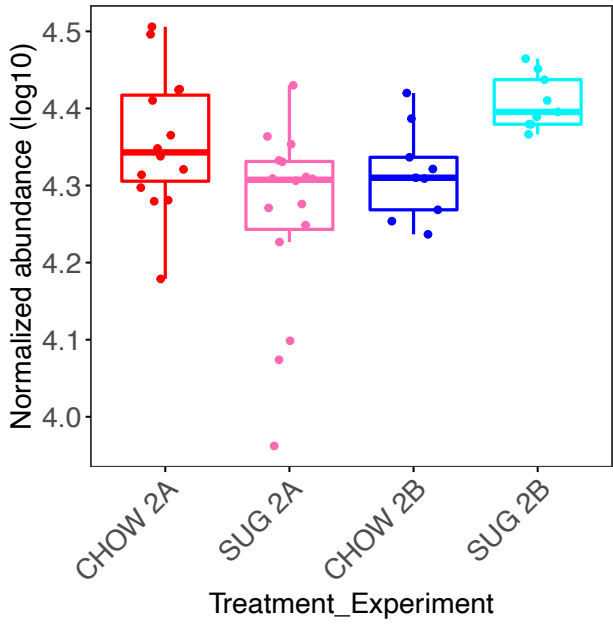
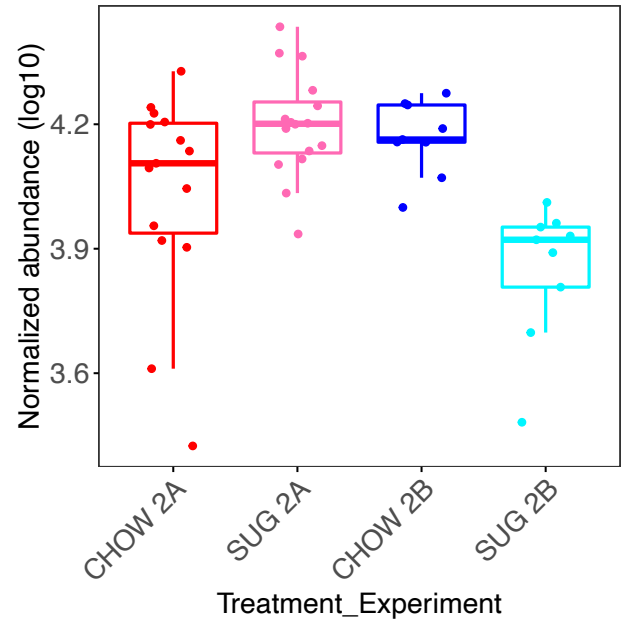


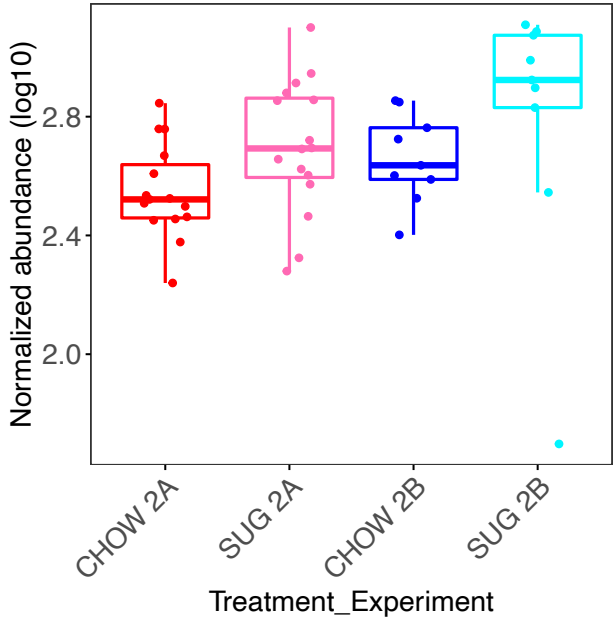
Firmicutes
Experiment 2A FDR = 0.08889
Experiment 2B FDR = 0.01197



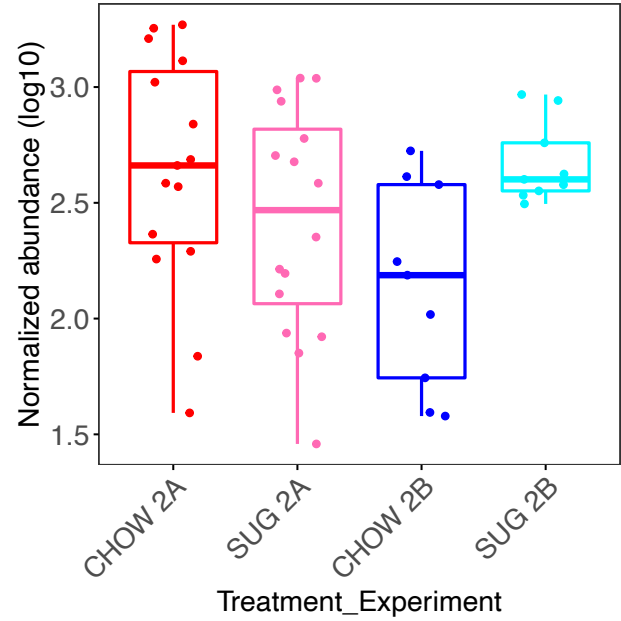
Bacteroidetes
Experiment 2A FDR = 0.08889
Experiment 2B FDR = 0.00074



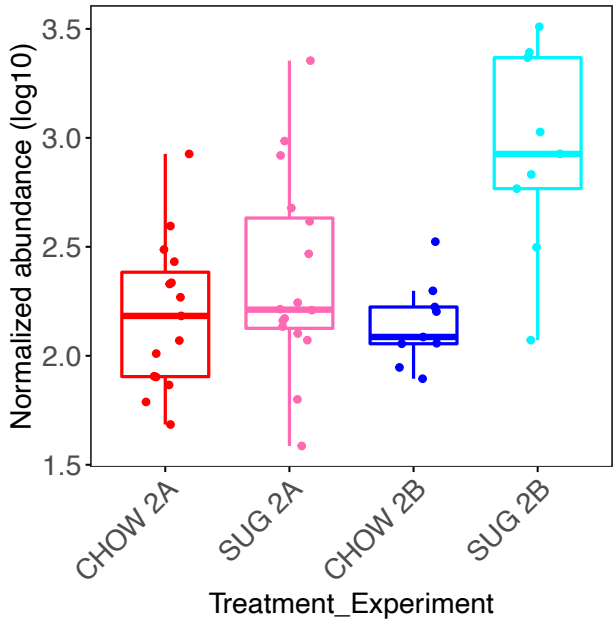
Proteobacteria
Experiment 2A FDR = 0.08889
Experiment 2B FDR = 0.09056



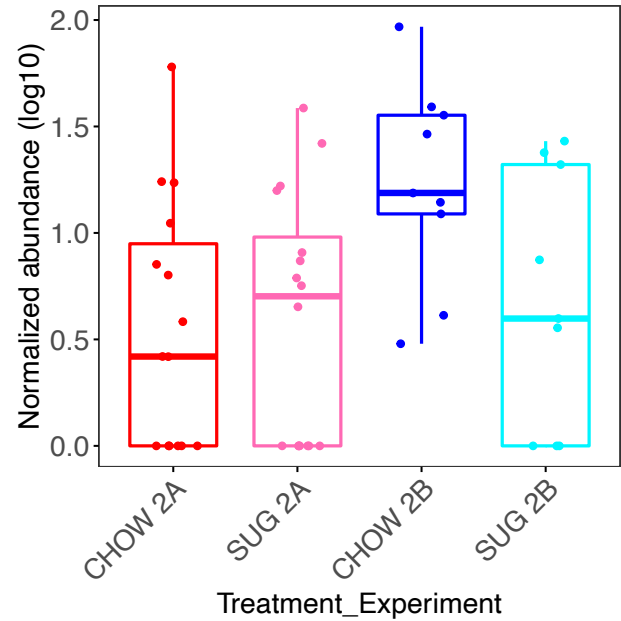
Tenericutes
Experiment 2A FDR = 0.37123
Experiment 2B FDR = 0.05498



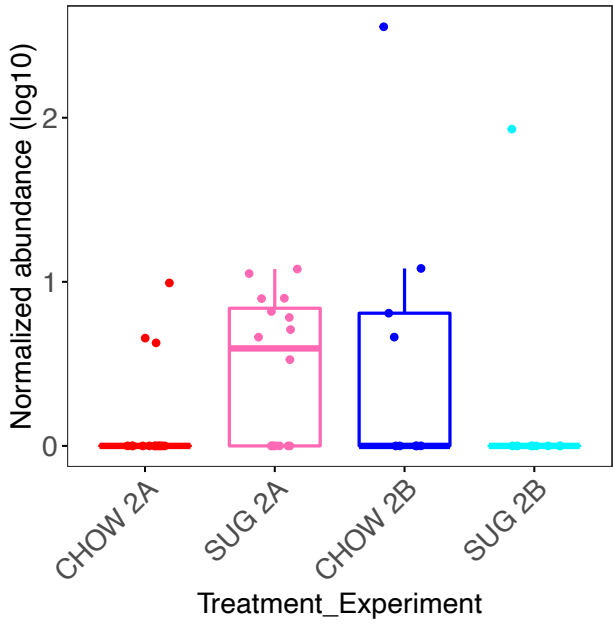
Actinobacteria
Experiment 2A FDR = 0.43067
Experiment 2B FDR = 0.00555



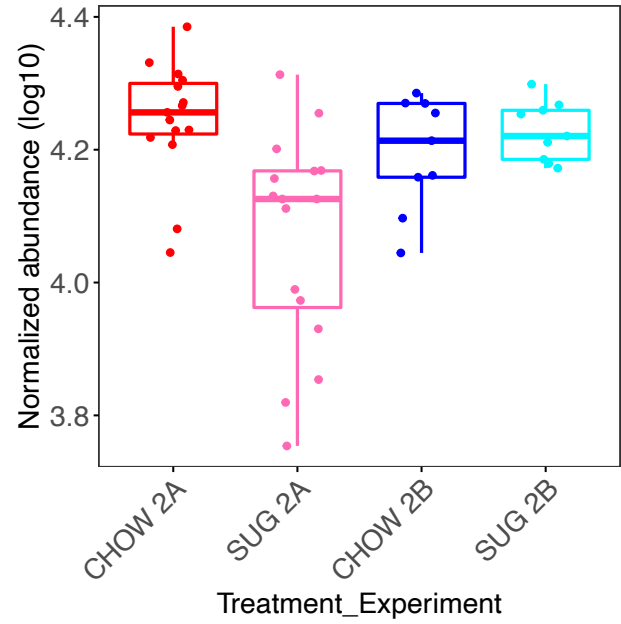
Cyanobacteria
Experiment 2A FDR = 0.95088
Experiment 2B FDR = 0.09471



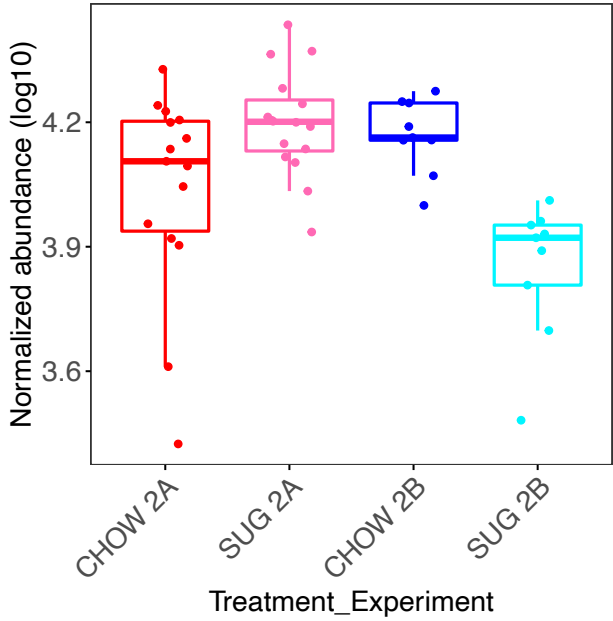
Deferribacteres
Experiment 2A FDR = 0.08889
Experiment 2B FDR = 0.23132



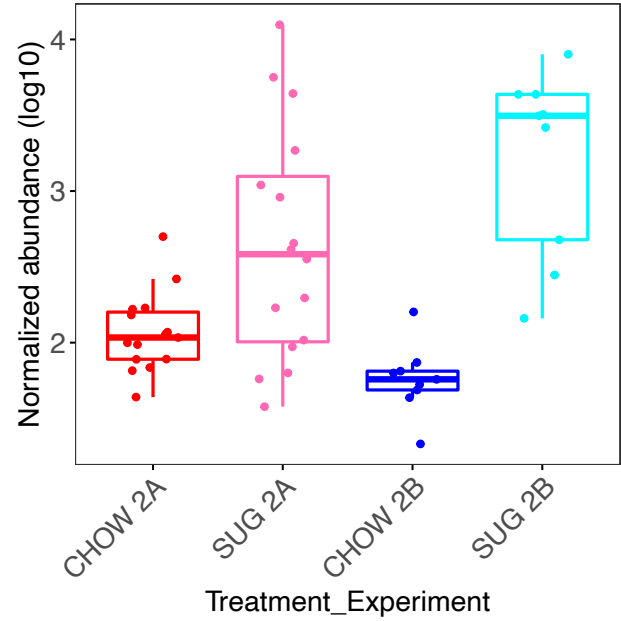
Firmicutes.D.2_Clostridia
Experiment 2A FDR = 0.00666
Experiment 2B FDR = 0.64801



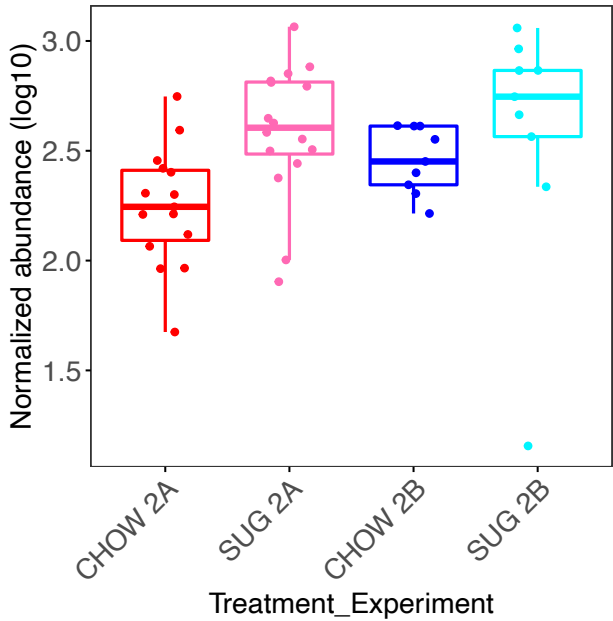
Bacteroidetes.D.2_Bacteroidia
Experiment 2A FDR = 0.09259
Experiment 2B FDR = 0.00062



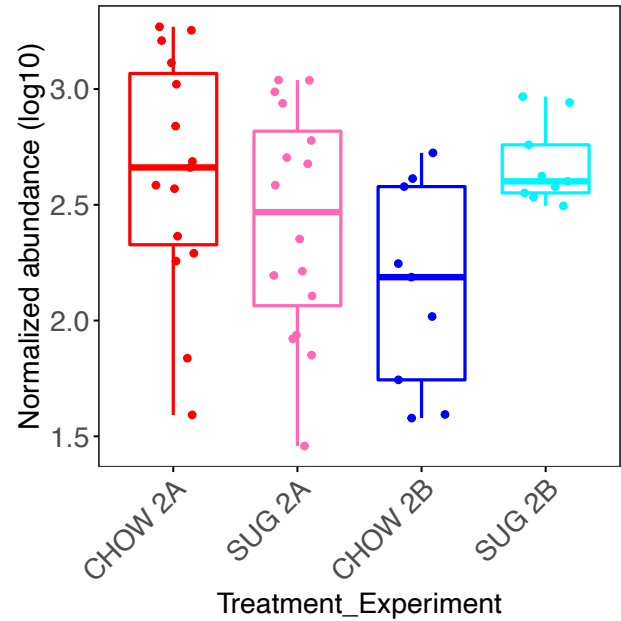
Firmicutes.D.2_Erysipelotrichia
Experiment 2A FDR = 0.08688
Experiment 2B FDR = 0.00062



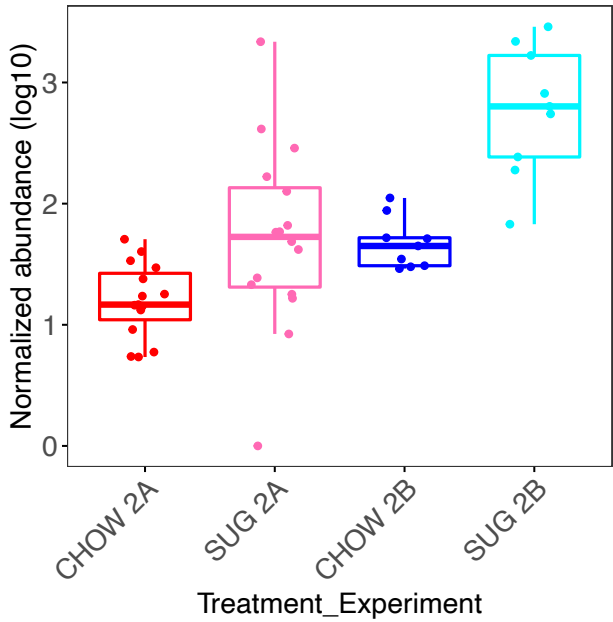
Proteobacteria.D.2_Gammaproteobacteria
Experiment 2A FDR = 0.01505
Experiment 2B FDR = 0.13531



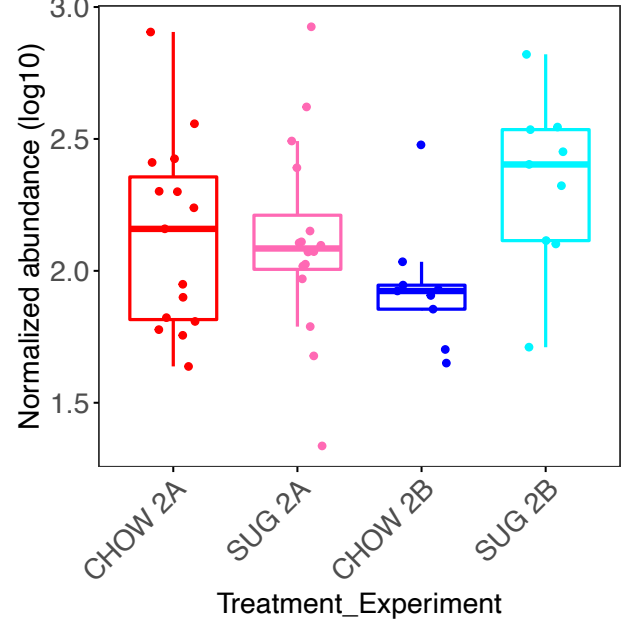
Tenericutes.D.2_Mollicutes
Experiment 2A FDR = 0.37123
Experiment 2B FDR = 0.0733



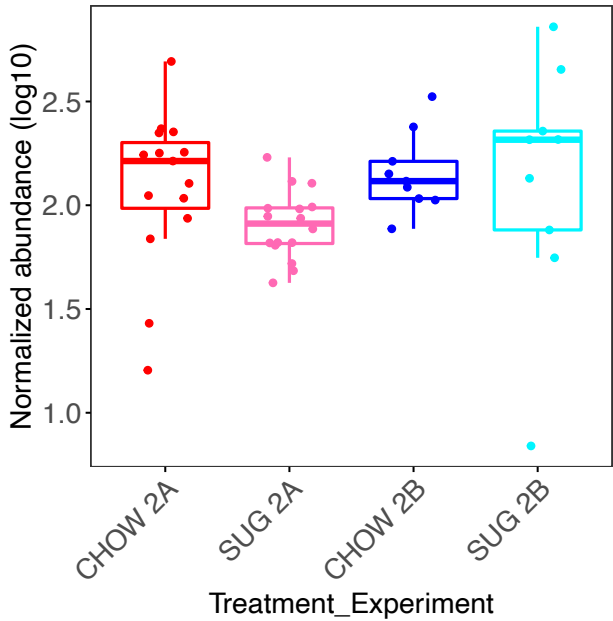
Actinobacteria.D.2_Actinobacteria
Experiment 2A FDR = 0.02762
Experiment 2B FDR = 0.00082



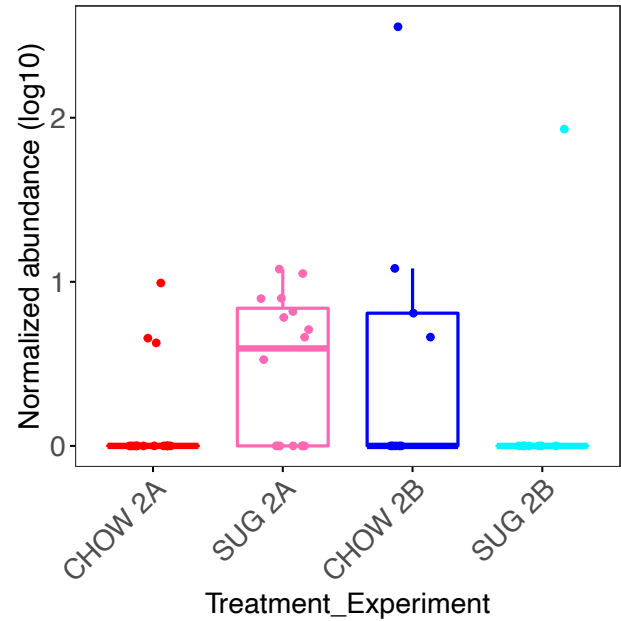
Actinobacteria.D.2_Coriobacteria
Experiment 2A FDR = 1
Experiment 2B FDR = 0.0398



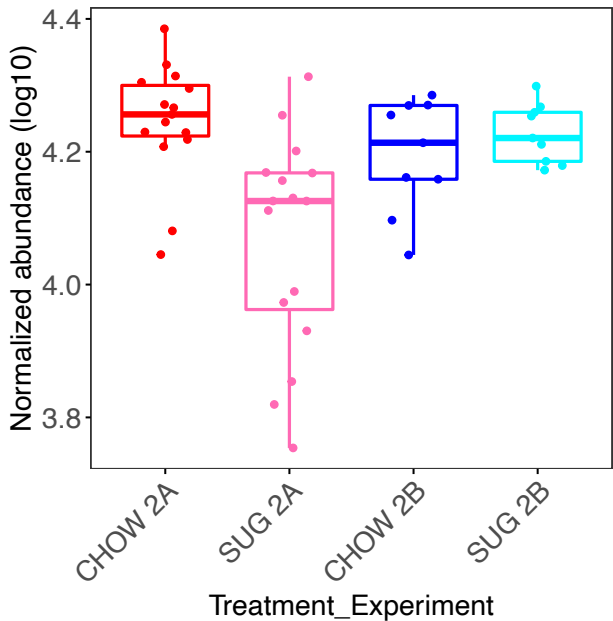
Proteobacteria.D.2_Deltaproteobacteria
Experiment 2A FDR = 0.05703
Experiment 2B FDR = 0.79617



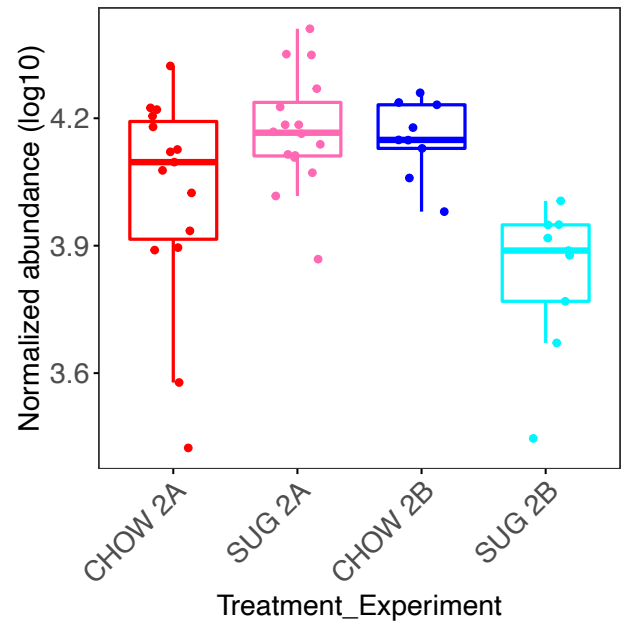
Deferribacteres.D.2_Deferribacteres
Experiment 2A FDR = 0.08688
Experiment 2B FDR = 0.33734



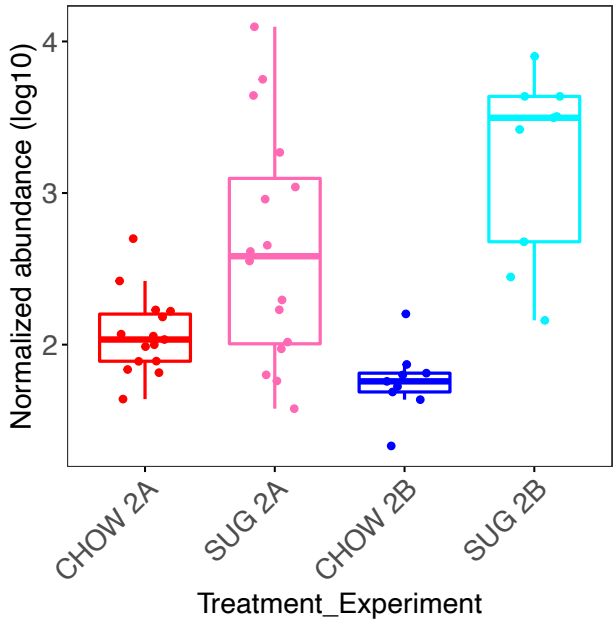
Firmicutes.D.2_Clostridia.D.3_Clostridiales
Experiment 2A FDR = 0.00739
Experiment 2B FDR = 0.66529



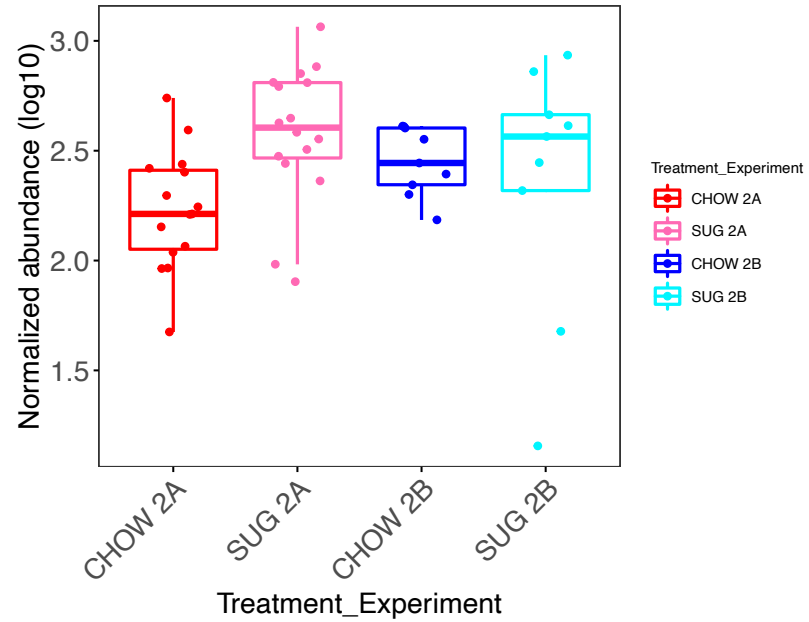
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales
Experiment 2A FDR = 0.21213
Experiment 2B FDR = 9e-04



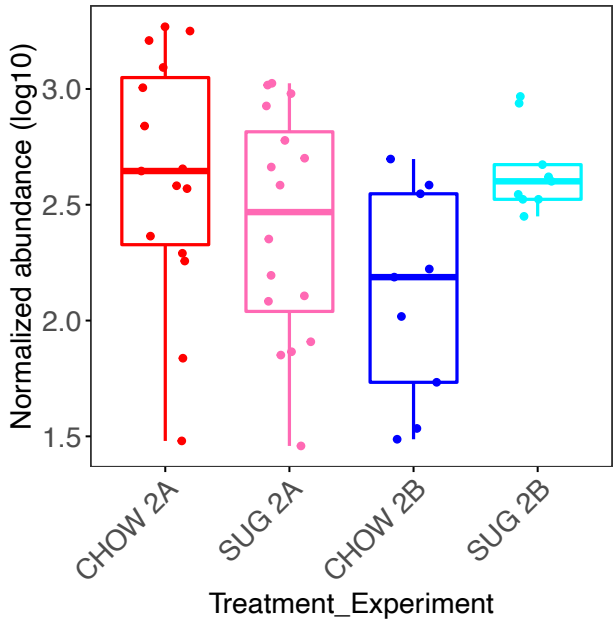
Firmicutes.D.2_Erysipelotrichia.D.3_Erysipelotrichales
Experiment 2A FDR = 0.0325
Experiment 2B FDR = 9e-04



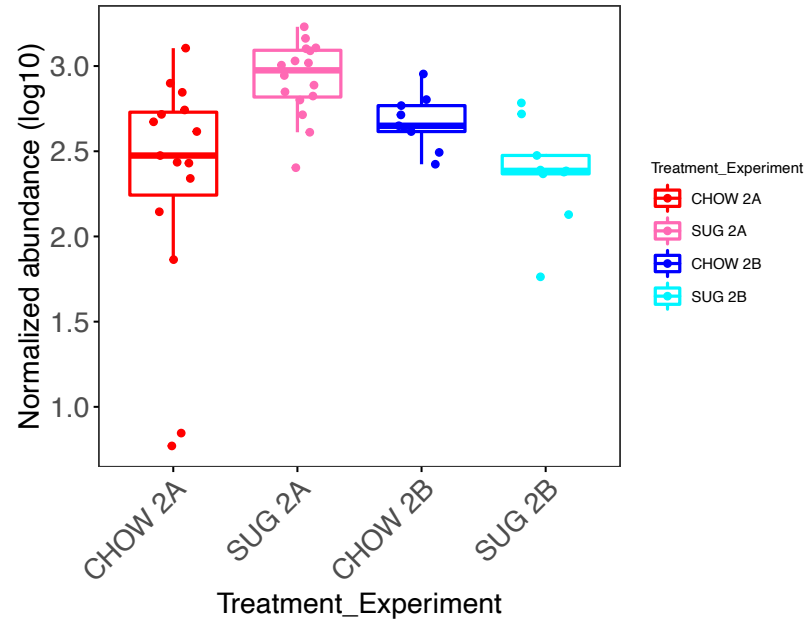
Proteobacteria.D.2_Gammaproteobacteria.D.3_Betaproteobacteriales
Experiment 2A FDR = 0.00986
Experiment 2B FDR = 0.59819



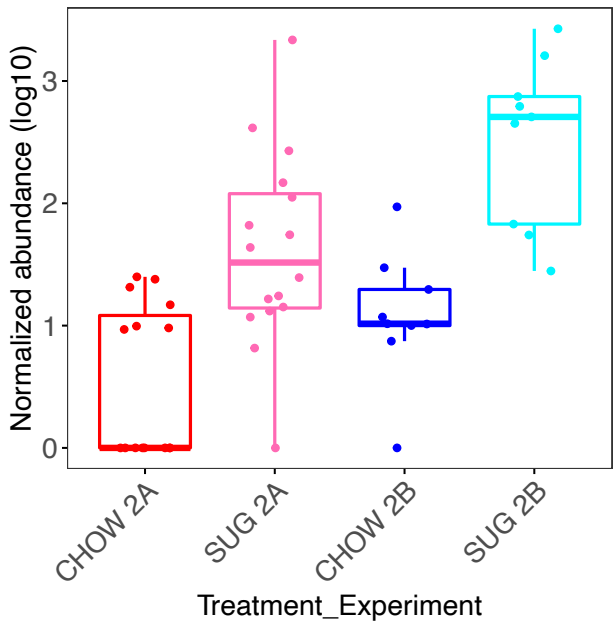
Tenericutes.D.2_Mollicutes.D.3_Mollicutes RF39
Experiment 2A FDR = 0.49791
Experiment 2B FDR = 0.08959



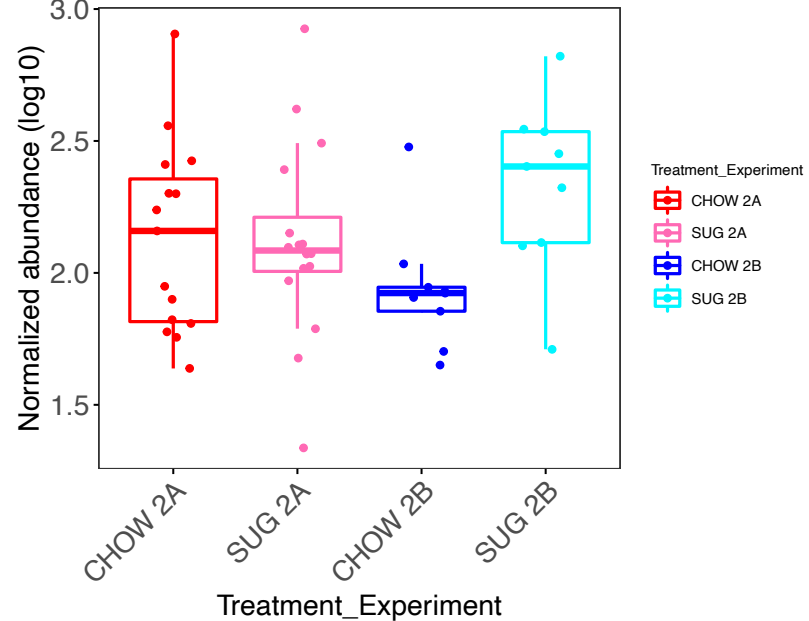
Bacteroidetes.D.2_Bacteroidia____
Experiment 2A FDR = 0.00738
Experiment 2B FDR = 0.08253



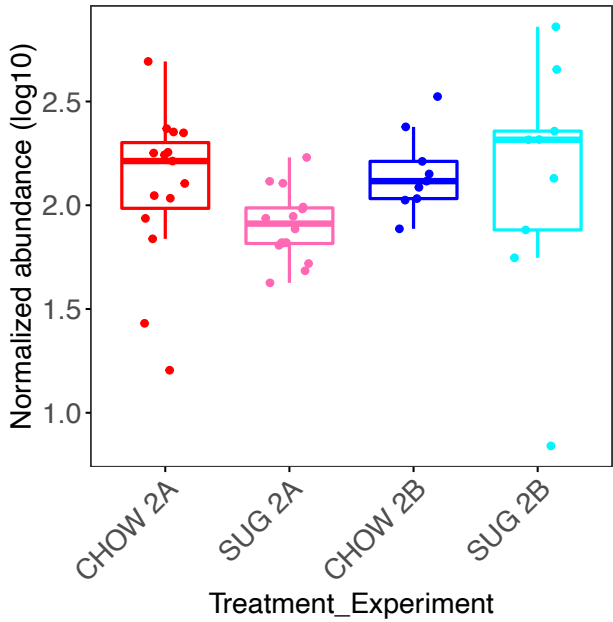
Actinobacteria.D.2_Actinobacteria.D.3_Bifidobacteriales
Experiment 2A FDR = 0.00738
Experiment 2B FDR = 0.00362



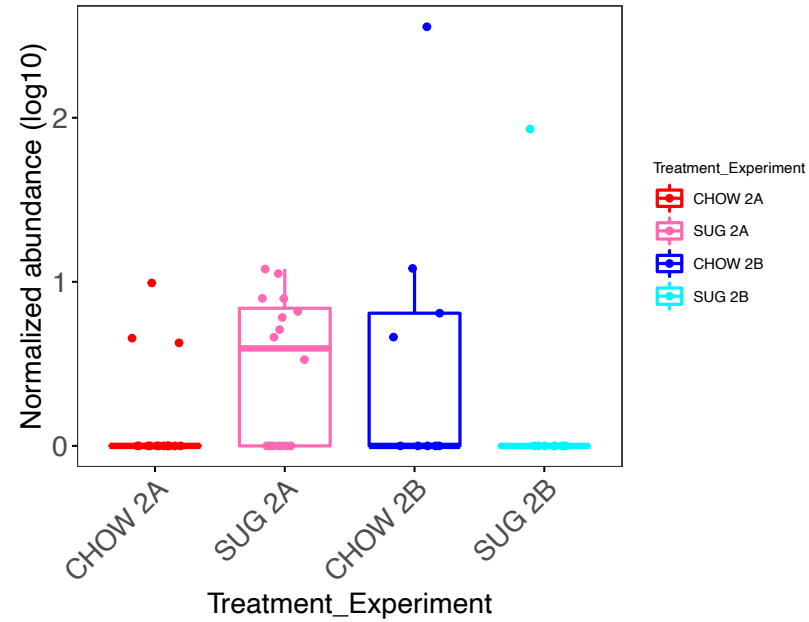
Actinobacteria.D.2_Coriobacteria.D.3_Coriobacteriales
Experiment 2A FDR = 1
Experiment 2B FDR = 0.05837



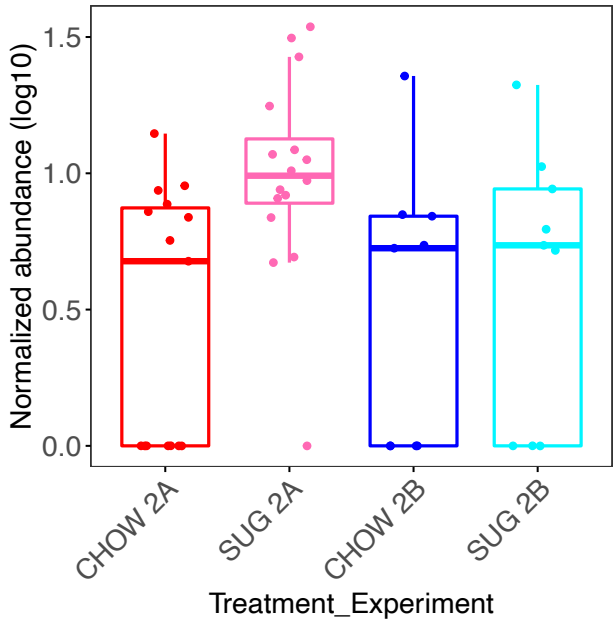
Proteobacteria.D.2_Deltaproteobacteria.D.3_Desulfovibrionales
Experiment 2A FDR = 0.04997
Experiment 2B FDR = 0.79617



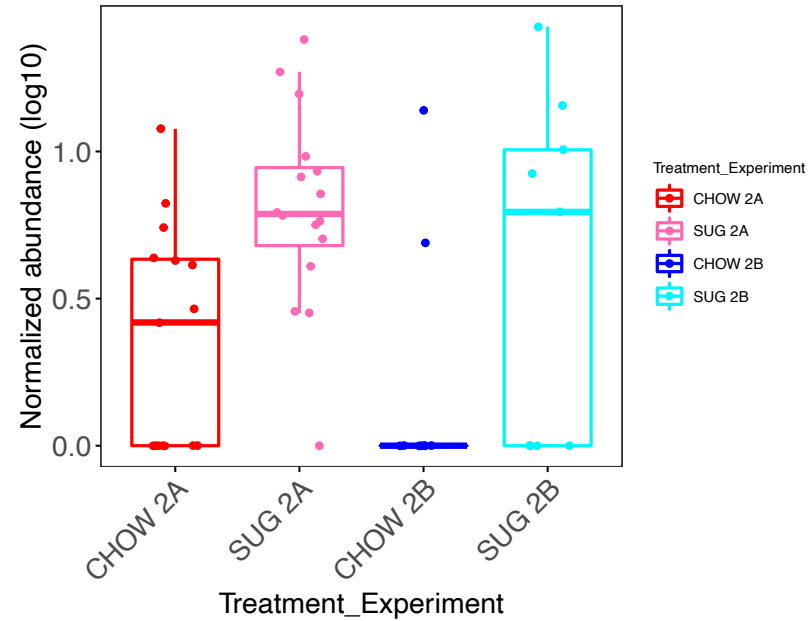
Deferribacteres.D.2_Deferribacteres.D.3_Deferribacterales
Experiment 2A FDR = 0.08314
Experiment 2B FDR = 0.32964



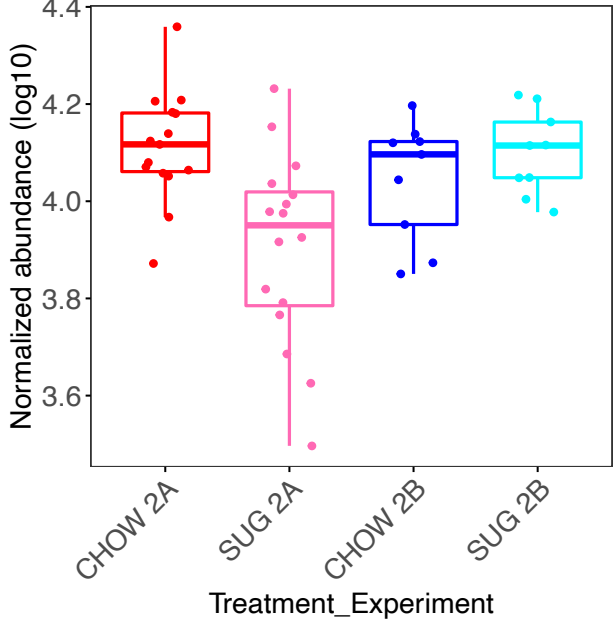
Bacteroidetes.D.2_Bacteroidia.D.3_Flavobacteriales
Experiment 2A FDR = 0.01384
Experiment 2B FDR = 0.75004



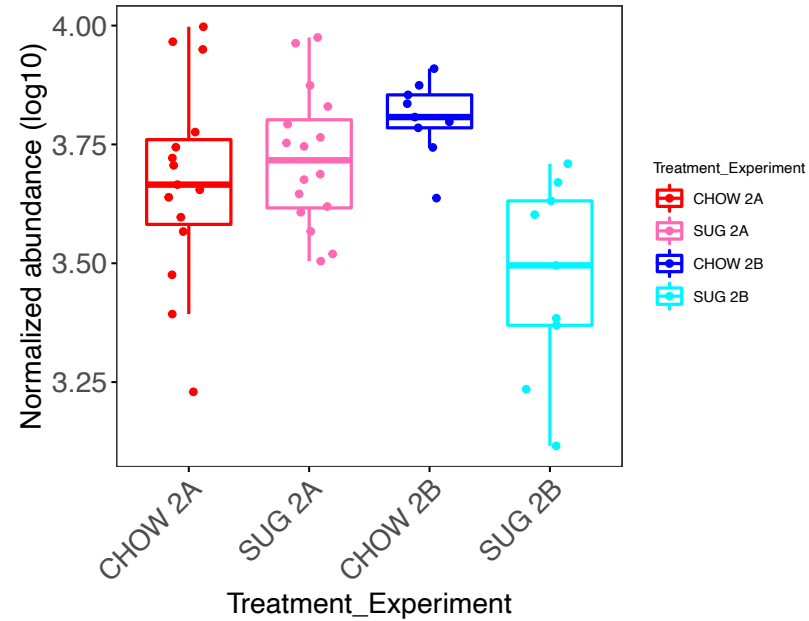
Proteobacteria.D.2_Alphaproteobacteria_...
Experiment 2A FDR = 0.01384
Experiment 2B FDR = 0.299



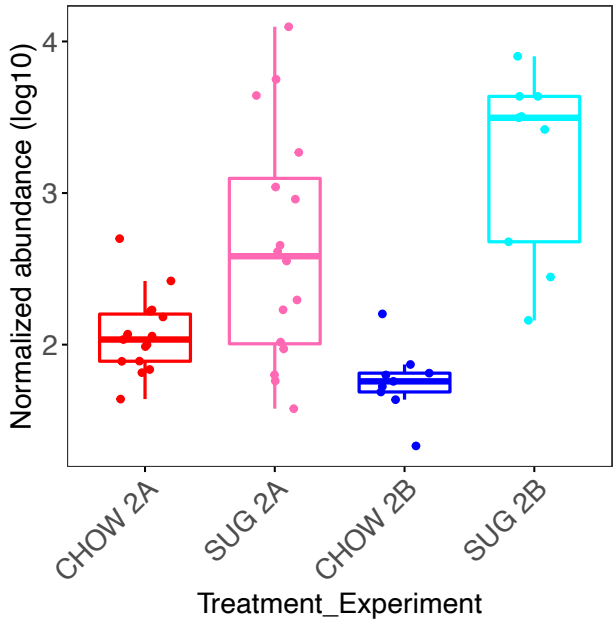
Firmicutes.D.2_Clostridia.D.3_Clostridiales.D.4_Ruminococaceae
Experiment 2A FDR = 0.01173
Experiment 2B FDR = 0.52577



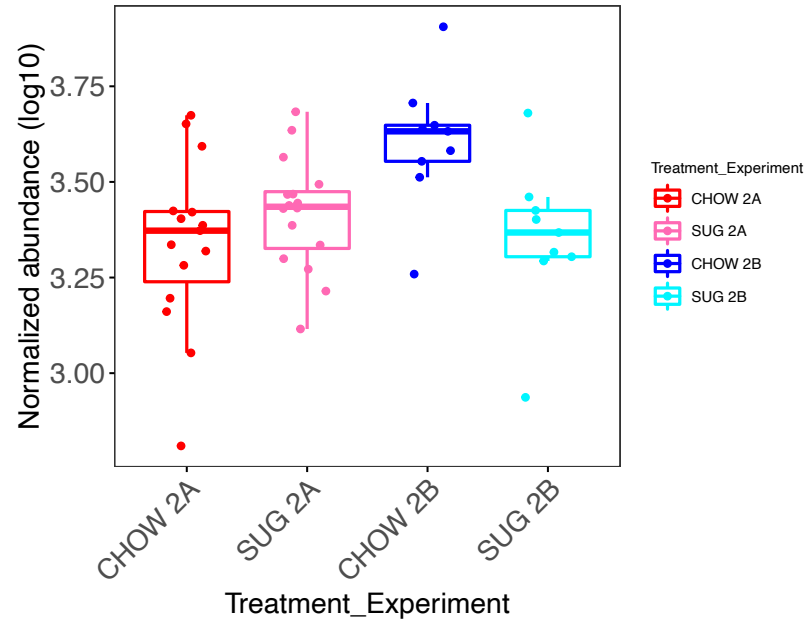
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Muribaculaceae
Experiment 2A FDR = 0.62391
Experiment 2B FDR = 0.00387



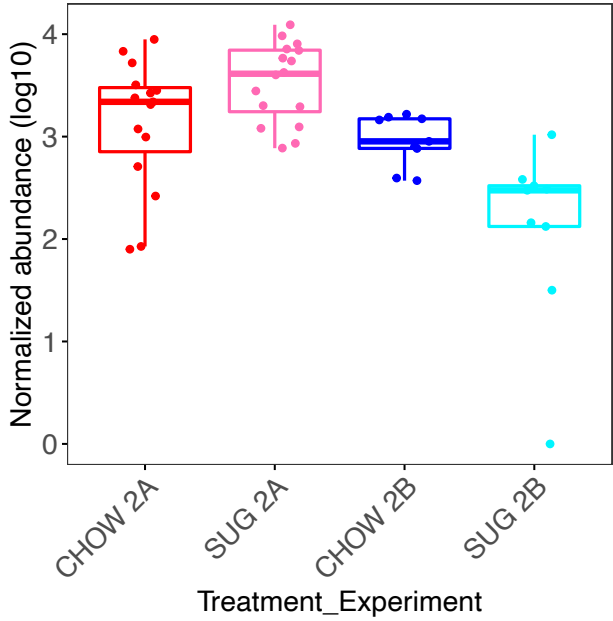
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae
Experiment 2A FDR = 0.11447
Experiment 2B FDR = 0.00387



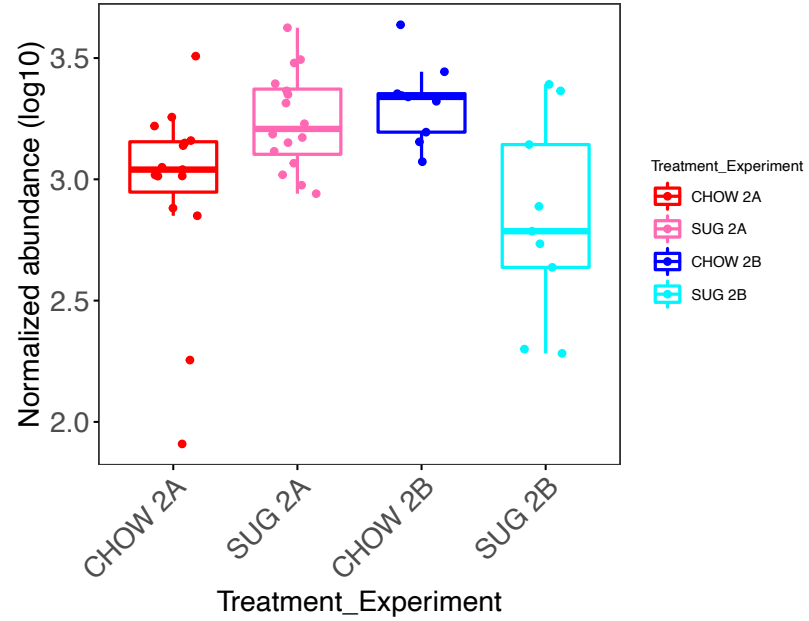
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales___
Experiment 2A FDR = 0.34626
Experiment 2B FDR = 0.08816



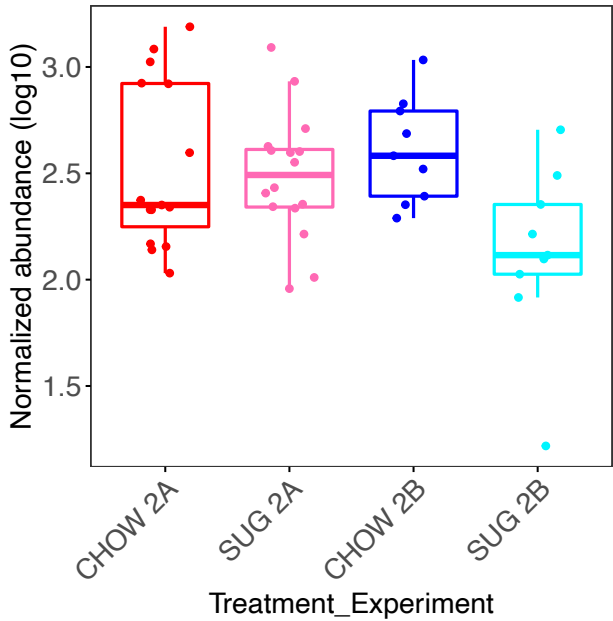
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Prevotellaceae
Experiment 2A FDR = 0.17862
Experiment 2B FDR = 0.00967



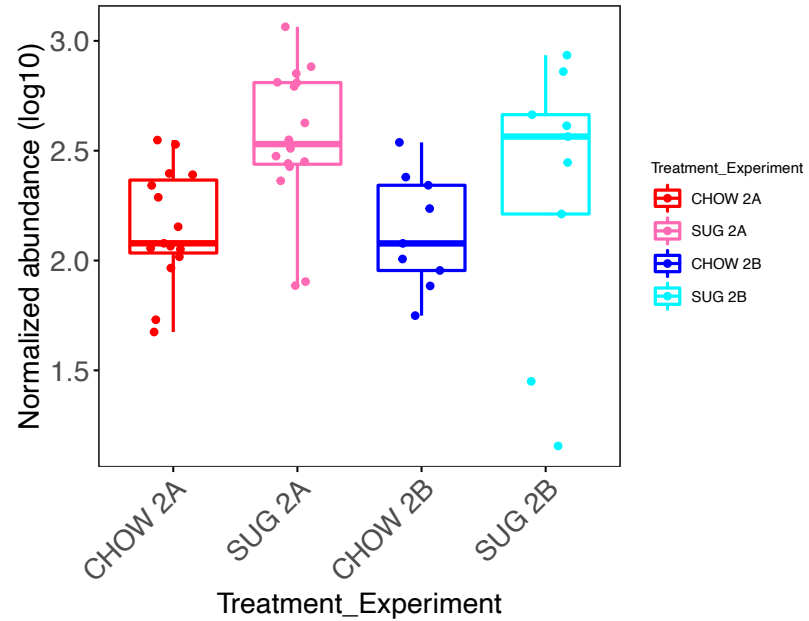
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Bacteroidaceae
Experiment 2A FDR = 0.06838
Experiment 2B FDR = 0.1044



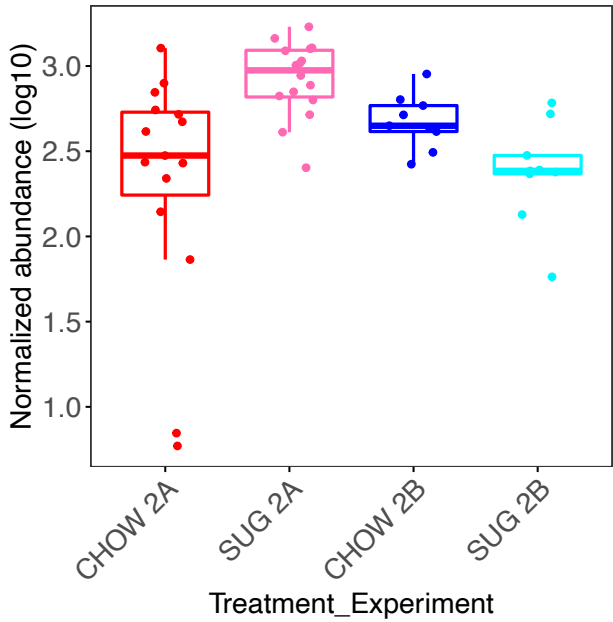
Firmicutes.D.2__Clostridia.D.3__Clostridiales___
Experiment 2A FDR = 0.73851
Experiment 2B FDR = 0.04568



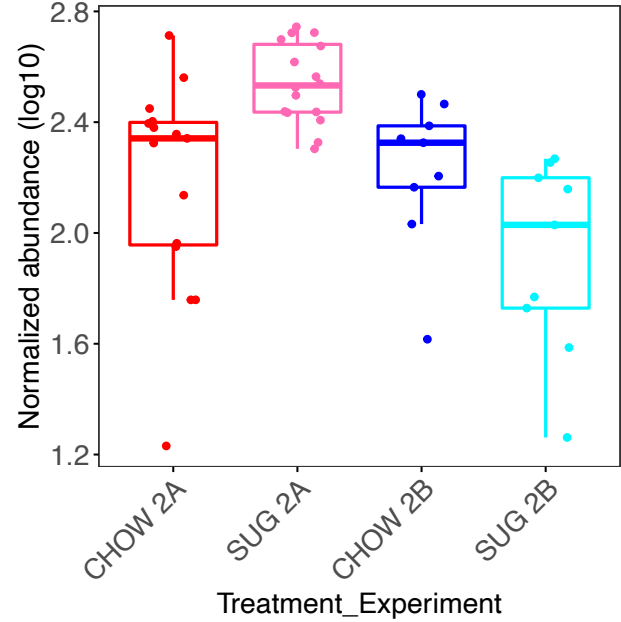
Proteobacteria.D.2__Gammaproteobacteria.D.3__Betaproteobacteriales.D.4__Burkholderiaceae
Experiment 2A FDR = 0.01017
Experiment 2B FDR = 0.25551



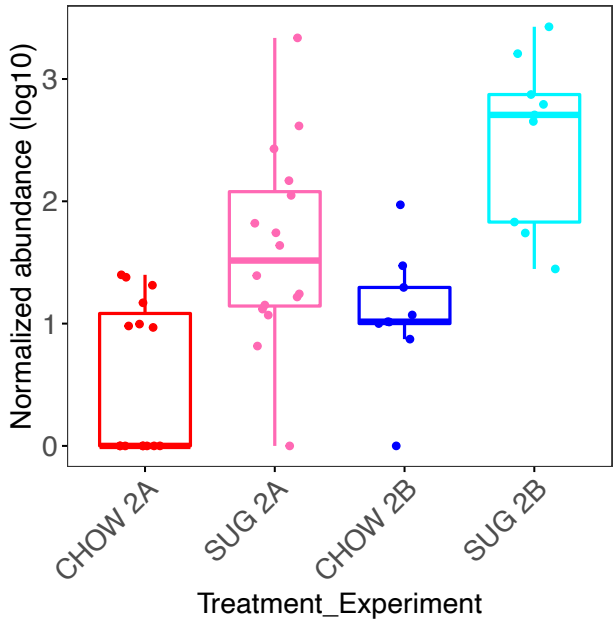
Bacteroidetes.D.2__Bacteroidia...
Experiment 2A FDR = 0.01017
Experiment 2B FDR = 0.08816



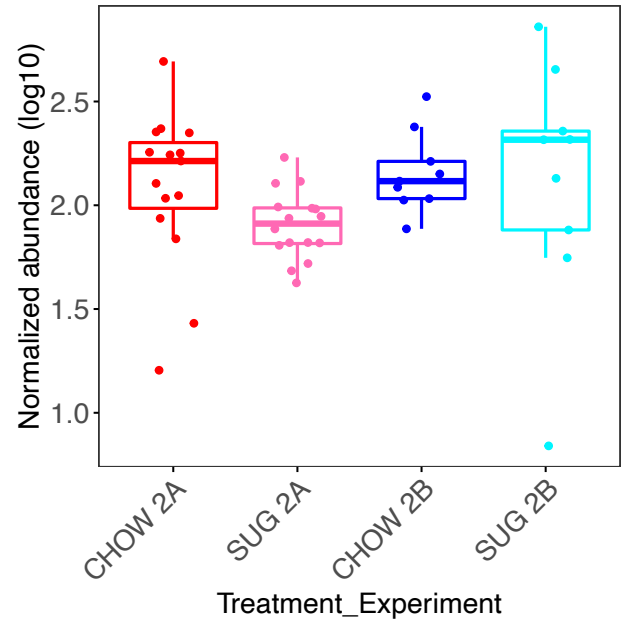
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Tannerellaceae
Experiment 2A FDR = 0.01017
Experiment 2B FDR = 0.10564



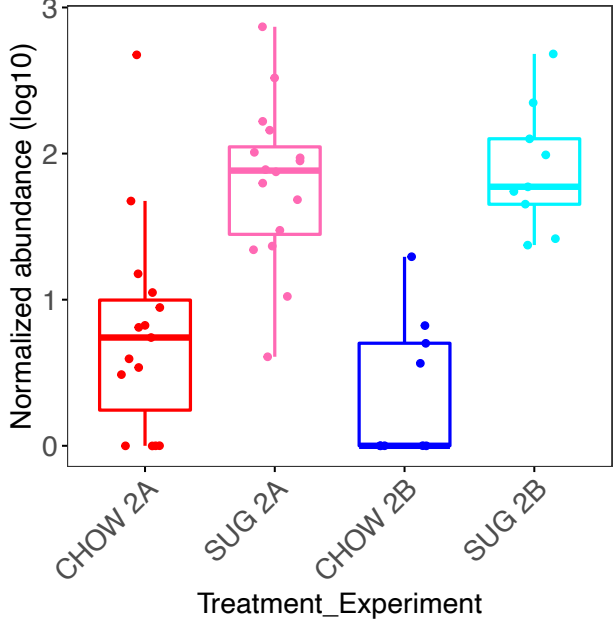
Actinobacteria.D.2__Actinobacteria.D.3__Bifidobacteriales.D.4__Bifidobacteriaceae
Experiment 2A FDR = 0.01017
Experiment 2B FDR = 0.00464



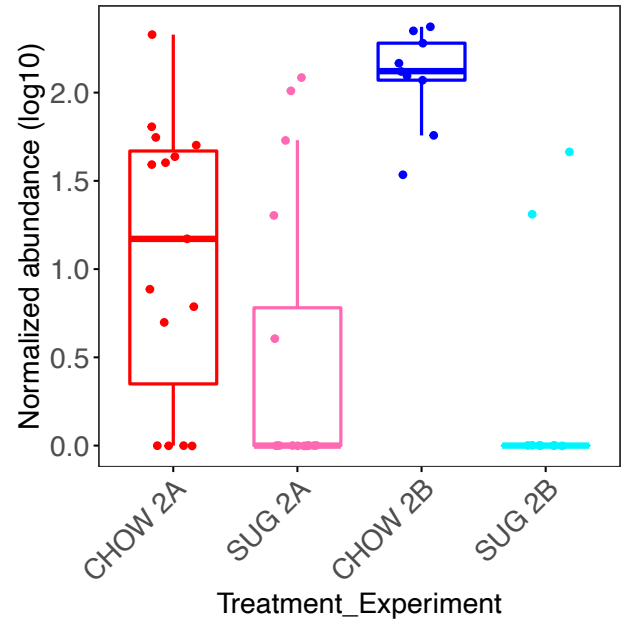
Proteobacteria.D.2__Deltaproteobacteria.D.3__Desulfufovibrionales.D.4__Desulfufovibrionaceae
Experiment 2A FDR = 0.06838
Experiment 2B FDR = 0.79617



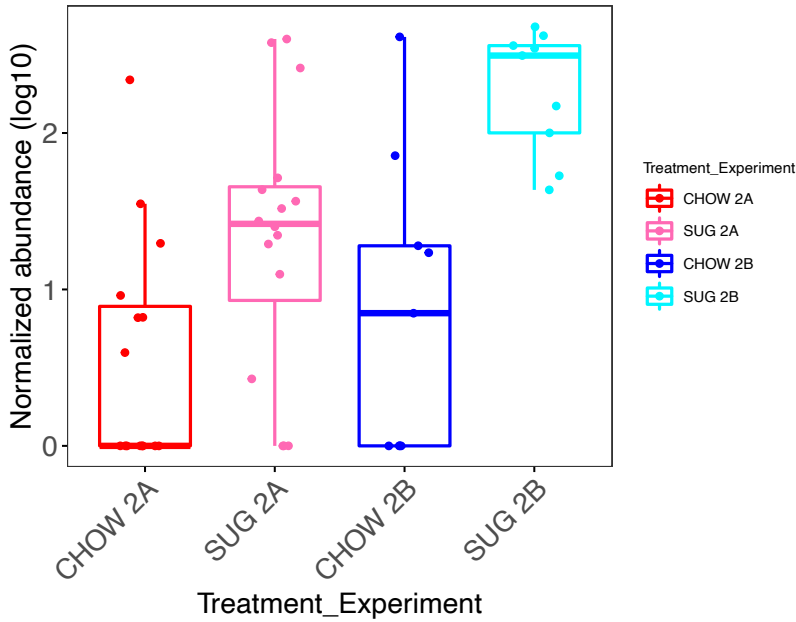
Actinobacteria.D.2__Coriobacteria.D.3__Coriobacteriales.D.4__Atopobiaceae
Experiment 2A FDR = 0.01017
Experiment 2B FDR = 0.00456



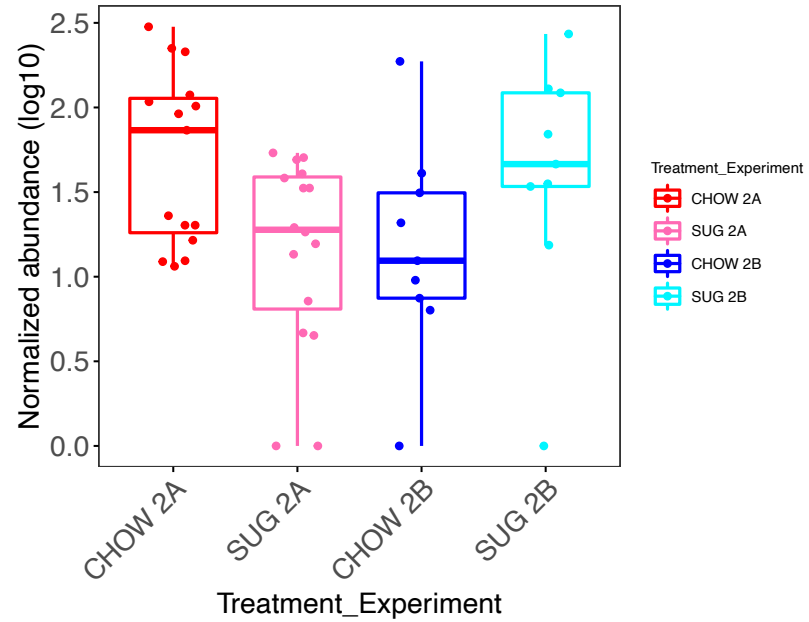
Proteobacteria.D.2__Gammaproteobacteria.D.3__Betaproteobacteriales...
Experiment 2A FDR = 0.14984
Experiment 2B FDR = 0.00456



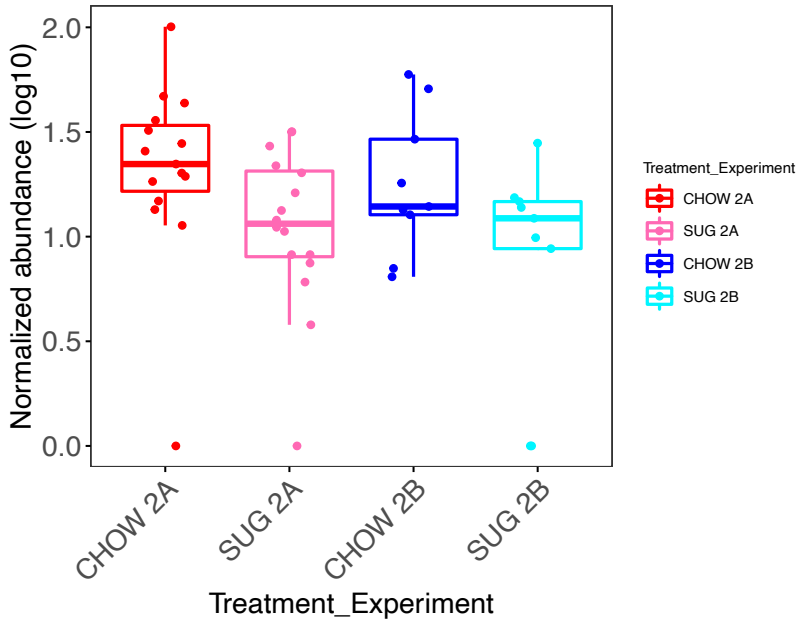
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Clostridiaceae 1
Experiment 2A FDR = 0.06132
Experiment 2B FDR = 0.03982



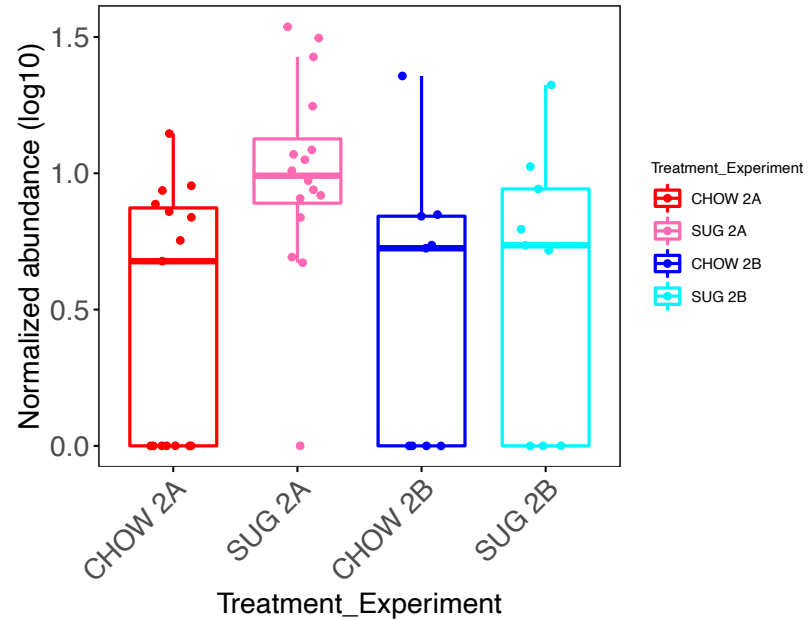
Actinobacteria.D.2__Coriobacteria.D.3__Coriobacteriales.D.4__uncultured
Experiment 2A FDR = 0.09419
Experiment 2B FDR = 0.21018



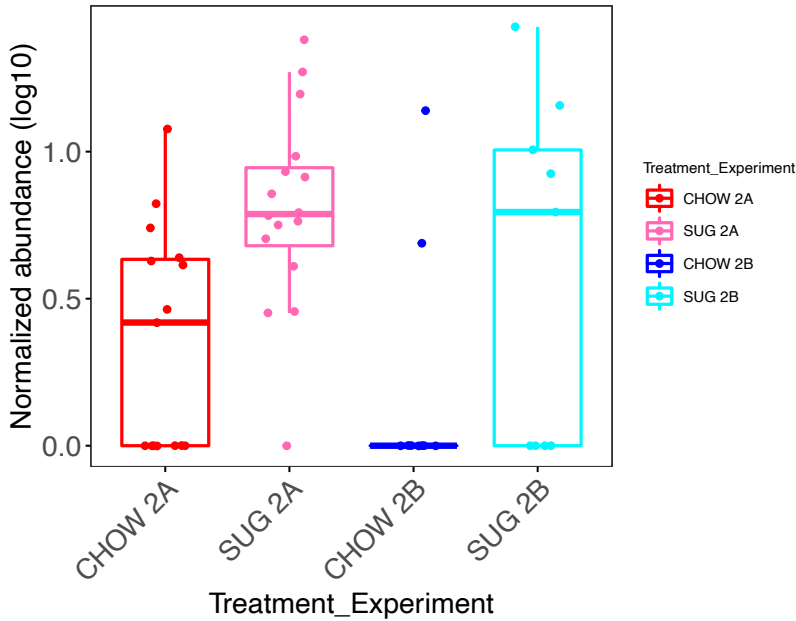
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Defluviitaleaceae
Experiment 2A FDR = 0.06838
Experiment 2B FDR = 0.33722



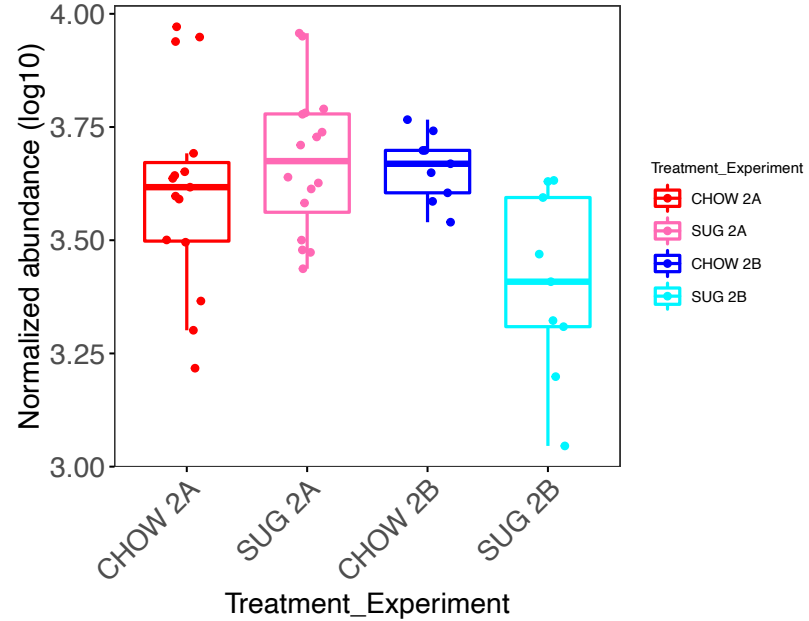
Bacteroidetes.D.2__Bacteroidia.D.3__Flavobacteriales.D.4__Flavobacteriaceae
Experiment 2A FDR = 0.02166
Experiment 2B FDR = 0.74777



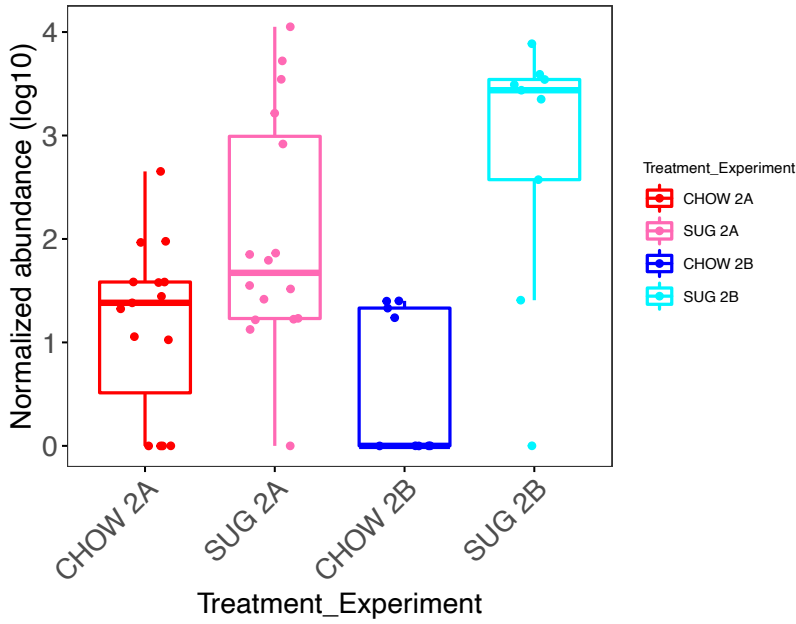
Proteobacteria.D.2__Alphaproteobacteria.....
Experiment 2A FDR = 0.02166
Experiment 2B FDR = 0.25551



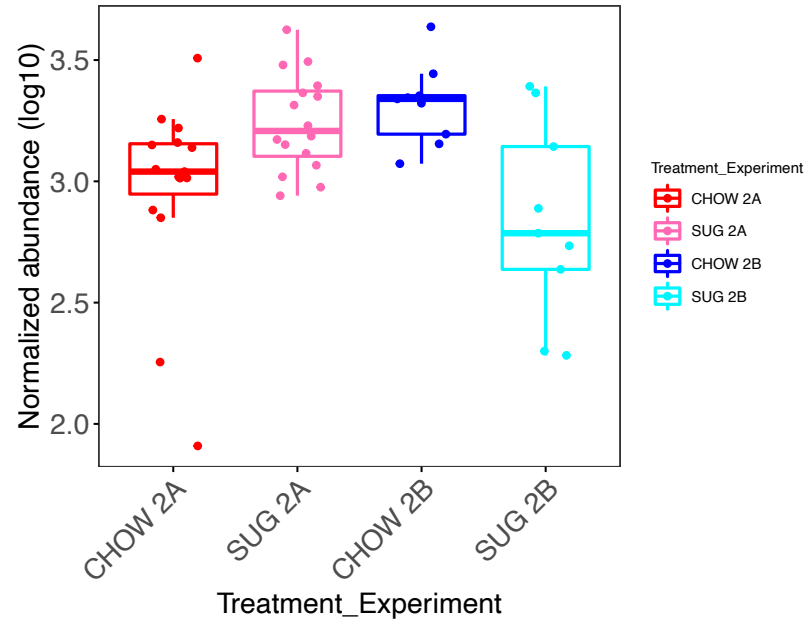
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Muribaculaceae.....
Experiment 2A FDR = 0.64741
Experiment 2B FDR = 0.03057



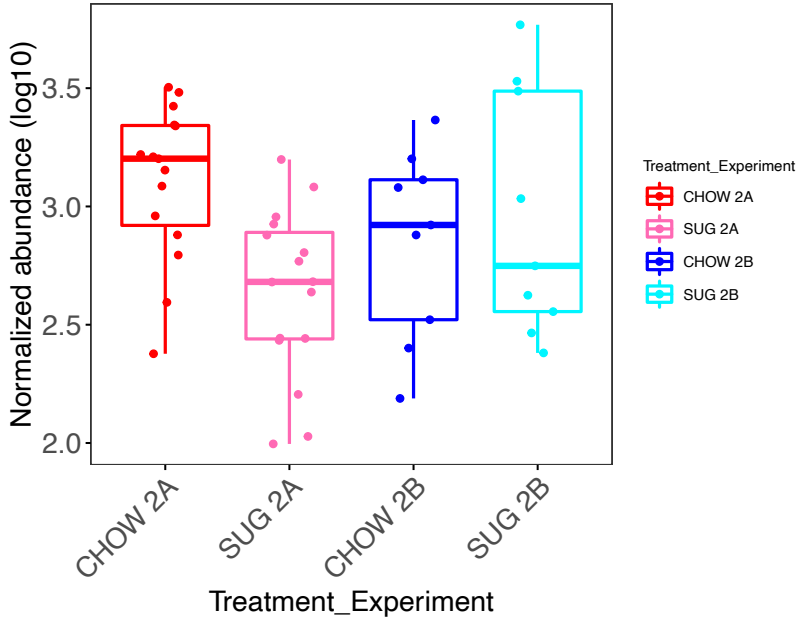
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Allobaculum
Experiment 2A FDR = 0.27157
Experiment 2B FDR = 0.03057



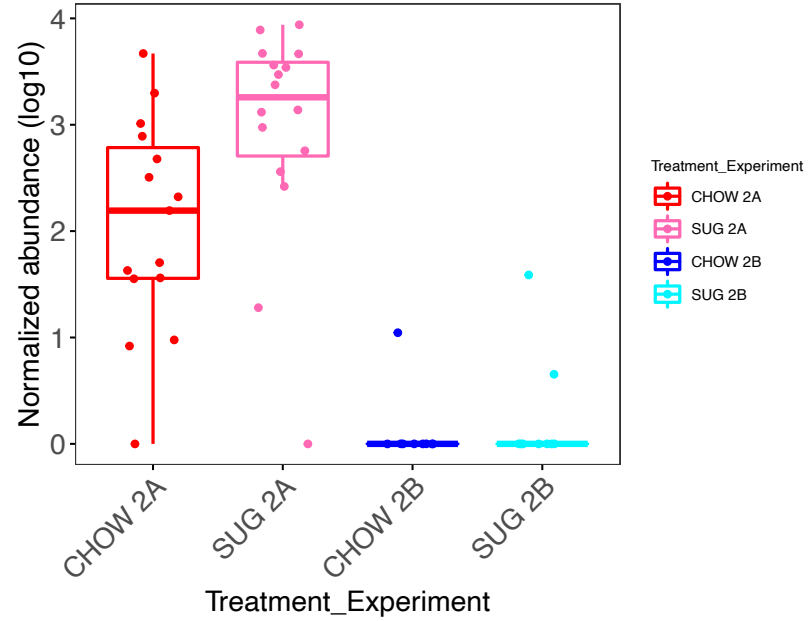
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Bacteroidaceae.D.5__Bacteroides
Experiment 2A FDR = 0.09972
Experiment 2B FDR = 0.11868



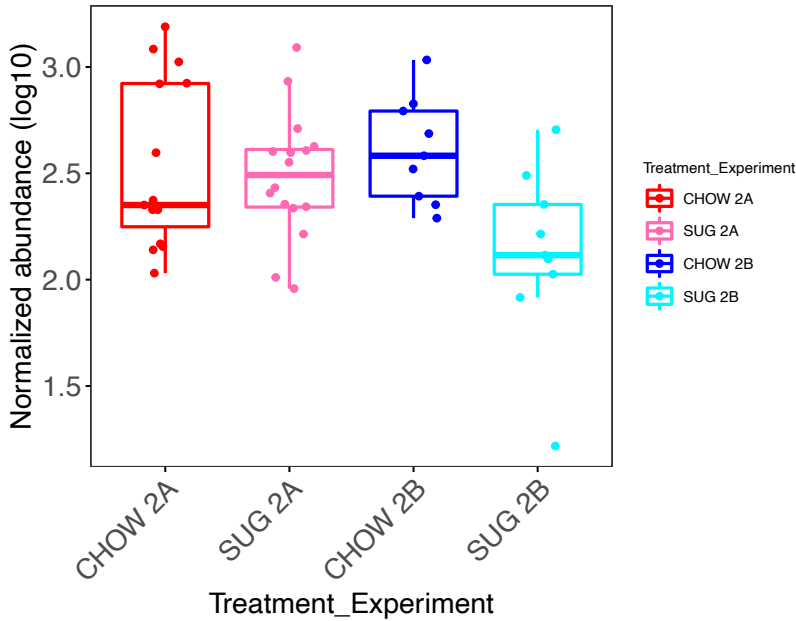
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__[Eubacterium] coprostanoligenes group
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.8203



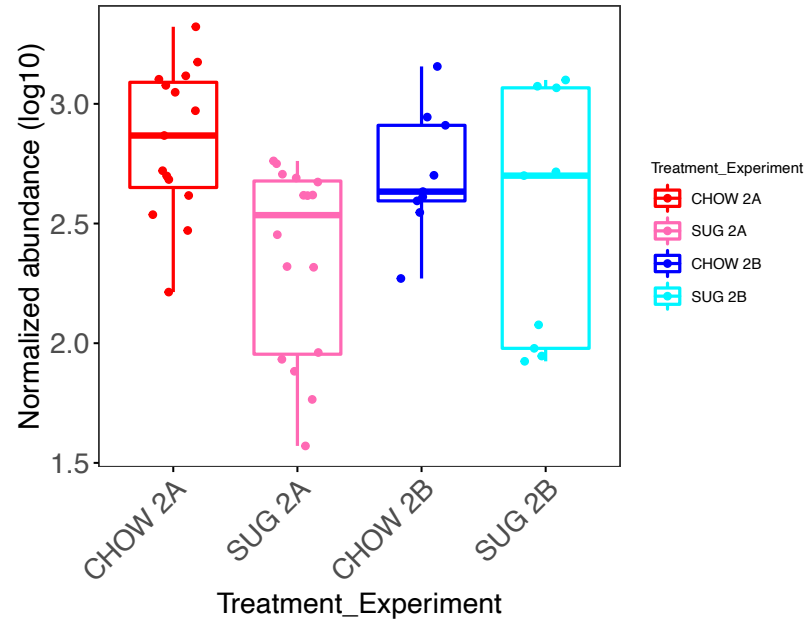
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Prevotellaceae.D.5__Prevotella 9
Experiment 2A FDR = 0.06257
Experiment 2B FDR = 0.71239



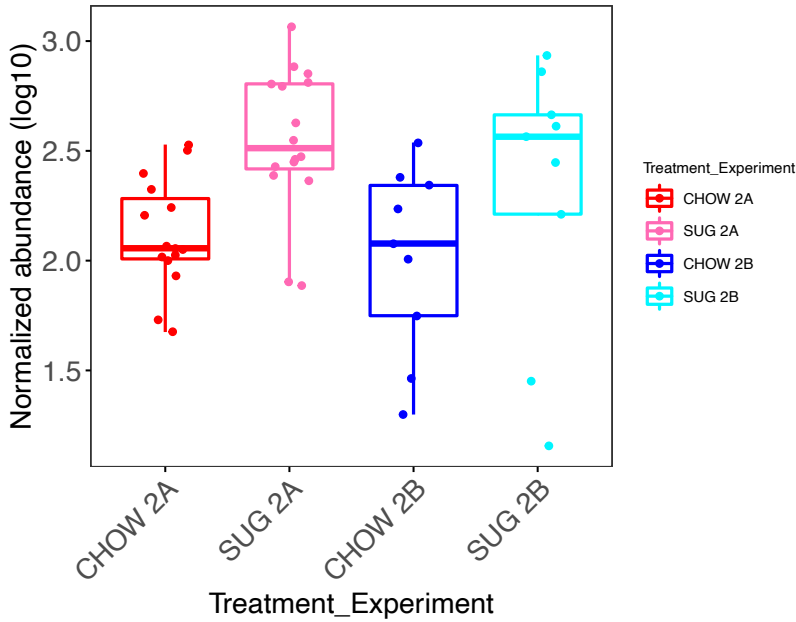
Firmicutes.D.2__Clostridia.D.3__Clostridiales.....
Experiment 2A FDR = 0.8986
Experiment 2B FDR = 0.06608



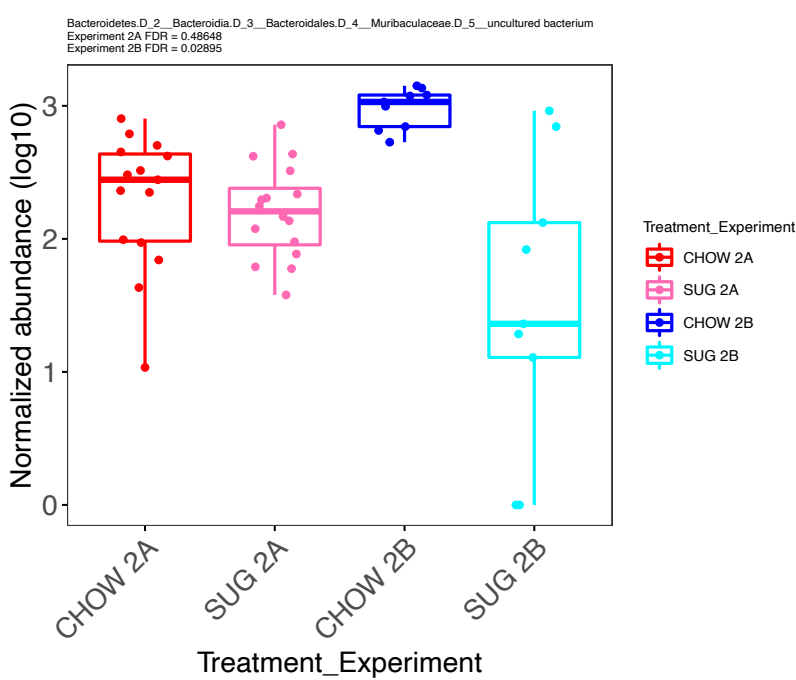
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Ruminiclostridium 5
Experiment 2A FDR = 0.01804
Experiment 2B FDR = 0.7232



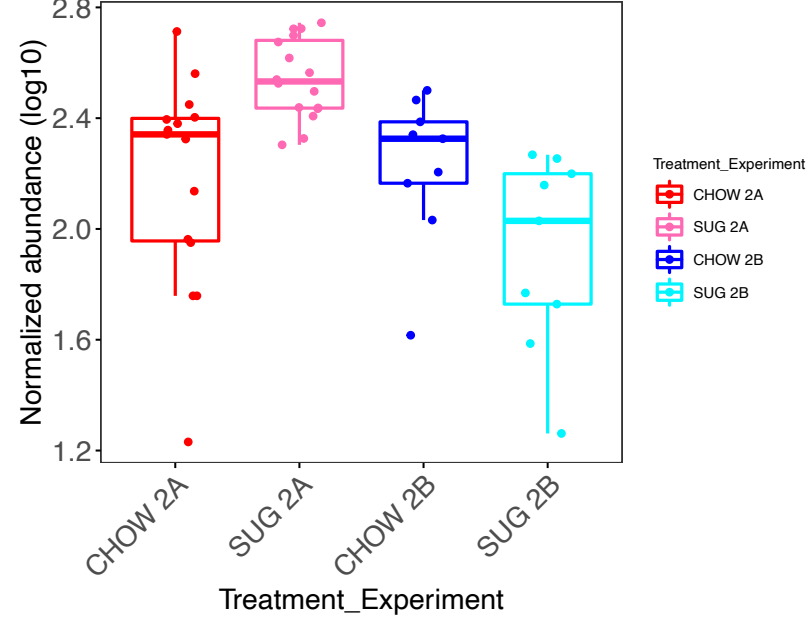
Proteobacteria.D.2_Gammaproteobacteria.D.3_Betaproteobacteriales.D.4_Burkholderiaceae.D.5_Parasutterella
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.29683



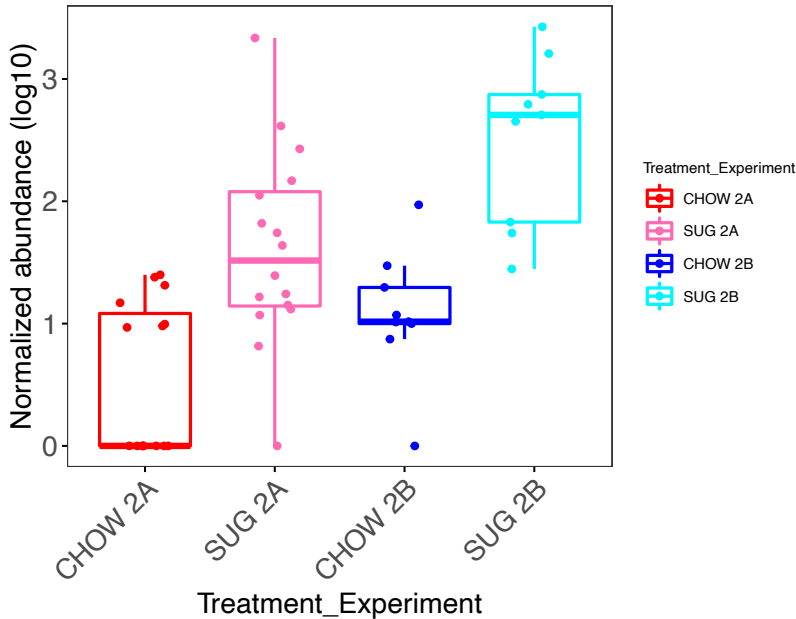
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Bacteroidales.D.5_Muribaculaceae.D.5_uncultured bacterium
Experiment 2A FDR = 0.48648
Experiment 2B FDR = 0.02895



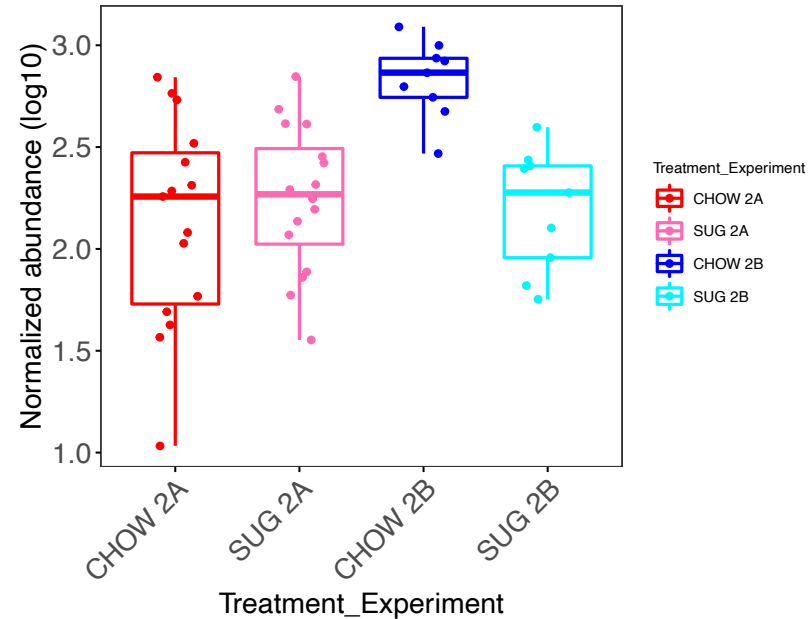
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Tannerellaceae.D.5_Parabacteroides
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.13374



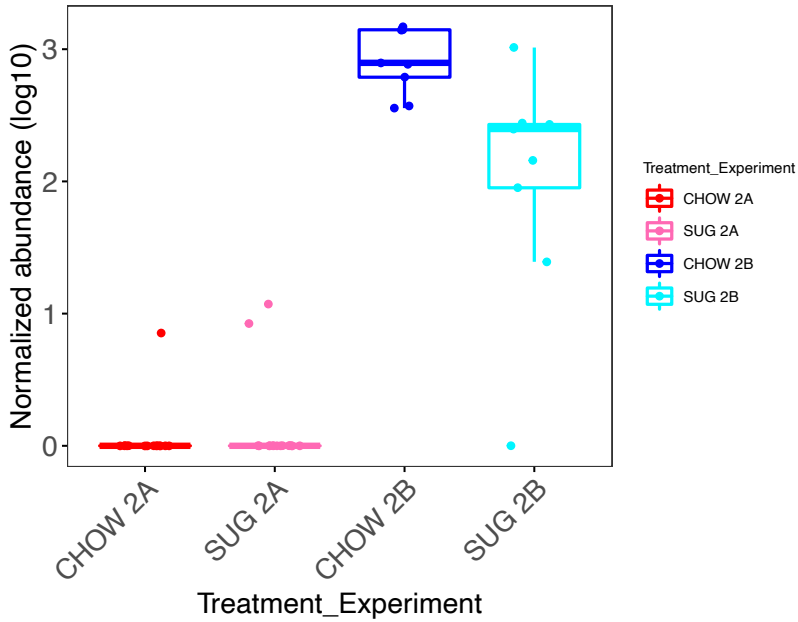
Actinobacteria.D.2_Actinobacteria.D.3_Bifidobacteriales.D.4_Bifidobacteriaceae.D.5_Bifidobacterium
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.01007



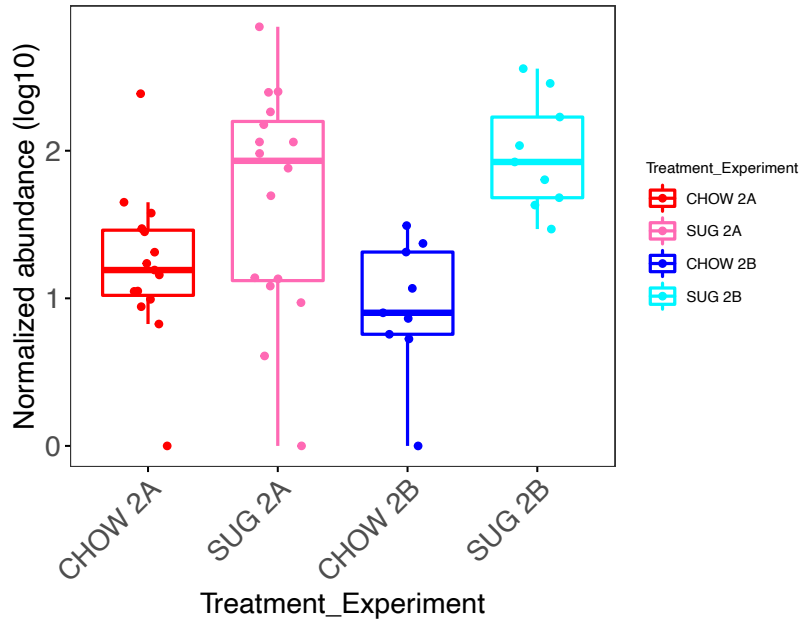
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Muribaculaceae.D.5_uncultured Bacteroidales bacterium
Experiment 2A FDR = 0.81621
Experiment 2B FDR = 0.0042



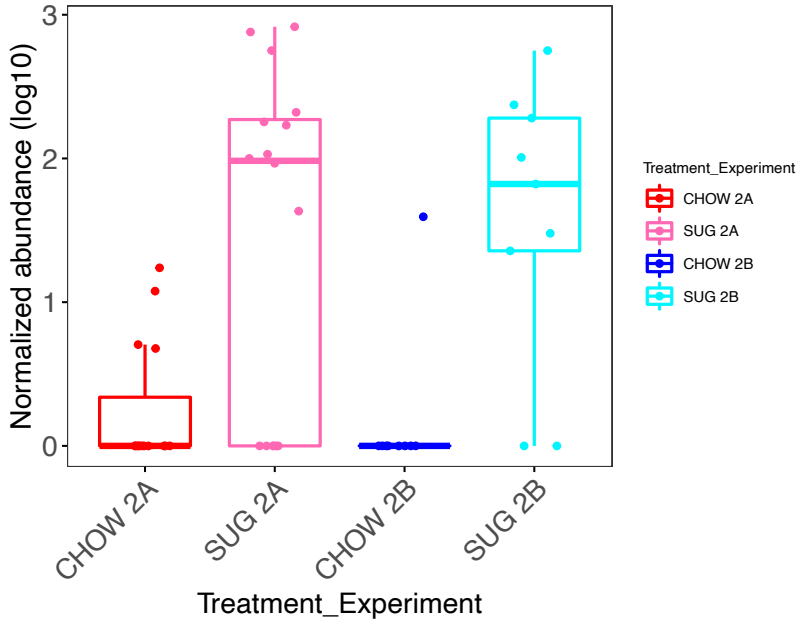
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Prevotellaceae.D.5_Prevotellaceae UCG-001
Experiment 2A FDR = 0.79946
Experiment 2B FDR = 0.01329



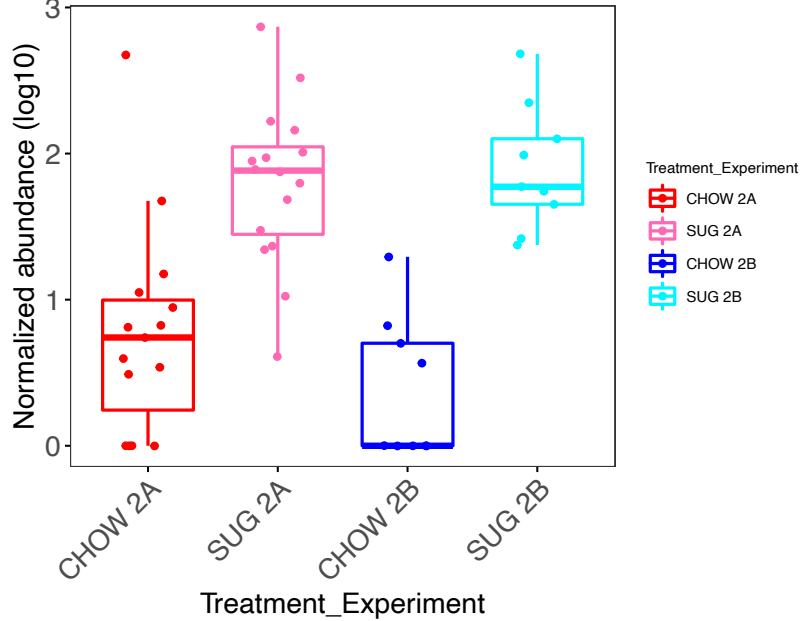
Firmicutes.D.2_Erysipelotrichia.D.3_Erysipelotrichales.D.4_Erysipelotrichaceae.D.5_Faecalibaculum
Experiment 2A FDR = 0.23238
Experiment 2B FDR = 0.0042



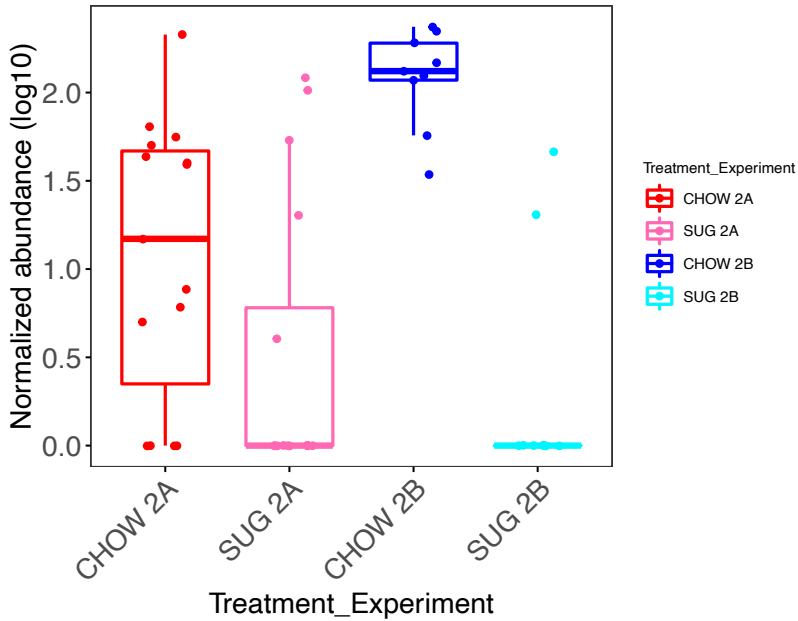
Firmicutes.D.2_Erysipelotrichia.D.3_Erysipelotrichales.D.4_Erysipelotrichaceae.D.5_Dubosiella
Experiment 2A FDR = 0.0524
Experiment 2B FDR = 0.06158



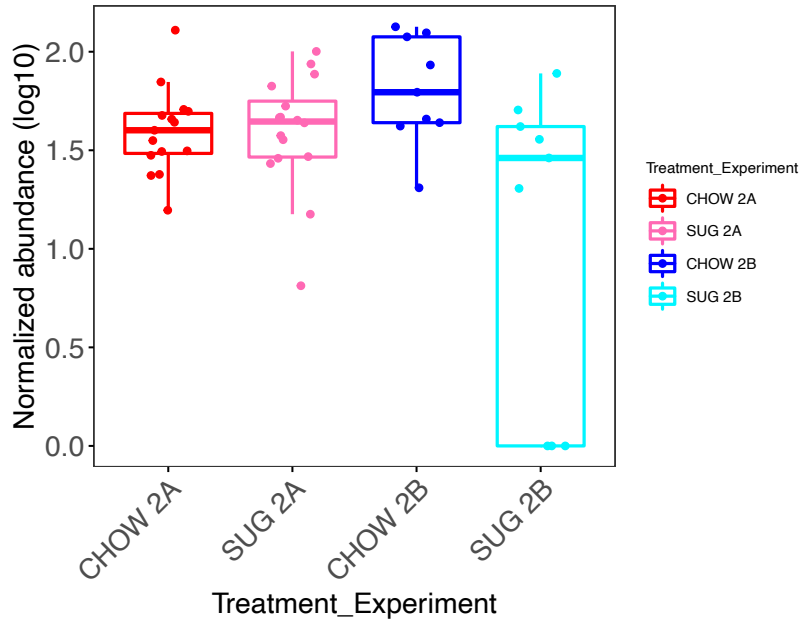
Actinobacteria.D.2_Coriorbacteria.D.3_Coriorbacteriales.D.4_Attopiaceae.D.5_Coriorbacteriaceae UCG-002
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.0099



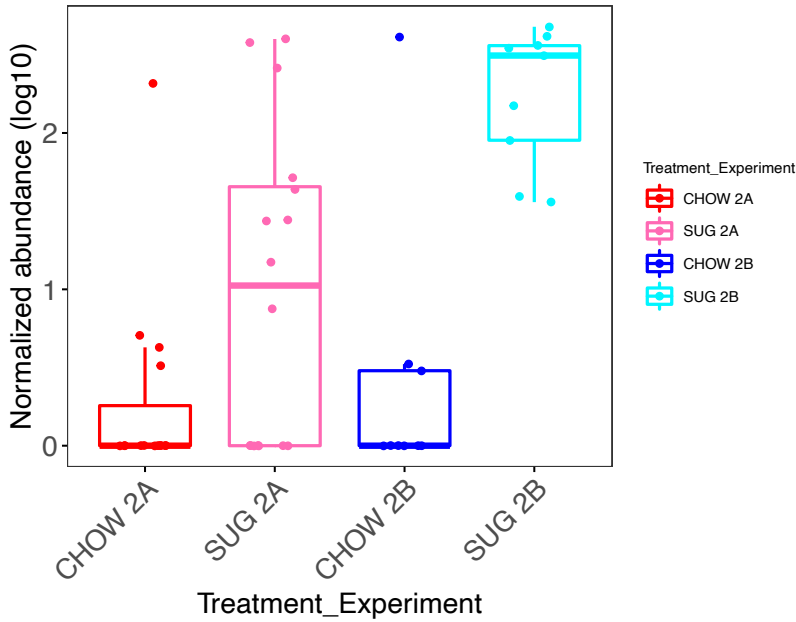
Proteobacteria.D.2_Gammaproteobacteria.D.3_Betaproteobacteriales.....
Experiment 2A FDR = 0.21071
Experiment 2B FDR = 0.0099



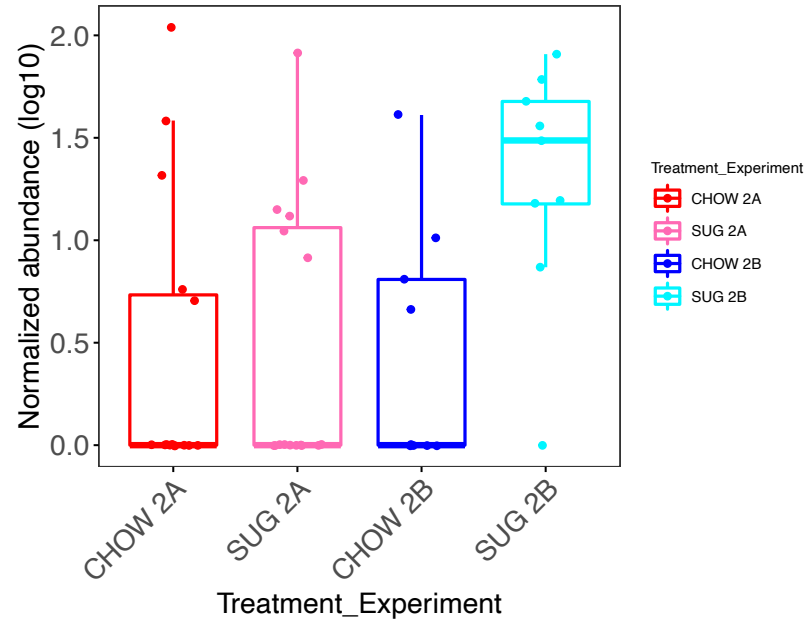
Bacteroidetes.D.2_Bacteroidia.D.3_Bacteroidales.D.4_Muribaculaceae.D.5_Muribaculum
Experiment 2A FDR = 0.8886
Experiment 2B FDR = 0.08893



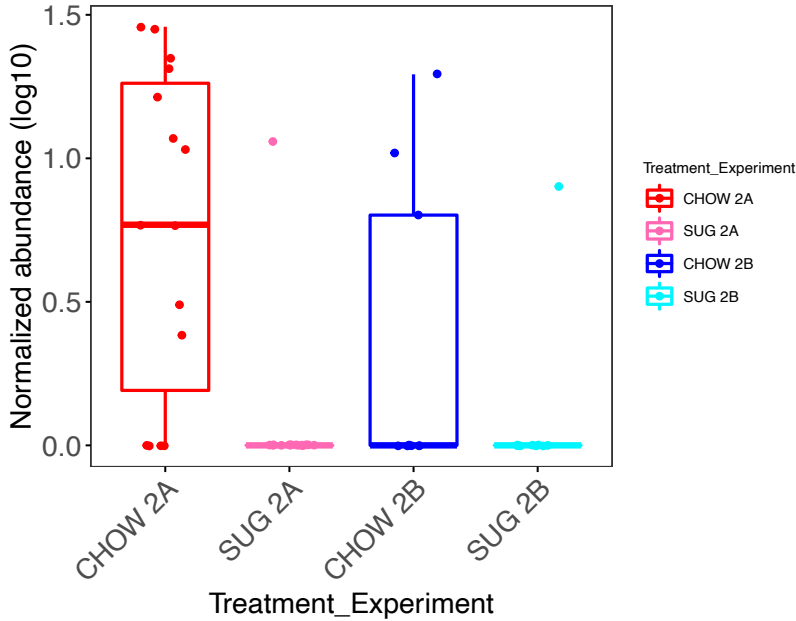
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Clostridiaceae.1.D.5__Clostridium sensu stricto 1
Experiment 2A FDR = 0.16777
Experiment 2B FDR = 0.03057



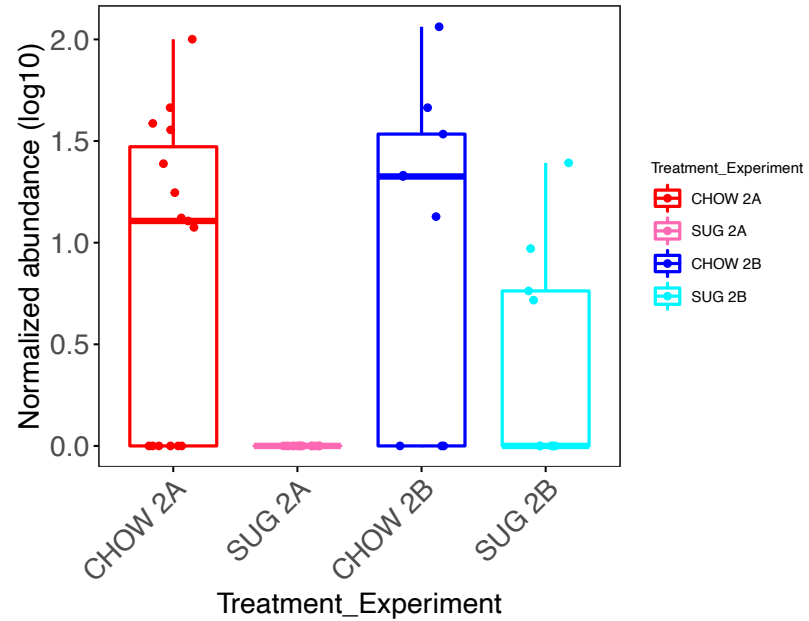
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Erysipelatoclostridium
Experiment 2A FDR = 0.93378
Experiment 2B FDR = 0.08893



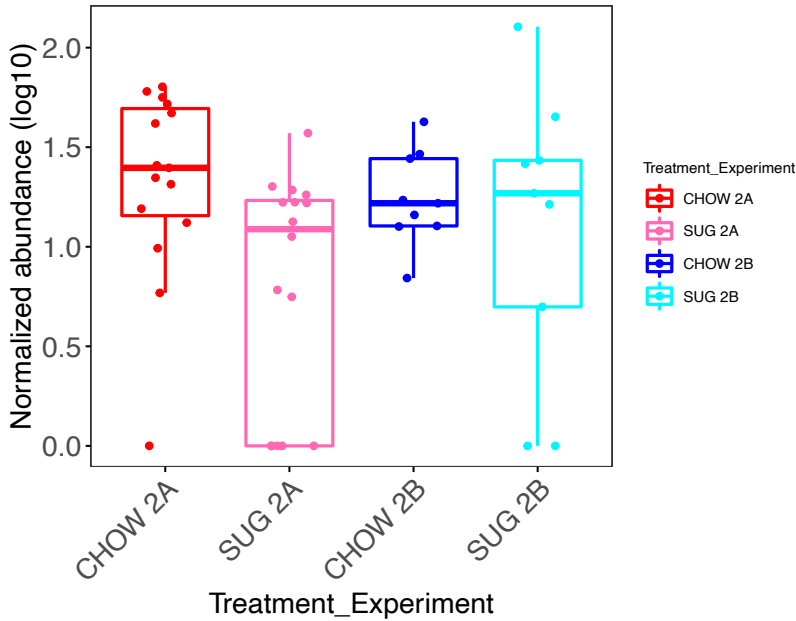
Firmicutes.D.2__Bacilli.D.3__Lactobacillales.D.4__Streptococcaceae.D.5__Lactococcus
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.46016



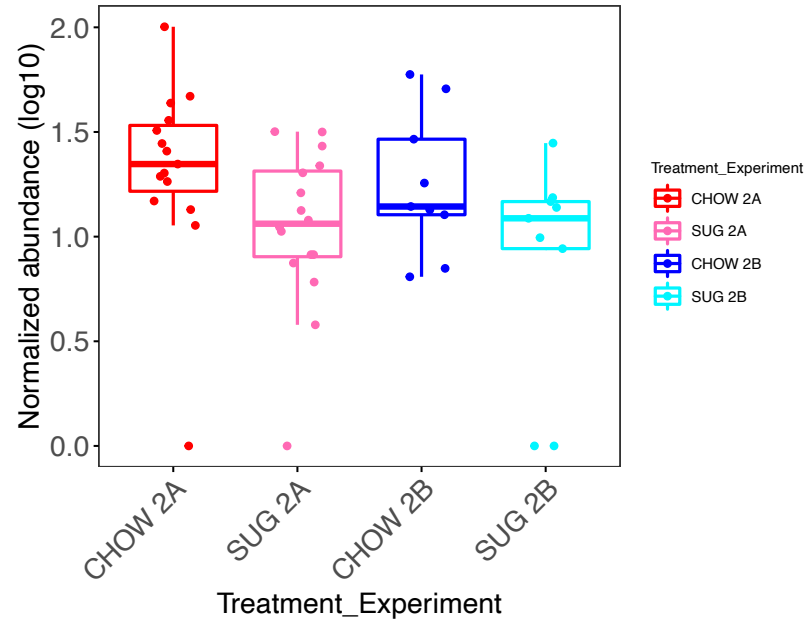
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__[Ruminococcus] gnavus group
Experiment 2A FDR = 0.0139
Experiment 2B FDR = 0.29683



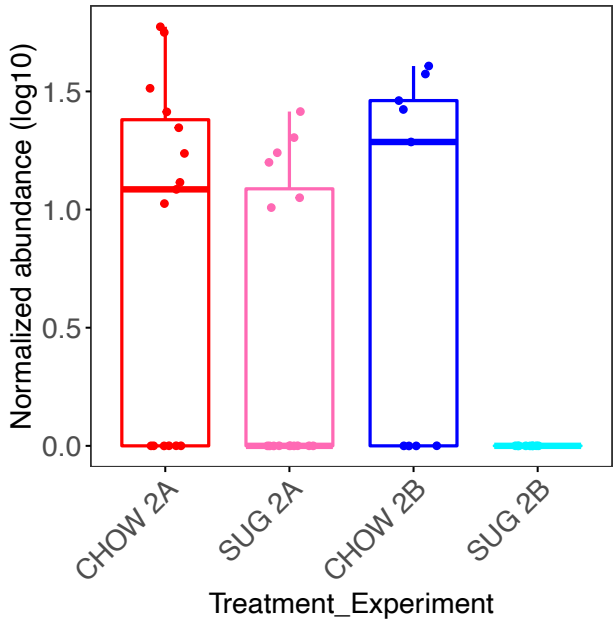
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae____
Experiment 2A FDR = 0.0524
Experiment 2B FDR = 1



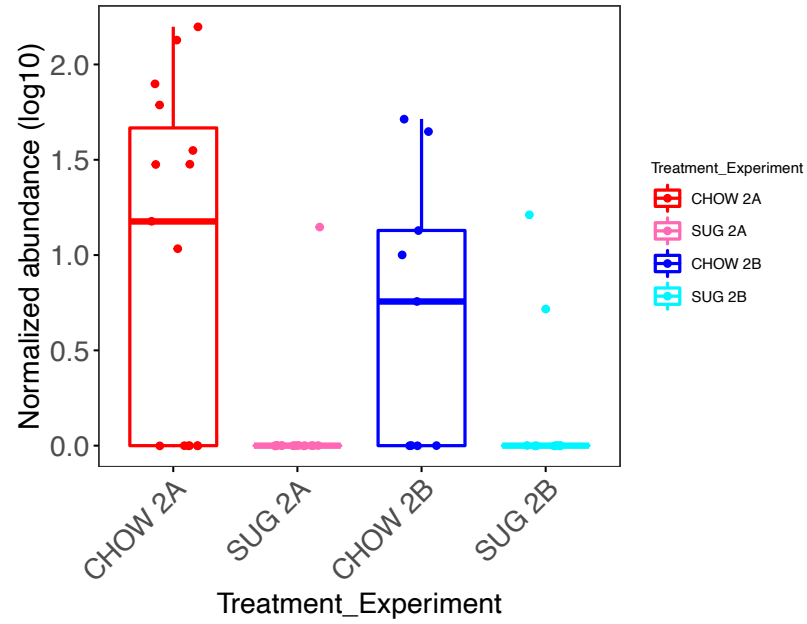
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Deffluviitaleaceae.D.5__Deffluviitaleaceae UCG-011
Experiment 2A FDR = 0.09819
Experiment 2B FDR = 0.40512



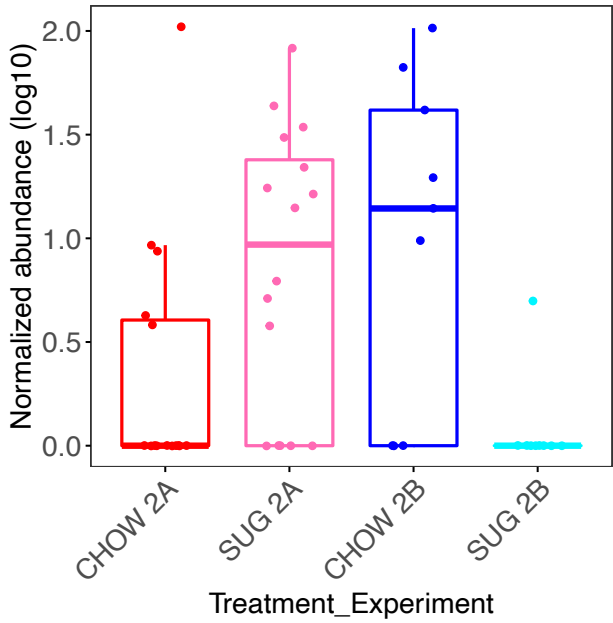
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Intestinimonas
Experiment 2A FDR = 0.33519
Experiment 2B FDR = 0.08893



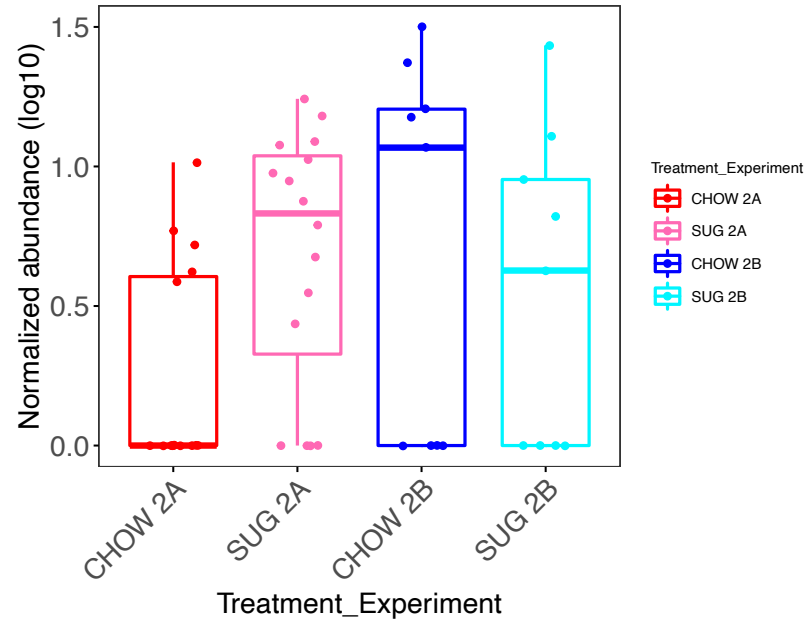
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__Lachnospiraceae.FCS020.group
Experiment 2A FDR = 0.01531
Experiment 2B FDR = 0.30137



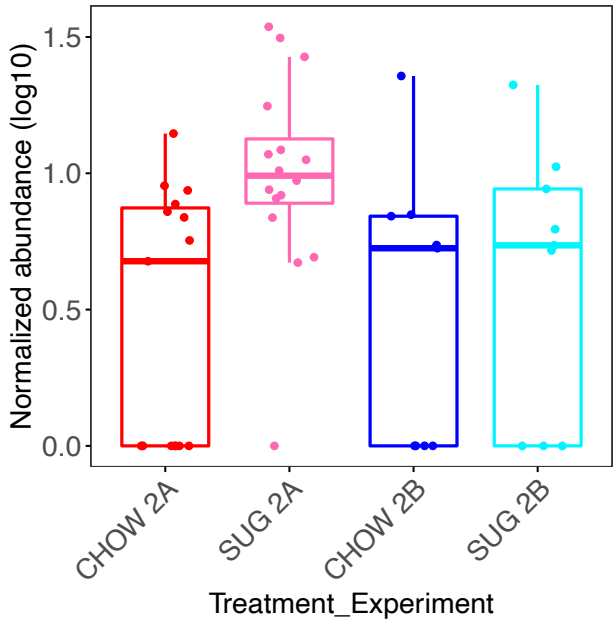
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__A2
Experiment 2A FDR = 0.15547
Experiment 2B FDR = 0.08893



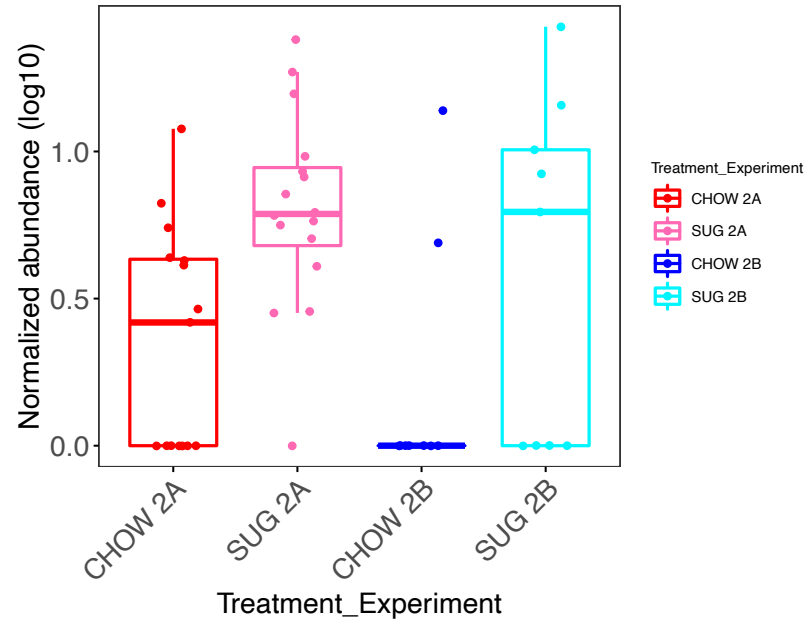
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__ASF356
Experiment 2A FDR = 0.06257
Experiment 2B FDR = 0.65201



Bacteroidetes.D.2__Bacteroidia.D.3__Flavobacteriales.D.4__Flavobacteriaceae.D.5__uncultured
Experiment 2A FDR = 0.03031
Experiment 2B FDR = 0.76069



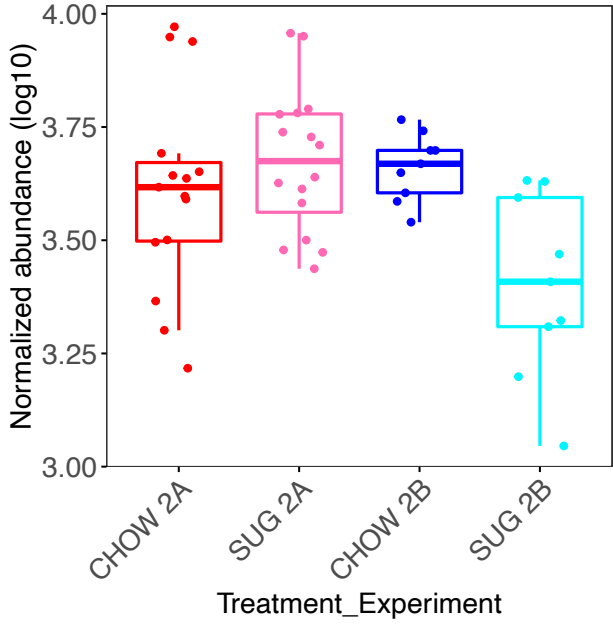
Proteobacteria.D.2__Alphaproteobacteria.....
Experiment 2A FDR = 0.03159
Experiment 2B FDR = 0.30137



Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Muribaculaceae_____

Experiment 2A FDR = 0.63414

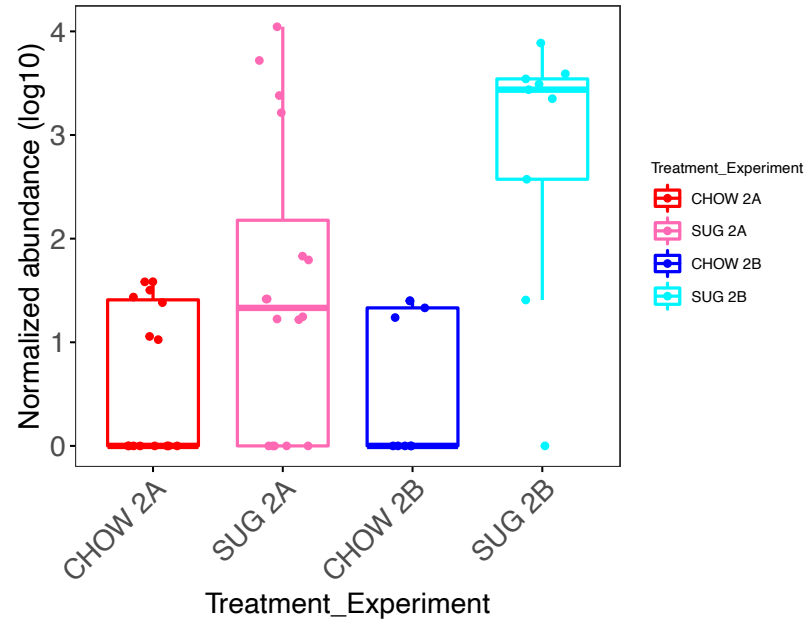
Experiment 2B FDR = 0.03269



Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Allobaculum.D.6__uncultured bacterium

Experiment 2A FDR = 0.29063

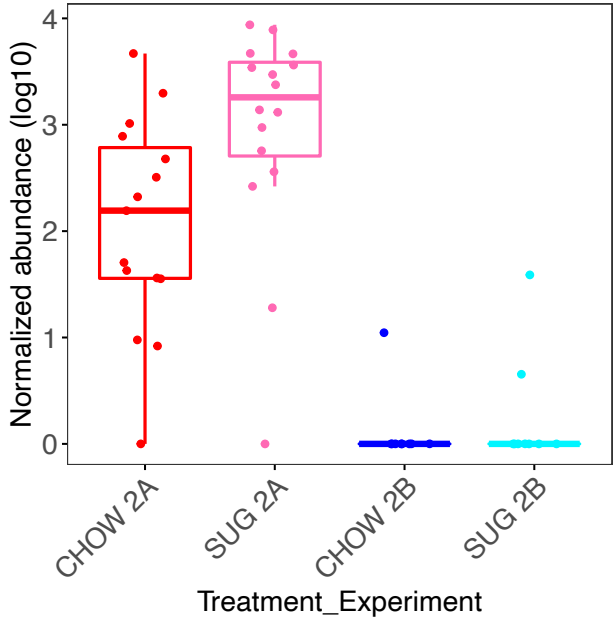
Experiment 2B FDR = 0.03269



Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Prevotellaceae.D.5__Prevotella.9_____

Experiment 2A FDR = 0.07564

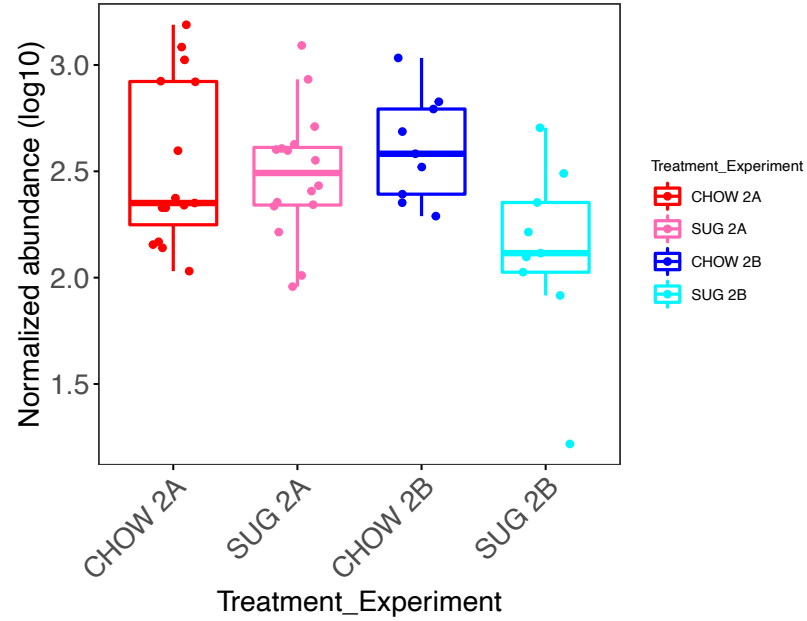
Experiment 2B FDR = 0.71837



Firmicutes.D.2__Clostridia.D.3__Clostridiales_____

Experiment 2A FDR = 0.86891

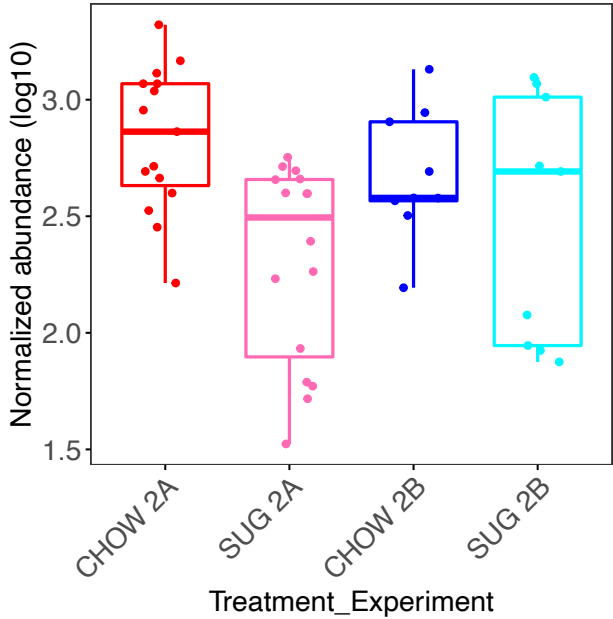
Experiment 2B FDR = 0.07177



Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Ruminiclostridium.5_____

Experiment 2A FDR = 0.01471

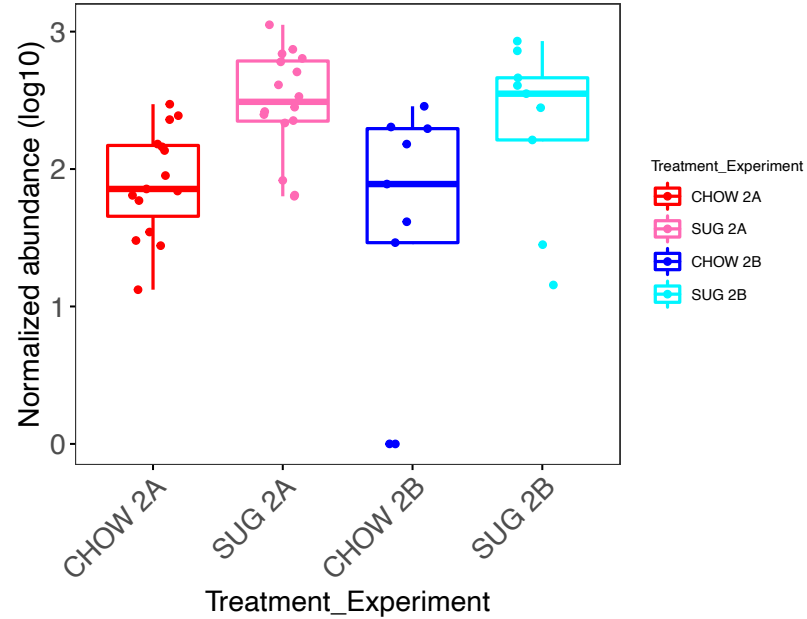
Experiment 2B FDR = 0.79684



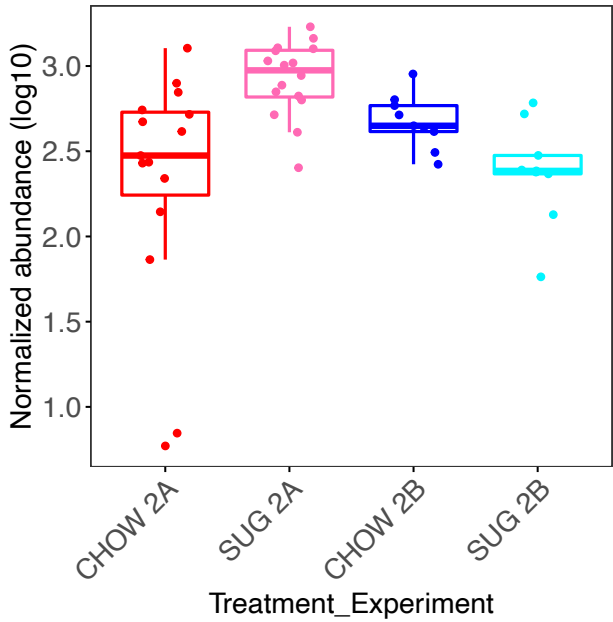
Proteobacteria.D.2__Gammaproteobacteria.D.3__Betaproteobacteriales.D.4__Burkholderiaceae.D.5__Parasutterella_____

Experiment 2A FDR = 0.0111

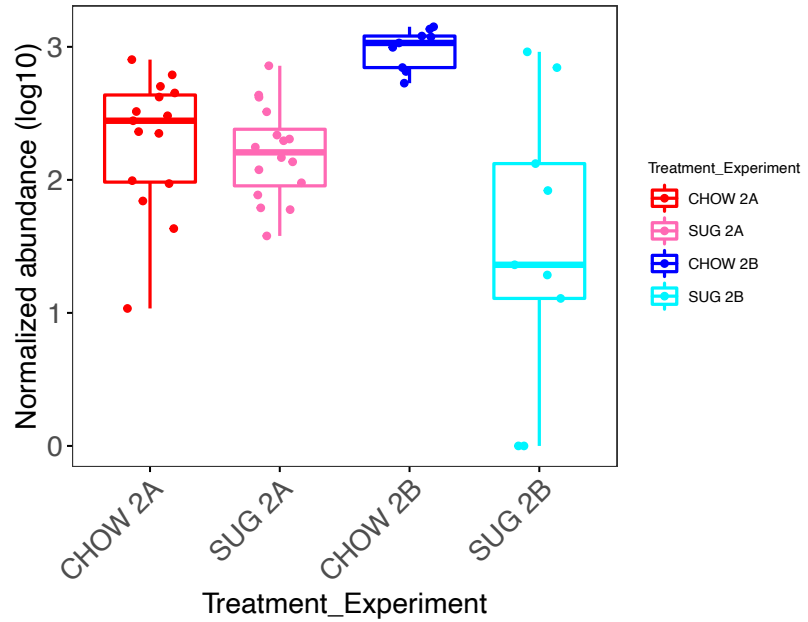
Experiment 2B FDR = 0.21491



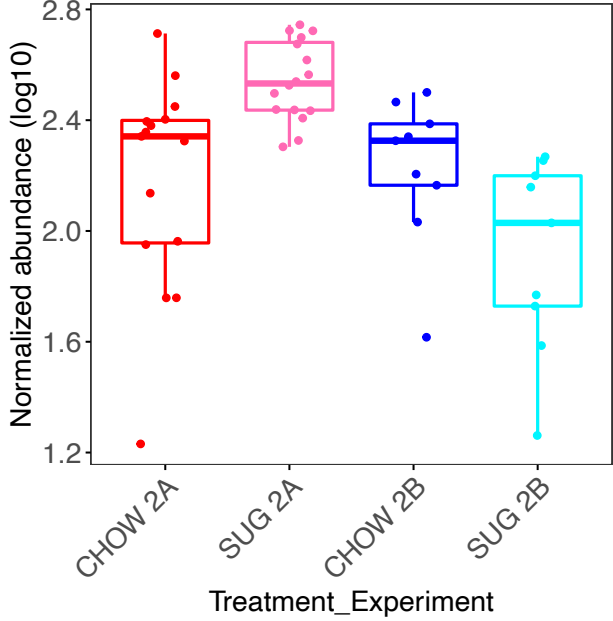
Bacteroidetes.D.2__Bacteroidia.....
Experiment 2A FDR = 0.01471
Experiment 2B FDR = 0.11847



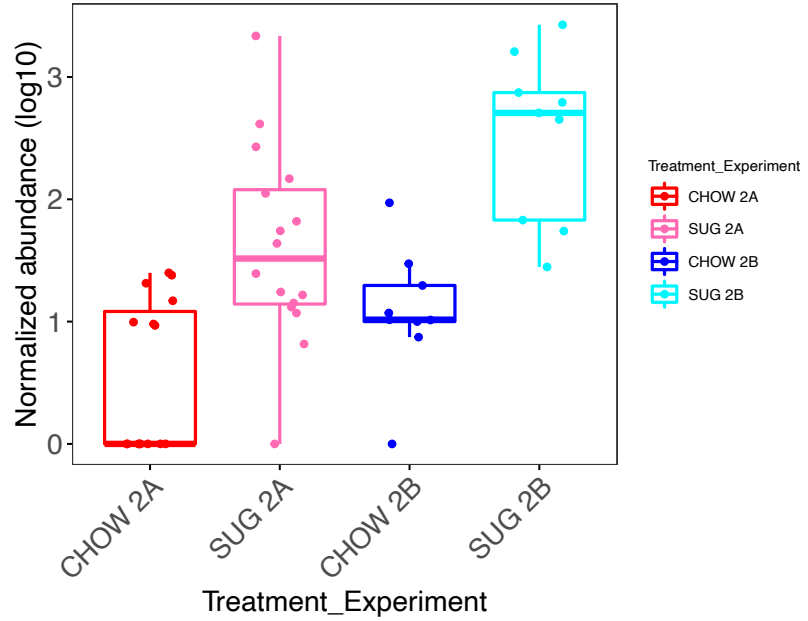
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Muribaculaceae.D.5__uncultured bacterium.D.6__uncultured bacterium
Experiment 2A FDR = 0.53244
Experiment 2B FDR = 0.0298



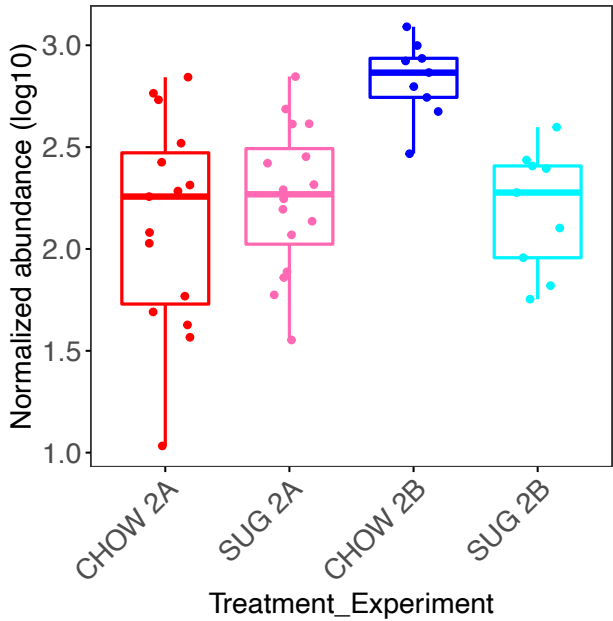
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Tannerellaceae.D.5__Parabacteroides.....
Experiment 2A FDR = 0.01471
Experiment 2B FDR = 0.15734



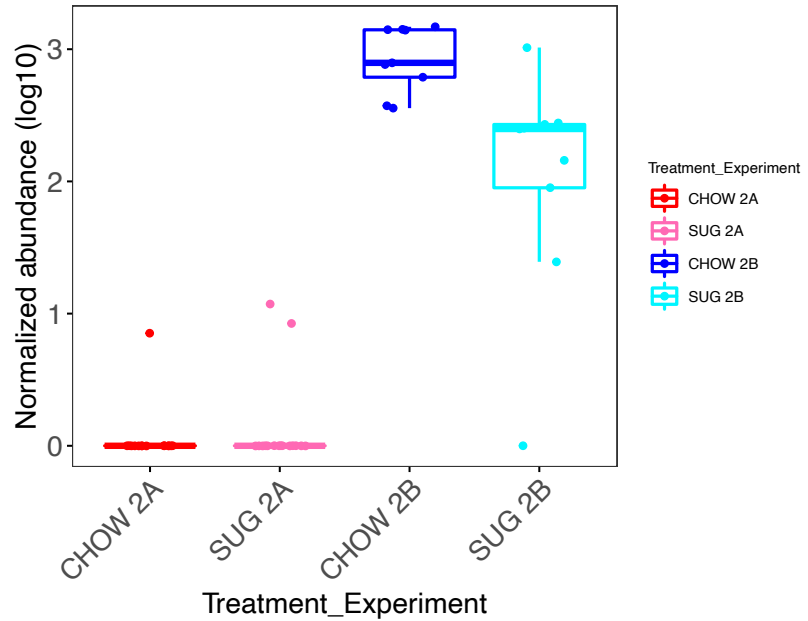
Actinobacteria.D.2__Actinobacteria.D.3__Bifidobacteriales.D.4__Bifidobacteriaceae.D.5__Bifidobacterium.....
Experiment 2A FDR = 0.01471
Experiment 2B FDR = 0.01185



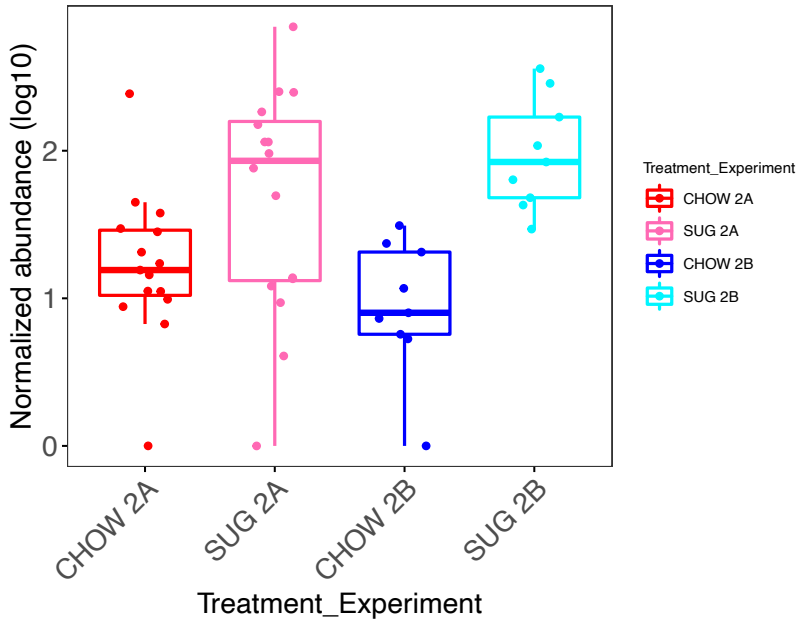
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Muribaculaceae.D.5__uncultured Bacteroidales bacterium.D.6__uncultured Bacter
Experiment 2A FDR = 0.73585
Experiment 2B FDR = 0.00494



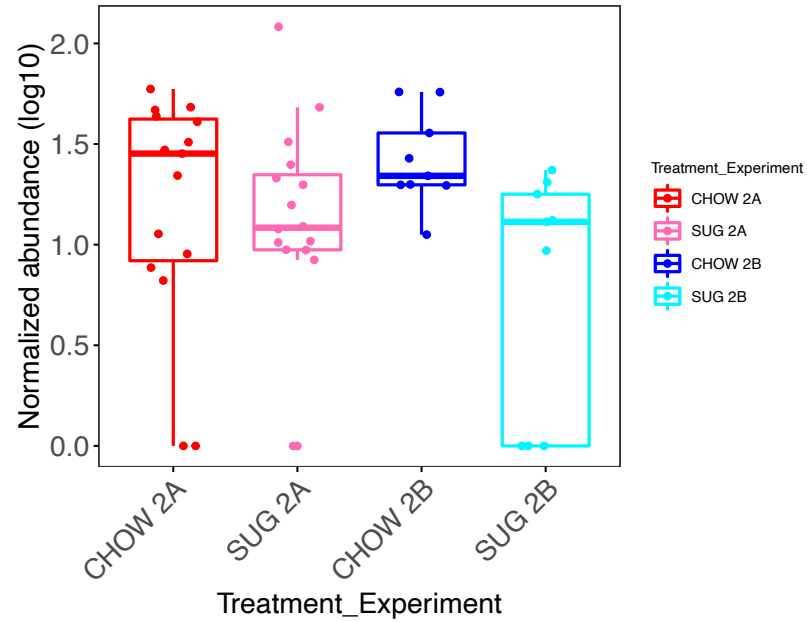
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Prevotellaceae.D.5__Prevotellaceae UCG-001.....
Experiment 2A FDR = 0.78255
Experiment 2B FDR = 0.01563



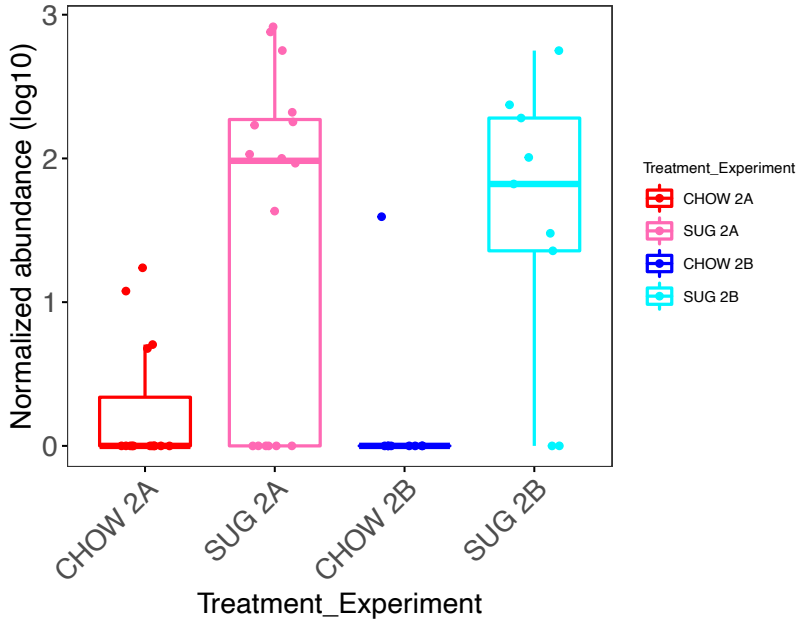
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Faecalibaculum.D.6__uncultured bacterium
 Experiment 2A FDR = 0.26876
 Experiment 2B FDR = 0.00494



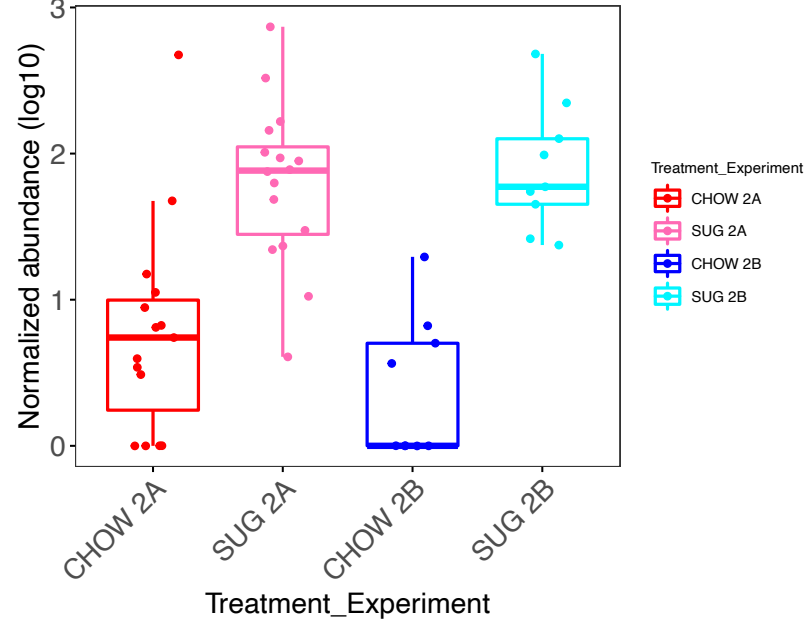
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Ruminococcaceae UCG-005__
 Experiment 2A FDR = 0.69071
 Experiment 2B FDR = 0.09847



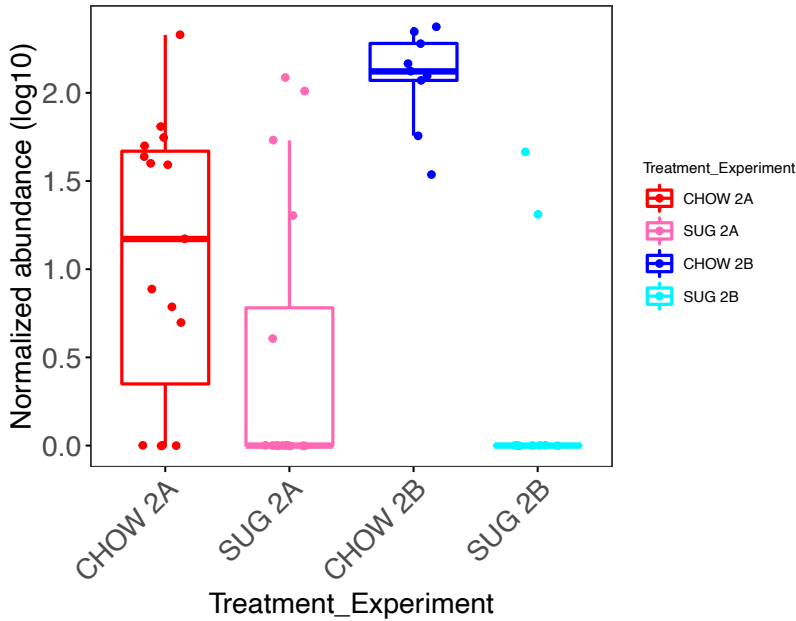
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Dubosiella.D.6__uncultured bacterium
 Experiment 2A FDR = 0.06238
 Experiment 2B FDR = 0.06641



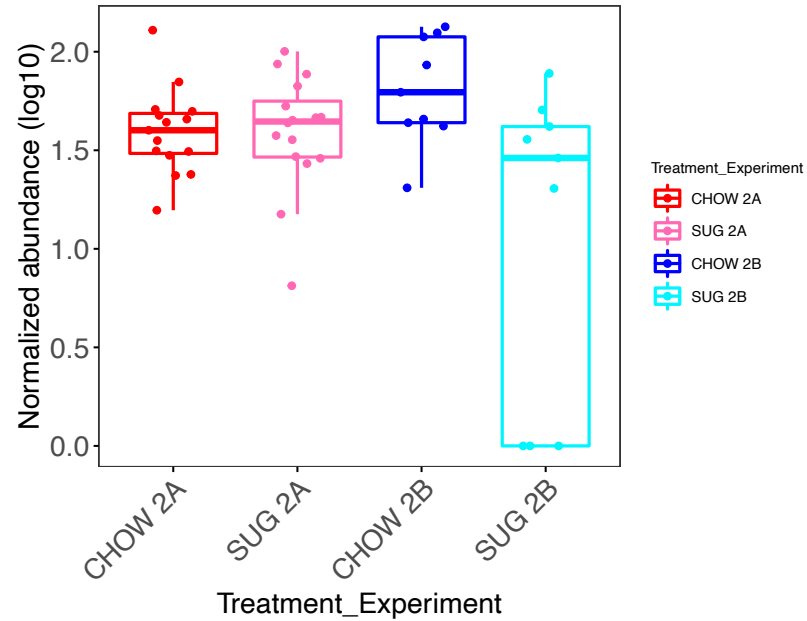
Actinobacteria.D.2__Coriobacteria.D.3__Coriobacteriales.D.4__Atopobiaceae.D.5__Coriobacteriaceae UCG-002.D.6__uncultured bacterium
 Experiment 2A FDR = 0.0111
 Experiment 2B FDR = 0.01165



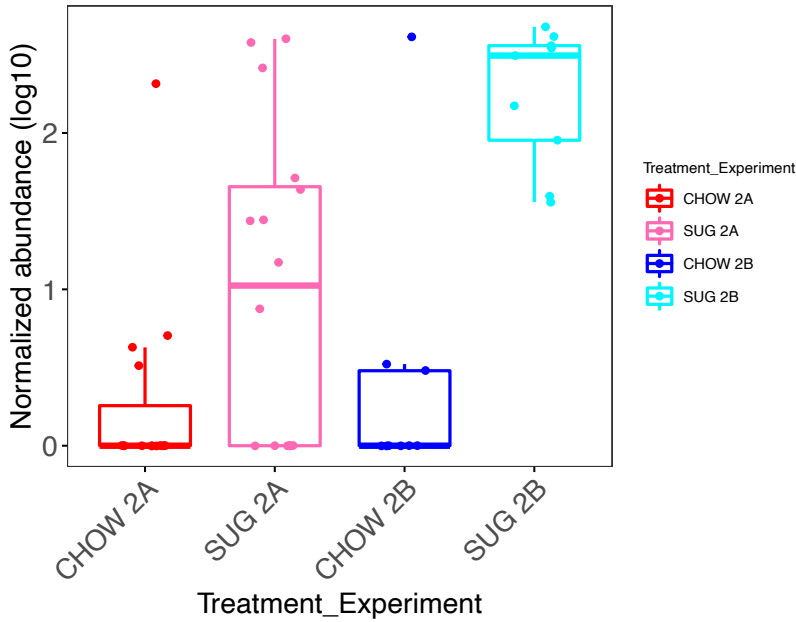
Proteobacteria.D.2__Gammaproteobacteria.D.3__Betaproteobacteriales__
 Experiment 2A FDR = 0.25084
 Experiment 2B FDR = 0.01165



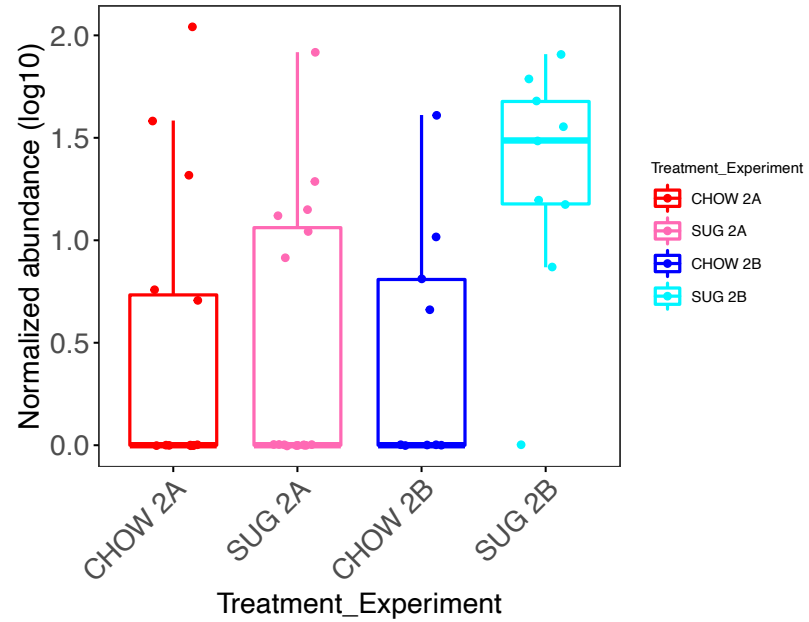
Bacteroidetes.D.2__Bacteroidia.D.3__Bacteroidales.D.4__Muribaculaceae.D.5__Muribaculum.D.6__uncultured bacterium
 Experiment 2A FDR = 0.86891
 Experiment 2B FDR = 0.09847



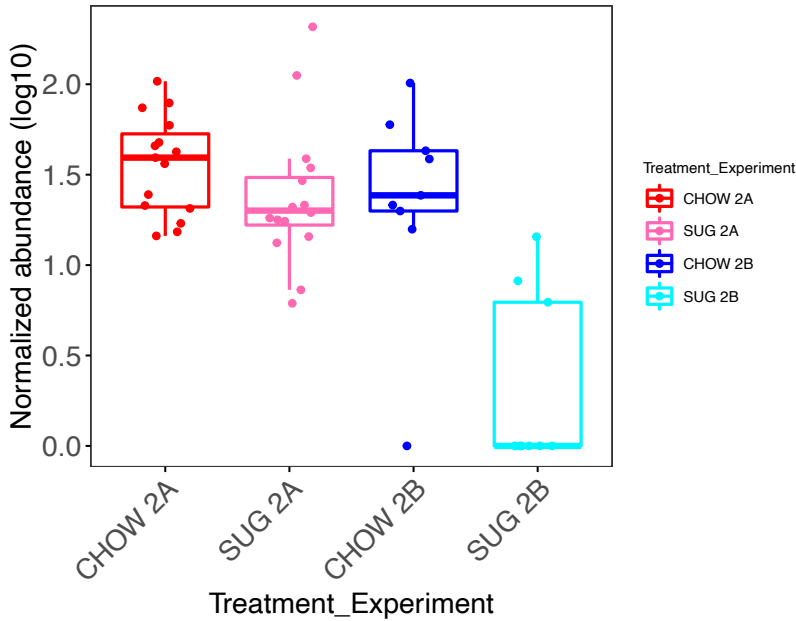
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Clostridiaceae.1.D.5__Clostridium_sensu_stricto.1__
Experiment 2A FDR = 0.2084
Experiment 2B FDR = 0.03269



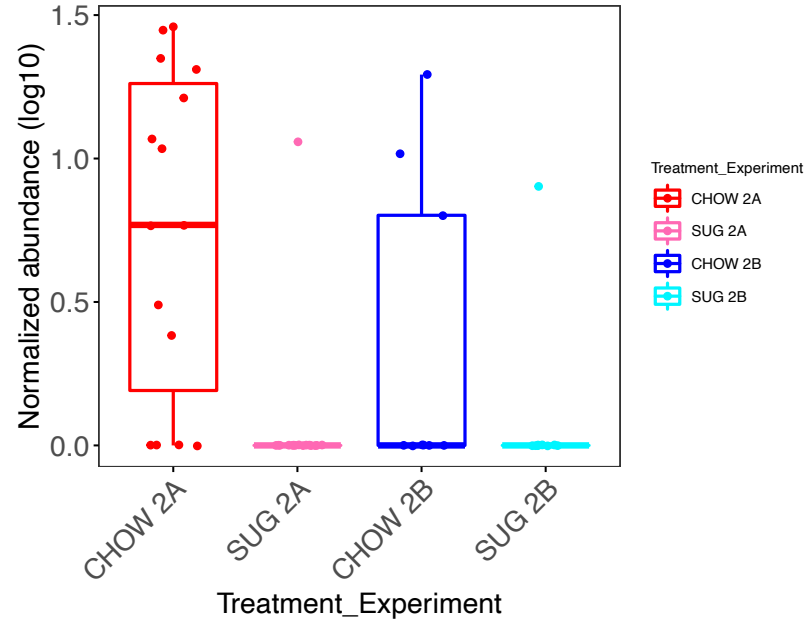
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae.D.5__Erysipelotoclostridium__
Experiment 2A FDR = 0.90784
Experiment 2B FDR = 0.09847



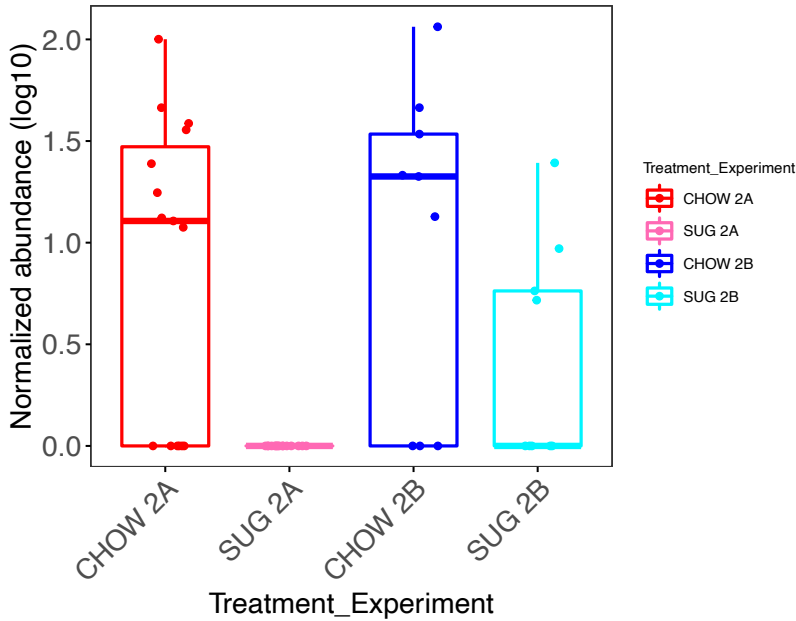
Proteobacteria.D.2__Gammaproteobacteria.D.3__Betaproteobacteriales.D.4__Burkholderiaceae.D.5__Parasutterella.D.6__Burkholderiales.b
Experiment 2A FDR = 0.26876
Experiment 2B FDR = 0.0298



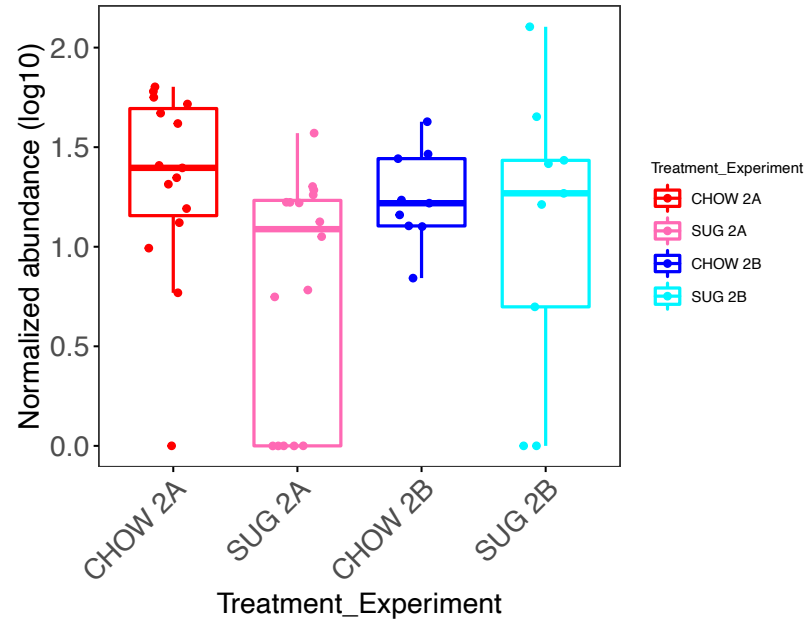
Firmicutes.D.2__Bacilli.D.3__Lactobacillales.D.4__Streptococcaceae.D.5__Lactococcus__
Experiment 2A FDR = 0.0111
Experiment 2B FDR = 0.48564



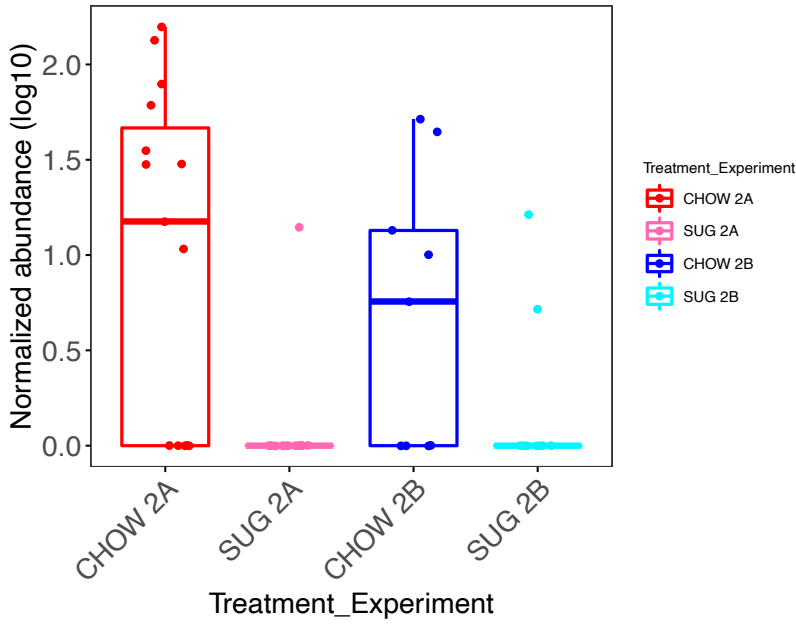
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__[Ruminococcus]_gnavus_group__
Experiment 2A FDR = 0.0111
Experiment 2B FDR = 0.30253



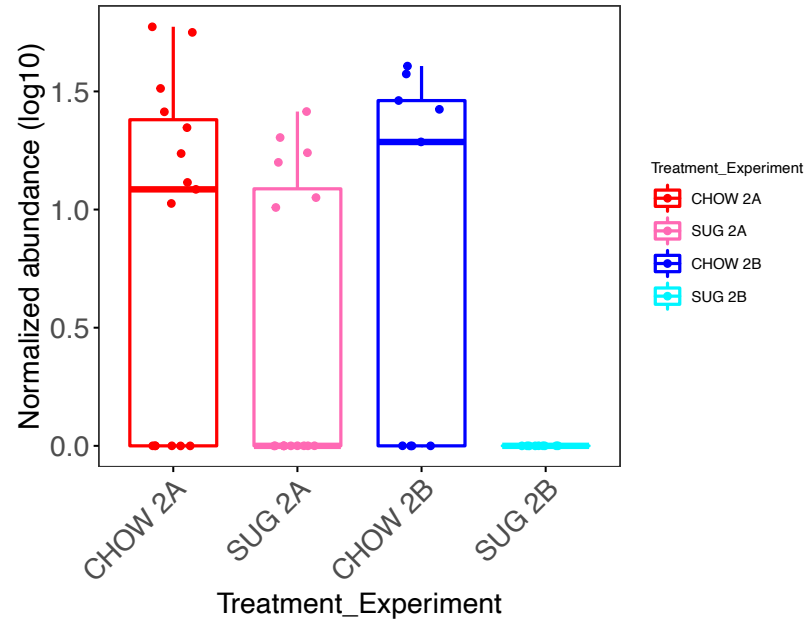
Firmicutes.D.2__Erysipelotrichia.D.3__Erysipelotrichales.D.4__Erysipelotrichaceae__
Experiment 2A FDR = 0.06238
Experiment 2B FDR = 1



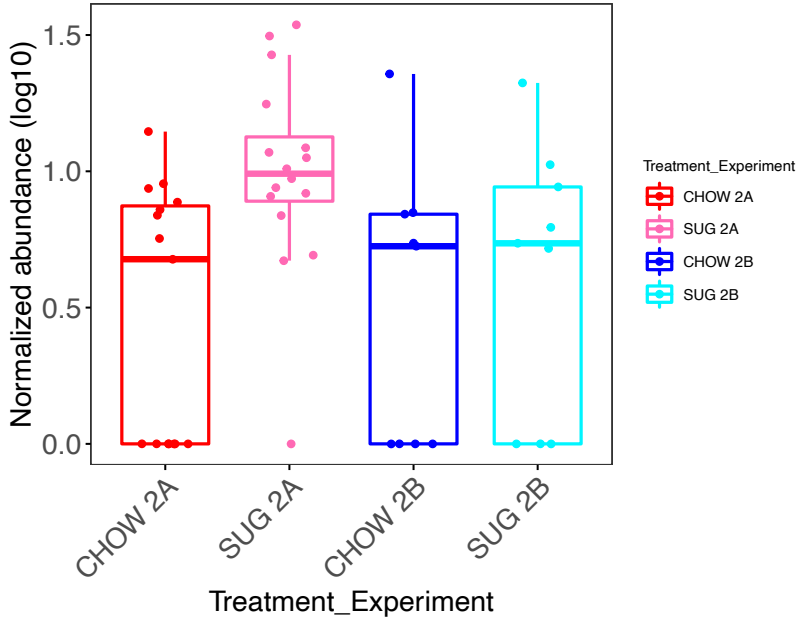
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Lachnospiraceae.D.5__Lachnospiraceae_FCS020 group.D.6__mouse gut metagenome
Experiment 2A FDR = 0.01641
Experiment 2B FDR = 0.32619



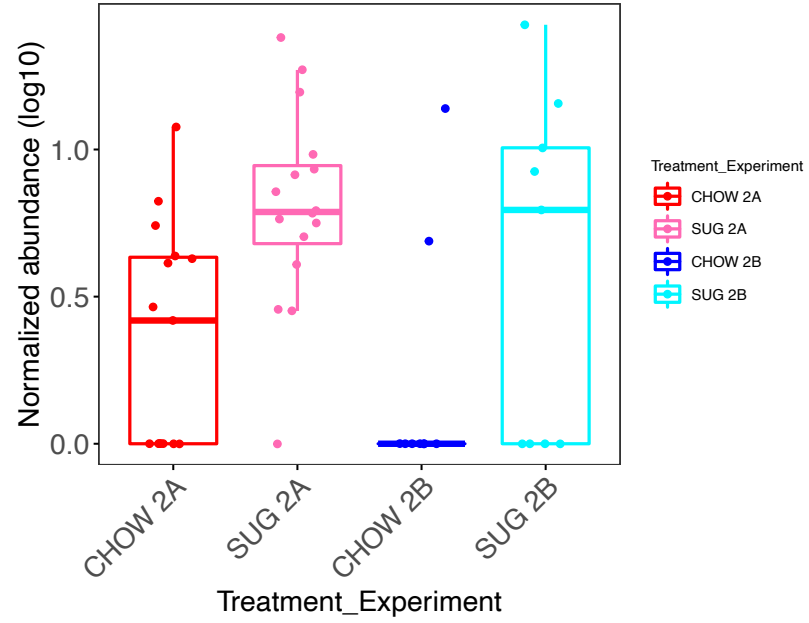
Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Intestinimonas___
Experiment 2A FDR = 0.38048
Experiment 2B FDR = 0.09947



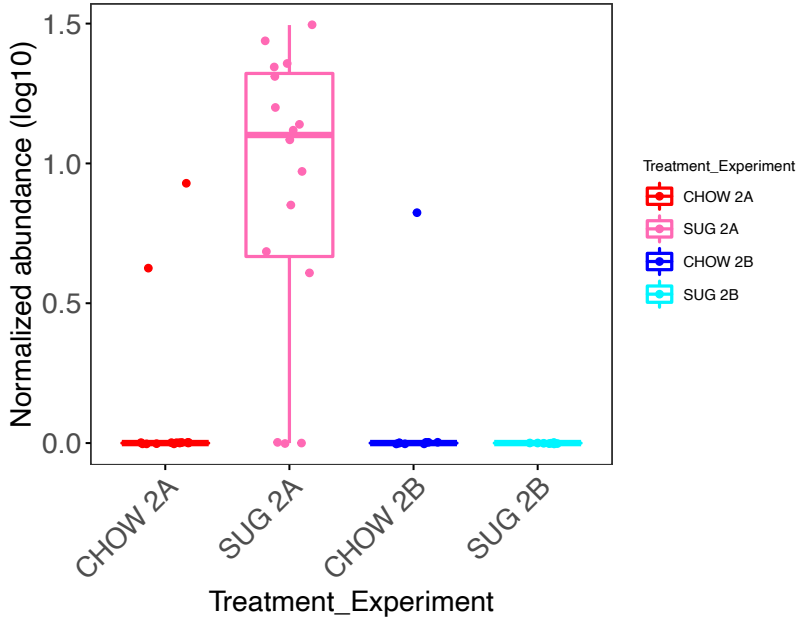
Bacteroidetes.D.2__Bacteroidia.D.3__Flavobacteriales.D.4__Flavobacteriaceae.D.5__uncultured.D.6__gut metagenome
Experiment 2A FDR = 0.03609
Experiment 2B FDR = 0.7882



Proteobacteria.D.2__Alphaproteobacteria_____
Experiment 2A FDR = 0.03761
Experiment 2B FDR = 0.32619



Firmicutes.D.2__Clostridia.D.3__Clostridiales.D.4__Ruminococcaceae.D.5__Ruminiclostridium 5.D.6__gut metagenome
Experiment 2A FDR = 0.0111
Experiment 2B FDR = 0.55739



Supplemental Figure 4 Abundance of the gut microbiota in the SUG vs CHOW groups when analyzed either before (2A) or after (2B) healthy dietary intervention. CHOW: chow-fed; SUG: sugar; FDR: false discovery rate