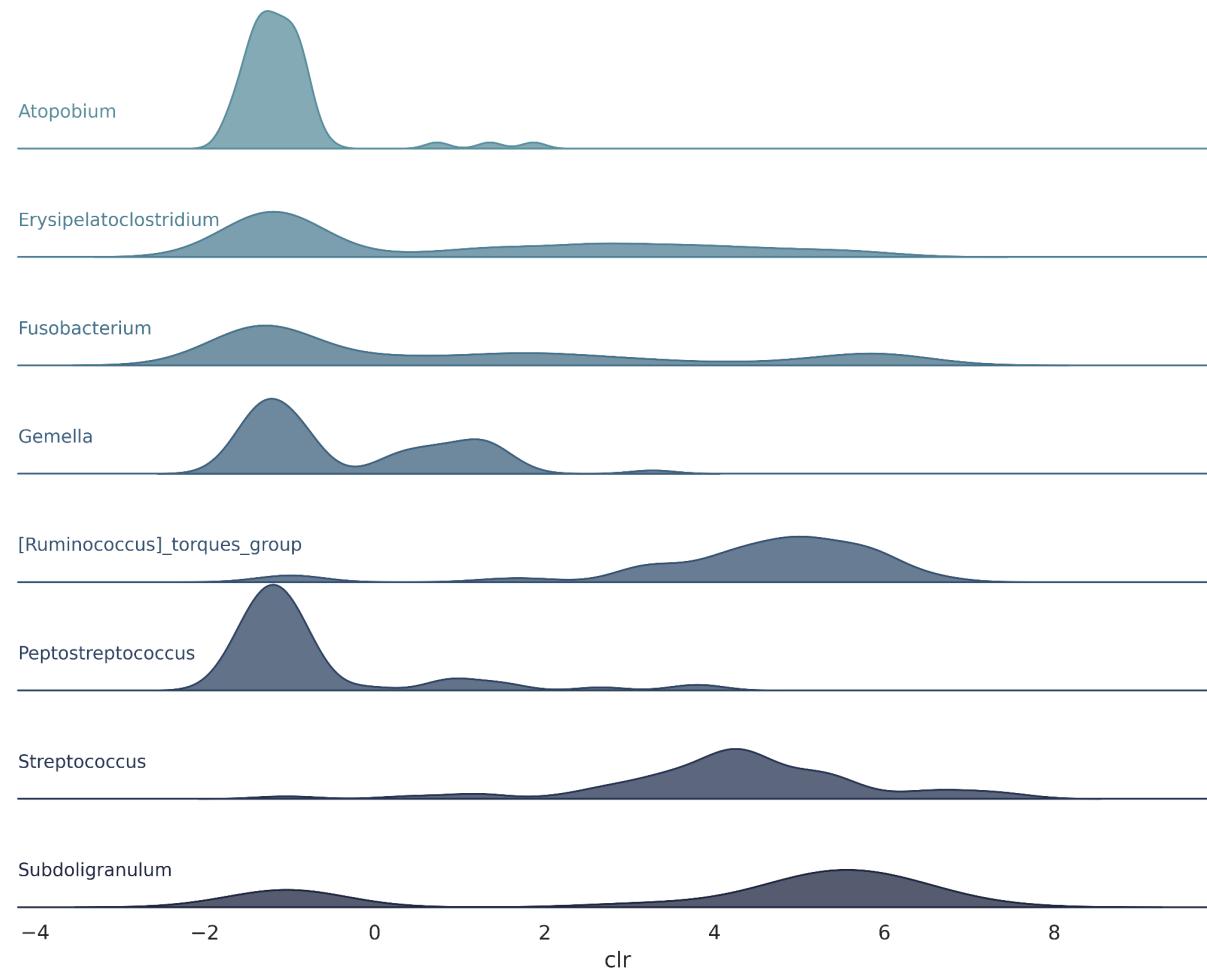
25% held out test set				
	F	Precision	Recall	AUROC
LR	0.78	<u>1.00</u>	0.64	0.82
SVM	0.78	<u>1.00</u>	0.64	0.82
RF	0.87	0.82	<u>0.93</u>	0.81
XGB	0.86	0.86	0.86	0.83
LGBM	<u>0.89</u>	0.92	0.86	<u>0.88</u>

Supplementary Figure S9



Supplementary Figure S10

A



B

