Function of the Week – `gt::gt()`

PennCHOP Microbiome Program

9/18/2019

```
#Install and load the package
#remotes::install_github("rstudio/gt")
library(gt)
```

Raw data

```
d0 <- read_tsv("genus_prop.tsv")
dim(d0)
```

```
## [1] 10 16
```

```
#View(d0)

d <- d0 %>%
  mutate(Taxa = fct_relevel(Taxa, "Other", after = Inf)) %>%
  mutate(Phylum = case_when(str_detect(Taxa, "Bacteroidetes") ~ "Bacteroidetes",
                            str_detect(Taxa, "Firmicutes") ~ "Firmicutes",
                            T ~ "Other phyla")) %>%
  arrange(Phylum, Taxa) %>%
  select(Taxa, Phylum, everything())
#View(d)
```

Initial table

```
d1 <- d %>%
  gt(rowname_col = "Taxa")

gtsave(d1, "initial.pdf")
```

	Phylum	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	Bacteroidetes	0.37279791	0.134158771	0.26989128	0.1366608504	0.032015616	0.203160319	3.322948e-01	0.217778778	1.710082e-01	0.3878570995	0.110302301	0.19823189	0.081499394	0.19650595	0.233108958
p__Bacteroidetes g__Parabacteroides	Bacteroidetes	0.12166549	0.010686866	0.03250334	0.0509505005	0.003204636	0.108421831	1.167310e-01	0.130831468	7.489761e-02	0.1087220234	0.013415551	0.04143612	0.070015281	0.01838296	0.013088984
p__Firmicutes f__Lachnospiraceae	Firmicutes	0.01070473	0.136124865	0.10123401	0.0744145468	0.039639113	0.051243229	5.940809e-02	0.086146166	9.334877e-02	0.0490265057	0.082498621	0.03071775	0.004757479	0.07611321	0.026210447
p__Firmicutes f__Ruminococcaceae	Firmicutes	0.01229297	0.026065822	0.01593553	0.0368812563	0.035074237	0.028830981	2.095374e-02	0.021981805	2.621945e-02	0.0164371929	0.032245450	0.02370870	0.002118811	0.02472573	0.026259165
p__Firmicutes g__Enterococcus	Firmicutes	0.04525847	0.003467804	0.01459596	0.0009918266	0.083597184	0.000000000	0.000000e+00	0.000000000	1.175233e-05	0.0000000000	0.003128290	0.05656703	0.186959467	0.00856458	0.008225273
p__Firmicutes g__Oscillospira	Firmicutes	0.03721563	0.129707920	0.05200748	0.0543300579	0.060980296	0.040858106	3.633909e-02	0.038838937	8.385876e-02	0.0352580821	0.073294230	0.06625761	0.013130327	0.06211856	0.057999139
p__Firmicutes o__Clostridiales	Firmicutes	0.08709270	0.250435737	0.23127950	0.4094958215	0.292090621	0.258270425	2.559224e-01	0.332481428	2.911581e-01	0.2173712622	0.411871459	0.14539736	0.028158919	0.29787960	0.278701170
p__Deferribacteres g__Mucispirillum	Other phyla	0.03504291	0.096809017	0.11952719	0.0338506750	0.283468077	0.004627458	9.461422e-04	0.006468742	1.222242e-03	0.0009158731	0.112337695	0.06159779	0.019730935	0.16381488	0.086945931
p__Proteobacteria g__Proteus	Other phyla	0.16856302	0.019528258	0.02813634	0.0003948939	0.078924718	0.000000000	3.013192e-05	0.000000000	2.350466e-05	0.0000000000	0.003980548	0.13209020	0.566935522	0.02423712	0.015151392
Other	Other phyla	0.10936617	0.193014939	0.13488938	0.2020295711	0.091005502	0.304587652	1.773745e-01	0.165472675	2.582516e-01	0.1844119609	0.156925854	0.24399555	0.026693867	0.12765742	0.254309540

Stub head (header for rowname)

```
d2 <- d1 %>%
  tab_stubhead(label = "Taxonomy")

gtsave(d2, "stub_head.pdf")
```

Taxonomy	Phylum	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	Bacteroidetes	0.37279791	0.134158771	0.26989128	0.1366608504	0.032015616	0.203160319	3.322948e-01	0.217778778	1.710082e-01	0.3878570995	0.110302301	0.19823189	0.081499394	0.19650595	0.233108958
p__Bacteroidetes g__Parabacteroides	Bacteroidetes	0.12166549	0.010686866	0.03250334	0.0509505005	0.003204636	0.108421831	1.167310e-01	0.130831468	7.489761e-02	0.1087220234	0.013415551	0.04143612	0.070015281	0.01838296	0.013088984
p__Firmicutes f__Lachnospiraceae	Firmicutes	0.01070473	0.136124865	0.10123401	0.0744145468	0.039639113	0.051243229	5.940809e-02	0.086146166	9.334877e-02	0.0490265057	0.082498621	0.03071775	0.004757479	0.07611321	0.026210447
p__Firmicutes f__Ruminococcaceae	Firmicutes	0.01229297	0.026065822	0.01593553	0.0368812563	0.035074237	0.028830981	2.095374e-02	0.021981805	2.621945e-02	0.0164371929	0.032245450	0.02370870	0.002118811	0.02472573	0.026259165
p__Firmicutes g__Enterococcus	Firmicutes	0.04525847	0.003467804	0.01459596	0.0009918266	0.083597184	0.000000000	0.000000e+00	0.000000000	1.175233e-05	0.0000000000	0.003128290	0.05656703	0.186959467	0.00856458	0.008225273
p__Firmicutes g__Oscillospira	Firmicutes	0.03721563	0.129707920	0.05200748	0.0543300579	0.060980296	0.040858106	3.633909e-02	0.038838937	8.385876e-02	0.0352580821	0.073294230	0.06625761	0.013130327	0.06211856	0.057999139
p__Firmicutes o__Clostridiales	Firmicutes	0.08709270	0.250435737	0.23127950	0.4094958215	0.292090621	0.258270425	2.559224e-01	0.332481428	2.911581e-01	0.2173712622	0.411871459	0.14539736	0.028158919	0.29787960	0.278701170
p__Deferribacteres g__Mucispirillum	Other phyla	0.03504291	0.096809017	0.11952719	0.0338506750	0.283468077	0.004627458	9.461422e-04	0.006468742	1.222242e-03	0.0009158731	0.112337695	0.06159779	0.019730935	0.16381488	0.086945931
p__Proteobacteria g__Proteus	Other phyla	0.16856302	0.019528258	0.02813634	0.0003948939	0.078924718	0.000000000	3.013192e-05	0.000000000	2.350466e-05	0.0000000000	0.003980548	0.13209020	0.566935522	0.02423712	0.015151392
Other	Other phyla	0.10936617	0.193014939	0.13488938	0.2020295711	0.091005502	0.304587652	1.773745e-01	0.165472675	2.582516e-01	0.1844119609	0.156925854	0.24399555	0.026693867	0.12765742	0.254309540

Hide columns

```
d3 <- d2 %>%
  cols_hide(columns = "Phylum")

gtsave(d3, "hide_cols.pdf")
```

Taxonomy	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	0.37279791	0.134158771	0.26989128	0.1366608504	0.032015616	0.203160319	3.322948e-01	0.217778778	1.710082e-01	0.3878570995	0.110302301	0.19823189	0.081499394	0.19650595	0.233108958
p__Bacteroidetes g__Parabacteroides	0.12166549	0.010686866	0.03250334	0.0509505005	0.003204636	0.108421831	1.167310e-01	0.130831468	7.489761e-02	0.1087220234	0.013415551	0.04143612	0.070015281	0.01838296	0.013088984
p__Firmicutes f__Lachnospiraceae	0.01070473	0.136124865	0.10123401	0.0744145468	0.039639113	0.051243229	5.940809e-02	0.086146166	9.334877e-02	0.0490265057	0.082498621	0.03071775	0.004757479	0.07611321	0.026210447
p__Firmicutes f__Ruminococcaceae	0.01229297	0.026065822	0.01593553	0.0368812563	0.035074237	0.028830981	2.095374e-02	0.021981805	2.621945e-02	0.0164371929	0.032245450	0.02370870	0.002118811	0.02472573	0.026259165
p__Firmicutes g__Enterococcus	0.04525847	0.003467804	0.01459596	0.0009918266	0.083597184	0.000000000	0.000000e+00	0.000000000	1.175233e-05	0.0000000000	0.003128290	0.05656703	0.186959467	0.00856458	0.008225273
p__Firmicutes g__Oscillospira	0.03721563	0.129707920	0.05200748	0.0543300579	0.060980296	0.040858106	3.633909e-02	0.038838937	8.385876e-02	0.0352580821	0.073294230	0.06625761	0.013130327	0.06211856	0.057999139
p__Firmicutes o__Clostridiales	0.08709270	0.250435737	0.23127950	0.4094958215	0.292090621	0.258270425	2.559224e-01	0.332481428	2.911581e-01	0.2173712622	0.411871459	0.14539736	0.028158919	0.29787960	0.278701170
p__Deferribacteres g__Mucispirillum	0.03504291	0.096809017	0.11952719	0.0338506750	0.283468077	0.004627458	9.461422e-04	0.006468742	1.222242e-03	0.0009158731	0.112337695	0.06159779	0.019730935	0.16381488	0.086945931
p__Proteobacteria g__Proteus	0.16856302	0.019528258	0.02813634	0.0003948939	0.078924718	0.000000000	3.013192e-05	0.000000000	2.350466e-05	0.0000000000	0.003980548	0.13209020	0.566935522	0.02423712	0.015151392
Other	0.10936617	0.193014939	0.13488938	0.2020295711	0.091005502	0.304587652	1.773745e-01	0.165472675	2.582516e-01	0.1844119609	0.156925854	0.24399555	0.026693867	0.12765742	0.254309540

Format columns

```
d4 <- d3 %>%
  fmt_percent(columns = contains("DSS"))

gtsave(d4, "format_cols.pdf")
```

Taxonomy	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Add titles

```
d5 <- d4 %>%
  tab_header(title = "Abundance table",
             subtitle = "Genus-level")

gtsave(d5, "add_titles.pdf")
```

Abundance table

Genus-level

Taxonomy	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Add source notes

```
d6 <- d5 %>%
  tab_source_note(source_note = "Data from Habtezion project") %>%
  tab_source_note(source_note = md("*E. coli* not found"))

gtsave(d6, "add_source.pdf")
```

Abundance table
Genus-level

Taxonomy	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Data from Habtezion project

E. coli not found

Add column spanners

```
d7 <- d6 %>%
  tab_spanner(label = "LCA DSS",
              columns = starts_with("LCA.DSS")) %>%
  tab_spanner(label = "NO DSS",
              columns = starts_with("NO.DSS")) %>%
  tab_spanner(label = "Water",
              columns = starts_with("Water"))

gtsave(d7, "add_col_spanners.pdf")
```

Abundance table
Genus-level

Taxonomy	LCA DSS					NO DSS					Water				
	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Data from Habtezion project

E. coli not found

Add row groups

```
d8 <- d7 %>%
  tab_row_group(group = "Bacteroidetes",
                rows = Phylum == "Bacteroidetes") %>%
  tab_row_group(group = "Firmicutes",
                rows = Phylum == "Firmicutes") %>%
  tab_row_group(group = "Other phyla",
                rows = Phylum == "Other phyla")

gtsave(d8, "add_row_groups.pdf")
```

Abundance table Genus-level															
Taxonomy	LCA DSS					NO DSS					Water				
	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
Bacteroidetes															
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
Firmicutes															
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
Other phyla															
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Data from Habtezion project

E. coli not found

Add row groups

```
d8 <- d7 %>%
  tab_row_group(group = "Bacteroidetes",
                rows = Phylum == "Bacteroidetes") %>%
  tab_row_group(group = "Firmicutes",
                rows = Phylum == "Firmicutes") %>%
  tab_row_group(group = "Other phyla",
                rows = Phylum == "Other phyla")

gtsave(d8, "add_row_groups.pdf")
```

Abundance table

Genus-level

Taxonomy	LCA DSS					NO DSS					Water				
	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
Bacteroidetes															
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
Firmicutes															
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
Other phyla															
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

Data from Habtezion project

E. coli not found

Add foot notes

```
d9 <- d8 %>%
  tab_footnote(footnote = md("**Not observed!**"),
               locations = cells_data(
                 columns = contains("No.DSS"),
                 rows = contains("p__Proteobacteria g__Proteus"))
               )

gtsave(d9, "add_foot_notes.pdf")
```

Abundance table

Genus-level

Taxonomy	LCA DSS					NO DSS					Water				
	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
Bacteroidetes															
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
Firmicutes															
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
Other phyla															
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%†	0.00%†	0.00%†	0.00%†	0.00%†	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

† **Not observed!**

Data from Habtezion project

E. coli not found

Other features

```
d10 <- d9 %>%
  tab_options(row.striping.background_color = "lightgrey")

gtsave(d10, "other_features.pdf")
```

Abundance table

Genus-level

Taxonomy	LCA DSS					NO DSS					Water				
	LCA.DSS.1	LCA.DSS.2	LCA.DSS.3	LCA.DSS.4	LCA.DSS.5	No.DSS.1	No.DSS.2	No.DSS.3	No.DSS.4	No.DSS.5	Water.DSS.1	Water.DSS.2	Water.DSS.3	Water.DSS.4	Water.DSS.5
Bacteroidetes															
p__Bacteroidetes g__Bacteroides	37.28%	13.42%	26.99%	13.67%	3.20%	20.32%	33.23%	21.78%	17.10%	38.79%	11.03%	19.82%	8.15%	19.65%	23.31%
p__Bacteroidetes g__Parabacteroides	12.17%	1.07%	3.25%	5.10%	0.32%	10.84%	11.67%	13.08%	7.49%	10.87%	1.34%	4.14%	7.00%	1.84%	1.31%
Firmicutes															
p__Firmicutes f__Lachnospiraceae	1.07%	13.61%	10.12%	7.44%	3.96%	5.12%	5.94%	8.61%	9.33%	4.90%	8.25%	3.07%	0.48%	7.61%	2.62%
p__Firmicutes f__Ruminococcaceae	1.23%	2.61%	1.59%	3.69%	3.51%	2.88%	2.10%	2.20%	2.62%	1.64%	3.22%	2.37%	0.21%	2.47%	2.63%
p__Firmicutes g__Enterococcus	4.53%	0.35%	1.46%	0.10%	8.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	5.66%	18.70%	0.86%	0.82%
p__Firmicutes g__Oscillospira	3.72%	12.97%	5.20%	5.43%	6.10%	4.09%	3.63%	3.88%	8.39%	3.53%	7.33%	6.63%	1.31%	6.21%	5.80%
p__Firmicutes o__Clostridiales	8.71%	25.04%	23.13%	40.95%	29.21%	25.83%	25.59%	33.25%	29.12%	21.74%	41.19%	14.54%	2.82%	29.79%	27.87%
Other phyla															
p__Deferribacteres g__Mucispirillum	3.50%	9.68%	11.95%	3.39%	28.35%	0.46%	0.09%	0.65%	0.12%	0.09%	11.23%	6.16%	1.97%	16.38%	8.69%
p__Proteobacteria g__Proteus	16.86%	1.95%	2.81%	0.04%	7.89%	0.00%†	0.00%†	0.00%†	0.00%†	0.00%†	0.40%	13.21%	56.69%	2.42%	1.52%
Other	10.94%	19.30%	13.49%	20.20%	9.10%	30.46%	17.74%	16.55%	25.83%	18.44%	15.69%	24.40%	2.67%	12.77%	25.43%

† **Not observed!**

Data from Habtezion project

E. coli not found