

Tree + Panphlan

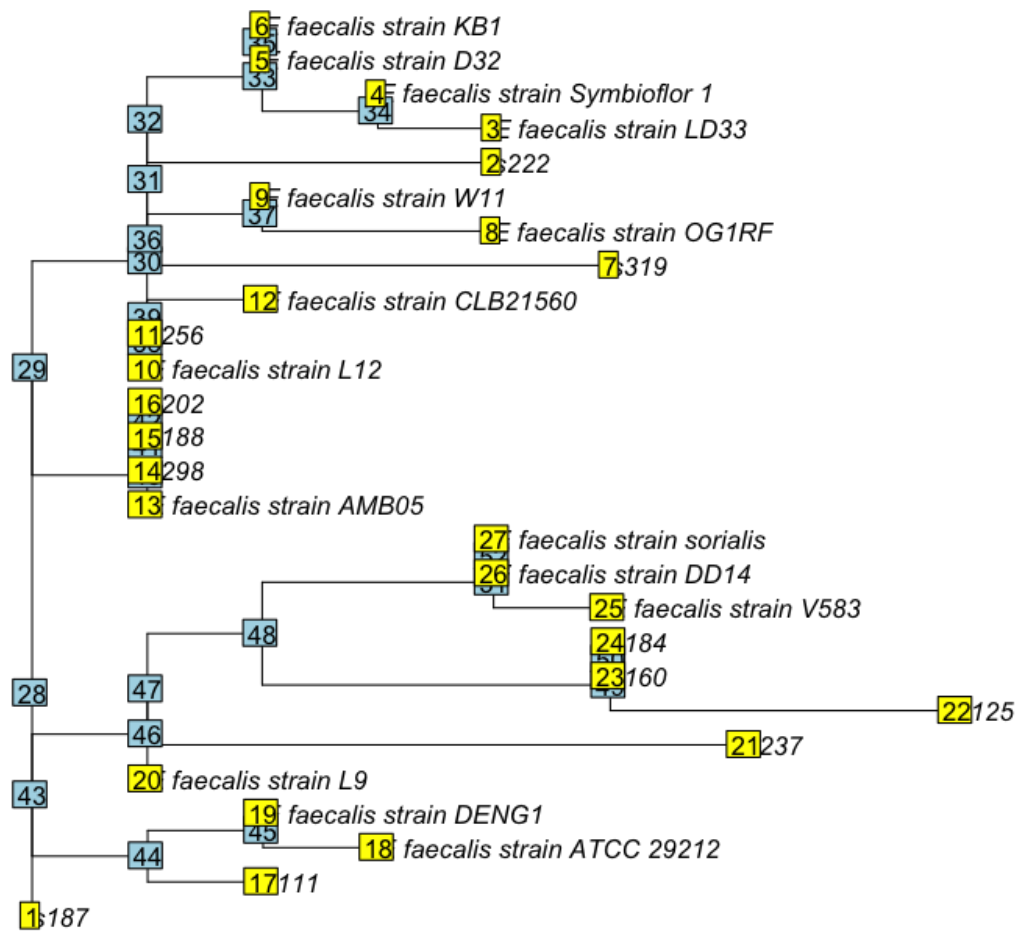
Chunyu Zhao

December 29, 2018

E. faecalis

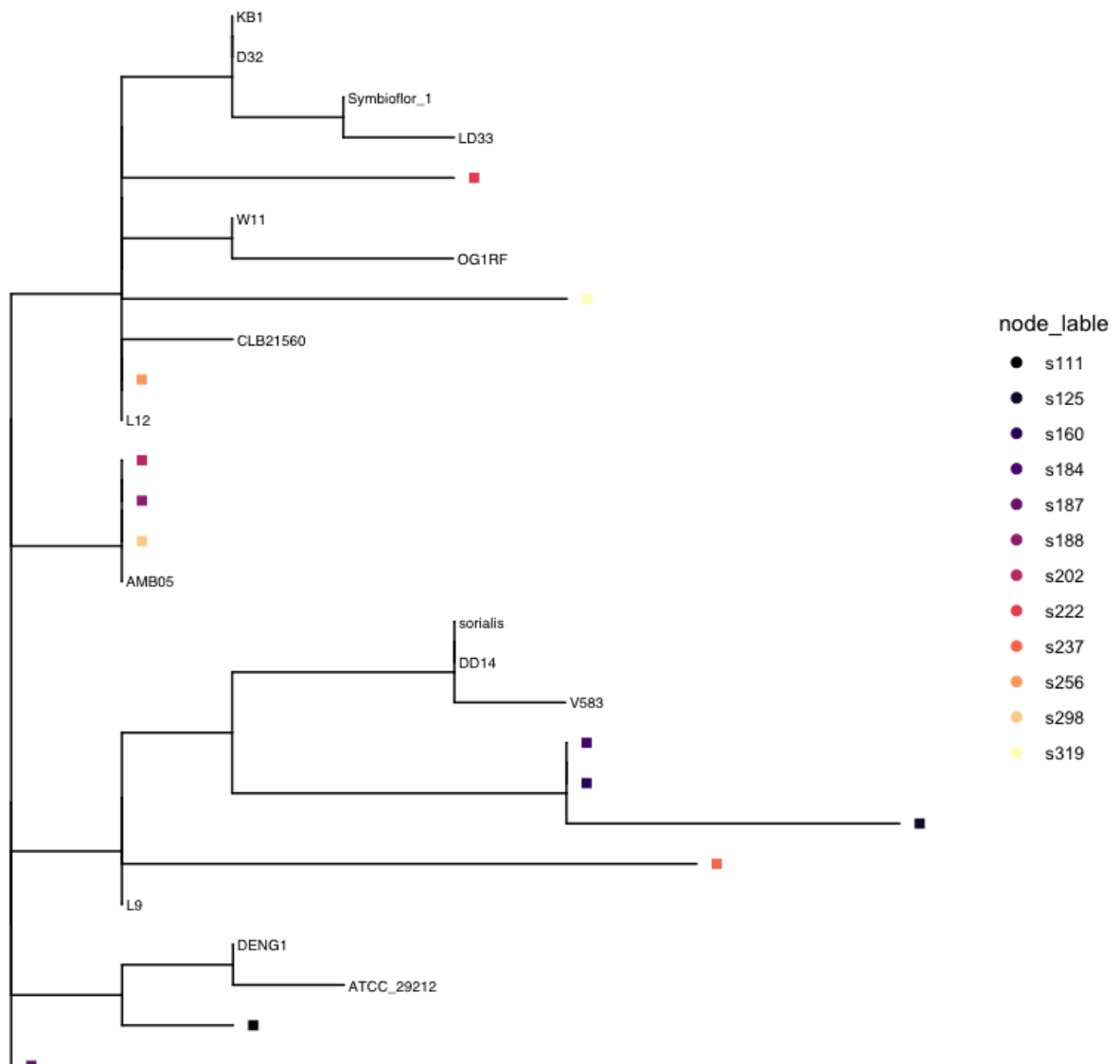
Phylogenetic Tree

- We read the **external genomes** list from the **anvio** pangenome analysis results.
- Read in the tree from **panphlan**
- write to 20180720_efaecalis_tree_tip_order.txt.



Tree time

- generate 20180702_efaecalis_tree_v1.pdf => KB18 suppl files

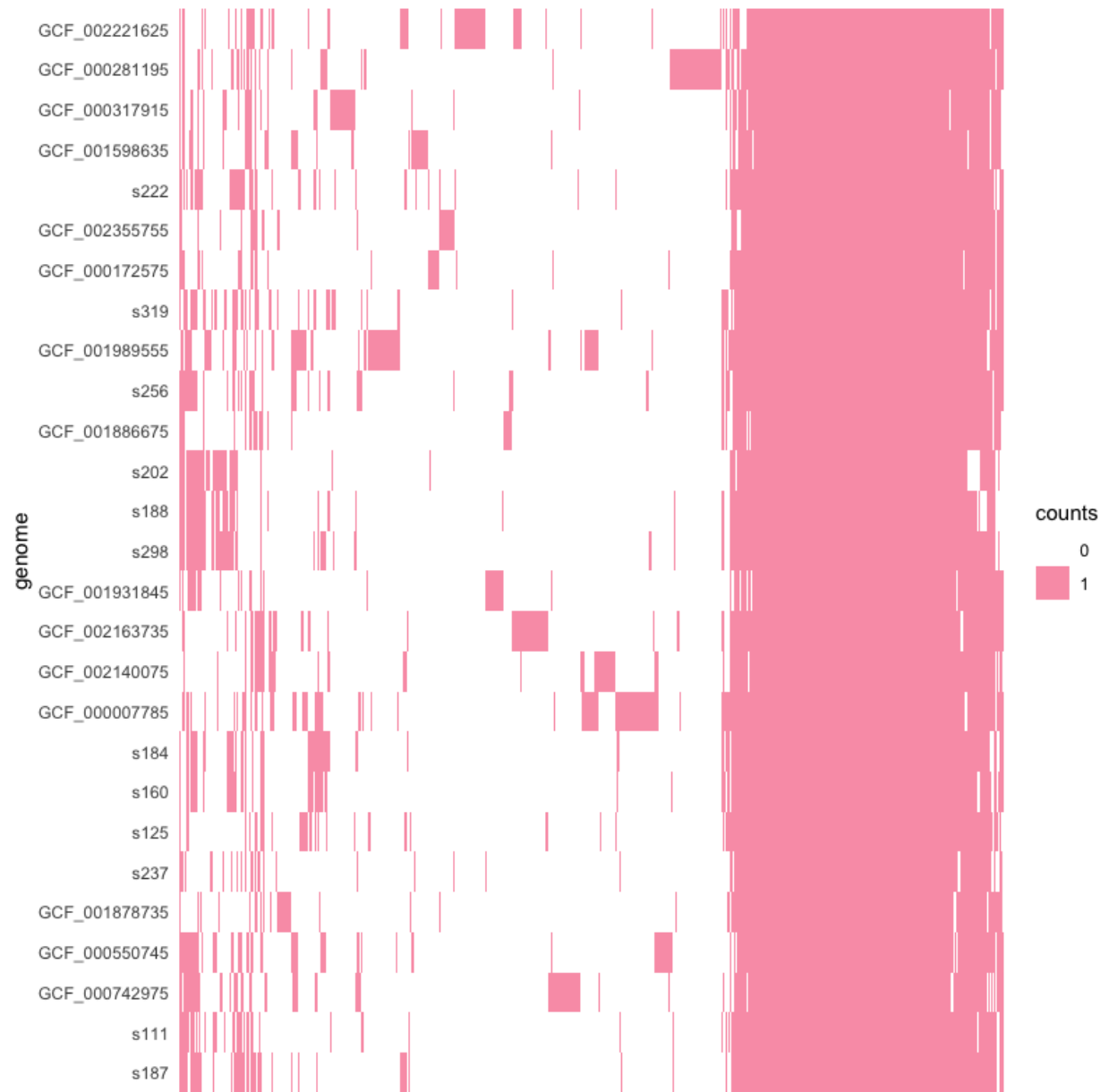


Panphlan

- visualize pangenome results
- read in `result_gene_presence_absence.csv`
- read in `20180720_efaecalis_tree_tip_order.txt`

Heatmap

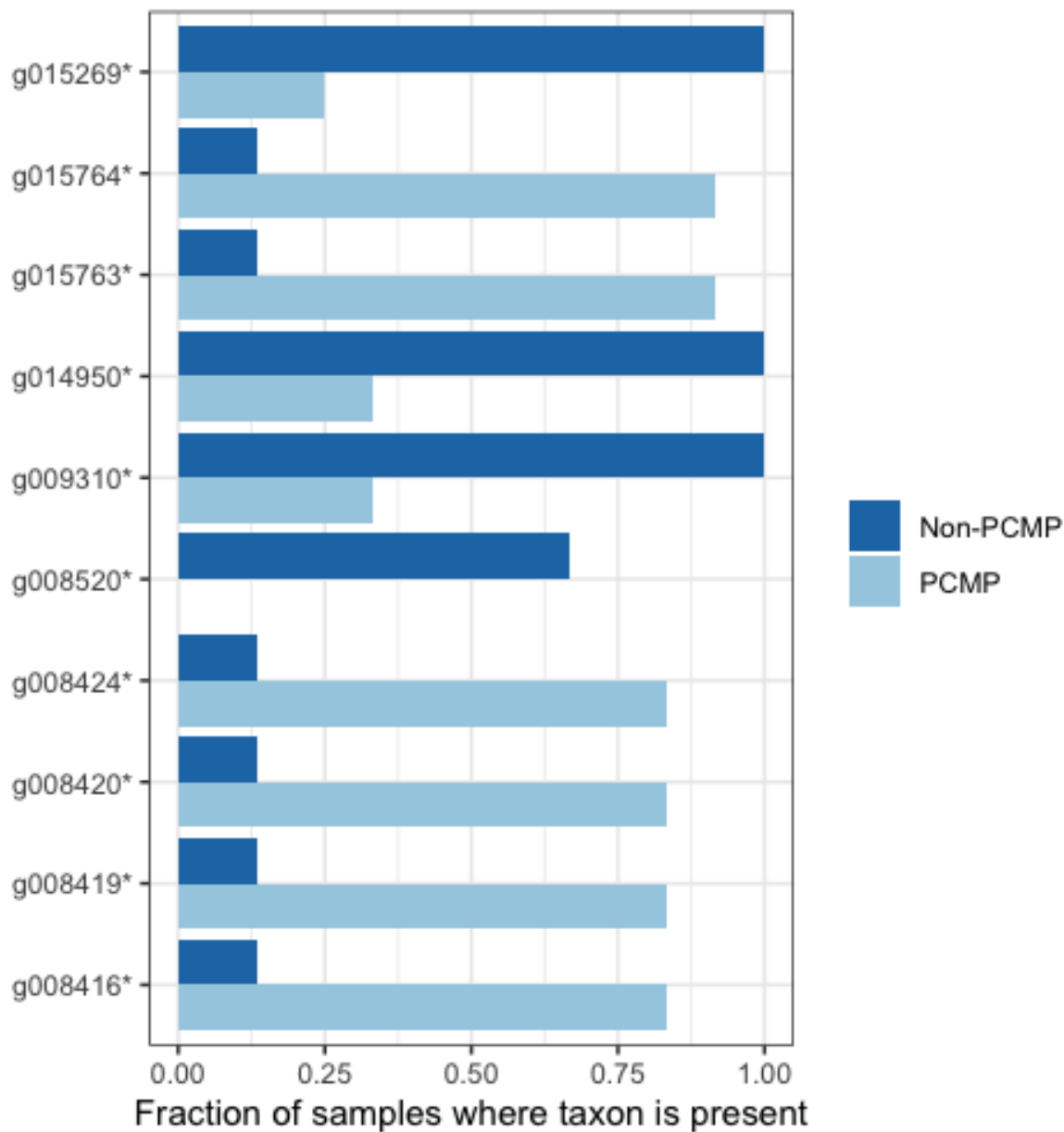
- `20180720_Fig2A_efaecalis_pan_heatmap.pdf`



PCoA plot based on Jacard Distance

- 20180720_efaecalis_pcoa.pdf

Gene	estimate	p.value	conf.low	conf.high	fdr_corrected	isSig
g008420	0.03788	0.0004352	0.002246	0.3381	0.04774	*
g008424	0.03788	0.0004352	0.002246	0.3381	0.04774	*



B. vulgatus

Phylogenetic Tree

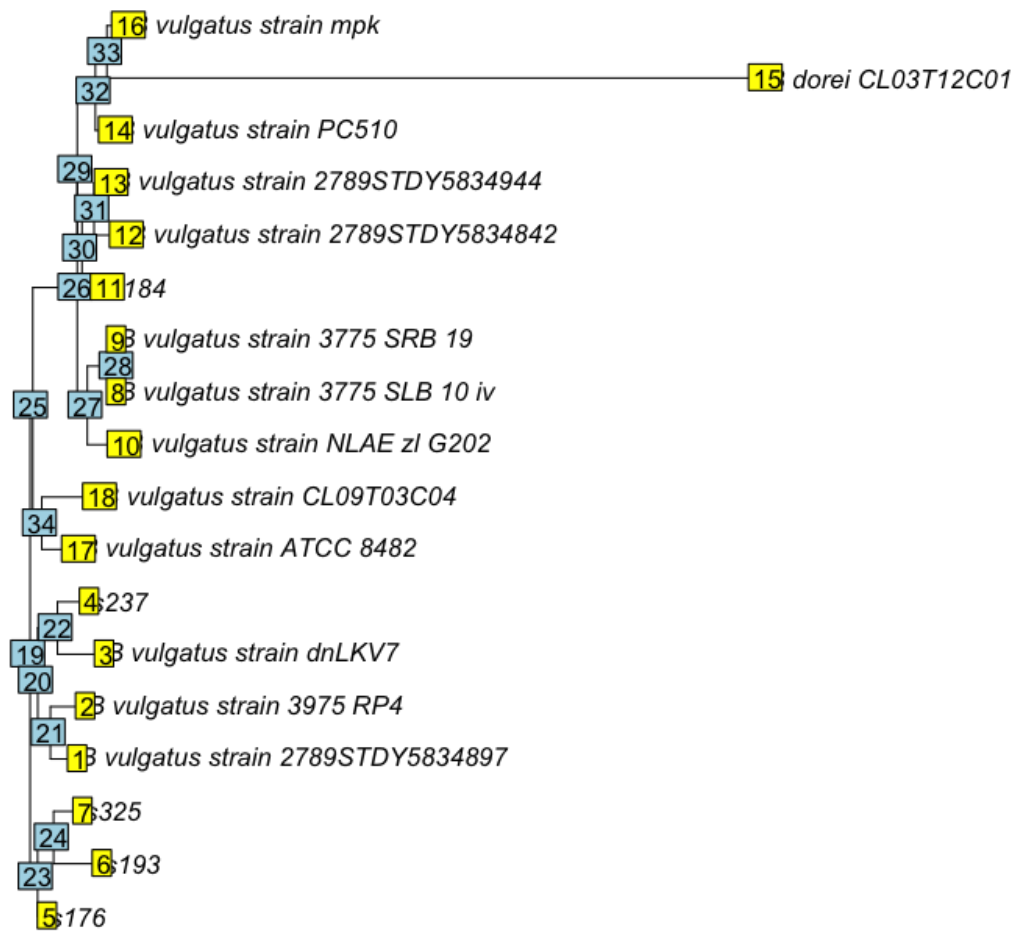
```
## [1] "B_vulgatus_strain_2789STDY5834897"
## [2] "B_vulgatus_strain_3975_RP4"
```

```

## [3] "B_vulgatus_strain_dnLKV7"
## [4] "s237"
## [5] "s176"
## [6] "s193"
## [7] "s325"
## [8] "B_vulgatus_strain_3775_SLB_10_iv"
## [9] "B_vulgatus_strain_3775_SRB_19"
## [10] "B_vulgatus_strain_NLAE_zl_G202"
## [11] "s184"
## [12] "B_vulgatus_strain_2789STDY5834842"
## [13] "B_vulgatus_strain_2789STDY5834944"
## [14] "B_vulgatus_strain_PC510"
## [15] "B_dorei_CL03T12C01"
## [16] "B_vulgatus_strain_mpk"
## [17] "B_vulgatus_strain_ATCC_8482"
## [18] "B_vulgatus_strain_CL09T03C04"

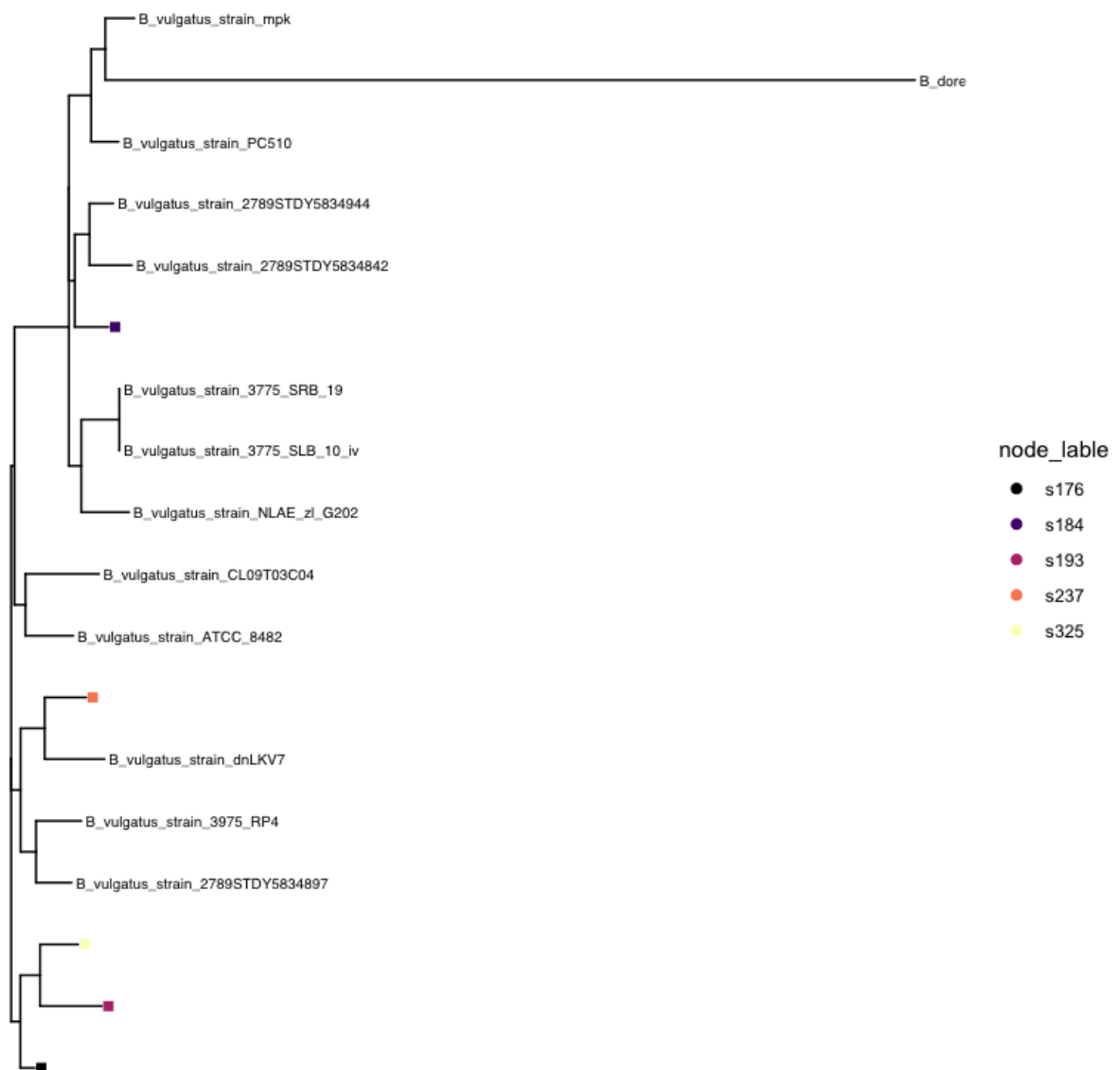
## [1] "B_vulgatus_strain_2789STDY5834897"
## [2] "B_vulgatus_strain_3975_RP4"
## [3] "B_vulgatus_strain_dnLKV7"
## [4] "s237"
## [5] "s176"
## [6] "s193"
## [7] "s325"
## [8] "B_vulgatus_strain_3775_SLB_10_iv"
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## [14] "B_vulgatus_strain_PC510"
## [15] "B_dorei_CL03T12C01"
## [16] "B_vulgatus_strain_mpk"
## [17] "B_vulgatus_strain_ATCC_8482"
## [18] "B_vulgatus_strain_CL09T03C04"

```



tree time

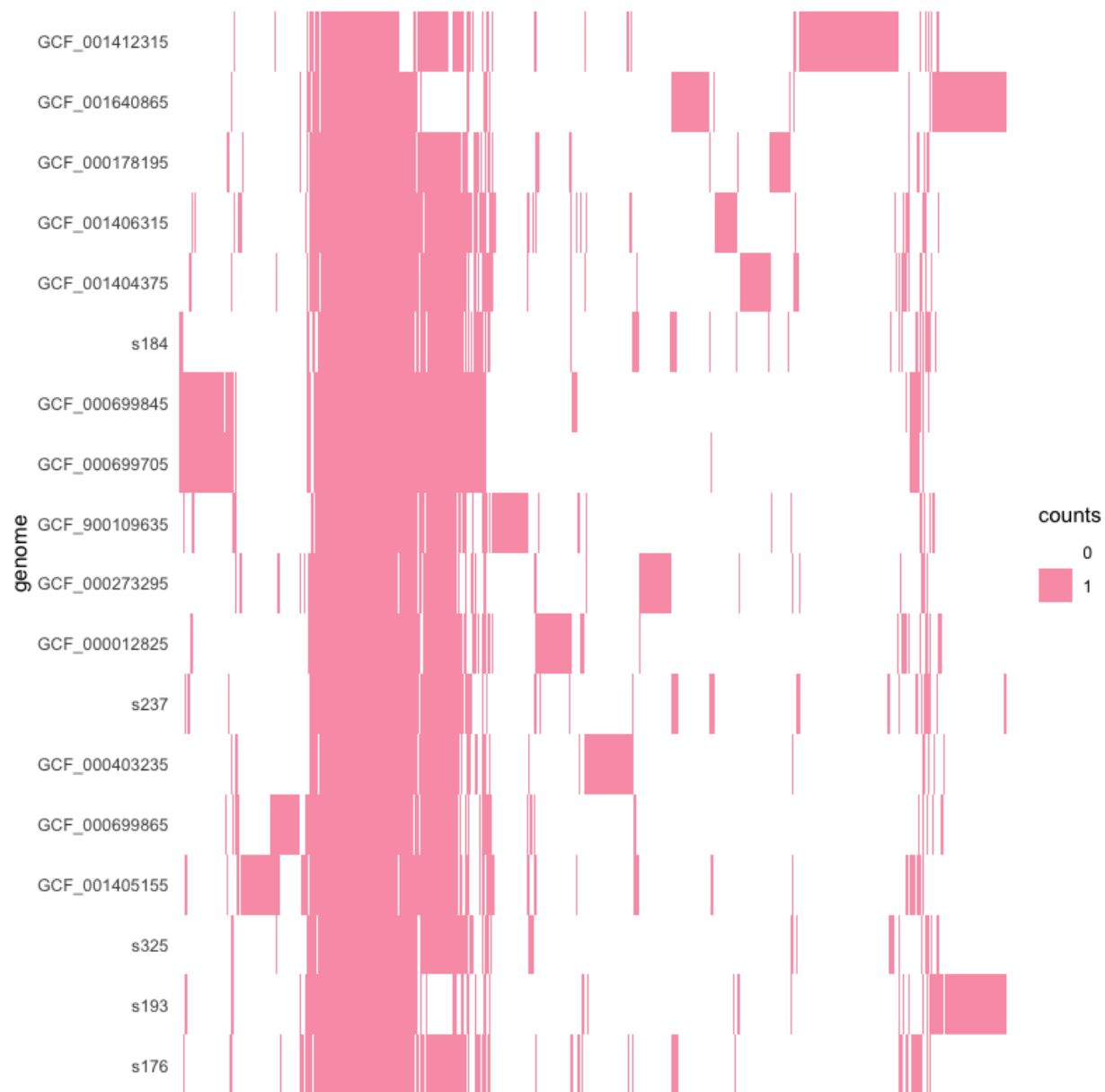
- 20180702_bvulgatus_tree_v1.pdf



Panphlan

Heatmap

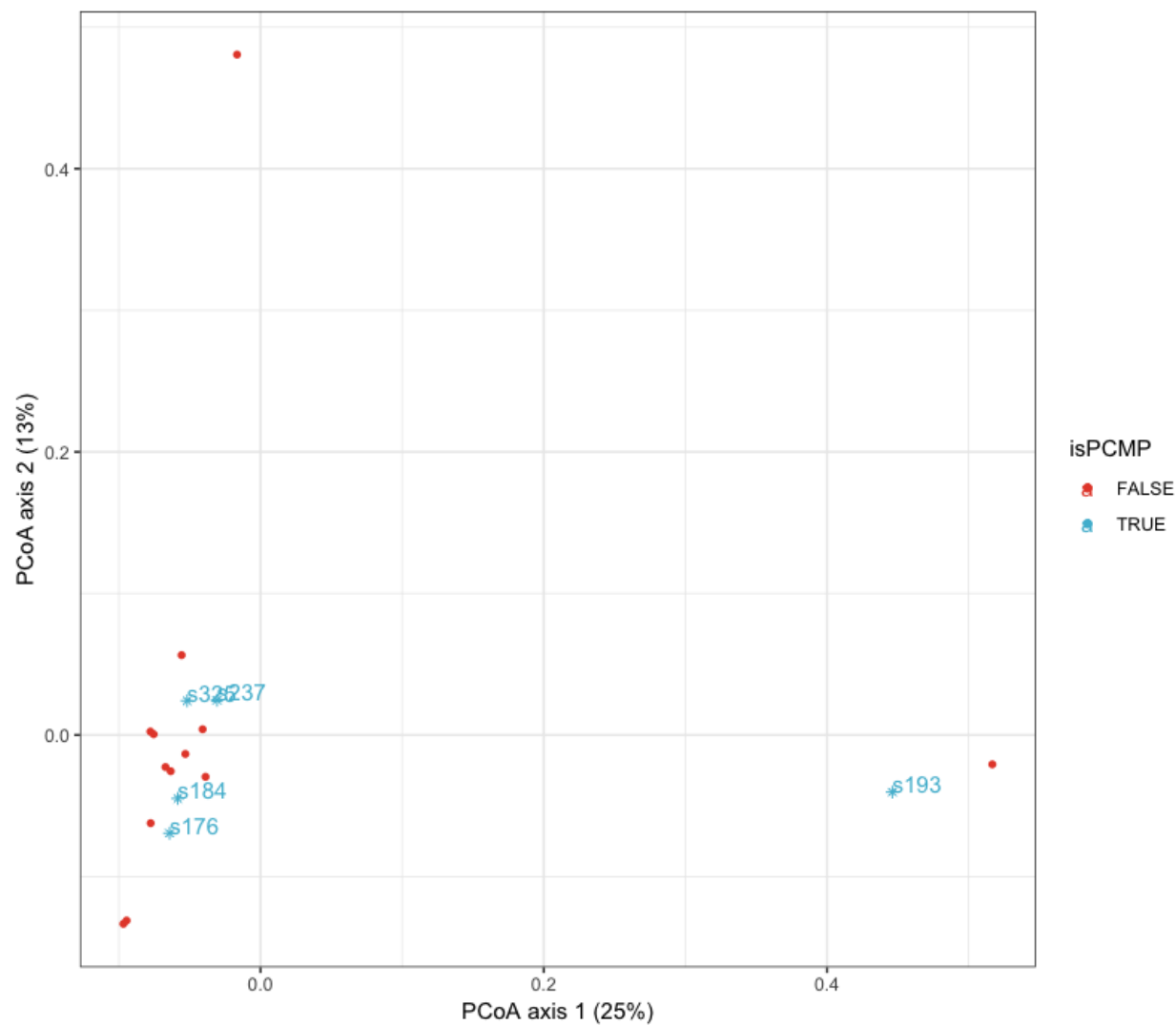
- 20180720_Fig2A_bvulgatus_pan_heatmap.pdf



PCoA plot based on Jacard Distance

- 20180720_bvulgatus_pcoa.pdf

character(0)



Fisher's exact test

- 20180720_bvulgatus_fisher.pdf

Gene	estimate	p.value	conf.low	conf.high	fdr_corrected	isSig
g010625	Inf	0.0001167	6.654	Inf	0.3316	
g000612	Inf	0.0007003	3.651	Inf	0.3316	
g004007	Inf	0.0007003	3.651	Inf	0.3316	
g007580	0	0.0007003	0	0.2739	0.3316	
g007582	0	0.0007003	0	0.2739	0.3316	
g007583	0	0.0007003	0	0.2739	0.3316	
g007586	0	0.0007003	0	0.2739	0.3316	
g010862	Inf	0.001634	2.977	Inf	0.6771	

Gene	estimate	p.value	conf.low	conf.high	fdr_corrected	isSig
g005909	0	0.002451	0	0.4163	0.7386	
g004420	Inf	0.002451	2.402	Inf	0.7386	

