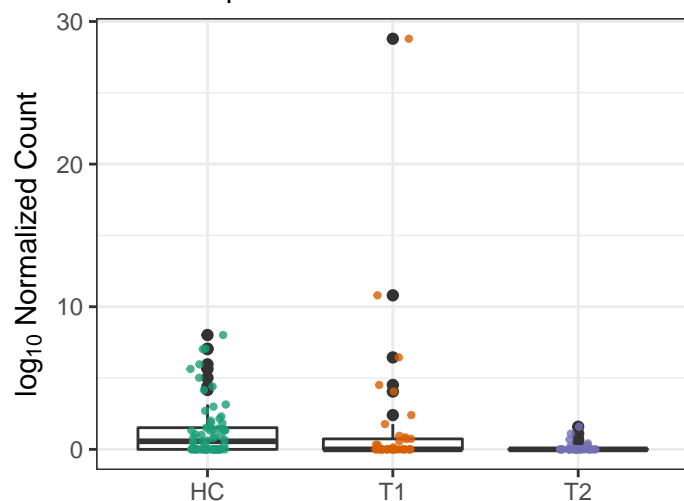


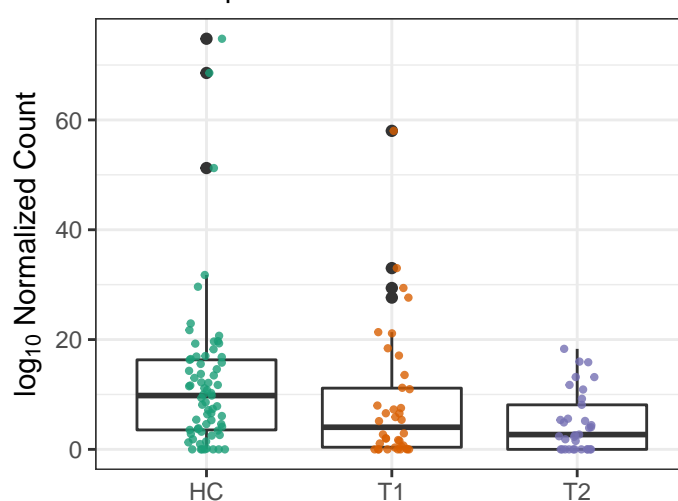
PWY490-3: nitrate reduction VI (assimi

HC vs. T1  $p = 0.82$   
HC vs. T2  $p = 0.0027$   
T1 vs. T2  $p = 0.21$



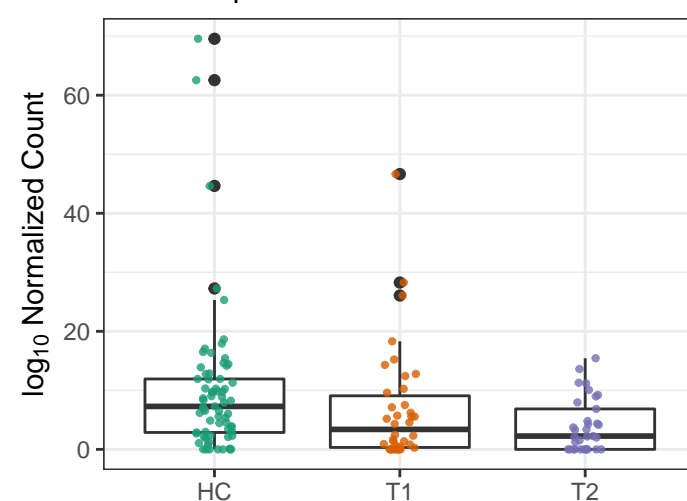
FAO-PWY: fatty acid & beta;-oxidation I

HC vs. T1  $p = 0.37$   
HC vs. T2  $p = 0.04$   
T1 vs. T2  $p = 0.14$



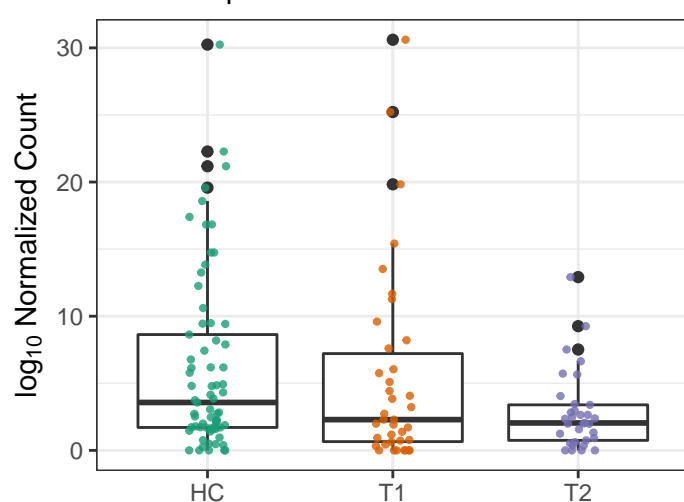
PWY-5136: fatty acid & beta;-oxidation

HC vs. T1  $p = 0.3$   
HC vs. T2  $p = 0.04$   
T1 vs. T2  $p = 0.16$



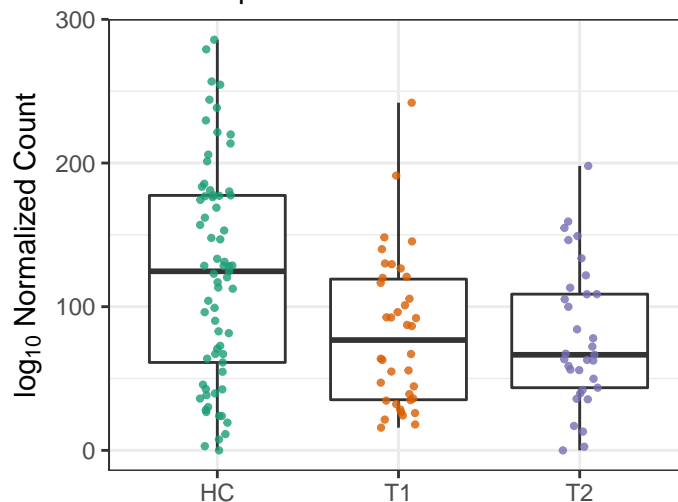
PWY-7115: C4 photosynthetic carbon a

HC vs. T1  $p = 0.79$   
HC vs. T2  $p = 0.04$   
T1 vs. T2  $p = 0.14$



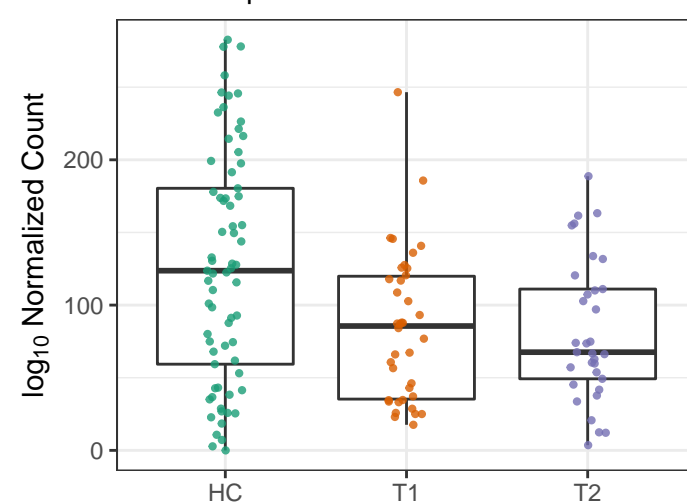
PWY0-781: aspartate superpathway

HC vs. T1  $p = 0.0072$   
HC vs. T2  $p = 0.04$   
T1 vs. T2  $p = 0.74$



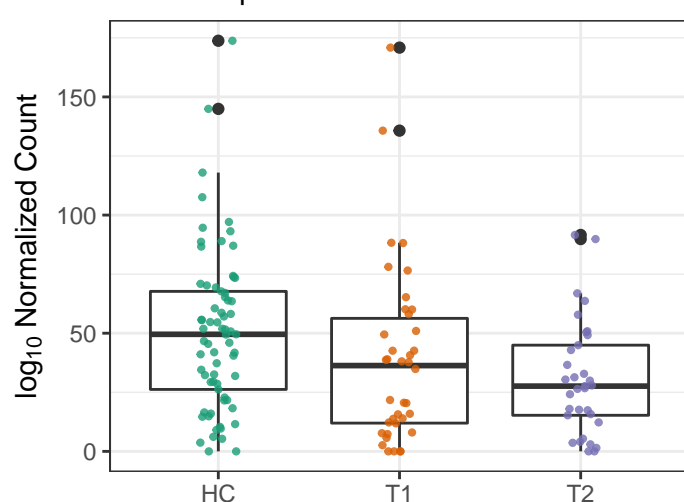
P4-PWY: superpathway of L-lysine, L-

HC vs. T1  $p = 0.0075$   
HC vs. T2  $p = 0.044$   
T1 vs. T2  $p = 0.75$



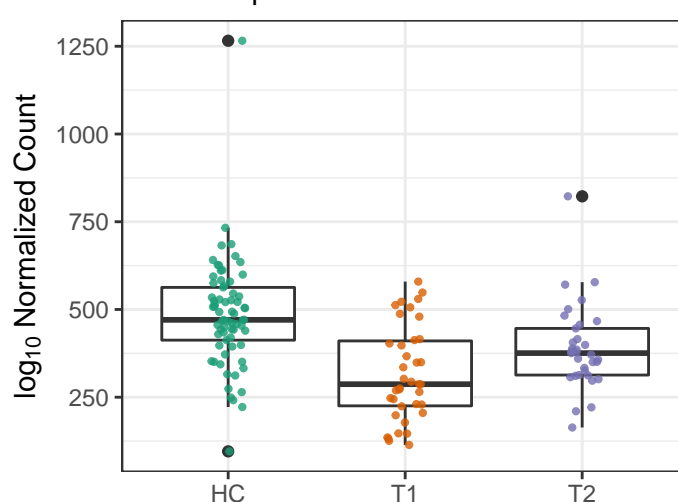
ARG+POLYAMINE-SYN: superpathwa

HC vs. T1  $p = 0.25$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.32$



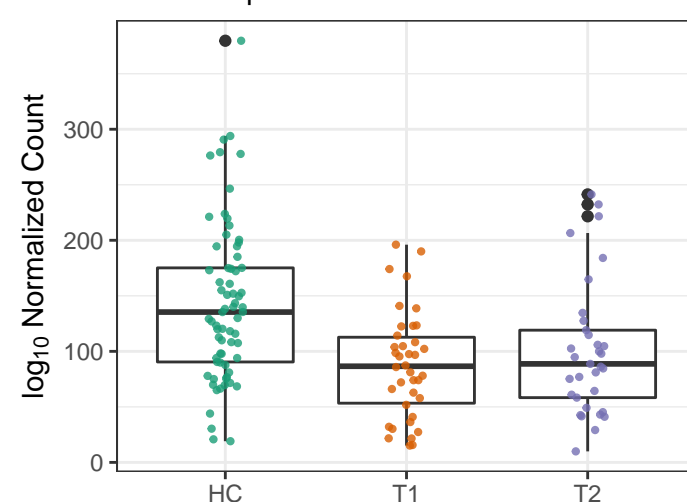
DTDPRHAMSYN-PWY: dTDP-L-rha

HC vs. T1  $p = 1.3e-05$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.13$



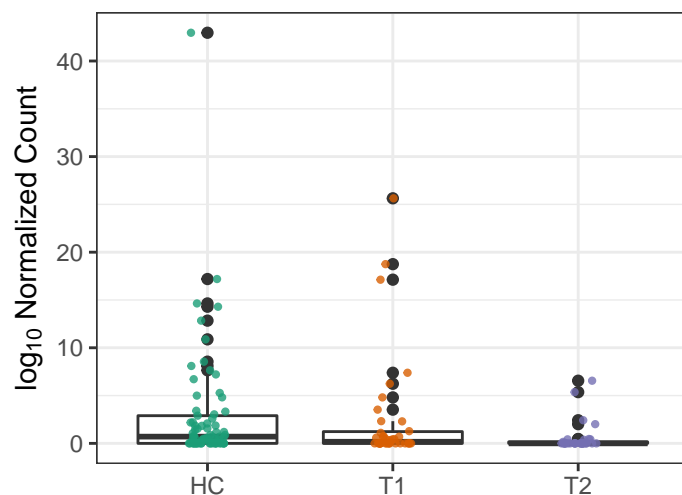
HOMOSER-METSYN-PWY: L-methio

HC vs. T1  $p = 0.00016$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.34$



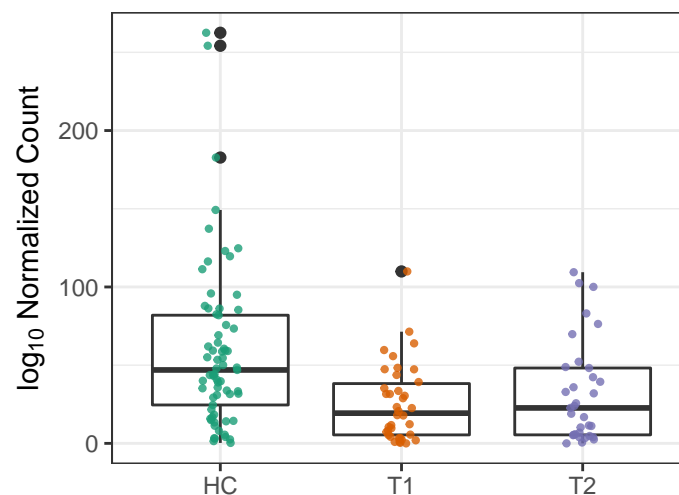
### KETOGLUCONMET-PWY: ketogluconate

HC vs. T1  $p = 0.82$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.18$



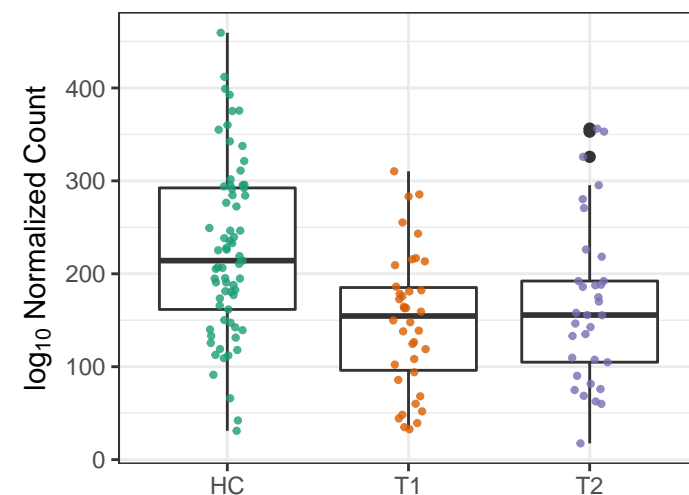
### LACTOSECAT-PWY: lactose and galactose

HC vs. T1  $p = 0.00026$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.35$



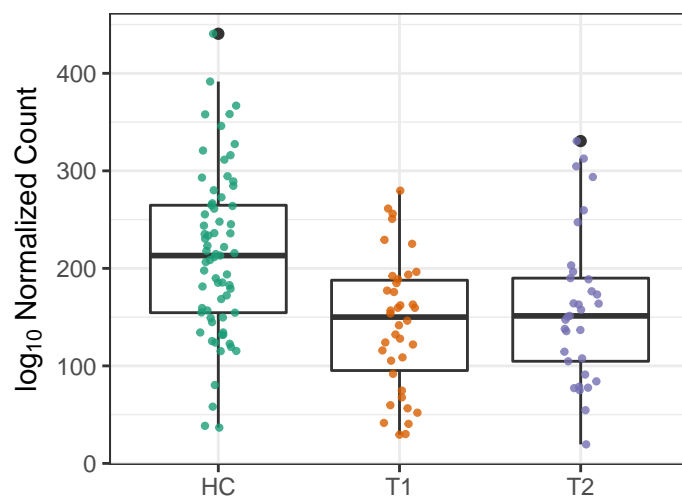
### MET-SAM-PWY: superpathway of S-adenosylmethionine

HC vs. T1  $p = 0.00024$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.43$



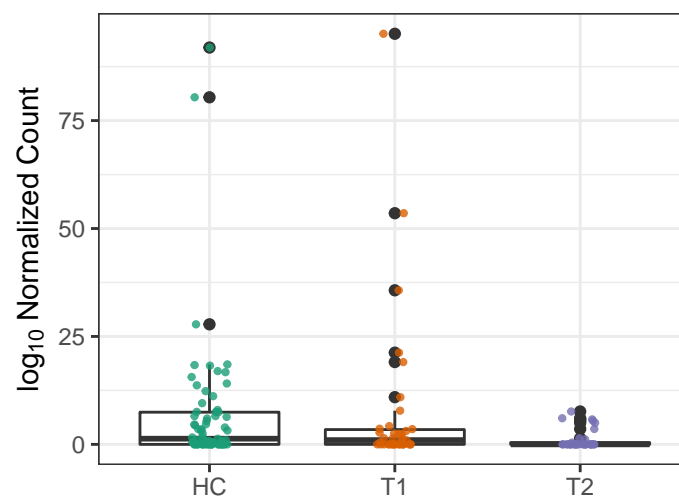
### METSYN-PWY: L-homoserine and L-methionine

HC vs. T1  $p = 2e-04$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.39$



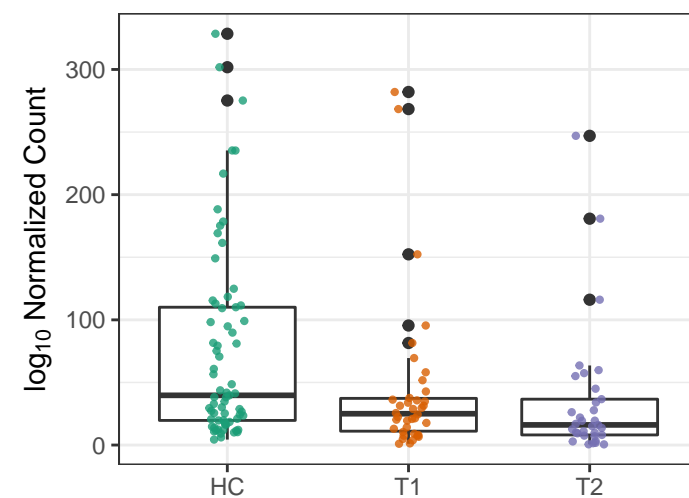
### P105-PWY: TCA cycle IV (2-oxoglutarate) and TCA cycle V (2-oxoglutarate)

HC vs. T1  $p = 0.95$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.16$



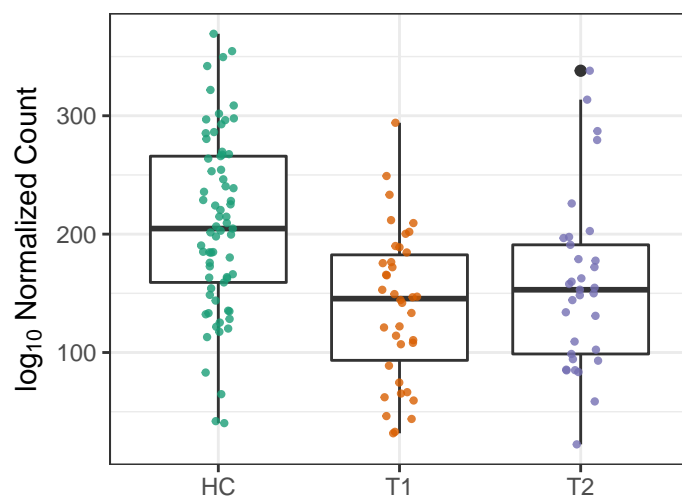
### PENTOSE-P-PWY: pentose phosphate pathway

HC vs. T1  $p = 0.081$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.45$



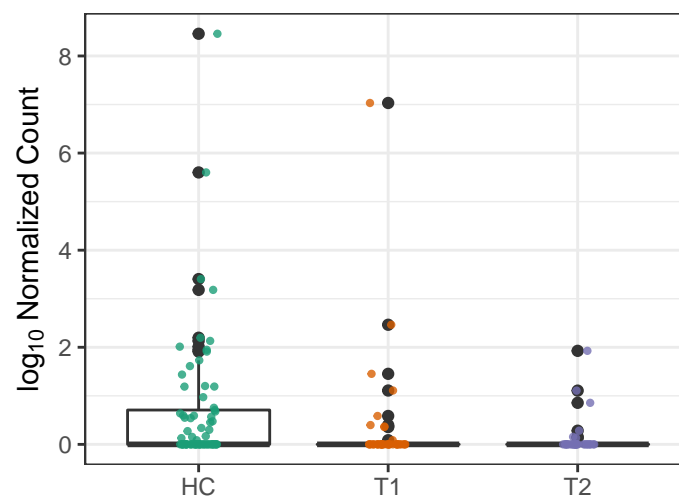
### PWY-5347: superpathway of L-methionine

HC vs. T1  $p = 1e-04$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.35$



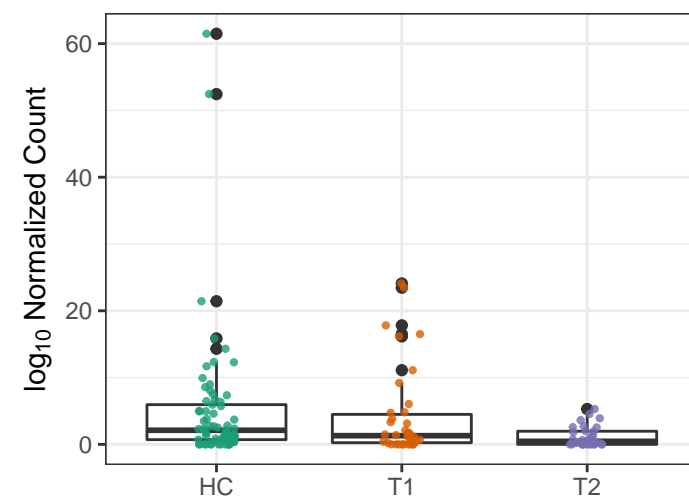
### PWY-5692: allantoin degradation to glycine

HC vs. T1  $p = 0.38$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.35$



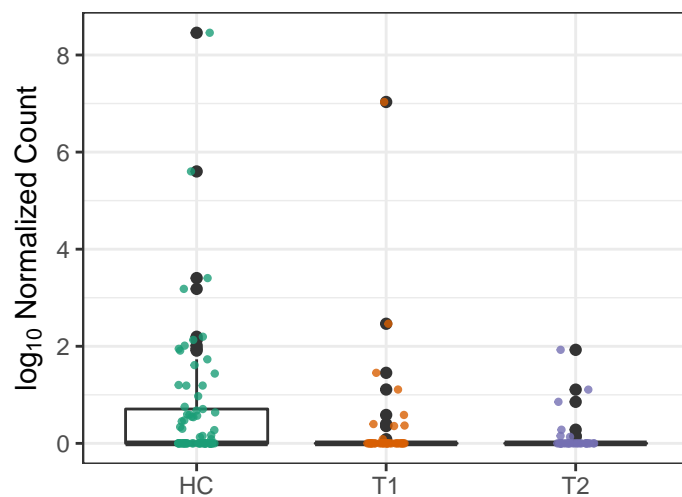
### REDCITCYC: TCA cycle VIII (helicobacter)

HC vs. T1  $p = 0.78$   
HC vs. T2  $p = 0.05$   
T1 vs. T2  $p = 0.13$



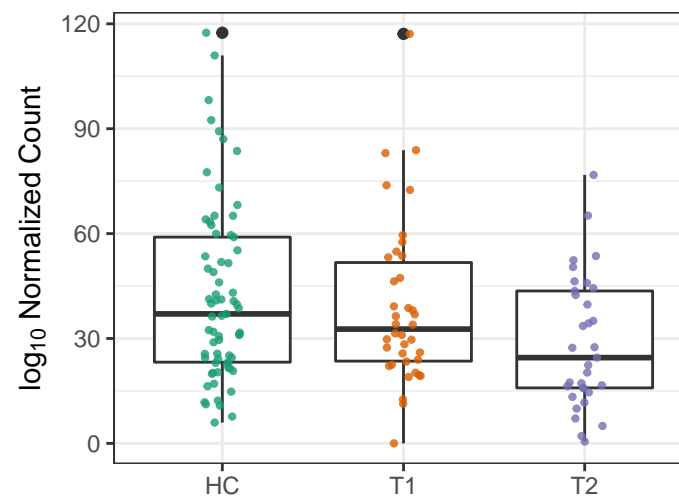
URDEGR–PWY: superpathway of allantoin

HC vs. T1  $p = 0.38$   
 HC vs. T2  $p = 0.05$   
 T1 vs. T2  $p = 0.35$



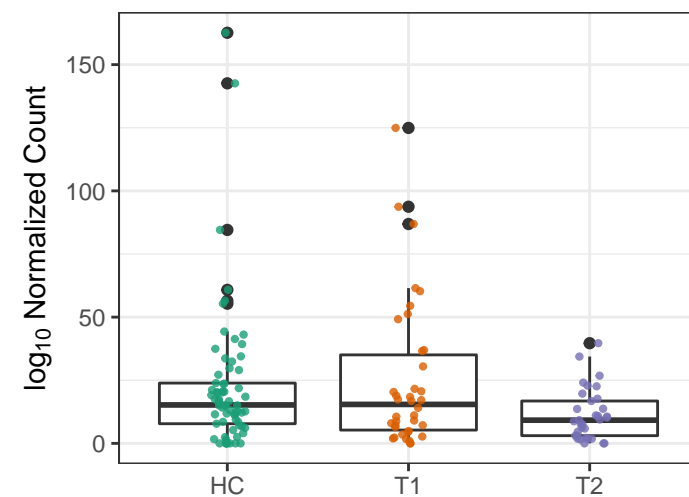
TCA: TCA cycle I (prokaryotic)

HC vs. T1  $p = 0.72$   
 HC vs. T2  $p = 0.05$   
 T1 vs. T2  $p = 0.13$



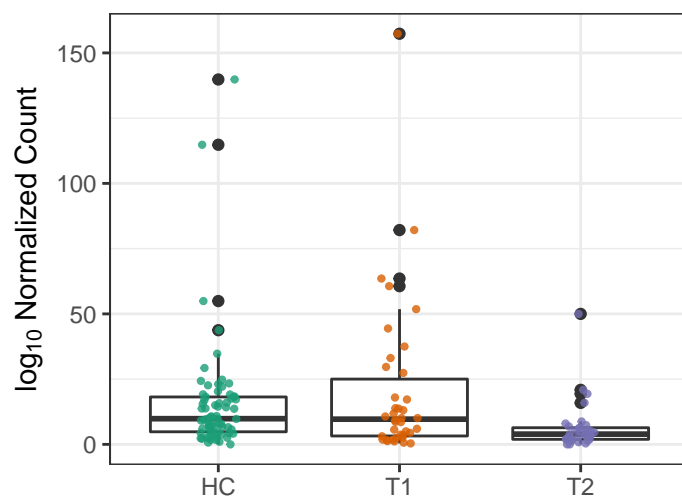
THISYN–PWY: superpathway of thiamin

HC vs. T1  $p = 0.83$   
 HC vs. T2  $p = 0.061$   
 T1 vs. T2  $p = 0.13$



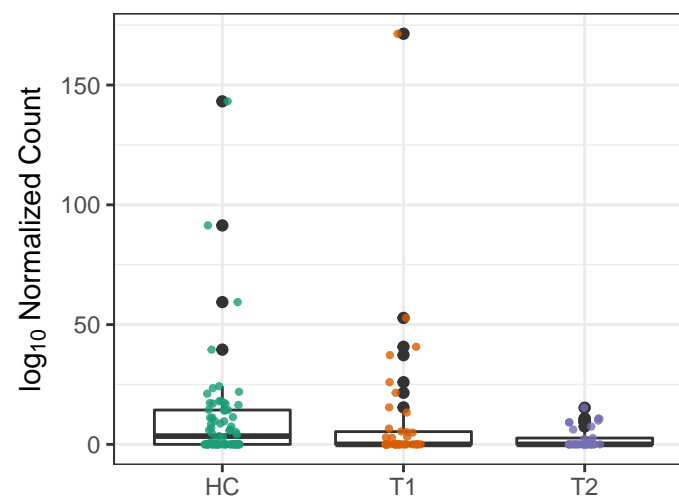
PWY0–1061: superpathway of L-alani

HC vs. T1  $p = 0.63$   
 HC vs. T2  $p = 0.063$   
 T1 vs. T2  $p = 0.13$



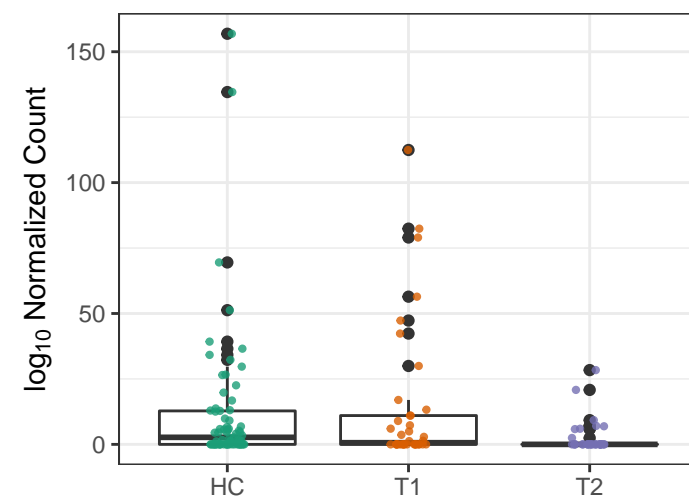
ENTBACSYN–PWY: enterobactin bios

HC vs. T1  $p = 0.97$   
 HC vs. T2  $p = 0.065$   
 T1 vs. T2  $p = 0.25$



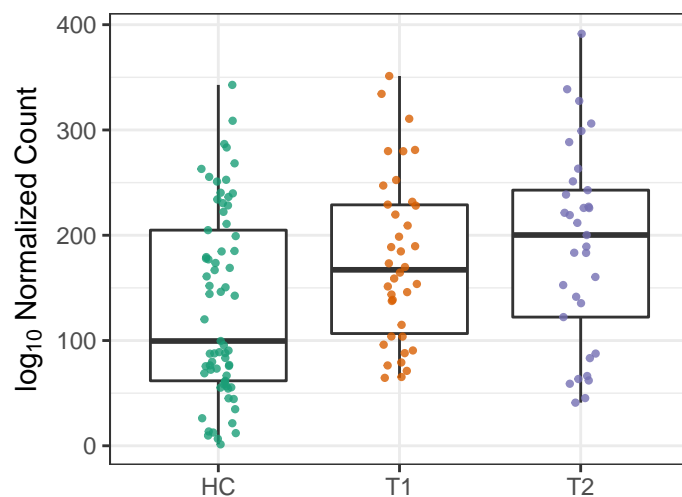
PWY–6895: superpathway of thiamin c

HC vs. T1  $p = 0.87$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.13$



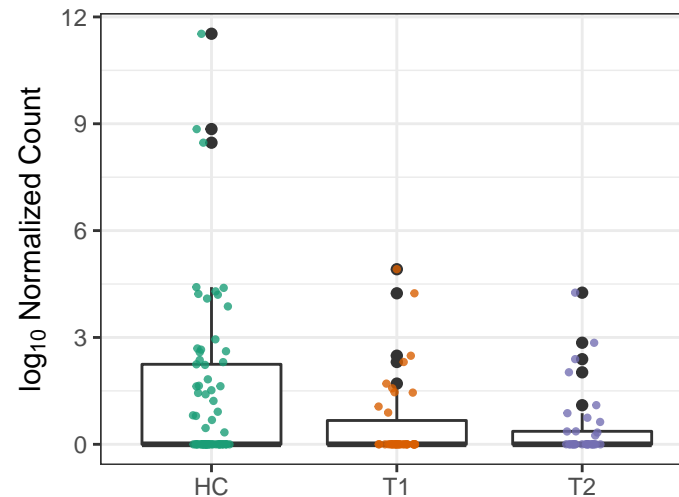
PWY–6897: thiamin salvage II

HC vs. T1  $p = 0.041$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.69$



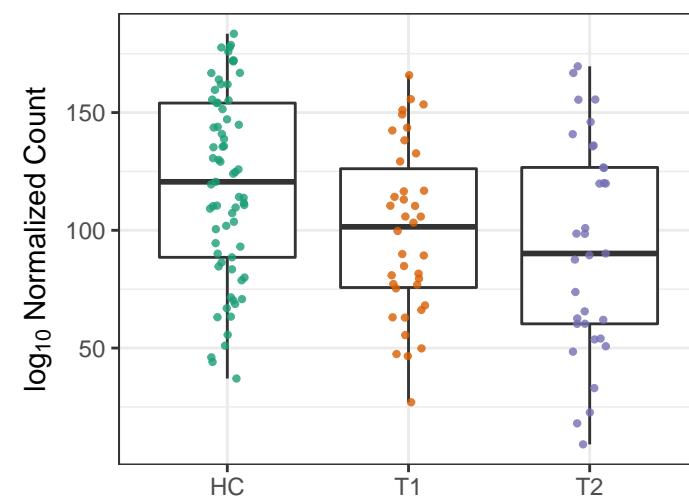
RUMP–PWY: formaldehyde oxidation I

HC vs. T1  $p = 0.053$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.73$



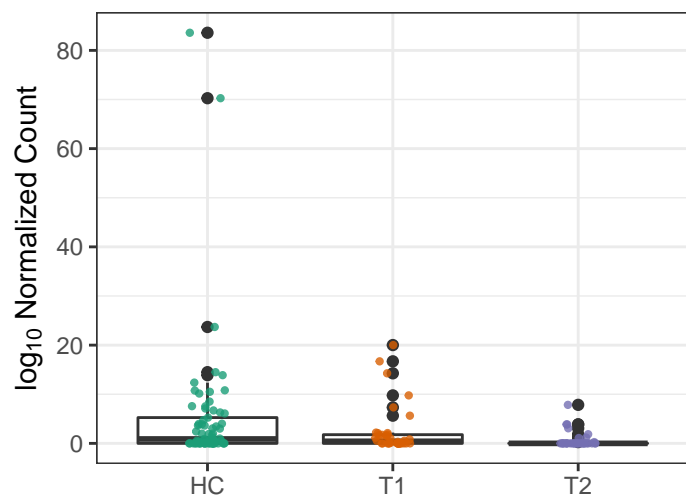
PRPP–PWY: superpathway of histidine

HC vs. T1  $p = 0.038$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.27$



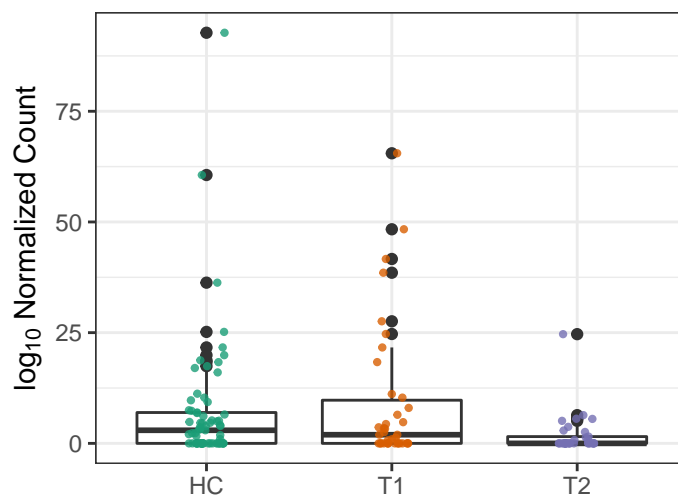
PWY-561: superpathway of glyoxylate (

HC vs. T1  $p = 0.25$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.14$



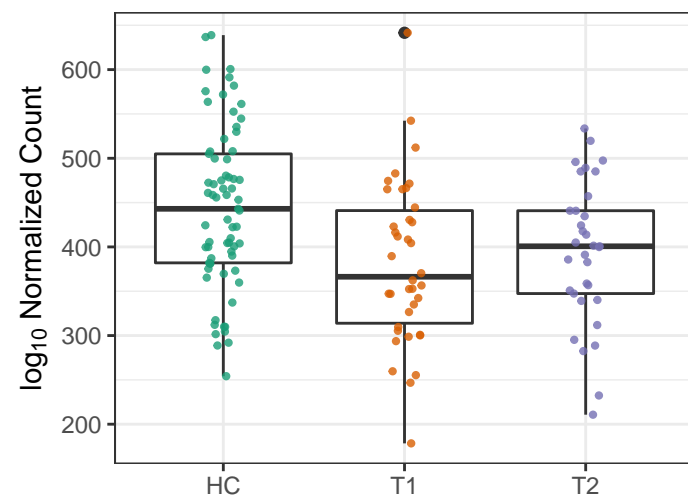
PWY-5838: superpathway of menaquin

HC vs. T1  $p = 0.75$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.13$



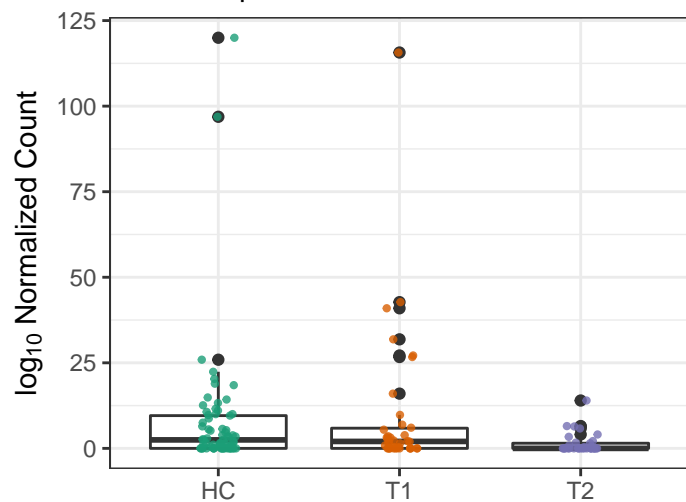
TRNA-CHARGING-PWY: tRNA charg

HC vs. T1  $p = 0.0072$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.66$



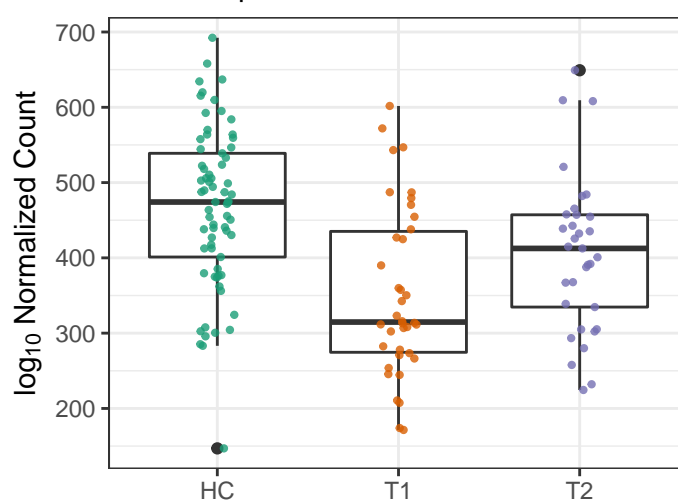
GLYCOLYSIS-TCA-GLYOX-BYPASS:

HC vs. T1  $p = 0.85$   
 HC vs. T2  $p = 0.068$   
 T1 vs. T2  $p = 0.14$



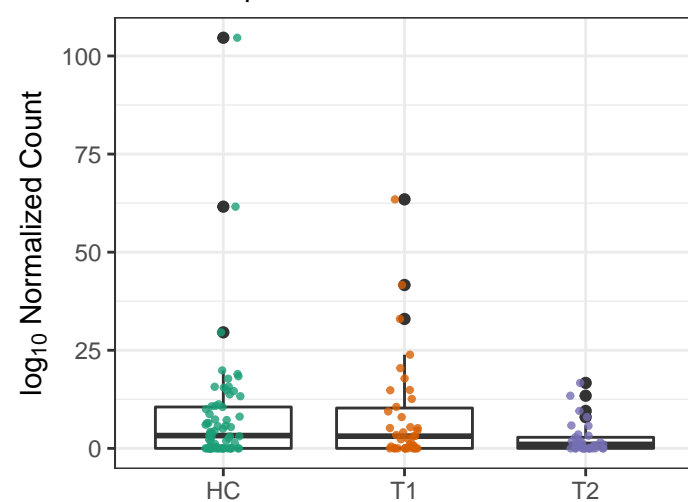
CALVIN-PWY: Calvin-Benson-Bassh:

HC vs. T1  $p = 1e-04$   
 HC vs. T2  $p = 0.07$   
 T1 vs. T2  $p = 0.14$



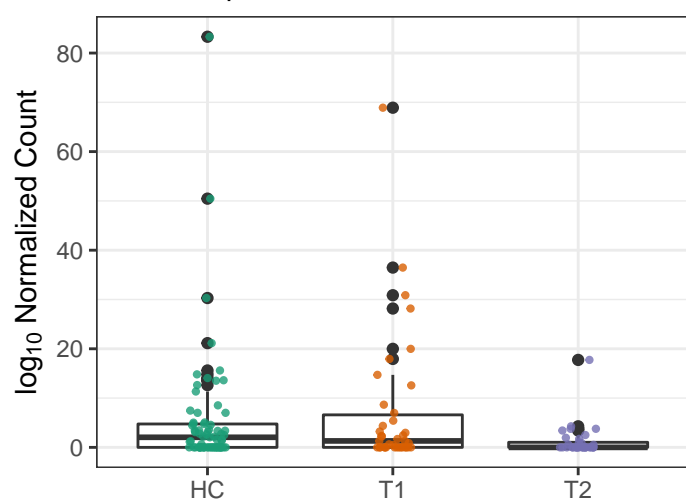
FUC-RHAMCAT-PWY: superpathway

HC vs. T1  $p = 0.94$   
 HC vs. T2  $p = 0.072$   
 T1 vs. T2  $p = 0.13$



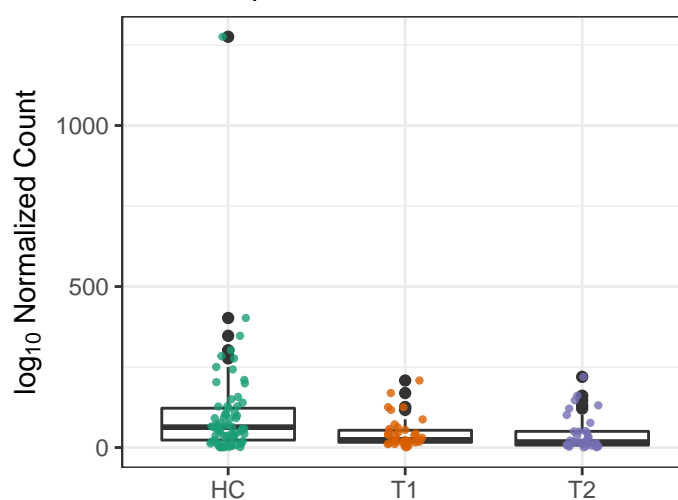
PWY-5861: superpathway of demethylr

HC vs. T1  $p = 0.77$   
 HC vs. T2  $p = 0.074$   
 T1 vs. T2  $p = 0.13$



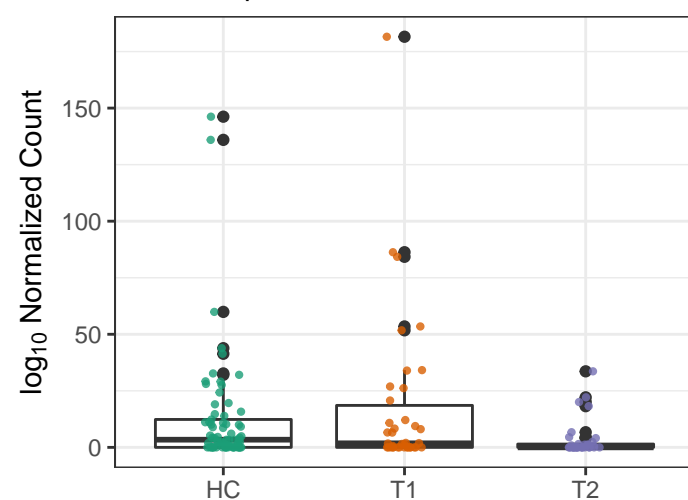
PWY-6147: 6-hydroxymethyl-dihydr

HC vs. T1  $p = 0.031$   
 HC vs. T2  $p = 0.074$   
 T1 vs. T2  $p = 0.88$



PWY-6630: superpathway of L-tyrosin

HC vs. T1  $p = 0.7$   
 HC vs. T2  $p = 0.074$   
 T1 vs. T2  $p = 0.14$

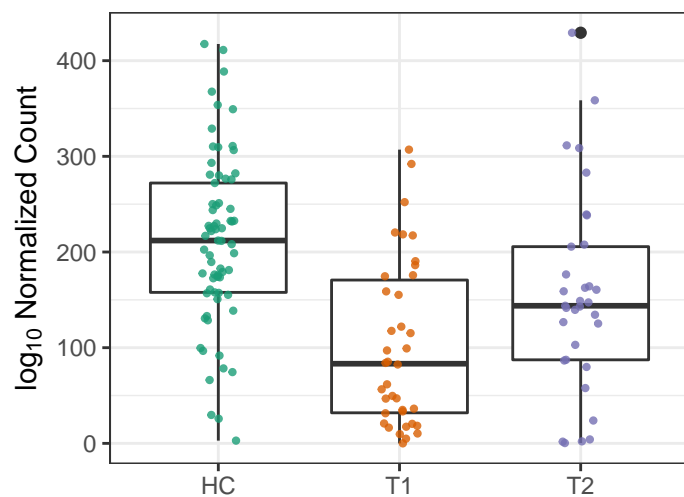


### COBALSYN-PWY: adenosylcobalamin

HC vs. T1  $p = 7.6e-06$

HC vs. T2  $p = 0.075$

T1 vs. T2  $p = 0.13$

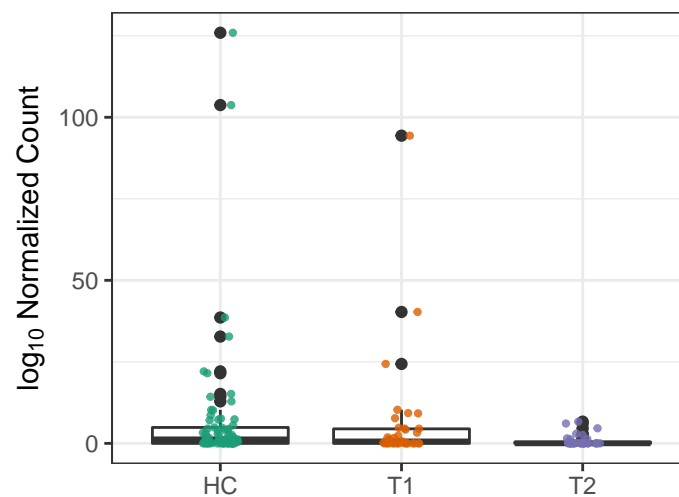


### GLUCOSE1PMETAB-PWY: glucose a

HC vs. T1  $p = 0.83$

HC vs. T2  $p = 0.075$

T1 vs. T2  $p = 0.19$

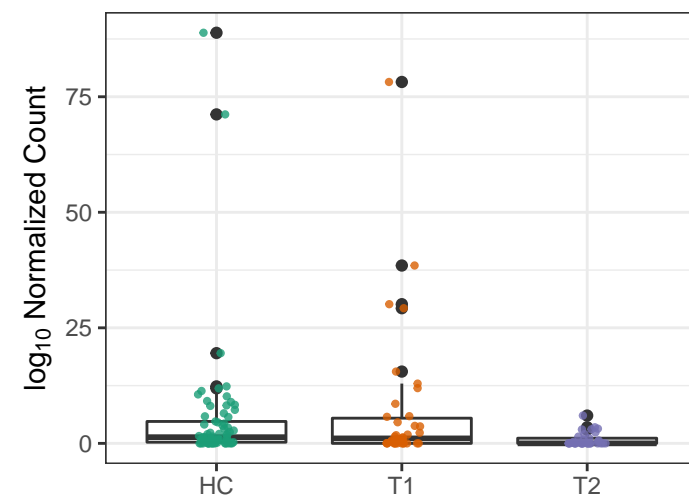


### GLYOXYLATE-BYPASS: glyoxylate cycl

HC vs. T1  $p = 0.79$

HC vs. T2  $p = 0.078$

T1 vs. T2  $p = 0.13$

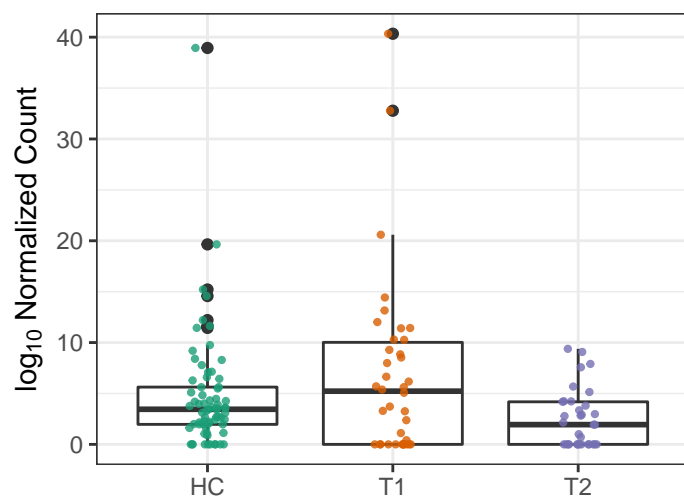


### PWY-5464: superpathway of cytosolic g

HC vs. T1  $p = 0.39$

HC vs. T2  $p = 0.078$

T1 vs. T2  $p = 0.13$

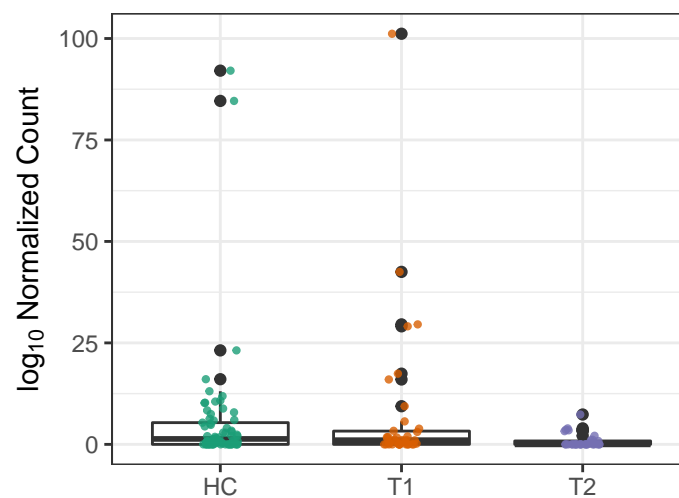


### TCA-GLYOX-BYPASS: superpathway

HC vs. T1  $p = 0.83$

HC vs. T2  $p = 0.078$

T1 vs. T2  $p = 0.15$

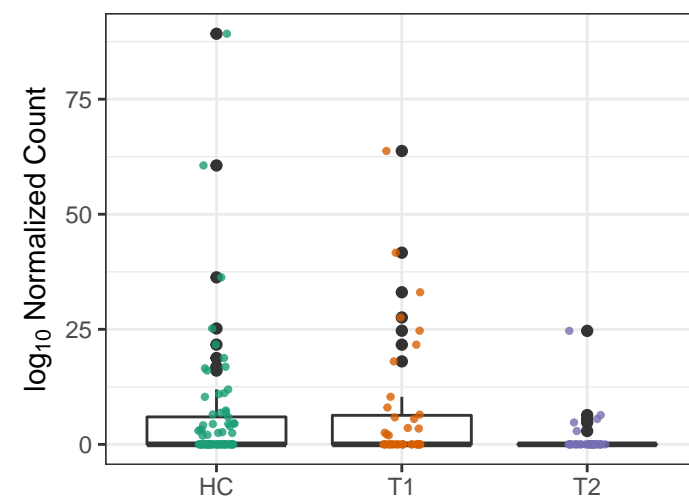


### PWY-5845: superpathway of menaquin

HC vs. T1  $p = 0.83$

HC vs. T2  $p = 0.083$

T1 vs. T2  $p = 0.13$

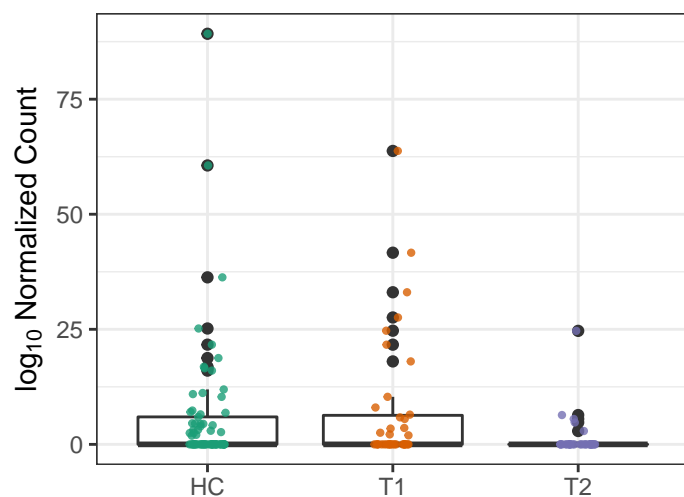


### PWY-5850: superpathway of menaquin

HC vs. T1  $p = 0.83$

HC vs. T2  $p = 0.083$

T1 vs. T2  $p = 0.13$

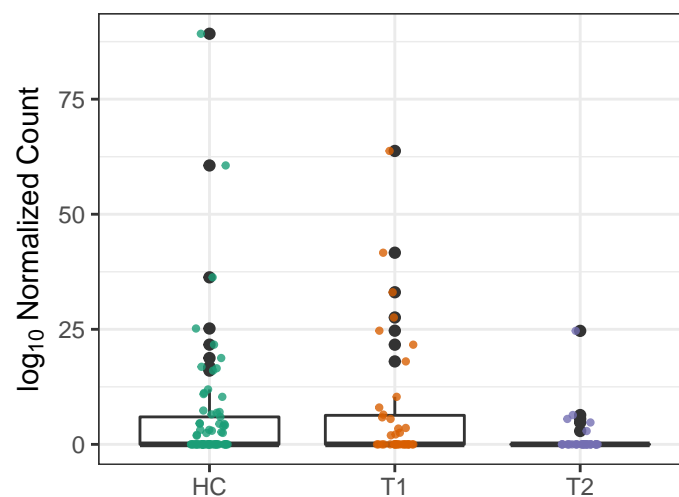


### PWY-5896: superpathway of menaquin

HC vs. T1  $p = 0.83$

HC vs. T2  $p = 0.083$

T1 vs. T2  $p = 0.13$

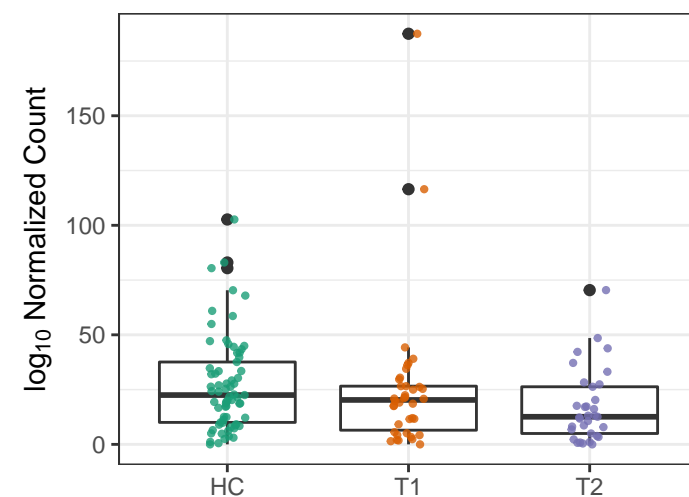


### PWY-5189: tetrapyrrole biosynthesis II

HC vs. T1  $p = 0.87$

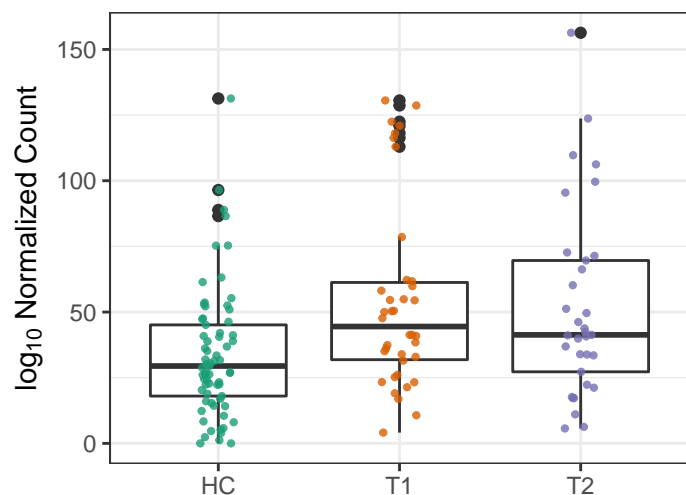
HC vs. T2  $p = 0.086$

T1 vs. T2  $p = 0.47$



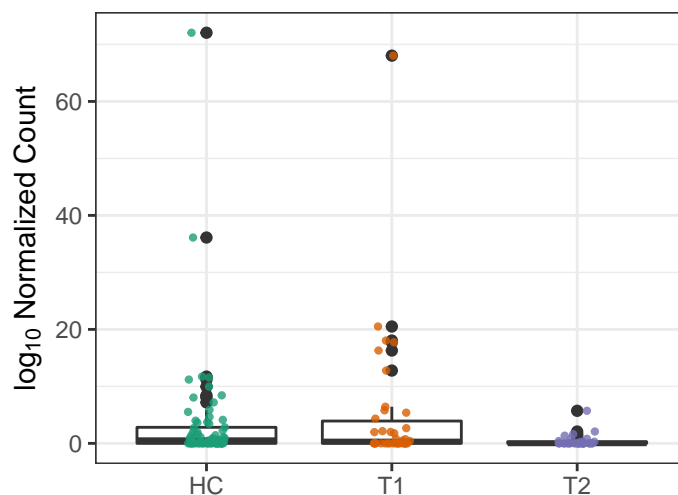
PWY66–399: gluconeogenesis III

HC vs. T1  $p = 0.012$   
 HC vs. T2  $p = 0.086$   
 T1 vs. T2  $p = 0.82$



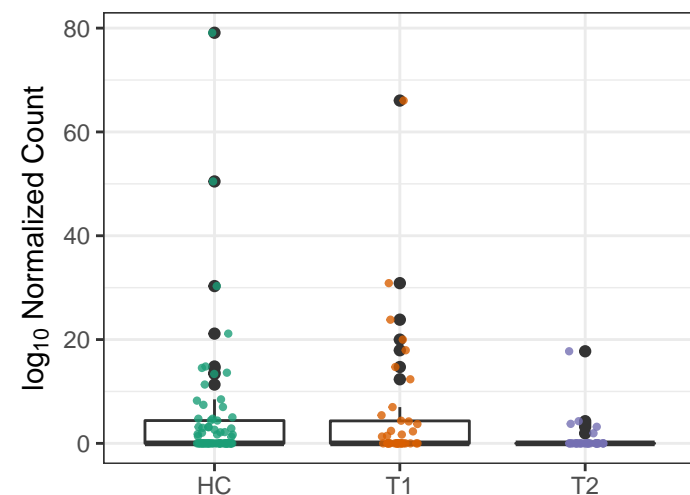
PWY–4041:  $\gamma$ -glutamyl cycle

HC vs. T1  $p = 0.75$   
 HC vs. T2  $p = 0.087$   
 T1 vs. T2  $p = 0.14$



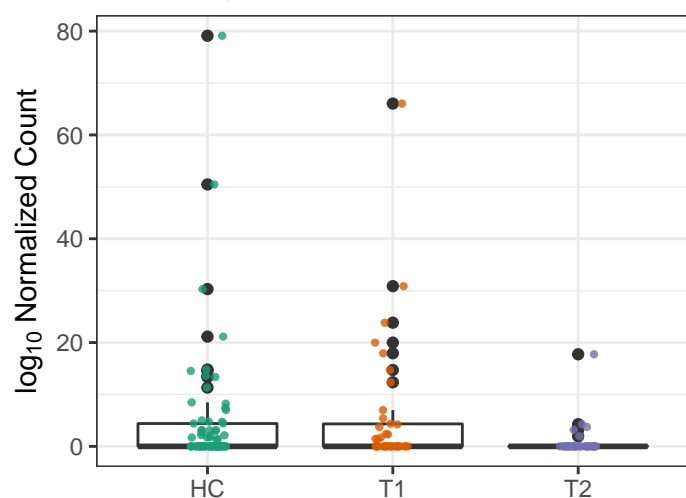
PWY–5860: superpathway of demethylr

HC vs. T1  $p = 0.85$   
 HC vs. T2  $p = 0.087$   
 T1 vs. T2  $p = 0.14$



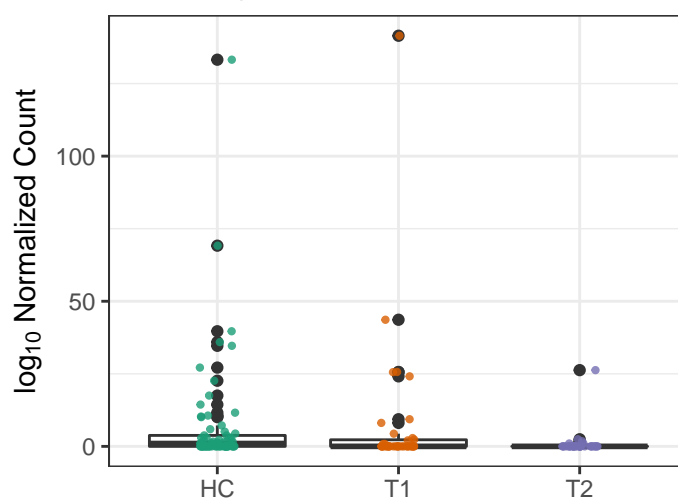
PWY–5862: superpathway of demethylr

HC vs. T1  $p = 0.85$   
 HC vs. T2  $p = 0.087$   
 T1 vs. T2  $p = 0.14$



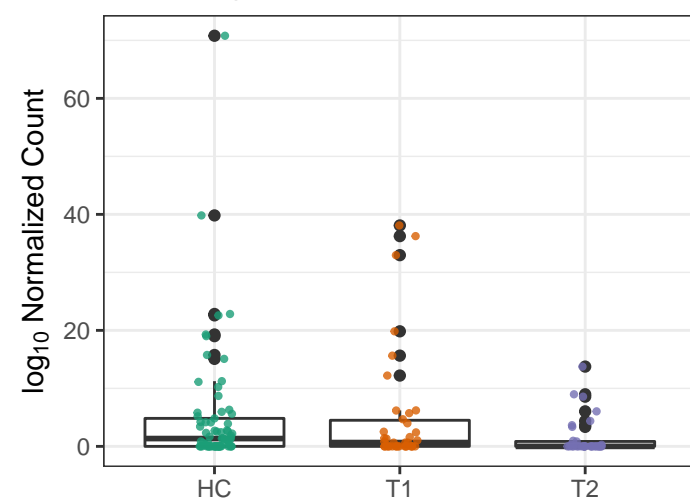
PWY–6629: superpathway of L-tryptophan

HC vs. T1  $p = 0.95$   
 HC vs. T2  $p = 0.087$   
 T1 vs. T2  $p = 0.24$



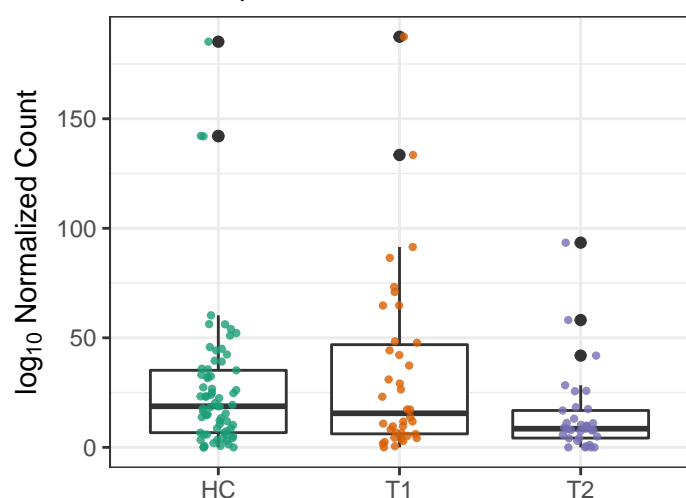
PWY–7204: pyridoxal 5'-phosphate sal

HC vs. T1  $p = 0.99$   
 HC vs. T2  $p = 0.087$   
 T1 vs. T2  $p = 0.16$



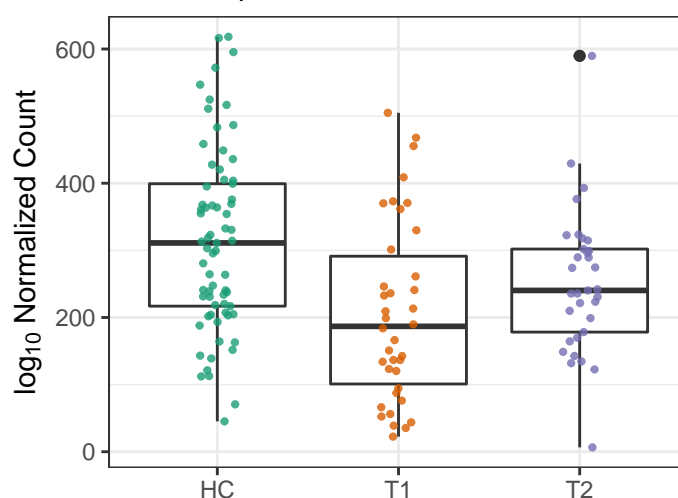
PWY–6628: superpathway of L-phenylalanine

HC vs. T1  $p = 0.68$   
 HC vs. T2  $p = 0.089$   
 T1 vs. T2  $p = 0.13$



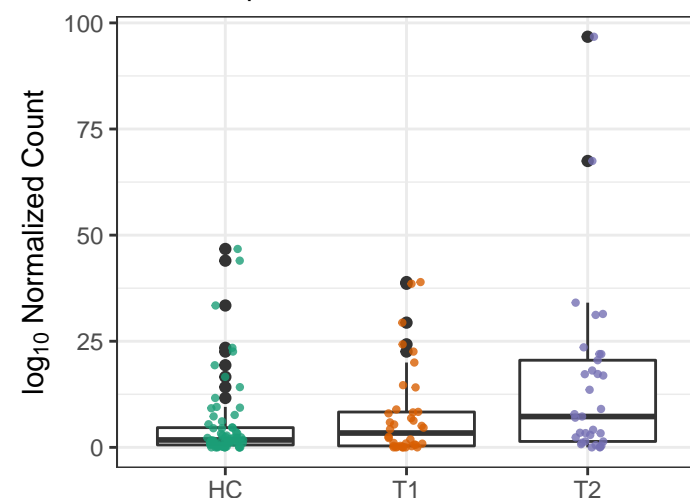
PWY–621: sucrose degradation III (sucrose)

HC vs. T1  $p = 0.0015$   
 HC vs. T2  $p = 0.091$   
 T1 vs. T2  $p = 0.32$



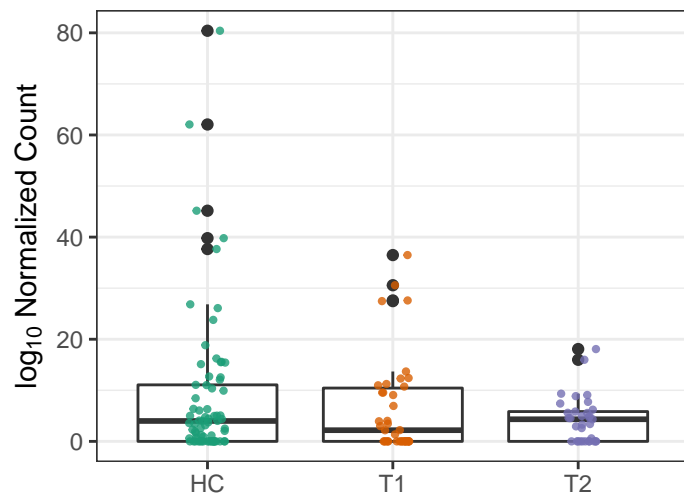
PWY–5384: sucrose degradation IV (sucrose)

HC vs. T1  $p = 0.5$   
 HC vs. T2  $p = 0.092$   
 T1 vs. T2  $p = 0.17$



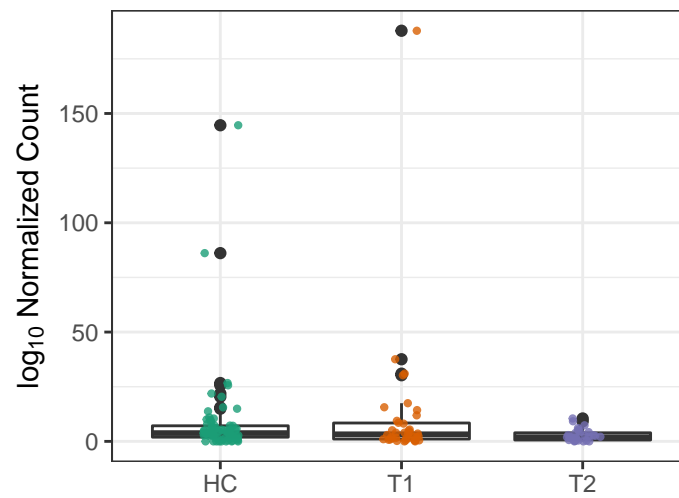
### CRNFORCAT-PWY: creatinine degradation

HC vs. T1  $p = 0.52$   
HC vs. T2  $p = 0.093$   
T1 vs. T2  $p = 0.28$



### PWY-6892: thiazole biosynthesis I (E.

HC vs. T1  $p = 0.82$   
HC vs. T2  $p = 0.093$   
T1 vs. T2  $p = 0.23$



### PWY-7254: TCA cycle VII (acetate-pro

HC vs. T1  $p = 0.91$   
HC vs. T2  $p = 0.093$   
T1 vs. T2  $p = 0.18$

