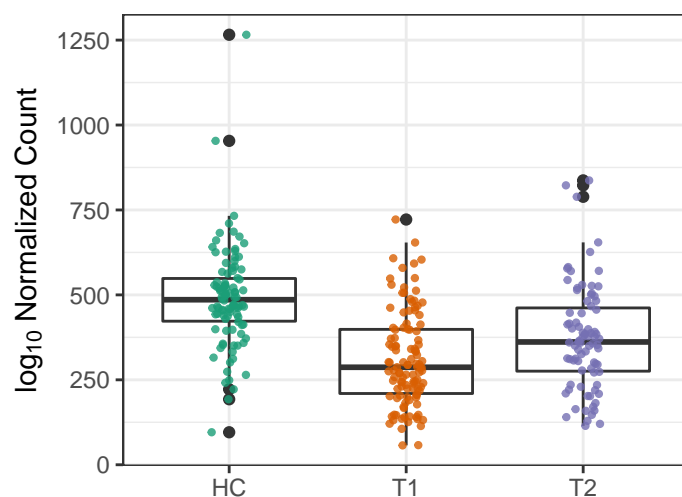


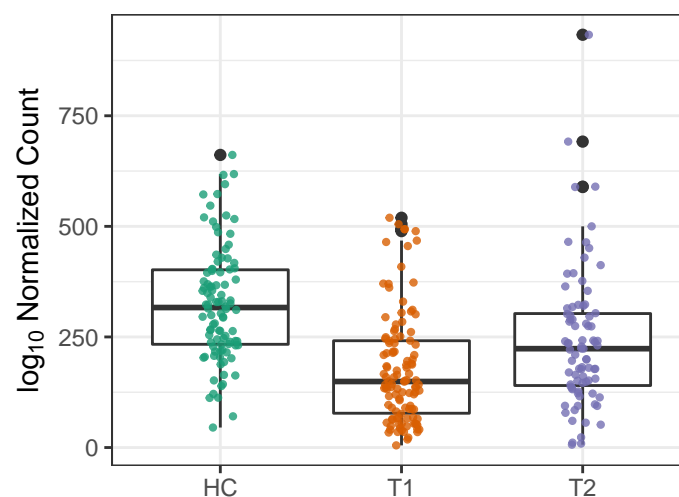
### DTDPRHAMSYN-PWY: dTDP-L-rha

HC vs. T1  $p = 6.3e-14$   
 HC vs. T2  $p = 4.8e-05$   
 T1 vs. T2  $p = 0.007$



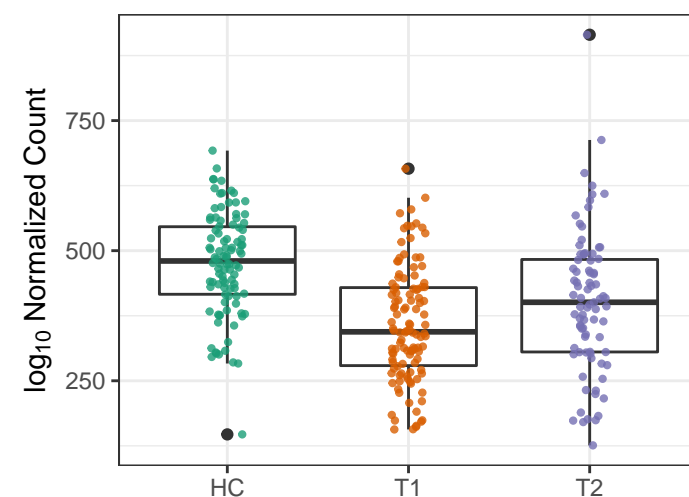
### PWY-621: sucrose degradation III (suc

HC vs. T1  $p = 1.3e-12$   
 HC vs. T2  $p = 0.0027$   
 T1 vs. T2  $p = 0.013$



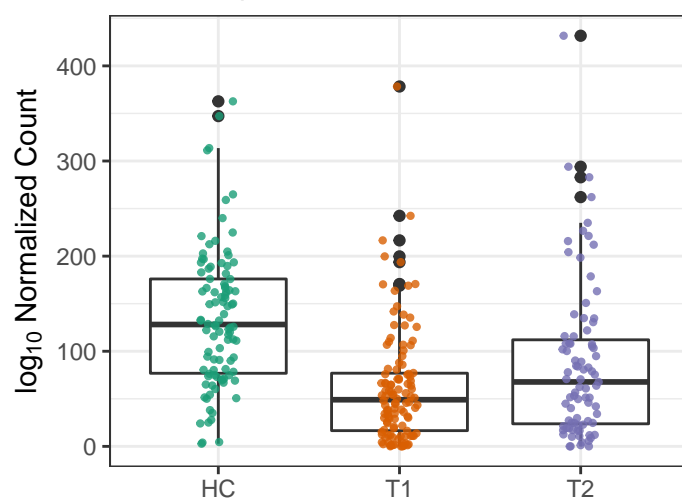
### CALVIN-PWY: Calvin-Benson-Bassha

HC vs. T1  $p = 3e-12$   
 HC vs. T2  $p = 0.0018$   
 T1 vs. T2  $p = 0.016$



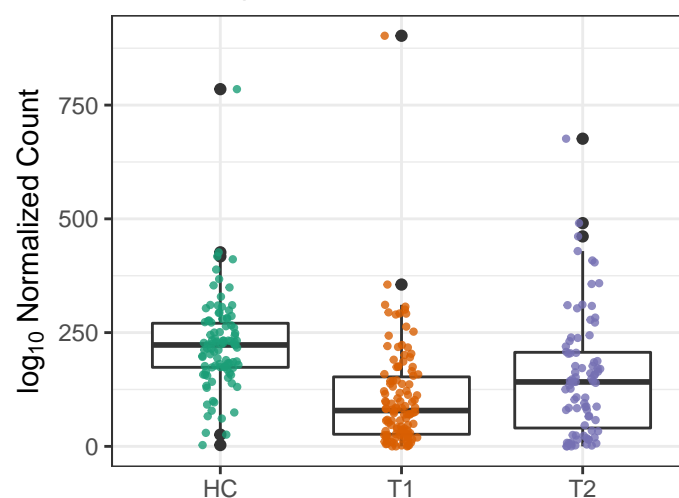
### PWY-5177: glutaryl-CoA degradation

HC vs. T1  $p = 1.8e-11$   
 HC vs. T2  $p = 0.0013$   
 T1 vs. T2  $p = 0.012$



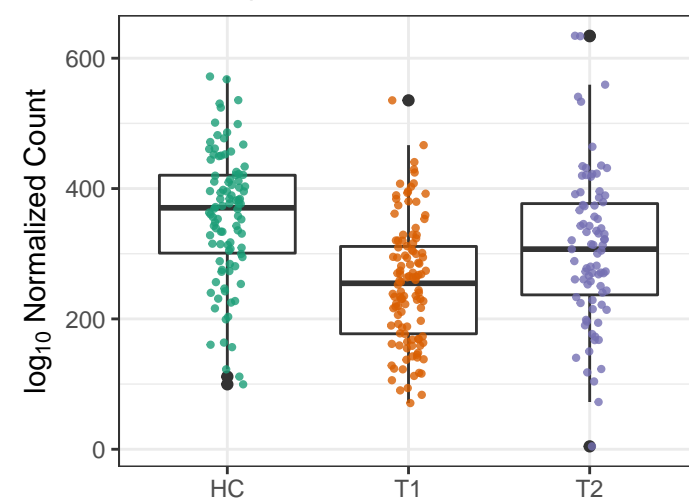
### COBALSYN-PWY: adenosylcobalamir

HC vs. T1  $p = 2.4e-11$   
 HC vs. T2  $p = 0.003$   
 T1 vs. T2  $p = 0.0057$



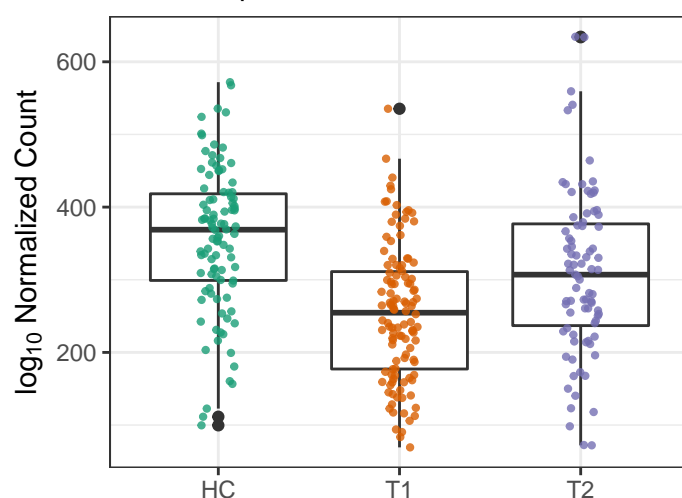
### PWY66-422: D-galactose degradation

HC vs. T1  $p = 2.5e-11$   
 HC vs. T2  $p = 0.02$   
 T1 vs. T2  $p = 0.0063$



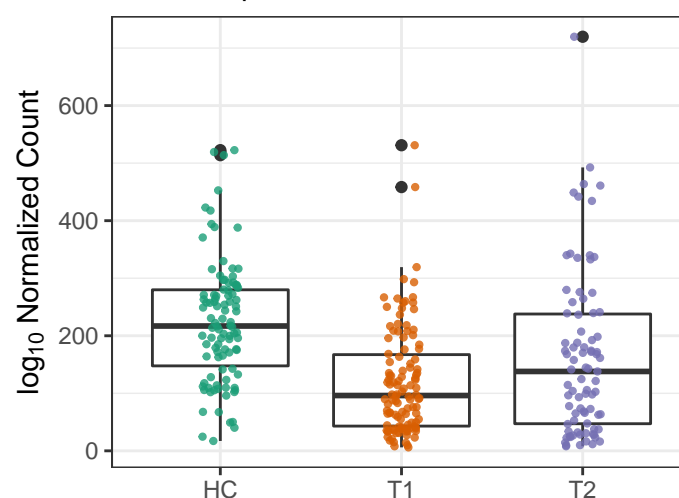
### PWY-6317: galactose degradation I (L

HC vs. T1  $p = 3.2e-11$   
 HC vs. T2  $p = 0.025$   
 T1 vs. T2  $p = 0.0059$



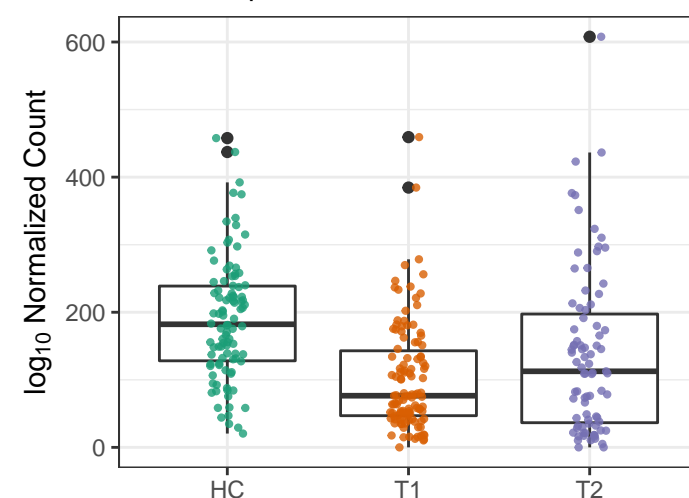
### PWY-7242: D-fructuronate degradatic

HC vs. T1  $p = 8.4e-11$   
 HC vs. T2  $p = 0.014$   
 T1 vs. T2  $p = 0.019$



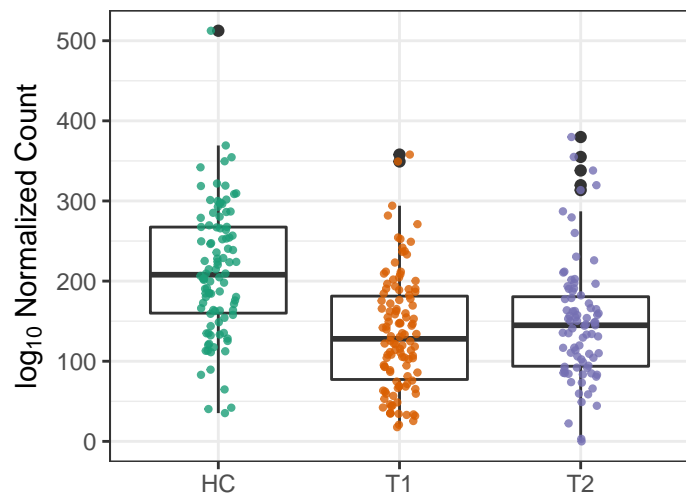
### GLUCUROCAT-PWY: superpathway o

HC vs. T1  $p = 1.6e-10$   
 HC vs. T2  $p = 0.016$   
 T1 vs. T2  $p = 0.021$



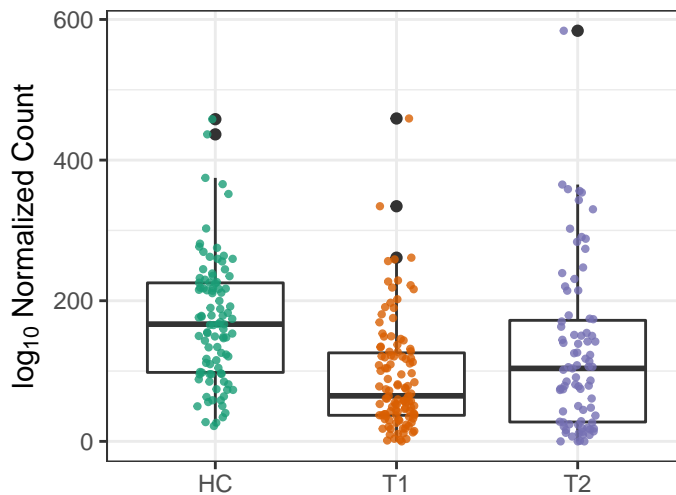
PWY-5347: superpathway of L-methic

HC vs. T1  $p = 1.6e-10$   
 HC vs. T2  $p = 8.1e-06$   
 T1 vs. T2  $p = 0.28$



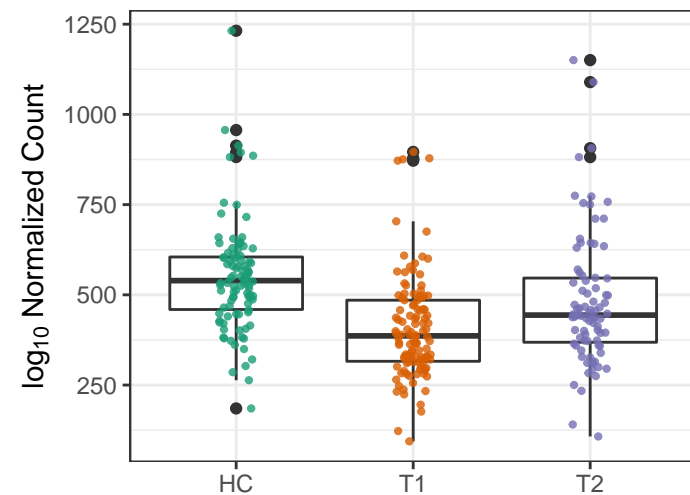
GALACT-GLUCUROCAT-PWY: super

HC vs. T1  $p = 1.2e-09$   
 HC vs. T2  $p = 0.025$   
 T1 vs. T2  $p = 0.02$



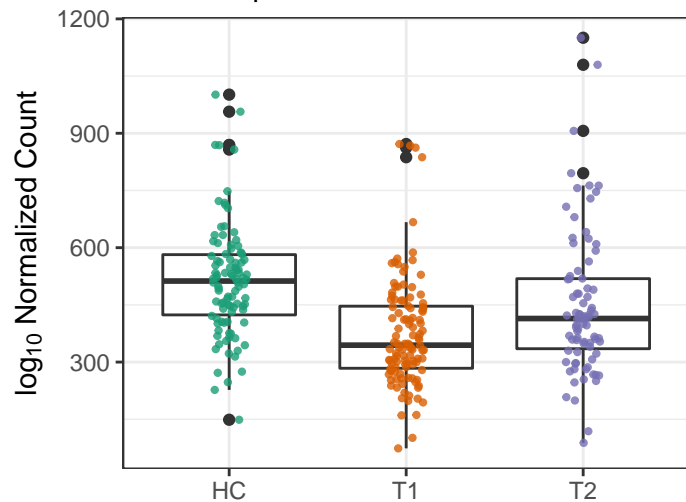
BRANCHED-CHAIN-AA-SYN-PWY:

HC vs. T1  $p = 2.3e-09$   
 HC vs. T2  $p = 0.044$   
 T1 vs. T2  $p = 0.0038$



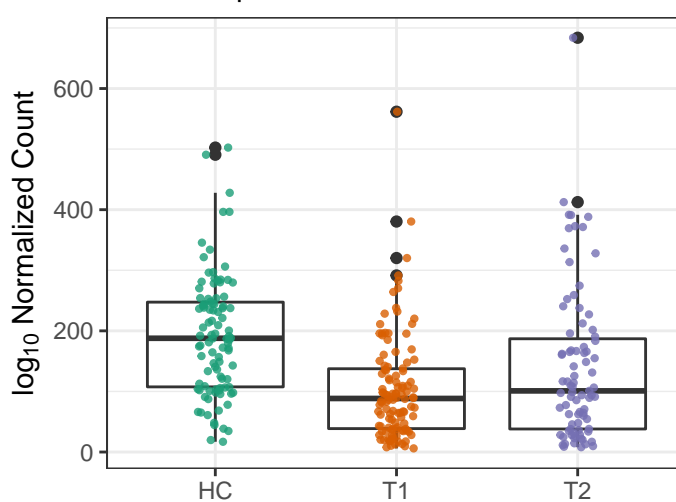
PWY-5103: L-isoleucine biosynthesis

HC vs. T1  $p = 2.3e-09$   
 HC vs. T2  $p = 0.064$   
 T1 vs. T2  $p = 0.0038$



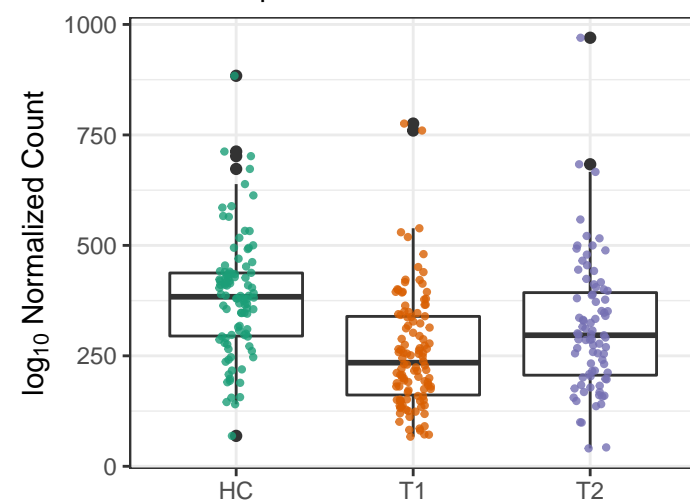
PWY-6507: 4-deoxy-L-threo-hex-4-

HC vs. T1  $p = 2.3e-09$   
 HC vs. T2  $p = 0.017$   
 T1 vs. T2  $p = 0.027$



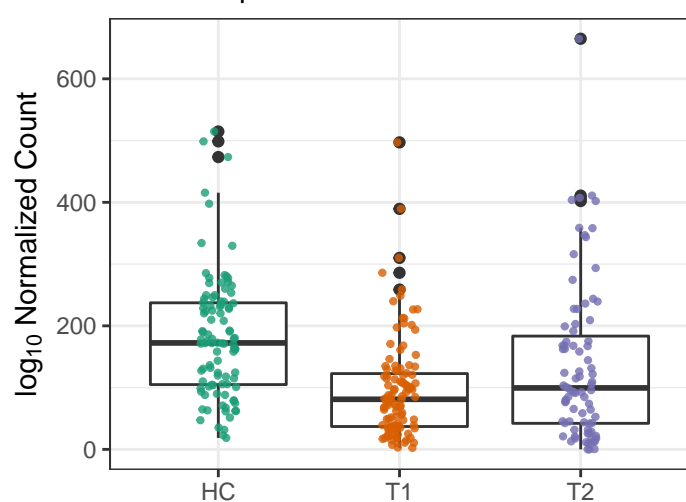
PWY-7357: thiamin formation from py

HC vs. T1  $p = 2.3e-09$   
 HC vs. T2  $p = 0.014$   
 T1 vs. T2  $p = 0.0086$



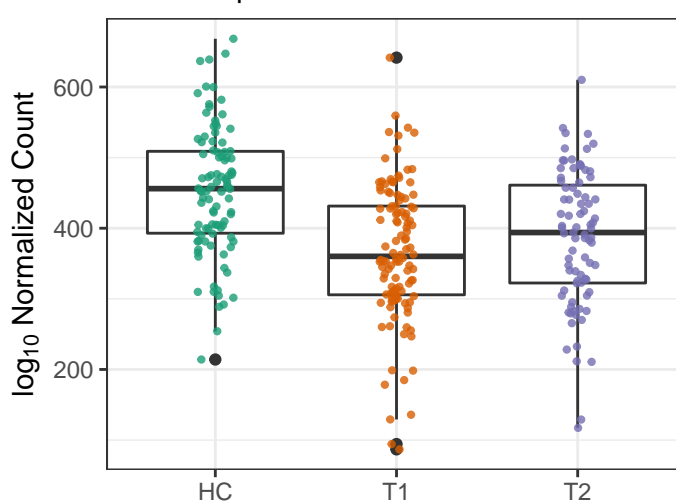
GALACTUROCAT-PWY: D-galacturor

HC vs. T1  $p = 3.2e-09$   
 HC vs. T2  $p = 0.041$   
 T1 vs. T2  $p = 0.019$



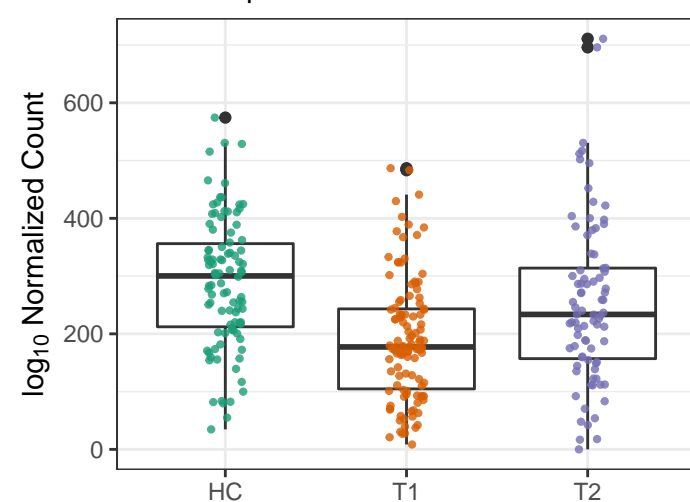
TRNA-CHARGING-PWY: tRNA charg

HC vs. T1  $p = 4.7e-09$   
 HC vs. T2  $p = 0.00019$   
 T1 vs. T2  $p = 0.076$



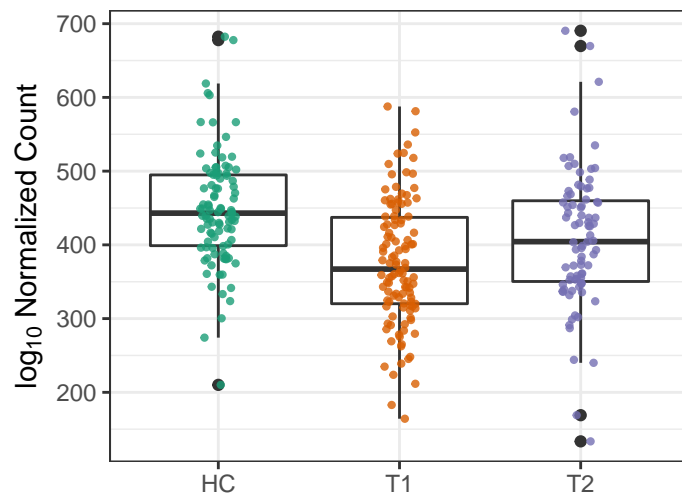
SER-GLYSYN-PWY: superpathway of

HC vs. T1  $p = 7.2e-09$   
 HC vs. T2  $p = 0.18$   
 T1 vs. T2  $p = 0.0038$



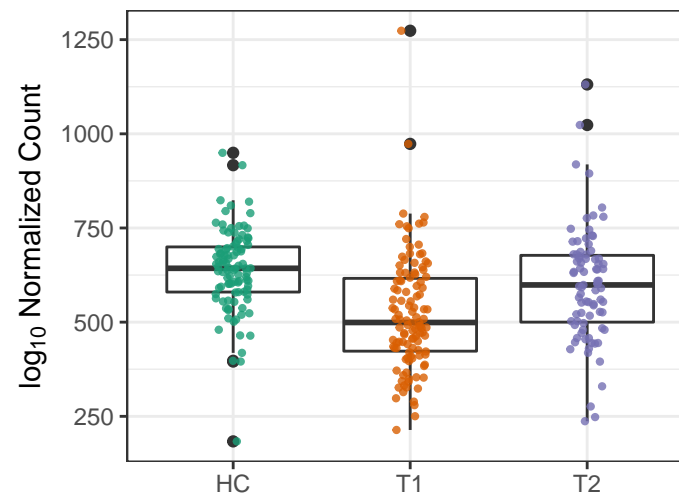
PWY-724: superpathway of L-lysine, l

HC vs. T1  $p = 8.6e-09$   
 HC vs. T2  $p = 0.018$   
 T1 vs. T2  $p = 0.019$



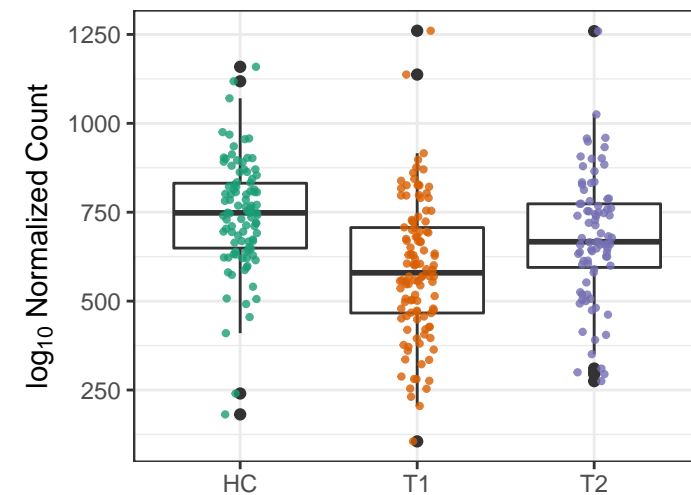
ARO-PWY: chorismate biosynthesis I

HC vs. T1  $p = 1.4e-08$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.0061$



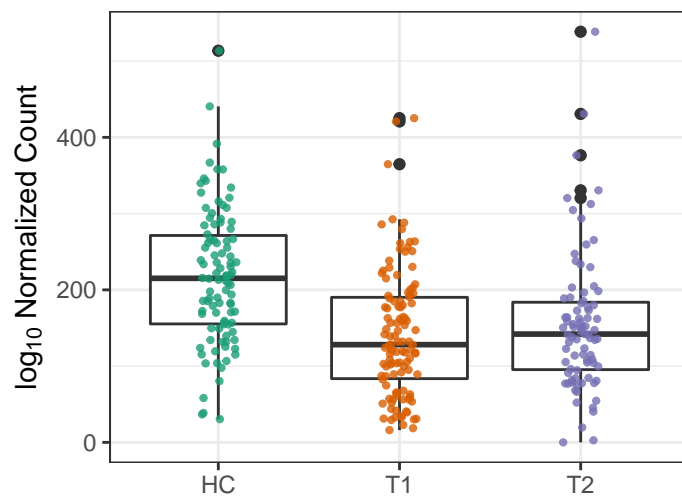
PWY-6737: starch degradation V

HC vs. T1  $p = 1.4e-08$   
 HC vs. T2  $p = 0.044$   
 T1 vs. T2  $p = 0.012$



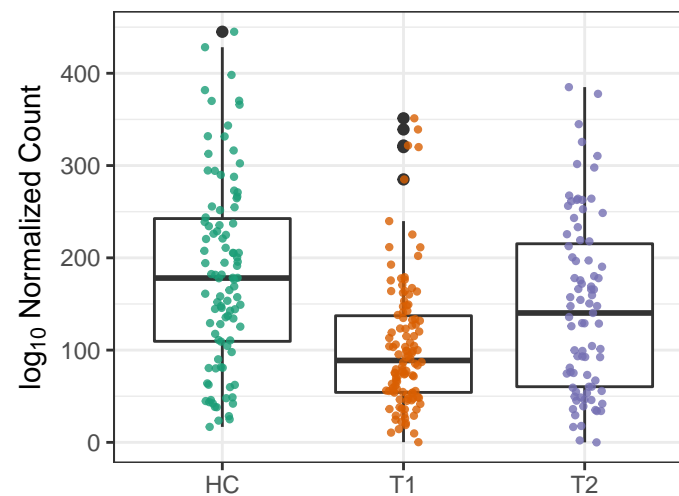
METSYN-PWY: L-homoserine and L-

HC vs. T1  $p = 1.7e-08$   
 HC vs. T2  $p = 0.00019$   
 T1 vs. T2  $p = 0.38$



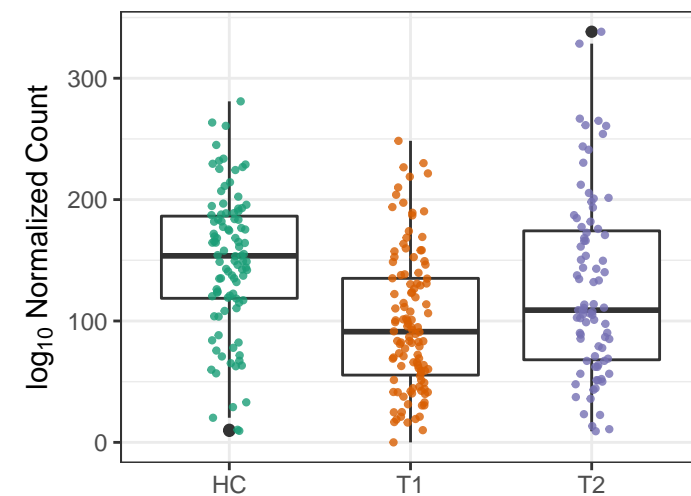
GLYCOGENSYNTH-PWY: glycogen b

HC vs. T1  $p = 2.1e-08$   
 HC vs. T2  $p = 0.064$   
 T1 vs. T2  $p = 0.02$



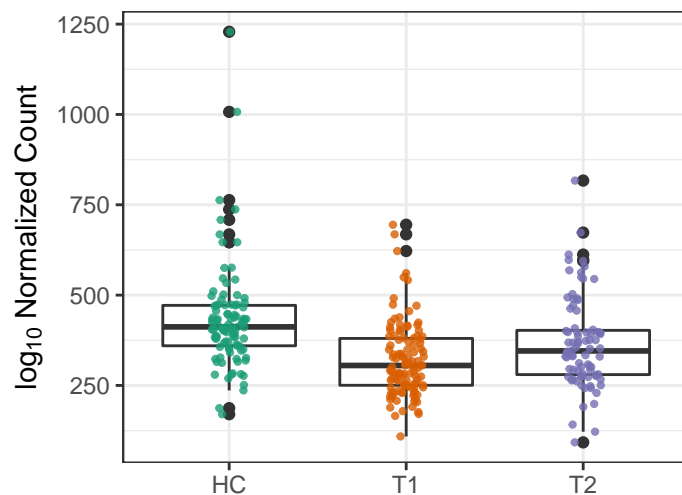
PWY-7199: pyrimidine deoxyribonucle

HC vs. T1  $p = 2.1e-08$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.022$



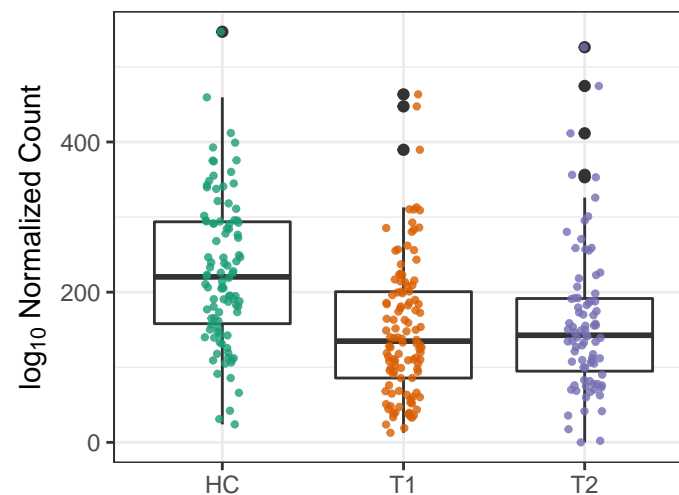
PWY-3001: superpathway of L-isoleu

HC vs. T1  $p = 2.3e-08$   
 HC vs. T2  $p = 0.014$   
 T1 vs. T2  $p = 0.0057$



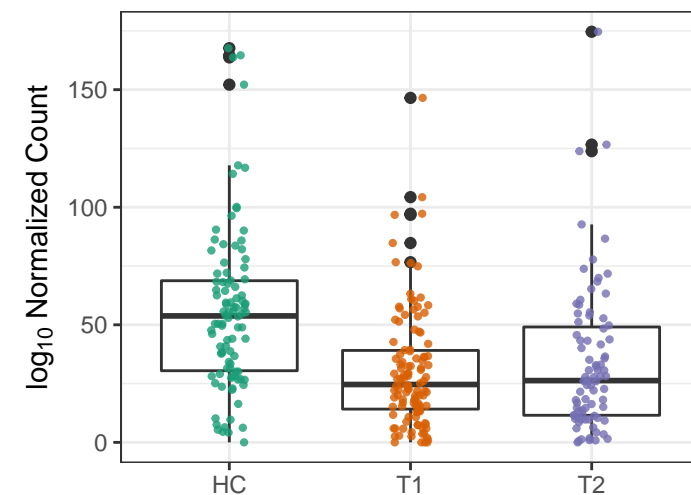
MET-SAM-PWY: superpathway of S-

HC vs. T1  $p = 9e-08$   
 HC vs. T2  $p = 0.00019$   
 T1 vs. T2  $p = 0.58$



POLYAMSYN-PWY: superpathway of p

HC vs. T1  $p = 1.3e-07$   
 HC vs. T2  $p = 0.00058$   
 T1 vs. T2  $p = 0.54$

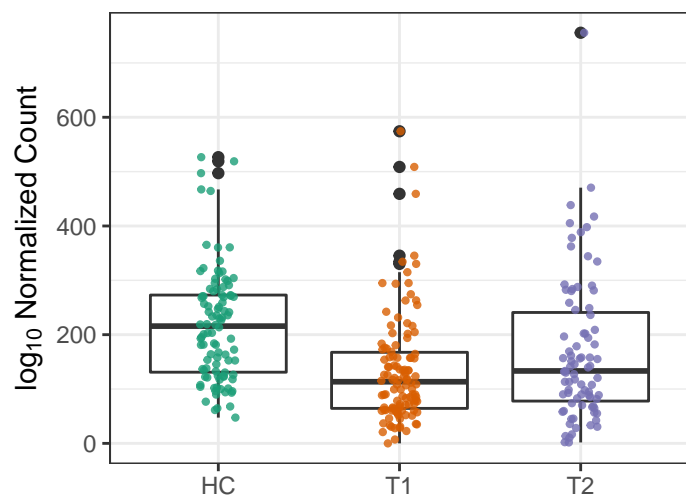


### GLCMANNANAUT–PWY: superpathway

HC vs. T1  $p = 1.8e-07$

HC vs. T2  $p = 0.04$

T1 vs. T2  $p = 0.042$

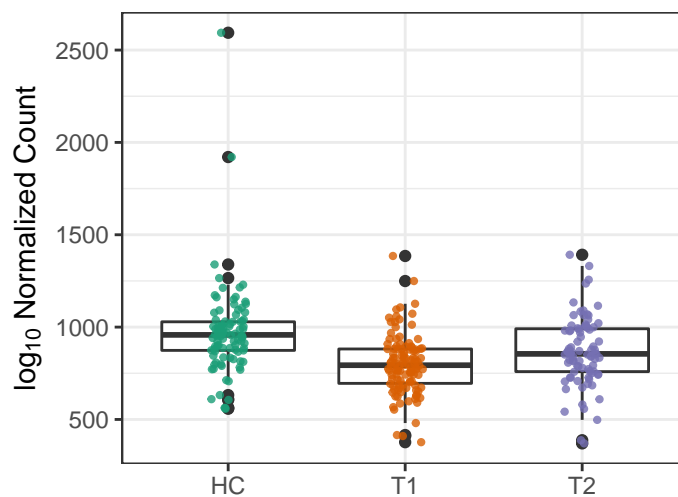


### PWY–7219: adenosine ribonucleotide

HC vs. T1  $p = 1.8e-07$

HC vs. T2  $p = 0.015$

T1 vs. T2  $p = 0.015$

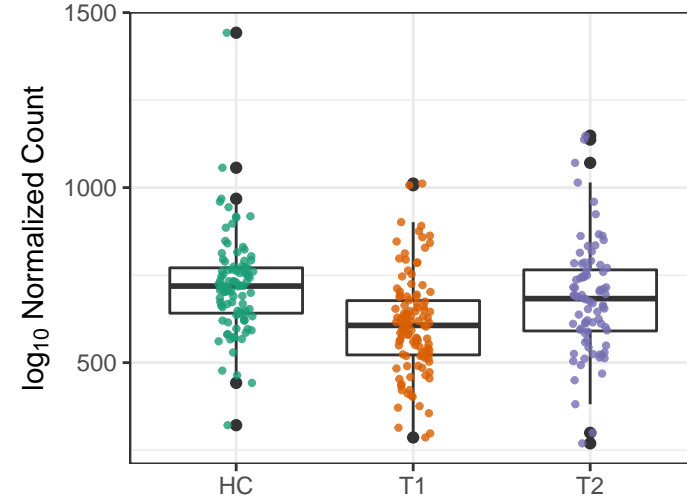


### PWY–5686: UMP biosynthesis

HC vs. T1  $p = 2.4e-07$

HC vs. T2  $p = 0.19$

T1 vs. T2  $p = 0.0063$

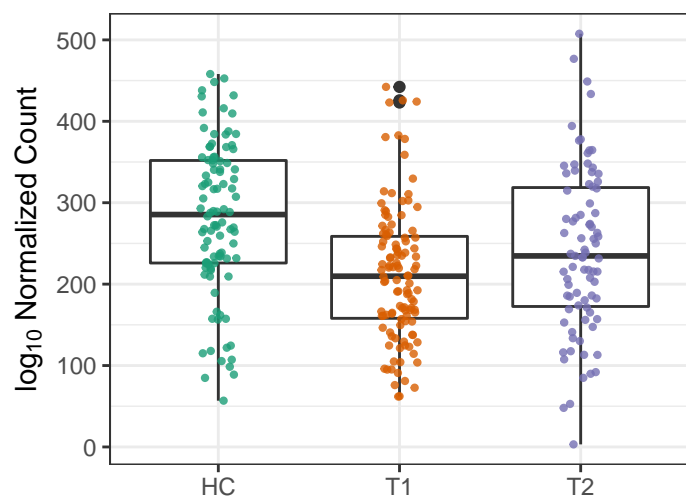


### PWY–6527: stachyose degradation

HC vs. T1  $p = 5.6e-07$

HC vs. T2  $p = 0.04$

T1 vs. T2  $p = 0.12$

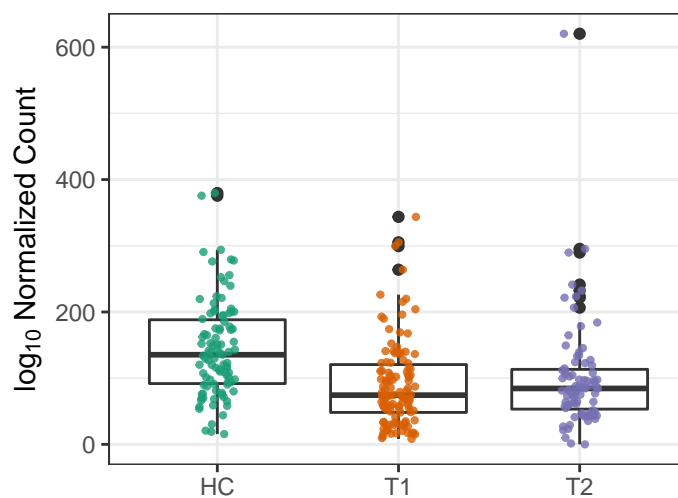


### HOMOSER–METSYN–PWY: L-methionine

HC vs. T1  $p = 7.4e-07$

HC vs. T2  $p = 0.0034$

T1 vs. T2  $p = 0.37$

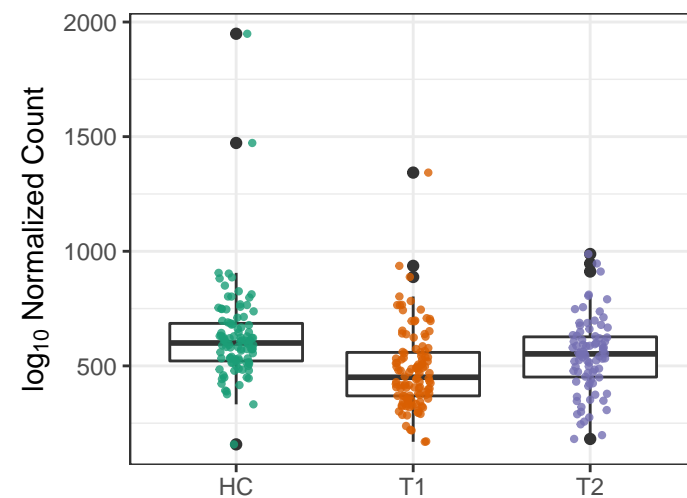


### PWY–6151: S-adenosyl-L-methionine

HC vs. T1  $p = 1.6e-06$

HC vs. T2  $p = 0.02$

T1 vs. T2  $p = 0.0062$

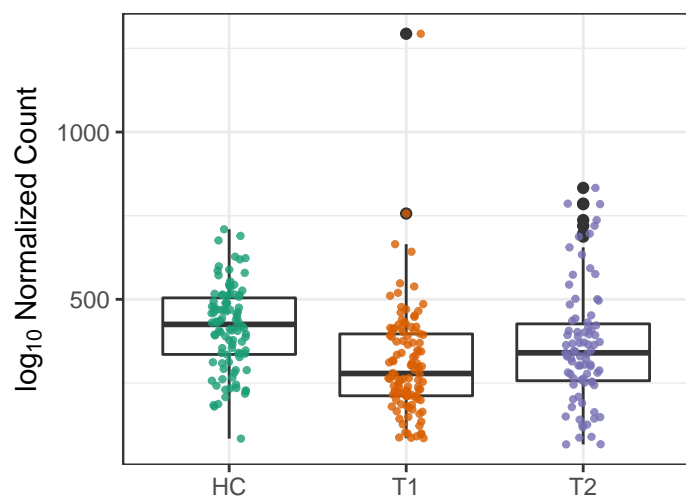


### NONOXIPENT–PWY: pentose phosphate

HC vs. T1  $p = 1.7e-06$

HC vs. T2  $p = 0.075$

T1 vs. T2  $p = 0.017$

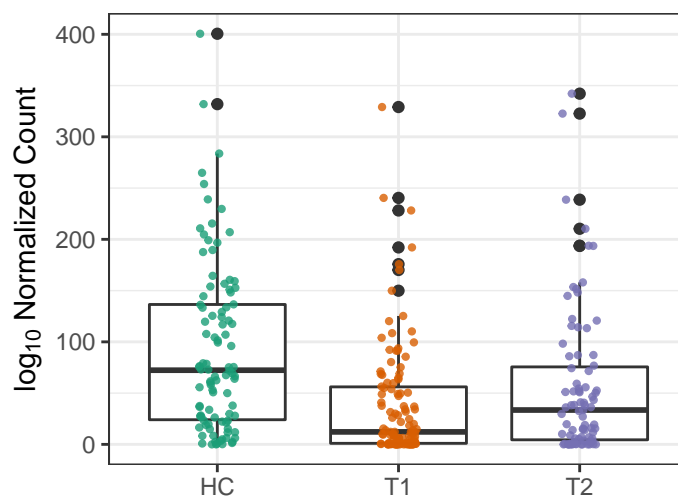


### PWY–5367: petroselinic acid biosynthesis

HC vs. T1  $p = 1.9e-06$

HC vs. T2  $p = 0.015$

T1 vs. T2  $p = 0.47$

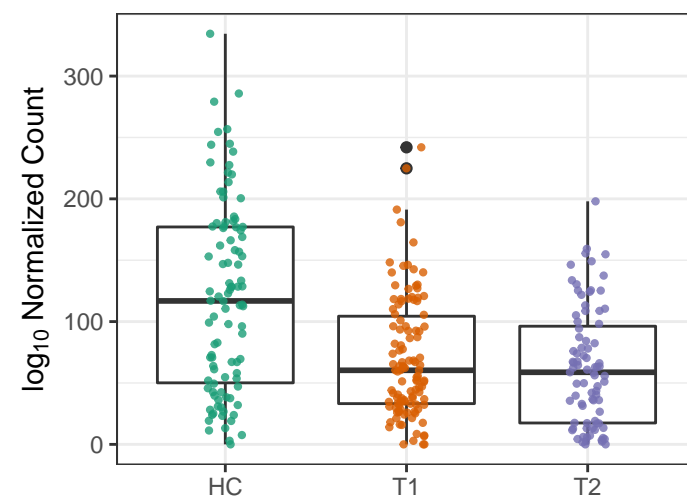


### PWY0–781: aspartate superpathway

HC vs. T1  $p = 2e-06$

HC vs. T2  $p = 3.1e-06$

T1 vs. T2  $p = 0.53$

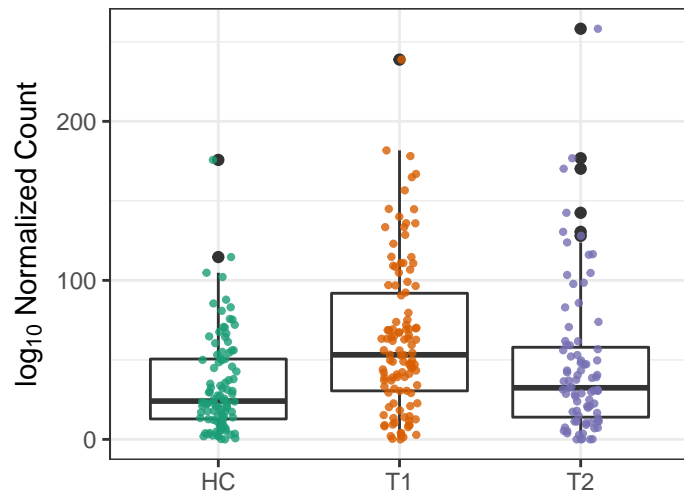


PWY-1269: CMP-3-deoxy-D-manno

HC vs. T1  $p = 2.3e-06$

HC vs. T2  $p = 0.1$

T1 vs. T2  $p = 0.02$

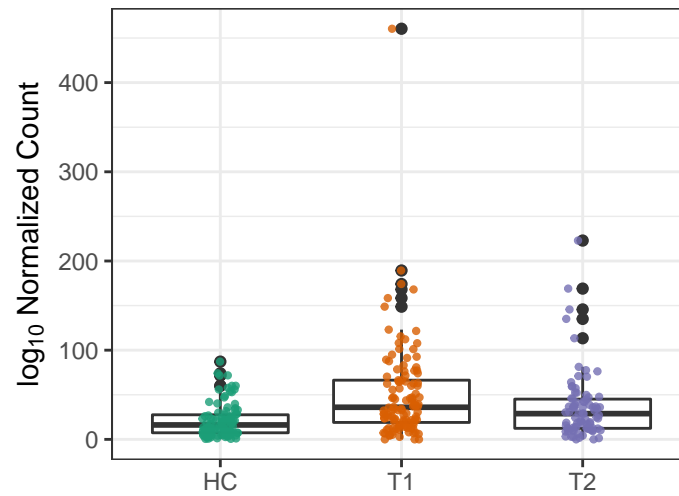


CITRULBIO-PWY: L-citrulline biosynt

HC vs. T1  $p = 2.8e-06$

HC vs. T2  $p = 0.014$

T1 vs. T2  $p = 0.086$

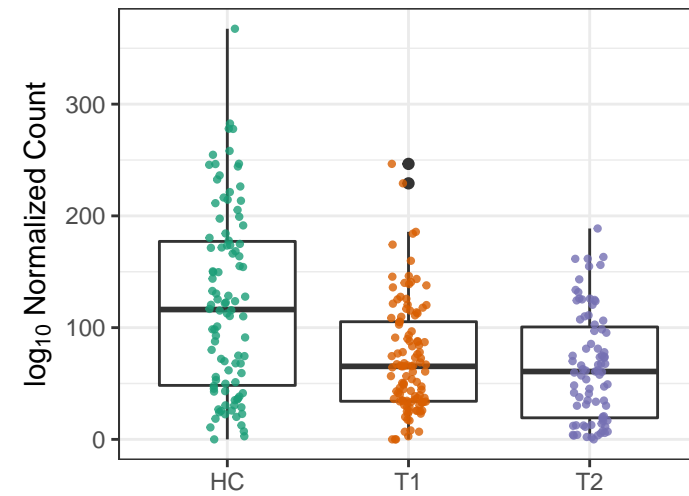


P4-PWY: superpathway of L-lysine, L-

HC vs. T1  $p = 3.3e-06$

HC vs. T2  $p = 3.5e-06$

T1 vs. T2  $p = 0.57$

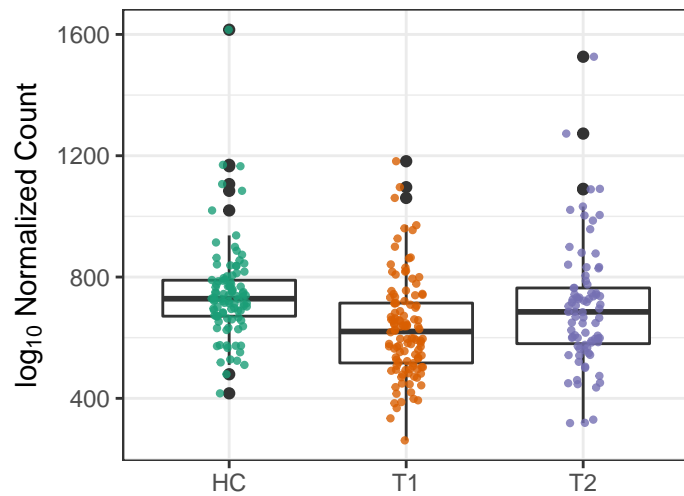


ILEUSYN-PWY: L-isoleucine biosynt

HC vs. T1  $p = 3.6e-06$

HC vs. T2  $p = 0.19$

T1 vs. T2  $p = 0.02$

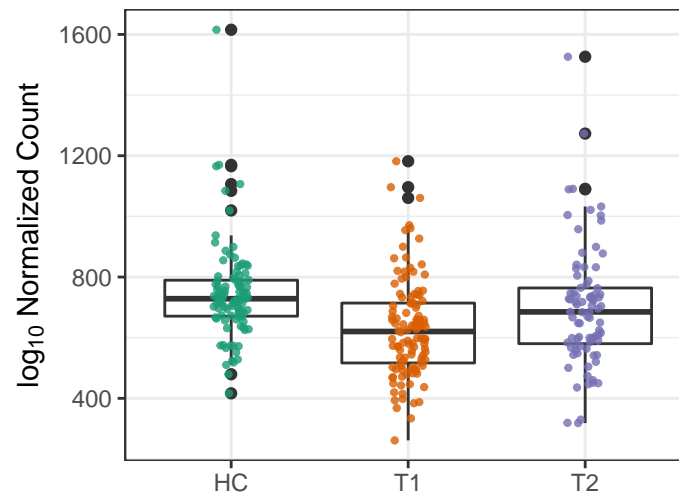


VALSYN-PWY: L-valine biosynthesis

HC vs. T1  $p = 3.6e-06$

HC vs. T2  $p = 0.19$

T1 vs. T2  $p = 0.02$

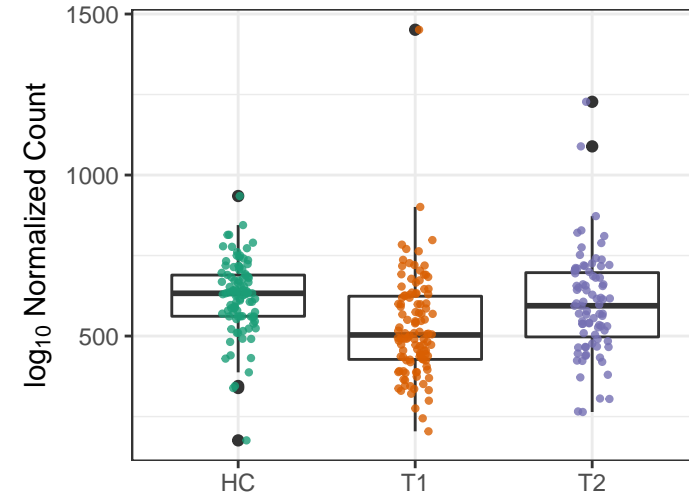


PWY-6163: chorismate biosynthesis f

HC vs. T1  $p = 4e-06$

HC vs. T2  $p = 0.35$

T1 vs. T2  $p = 0.0089$

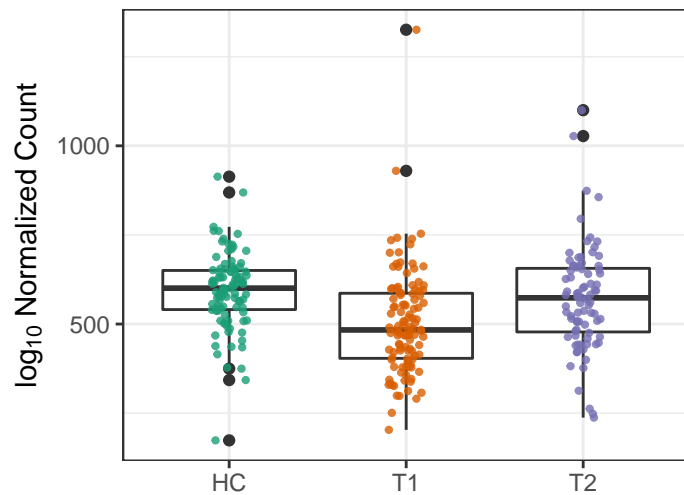


COMPLETE-ARO-PWY: superpathw

HC vs. T1  $p = 4.6e-06$

HC vs. T2  $p = 0.38$

T1 vs. T2  $p = 0.0069$

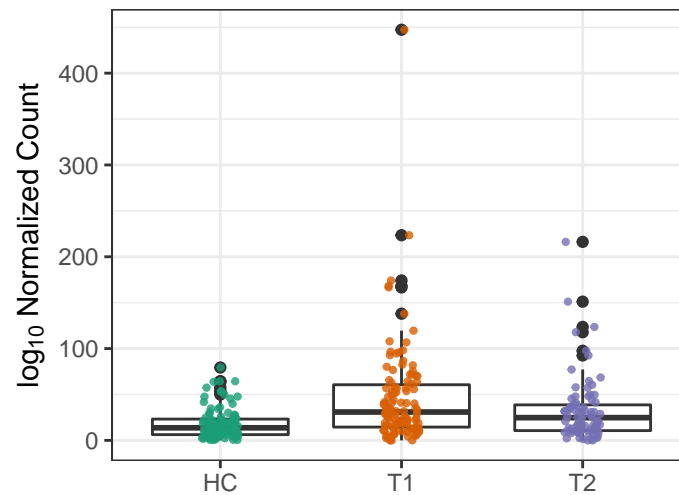


PWY-4984: urea cycle

HC vs. T1  $p = 6.9e-06$

HC vs. T2  $p = 0.014$

T1 vs. T2  $p = 0.092$

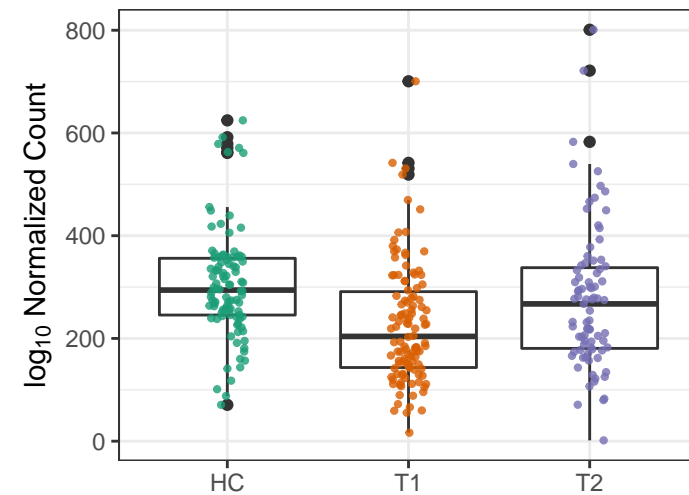


PWY-6123: inosine-5'-phosphate bio

HC vs. T1  $p = 7.3e-06$

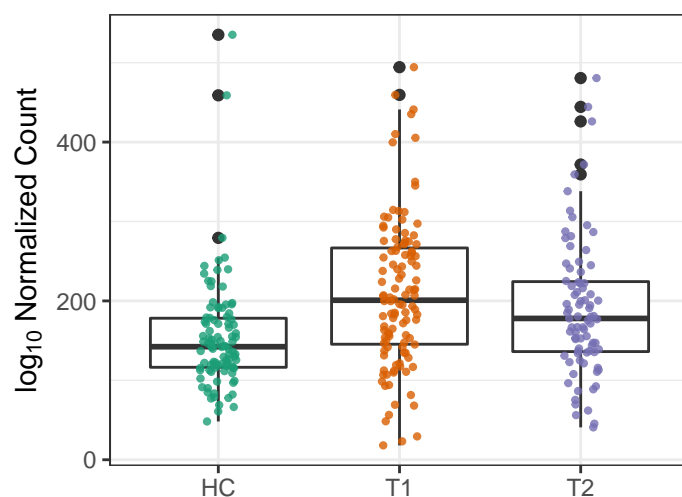
HC vs. T2  $p = 0.25$

T1 vs. T2  $p = 0.0078$



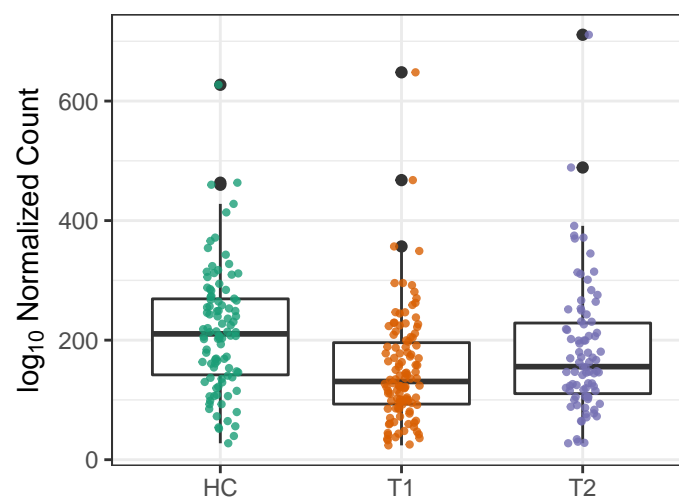
PWY-7228: superpathway of guanosin

HC vs. T1  $p = 1.2e-05$   
 HC vs. T2  $p = 0.017$   
 T1 vs. T2  $p = 0.23$



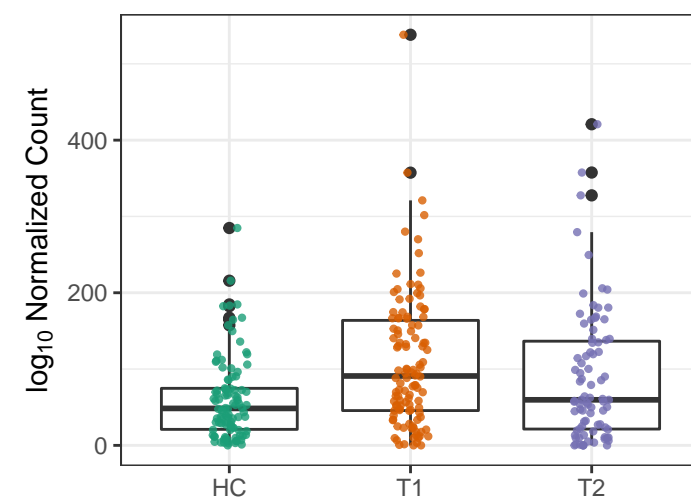
THISYNARA-PWY: superpathway of tl

HC vs. T1  $p = 1.6e-05$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.01$



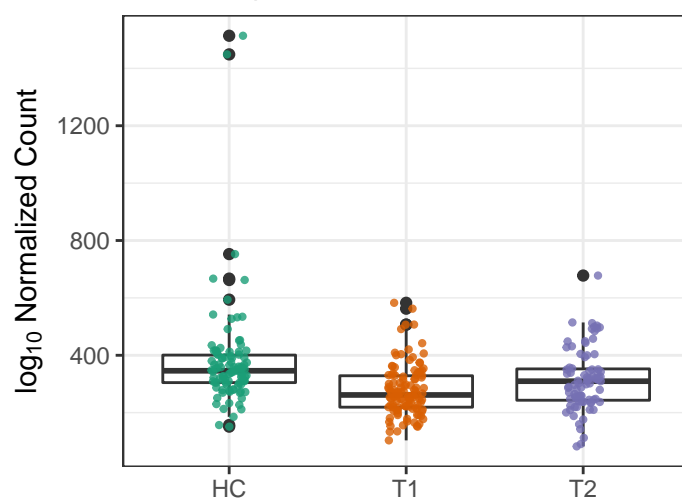
PYRIDOXSYN-PWY: pyridoxal 5'-pho

HC vs. T1  $p = 1.6e-05$   
 HC vs. T2  $p = 0.051$   
 T1 vs. T2  $p = 0.076$



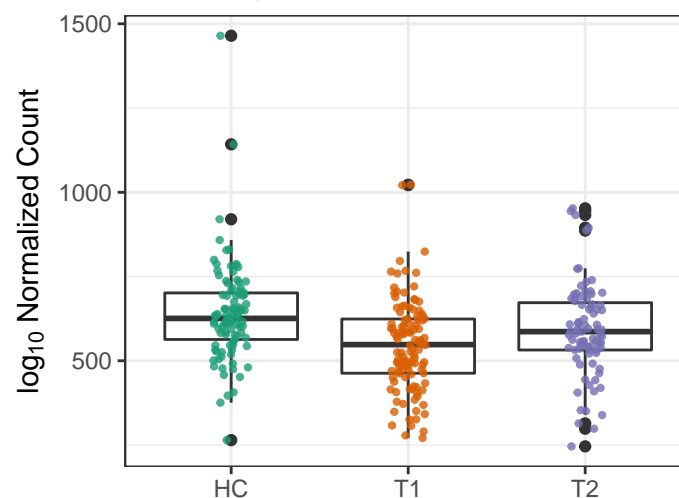
THRESYN-PWY: superpathway of L-

HC vs. T1  $p = 1.8e-05$   
 HC vs. T2  $p = 0.028$   
 T1 vs. T2  $p = 0.0089$



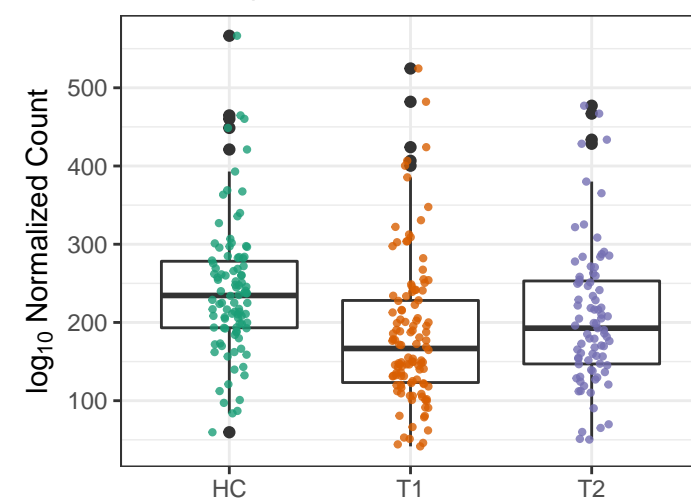
COA-PWY-1: coenzyme A biosynthe

HC vs. T1  $p = 2.2e-05$   
 HC vs. T2  $p = 0.08$   
 T1 vs. T2  $p = 0.024$



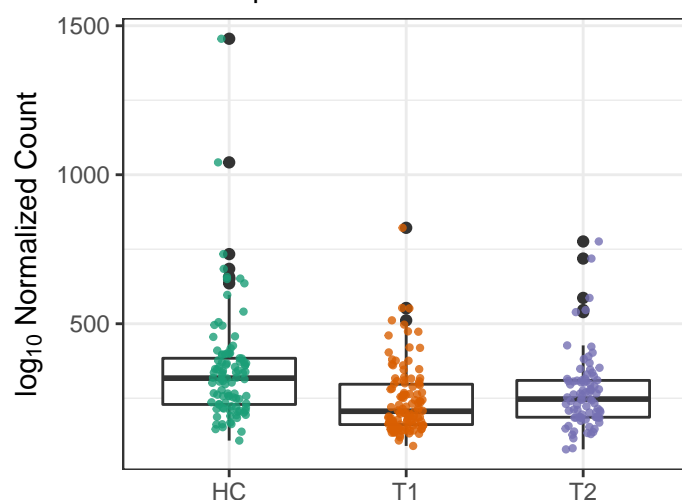
PWY-5100: pyruvate fermentation to a

HC vs. T1  $p = 3.8e-05$   
 HC vs. T2  $p = 0.044$   
 T1 vs. T2  $p = 0.06$



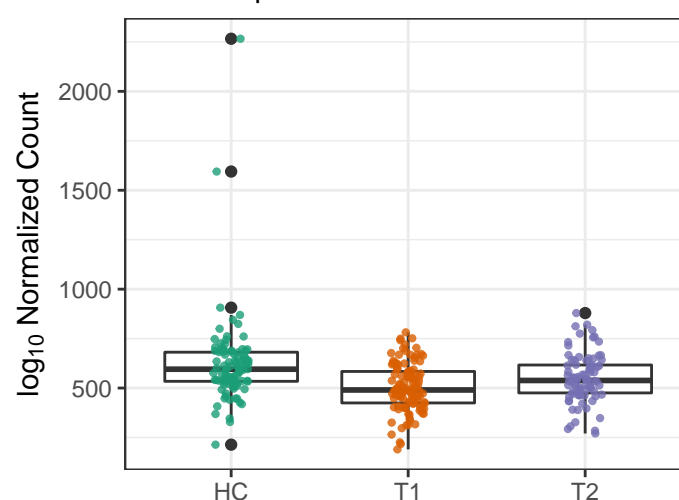
HISTSYN-PWY: L-histidine biosynthe

HC vs. T1  $p = 4e-05$   
 HC vs. T2  $p = 0.014$   
 T1 vs. T2  $p = 0.024$



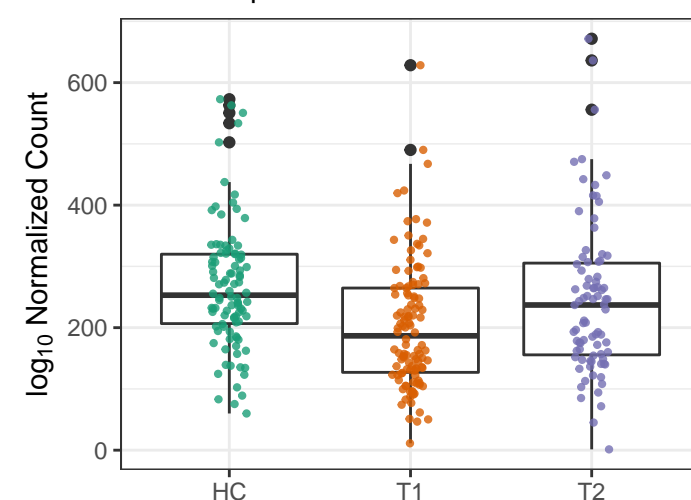
NONMEVIPP-PWY: methylerythritol p

HC vs. T1  $p = 5.1e-05$   
 HC vs. T2  $p = 0.044$   
 T1 vs. T2  $p = 0.036$



PWY-6124: inosine-5'-phosphate bio

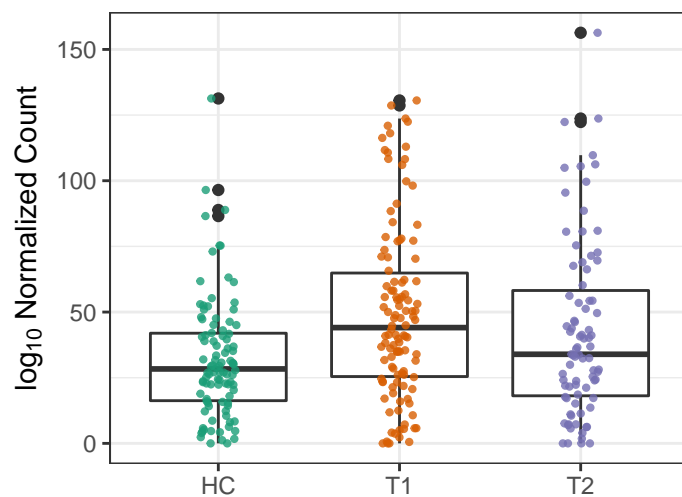
HC vs. T1  $p = 6.5e-05$   
 HC vs. T2  $p = 0.35$   
 T1 vs. T2  $p = 0.0089$





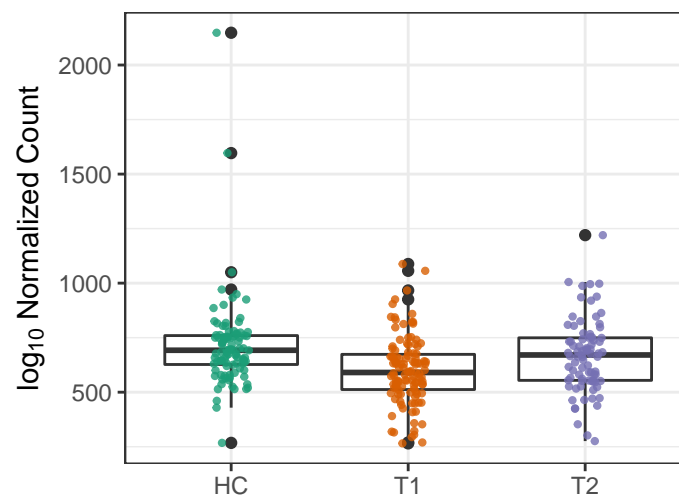
### PWY66–399: gluconeogenesis III

HC vs. T1  $p = 8.5e-05$   
 HC vs. T2  $p = 0.065$   
 T1 vs. T2  $p = 0.09$



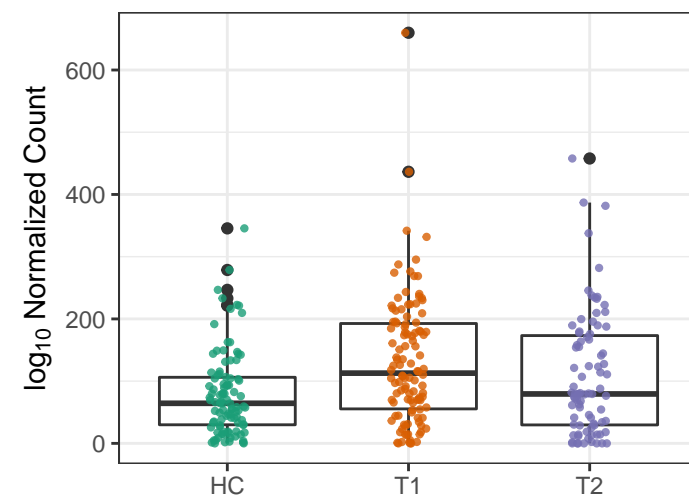
### PWY–6387: UDP–N–acetylmuramoyl-

HC vs. T1  $p = 0.00011$   
 HC vs. T2  $p = 0.19$   
 T1 vs. T2  $p = 0.014$



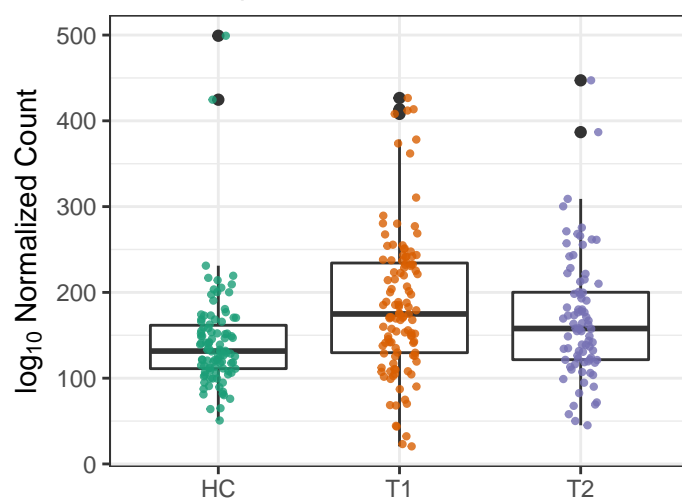
### PWY0–845: superpathway of pyridoxal

HC vs. T1  $p = 0.00011$   
 HC vs. T2  $p = 0.07$   
 T1 vs. T2  $p = 0.11$



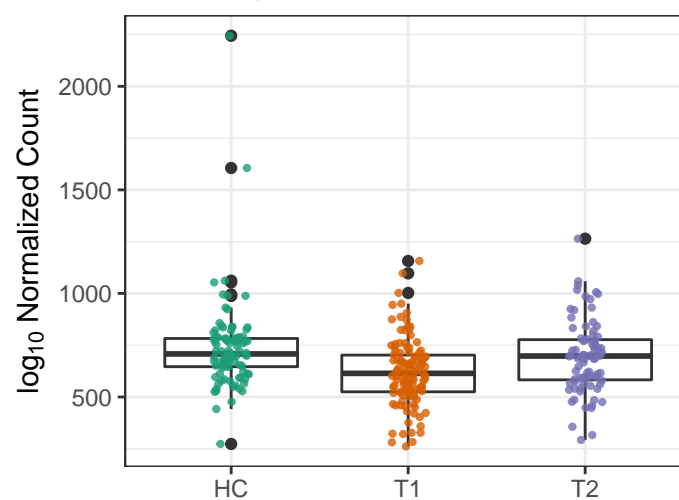
### PWY–6125: superpathway of guanosin

HC vs. T1  $p = 0.00011$   
 HC vs. T2  $p = 0.041$   
 T1 vs. T2  $p = 0.19$



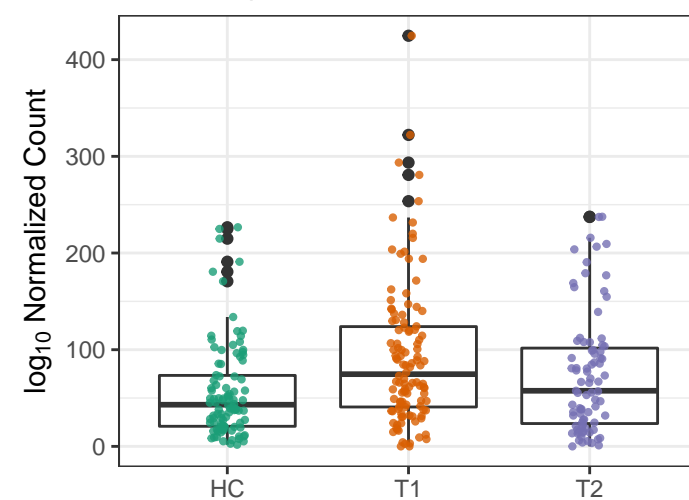
### PWY–6386: UDP–N–acetylmuramoyl-

HC vs. T1  $p = 0.00014$   
 HC vs. T2  $p = 0.27$   
 T1 vs. T2  $p = 0.01$



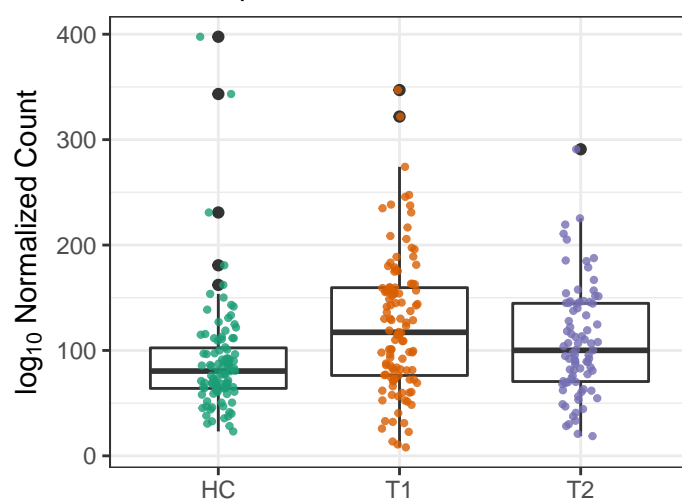
### PWY–5484: glycolysis II (from fructose

HC vs. T1  $p = 0.00018$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.087$



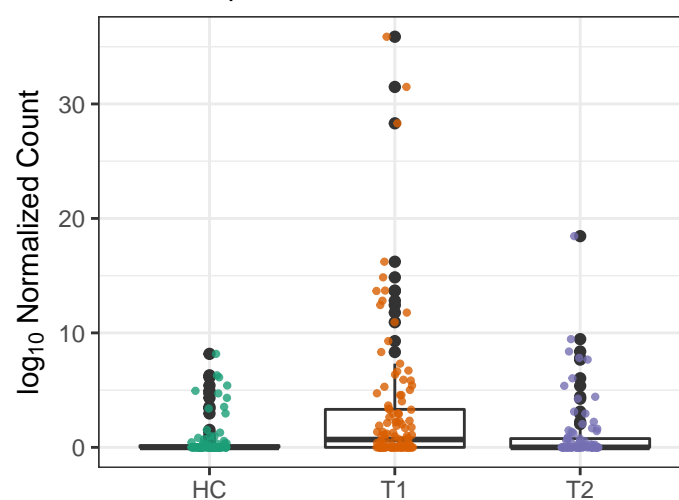
### PWY–7197: pyrimidine deoxyribonucle

HC vs. T1  $p = 2e-04$   
 HC vs. T2  $p = 0.078$   
 T1 vs. T2  $p = 0.21$



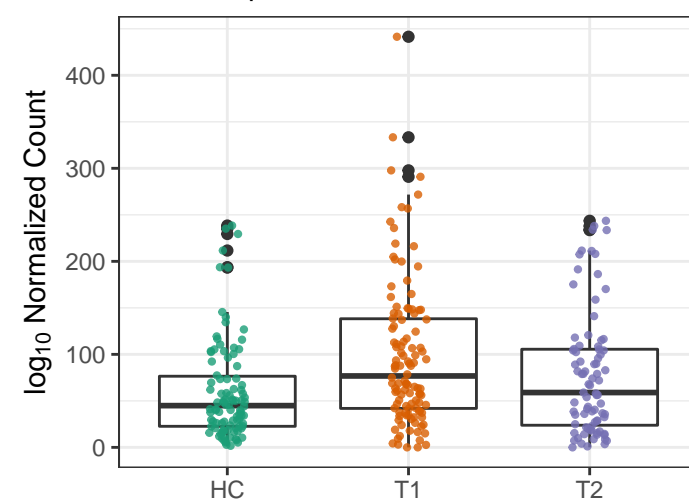
### 7ALPHADEHYDROX–PWY: cholate de

HC vs. T1  $p = 0.00021$   
 HC vs. T2  $p = 0.2$   
 T1 vs. T2  $p = 0.02$



### GLYCOLYSIS: glycolysis I (from glucos

HC vs. T1  $p = 0.00023$   
 HC vs. T2  $p = 0.12$   
 T1 vs. T2  $p = 0.087$

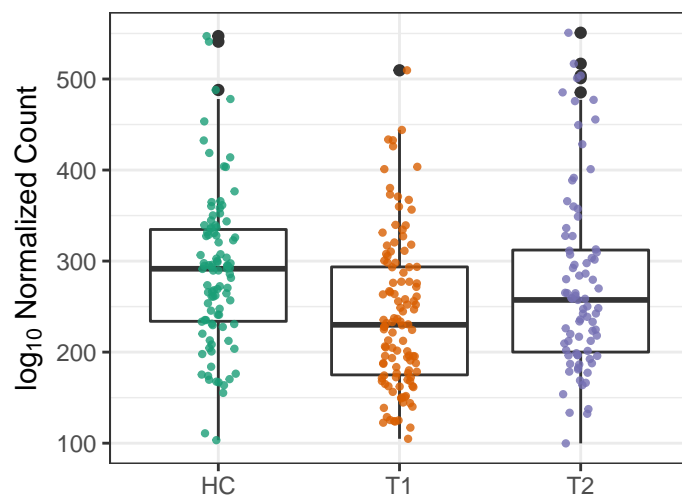


PWY-6609: adenine and adenosine salvage

HC vs. T1  $p = 0.00027$

HC vs. T2  $p = 0.45$

T1 vs. T2  $p = 0.014$

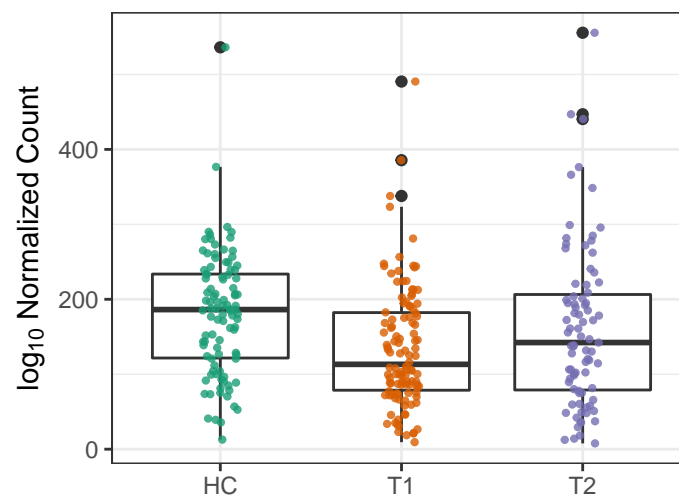


ASPASN-PWY: superpathway of L-asparagine

HC vs. T1  $p = 0.00028$

HC vs. T2  $p = 0.27$

T1 vs. T2  $p = 0.061$

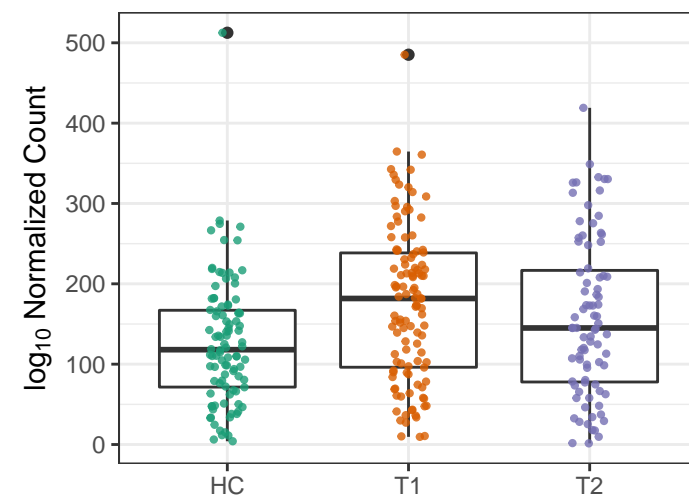


PWY-7663: gondoate biosynthesis (archaea)

HC vs. T1  $p = 0.00031$

HC vs. T2  $p = 0.075$

T1 vs. T2  $p = 0.024$

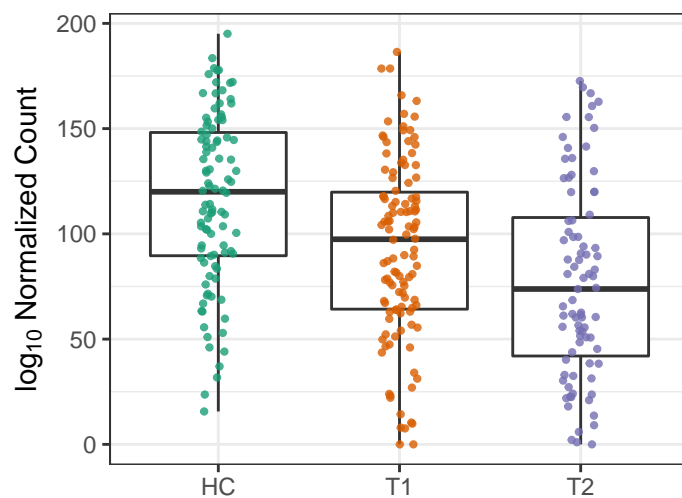


PRPP-PWY: superpathway of histidine

HC vs. T1  $p = 0.00031$

HC vs. T2  $p = 3.1e-06$

T1 vs. T2  $p = 0.02$

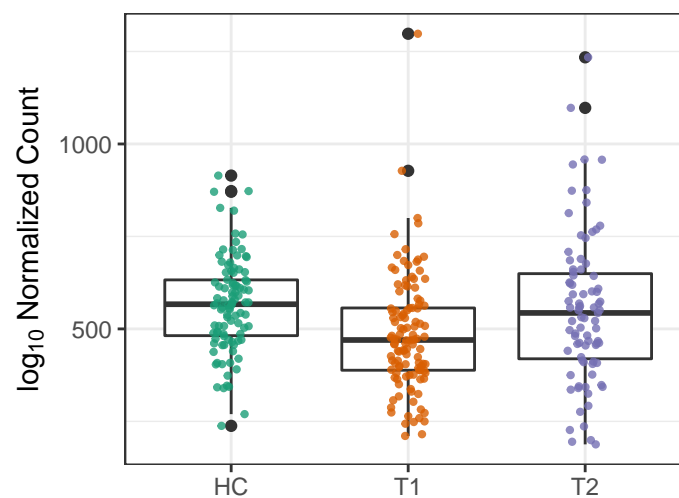


PWY-1042: glycolysis IV (plant cytosol)

HC vs. T1  $p = 0.00035$

HC vs. T2  $p = 0.74$

T1 vs. T2  $p = 0.024$

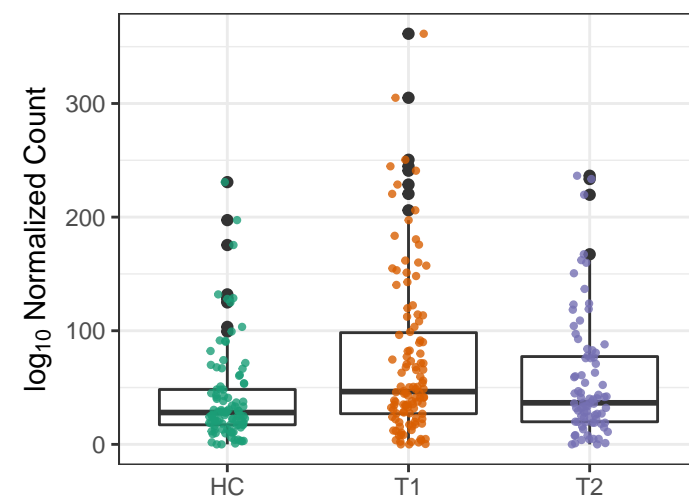


PWY66-400: glycolysis VI (metazoan)

HC vs. T1  $p = 0.00035$

HC vs. T2  $p = 0.1$

T1 vs. T2  $p = 0.049$

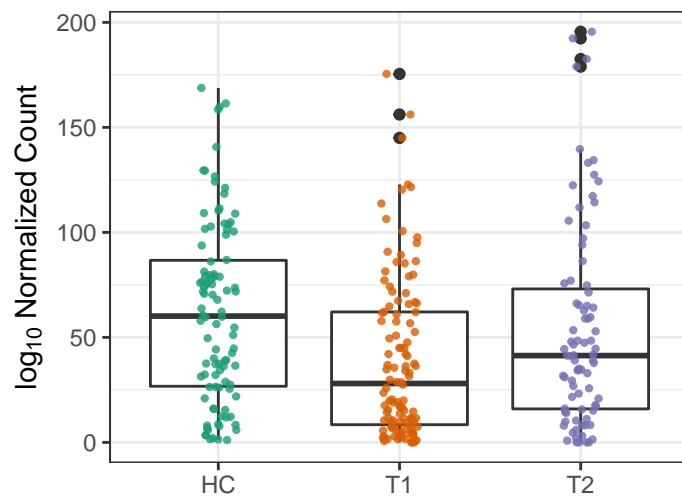


PWY-5989: stearate biosynthesis II (bacteria)

HC vs. T1  $p = 0.00038$

HC vs. T2  $p = 0.35$

T1 vs. T2  $p = 0.23$

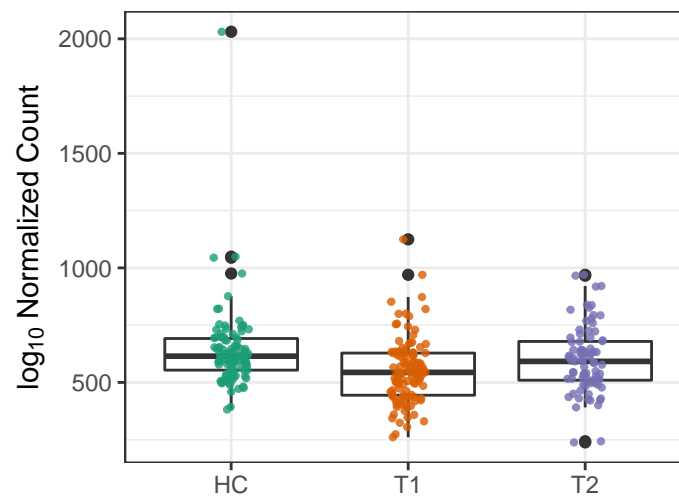


PWY-6121: 5-aminoimidazole ribonucleotide biosynthesis

HC vs. T1  $p = 0.00044$

HC vs. T2  $p = 0.19$

T1 vs. T2  $p = 0.012$

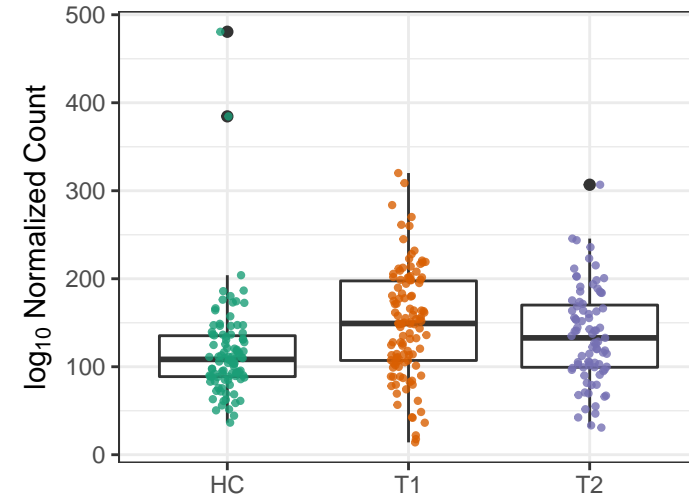


PWY-7184: pyrimidine deoxyribonucleotide biosynthesis

HC vs. T1  $p = 0.00045$

HC vs. T2  $p = 0.082$

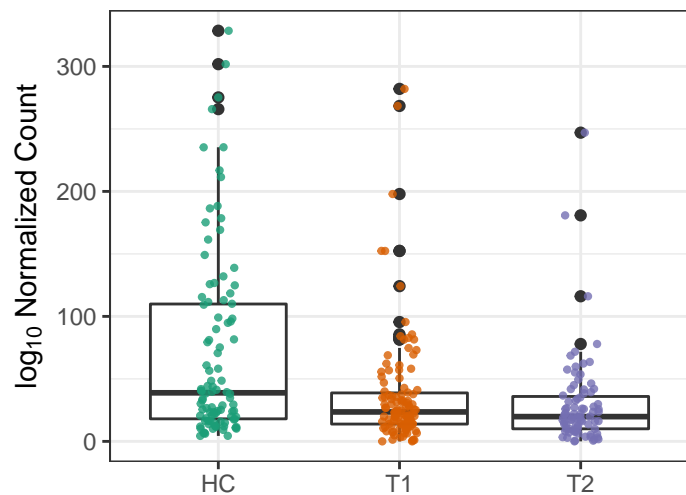
T1 vs. T2  $p = 0.21$





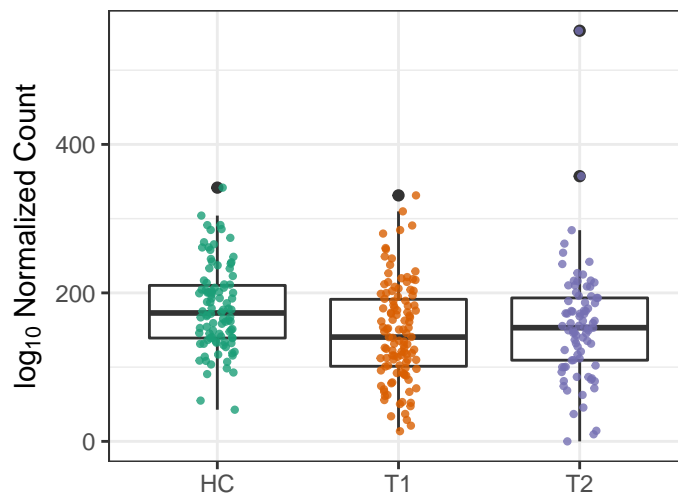
### PENTOSE-P-PWY: pentose phosphat

HC vs. T1  $p = 0.00051$   
HC vs. T2  $p = 0.00012$   
T1 vs. T2  $p = 0.21$



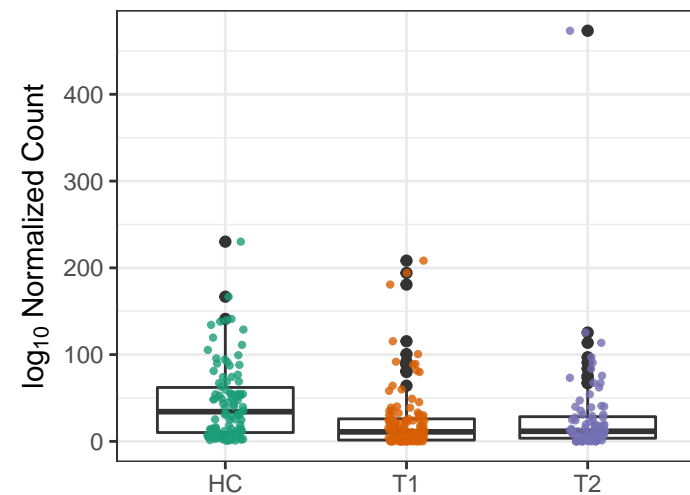
### PYRIDNUCSYN-PWY: NAD biosynthe

HC vs. T1  $p = 0.00056$   
HC vs. T2  $p = 0.078$   
T1 vs. T2  $p = 0.25$



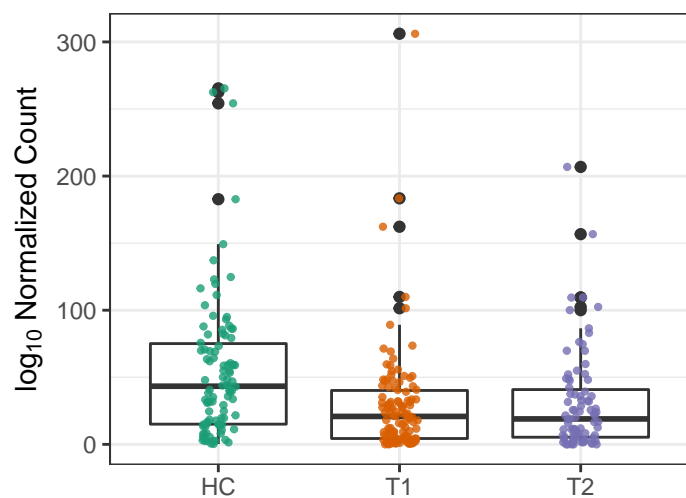
### PWY-5304: superpathway of sulfur ox

HC vs. T1  $p = 0.00057$   
HC vs. T2  $p = 0.078$   
T1 vs. T2  $p = 0.41$



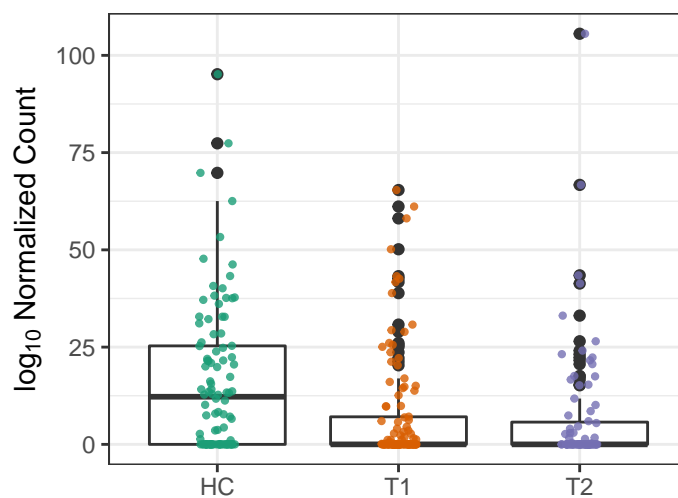
### LACTOSECAT-PWY: lactose and gala

HC vs. T1  $p = 0.00063$   
HC vs. T2  $p = 0.0068$   
T1 vs. T2  $p = 0.57$



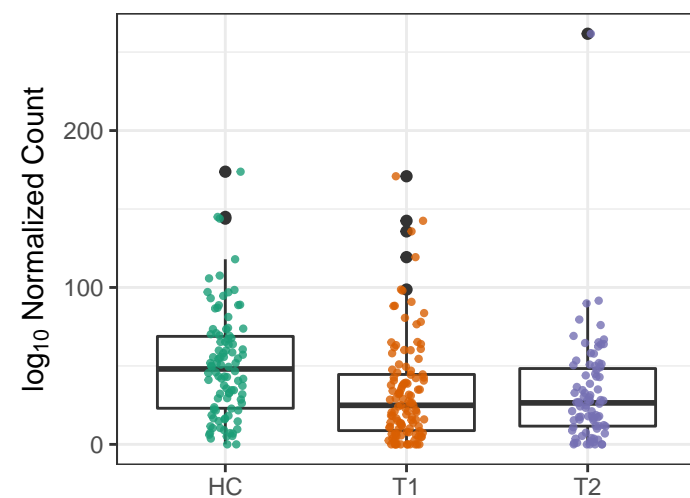
### PWY-7209: superpathway of pyrimidin

HC vs. T1  $p = 0.001$   
HC vs. T2  $p = 0.0068$   
T1 vs. T2  $p = 0.68$



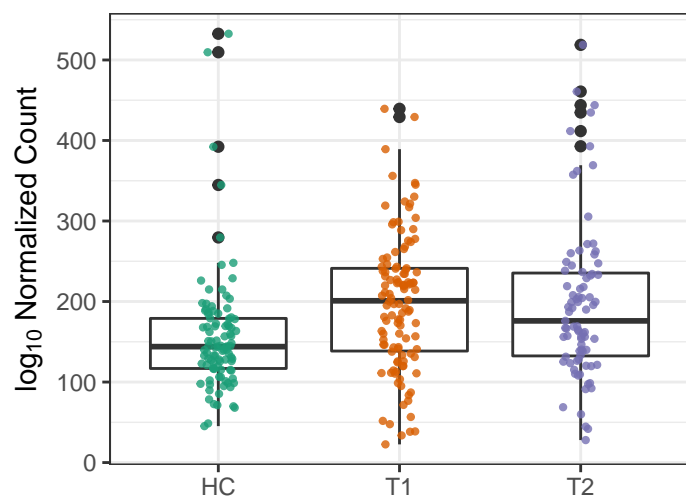
### ARG+POLYAMINE-SYN: superpathwa

HC vs. T1  $p = 0.0011$   
HC vs. T2  $p = 0.0079$   
T1 vs. T2  $p = 0.63$



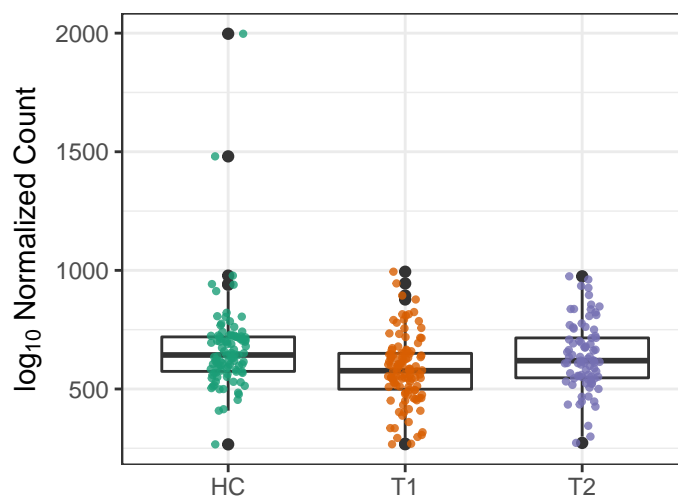
### PWY-7208: superpathway of pyrimidin

HC vs. T1  $p = 0.0011$   
HC vs. T2  $p = 0.02$   
T1 vs. T2  $p = 0.95$



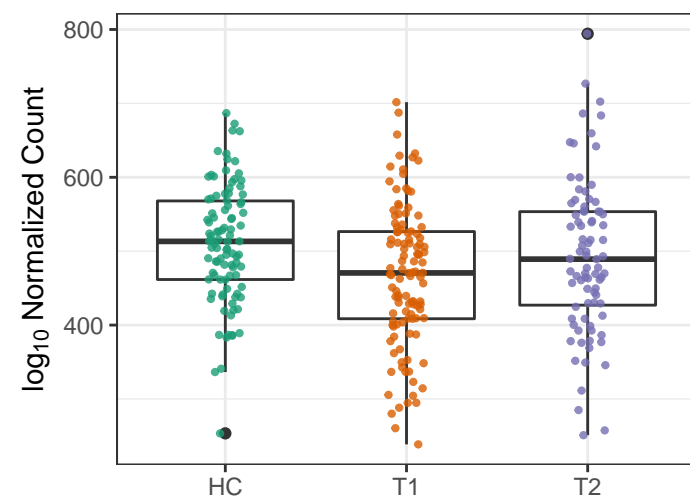
### PEPTIDOGLYCANSYN-PWY: peptid

HC vs. T1  $p = 0.0014$   
HC vs. T2  $p = 0.34$   
T1 vs. T2  $p = 0.019$



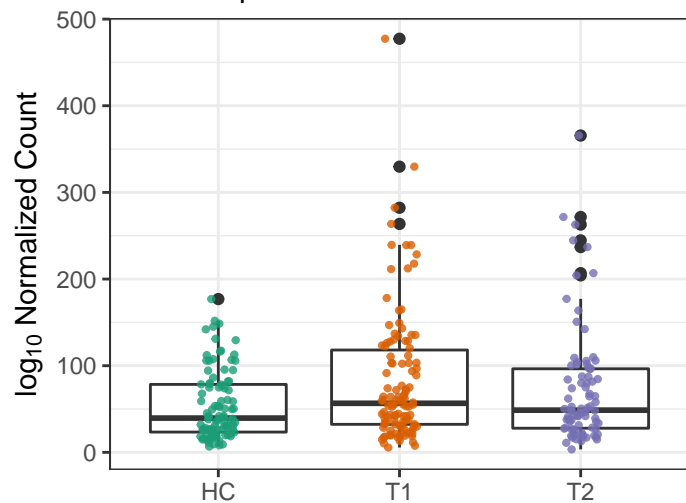
### PWY-5097: L-lysine biosynthesis VI

HC vs. T1  $p = 0.0014$   
HC vs. T2  $p = 0.31$   
T1 vs. T2  $p = 0.3$



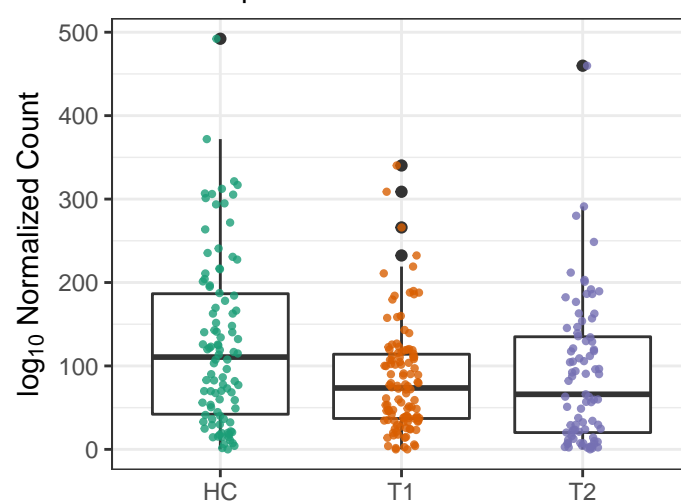
PWY0-1297: superpathway of purine c

HC vs. T1  $p = 0.0017$   
 HC vs. T2  $p = 0.078$   
 T1 vs. T2  $p = 0.21$



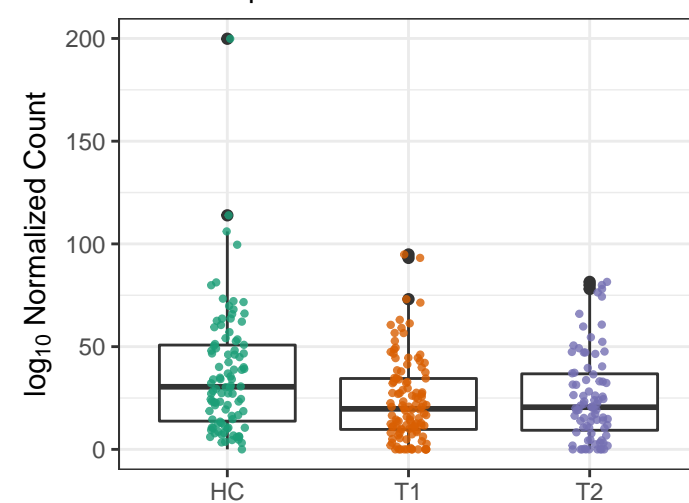
DAPLYSINESYN-PWY: L-lysine biosy

HC vs. T1  $p = 0.0018$   
 HC vs. T2  $p = 0.04$   
 T1 vs. T2  $p = 0.34$



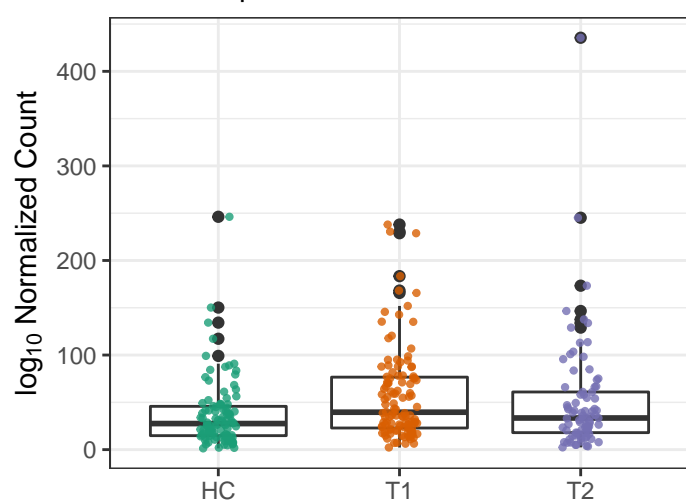
FOLSYN-PWY: superpathway of tetra

HC vs. T1  $p = 0.0018$   
 HC vs. T2  $p = 0.025$   
 T1 vs. T2  $p = 0.64$



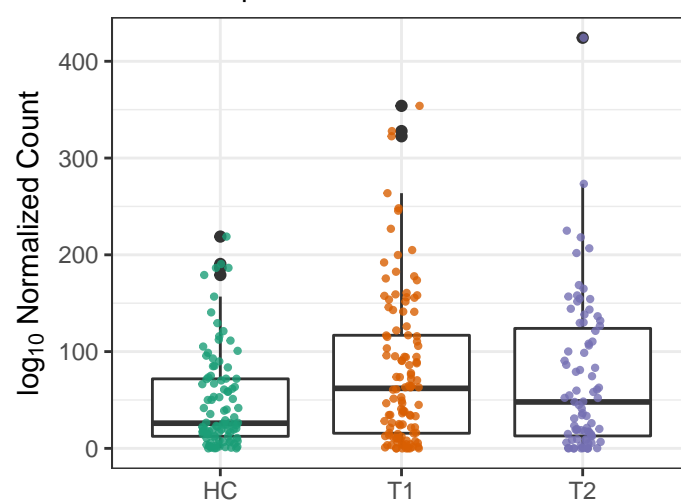
HISDEG-PWY: L-histidine degradati

HC vs. T1  $p = 0.0021$   
 HC vs. T2  $p = 0.14$   
 T1 vs. T2  $p = 0.81$



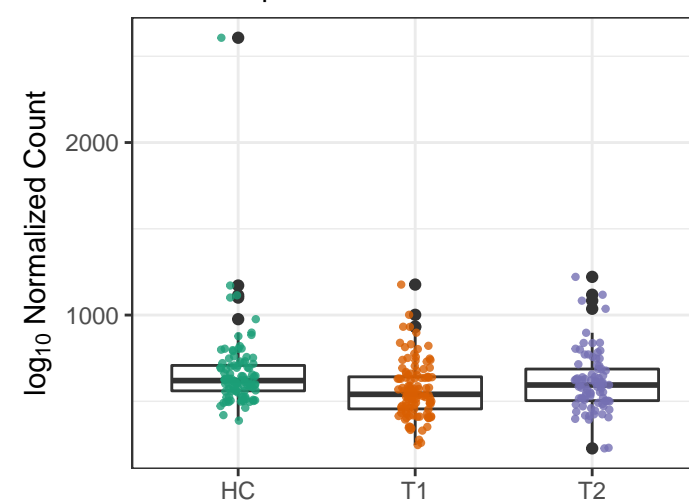
ARGININE-SYN4-PWY: L-ornithine d

HC vs. T1  $p = 0.0021$   
 HC vs. T2  $p = 0.072$   
 T1 vs. T2  $p = 0.21$



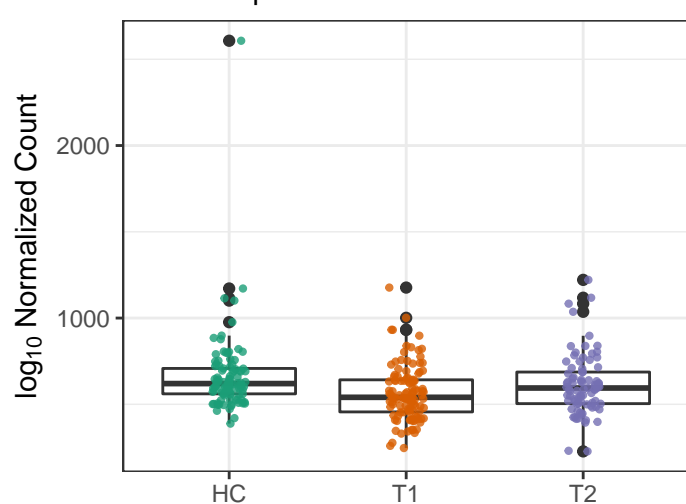
PWY-6122: 5-aminoimidazole ribonu

HC vs. T1  $p = 0.0023$   
 HC vs. T2  $p = 0.19$   
 T1 vs. T2  $p = 0.016$



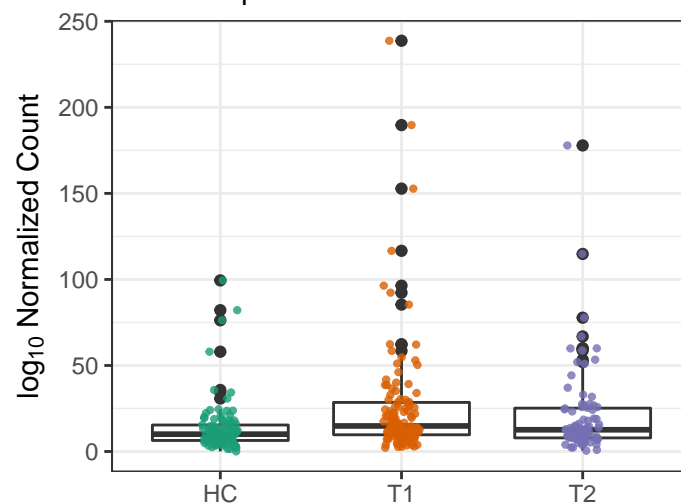
PWY-6277: superpathway of 5-amin

HC vs. T1  $p = 0.0023$   
 HC vs. T2  $p = 0.19$   
 T1 vs. T2  $p = 0.016$



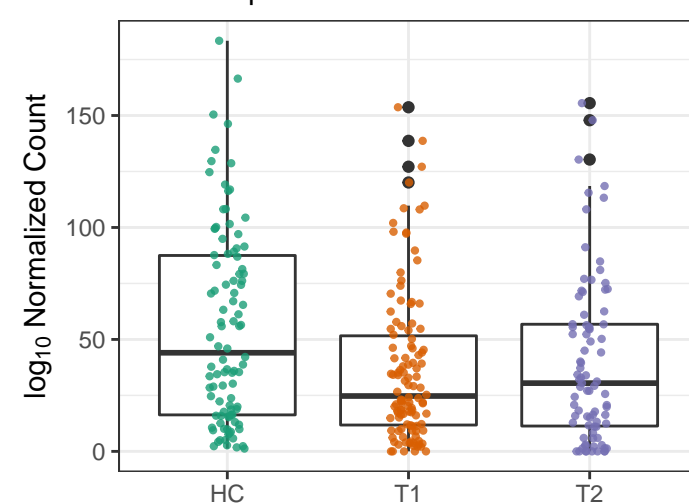
P161-PWY: acetylene degradation

HC vs. T1  $p = 0.0026$   
 HC vs. T2  $p = 0.085$   
 T1 vs. T2  $p = 0.34$



PYRIDNUCSAL-PWY: NAD salvage p

HC vs. T1  $p = 0.0026$   
 HC vs. T2  $p = 0.048$   
 T1 vs. T2  $p = 0.59$

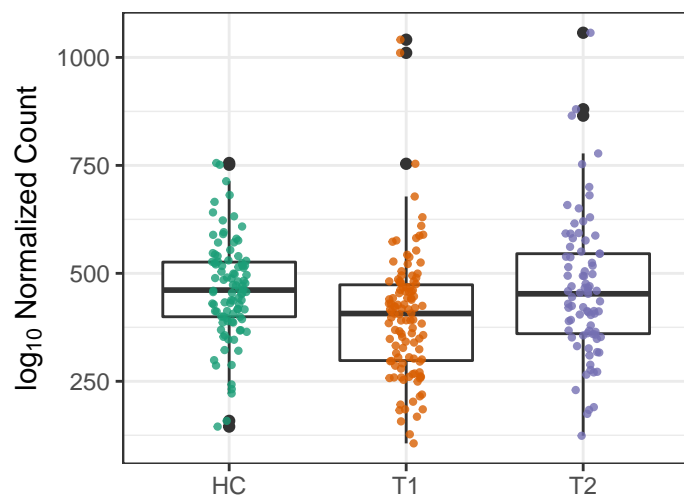


PWY0-1296: purine ribonucleosides c

HC vs. T1  $p = 0.0028$

HC vs. T2  $p = 0.99$

T1 vs. T2  $p = 0.043$

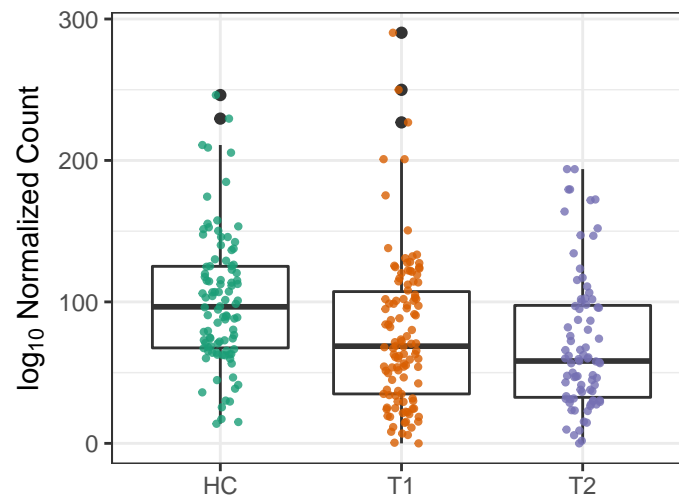


HSERMETANA-PWY: L-methionine bi

HC vs. T1  $p = 0.0029$

HC vs. T2  $p = 0.0011$

T1 vs. T2  $p = 0.58$

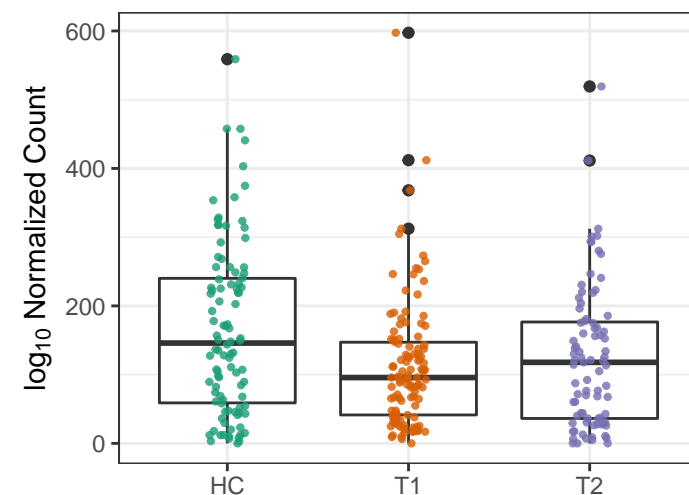


OANTIGEN-PWY: O-antigen building

HC vs. T1  $p = 0.0029$

HC vs. T2  $p = 0.07$

T1 vs. T2  $p = 0.12$

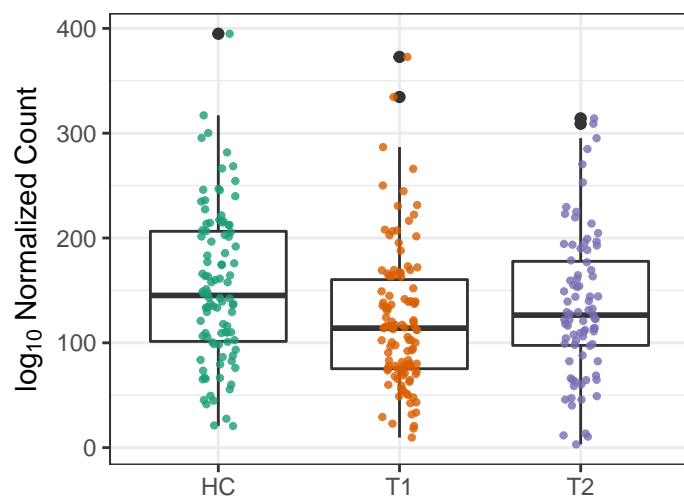


PWY-5659: GDP-mannose biosynthe

HC vs. T1  $p = 0.0029$

HC vs. T2  $p = 0.18$

T1 vs. T2  $p = 0.39$

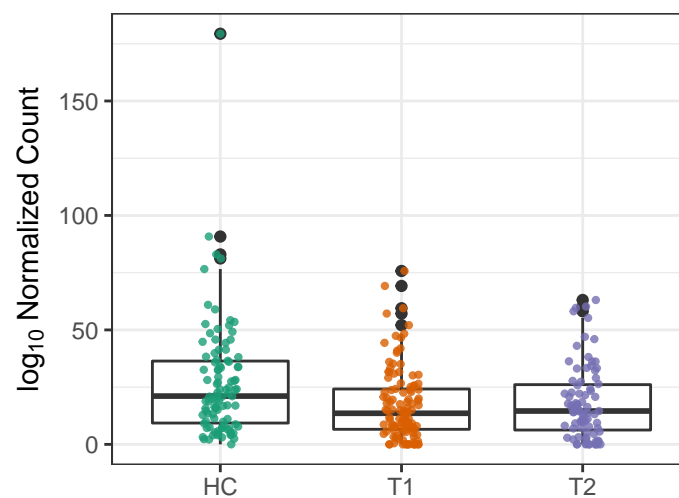


PWY-6612: superpathway of tetrahydr

HC vs. T1  $p = 0.0037$

HC vs. T2  $p = 0.028$

T1 vs. T2  $p = 0.72$

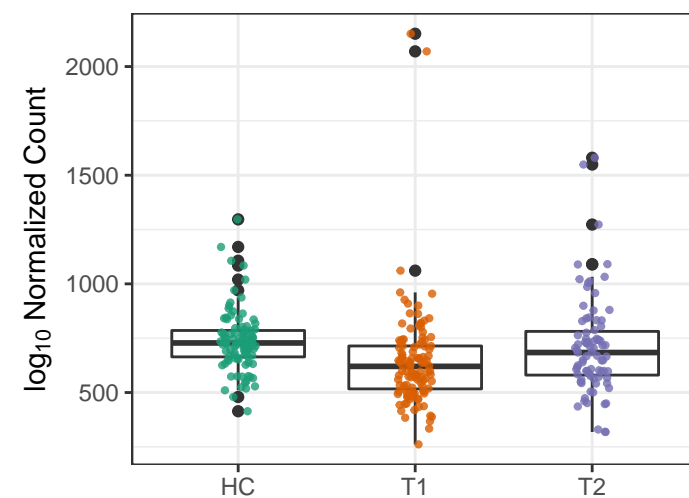


PWY-7111: pyruvate fermentation to i

HC vs. T1  $p = 0.0038$

HC vs. T2  $p = 0.47$

T1 vs. T2  $p = 0.024$

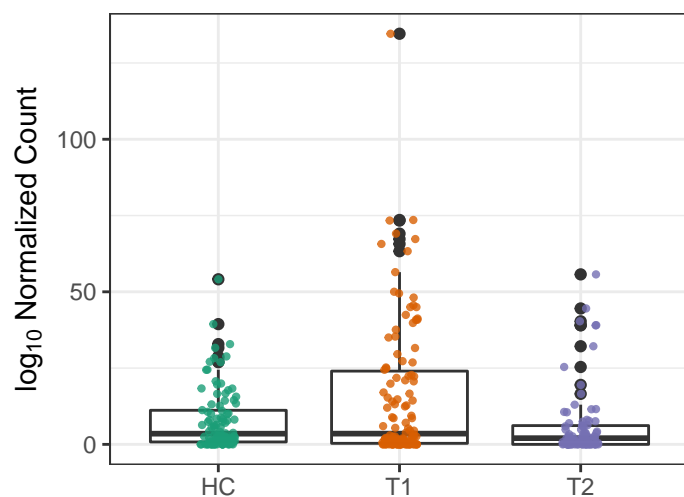


P108-PWY: pyruvate fermentation to p

HC vs. T1  $p = 0.004$

HC vs. T2  $p = 0.36$

T1 vs. T2  $p = 0.0089$

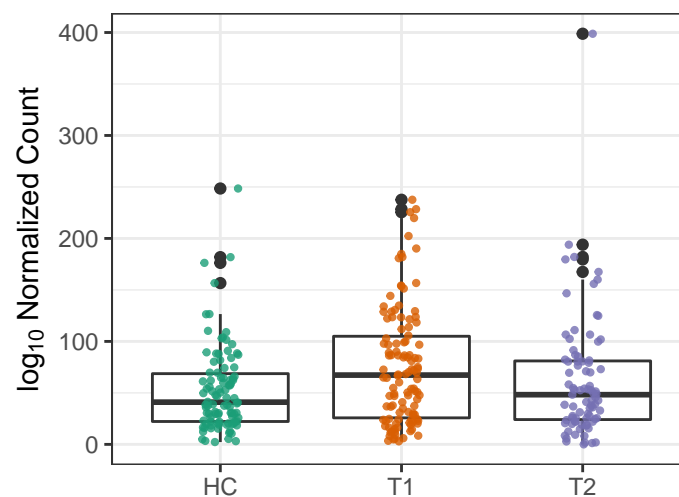


PWY-5154: L-arginine biosynthesis III

HC vs. T1  $p = 0.004$

HC vs. T2  $p = 0.36$

T1 vs. T2  $p = 0.093$

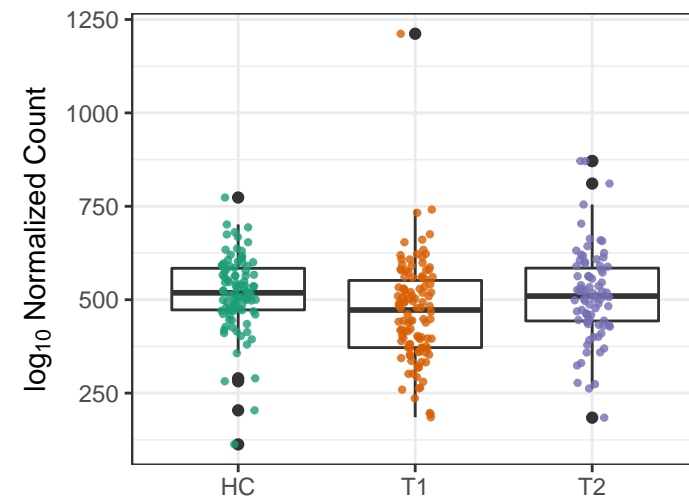


PWY-5667: CDP-diacylglycerol biosy

HC vs. T1  $p = 0.0042$

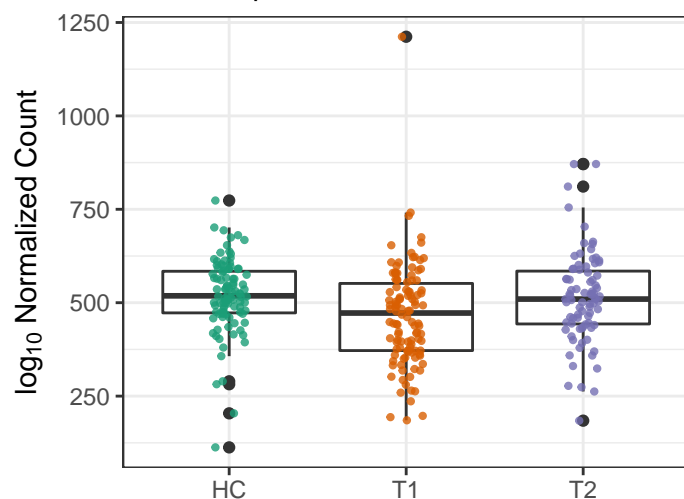
HC vs. T2  $p = 0.8$

T1 vs. T2  $p = 0.18$



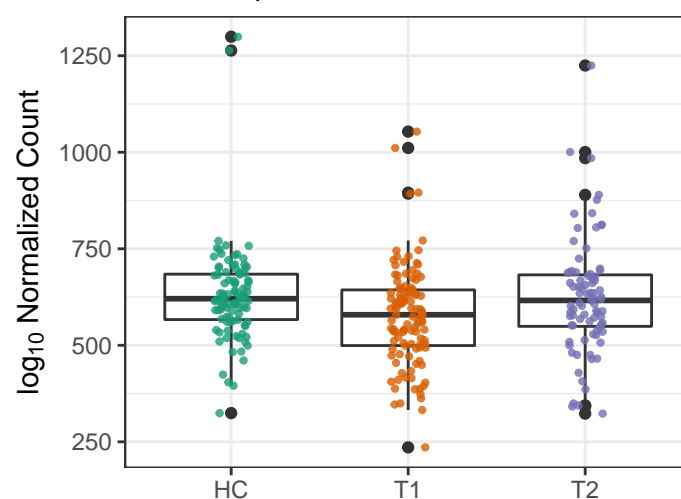
PWY0-1319: CDP-diacylglycerol biosynthesis

HC vs. T1  $p = 0.0042$   
 HC vs. T2  $p = 0.8$   
 T1 vs. T2  $p = 0.18$



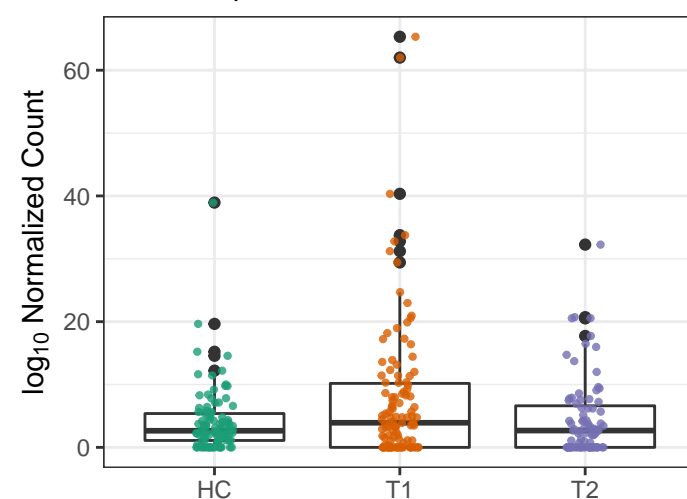
PWY-7221: guanosine ribonucleotide biosynthesis

HC vs. T1  $p = 0.007$   
 HC vs. T2  $p = 0.88$   
 T1 vs. T2  $p = 0.045$



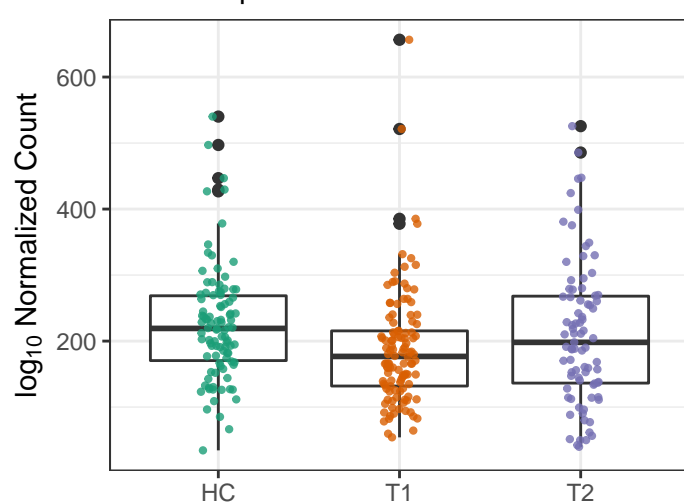
PWY-5464: superpathway of cytosolic glycolysis

HC vs. T1  $p = 0.0072$   
 HC vs. T2  $p = 0.68$   
 T1 vs. T2  $p = 0.079$



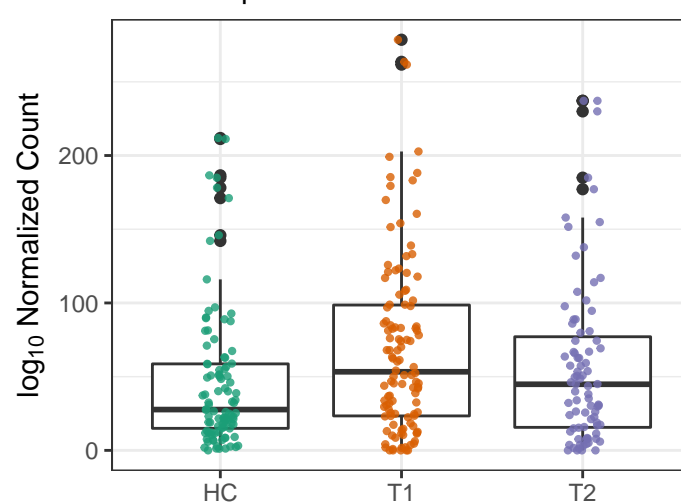
COA-PWY: coenzyme A biosynthesis

HC vs. T1  $p = 0.008$   
 HC vs. T2  $p = 0.47$   
 T1 vs. T2  $p = 0.027$



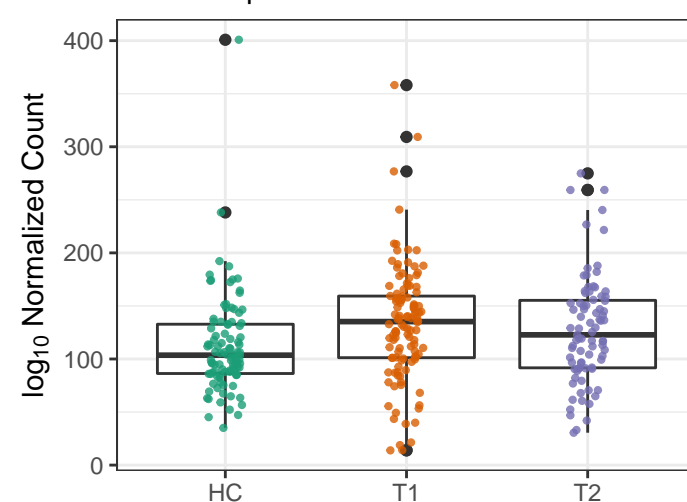
PHOSLIPSYN-PWY: superpathway of phospholipid synthesis

HC vs. T1  $p = 0.008$   
 HC vs. T2  $p = 0.27$   
 T1 vs. T2  $p = 0.078$



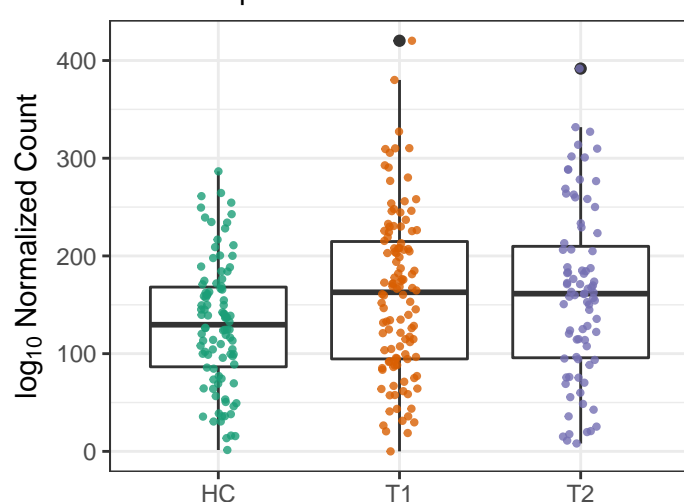
PWY-6545: pyrimidine deoxyribonucleotide biosynthesis

HC vs. T1  $p = 0.01$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.74$



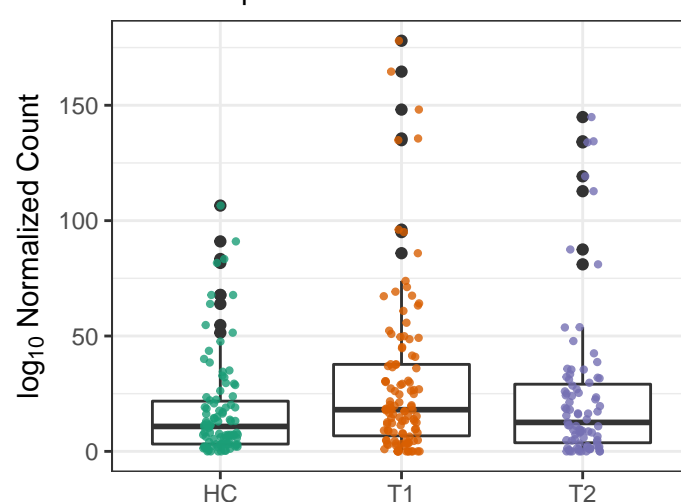
PWY-6168: flavin biosynthesis III (flavin mononucleotide)

HC vs. T1  $p = 0.011$   
 HC vs. T2  $p = 0.041$   
 T1 vs. T2  $p = 0.42$



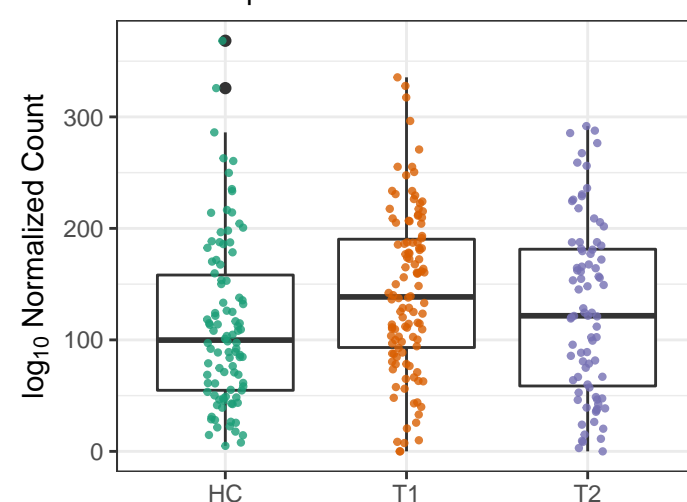
PWY-7323: superpathway of GDP-mannose biosynthesis

HC vs. T1  $p = 0.011$   
 HC vs. T2  $p = 0.27$   
 T1 vs. T2  $p = 0.19$



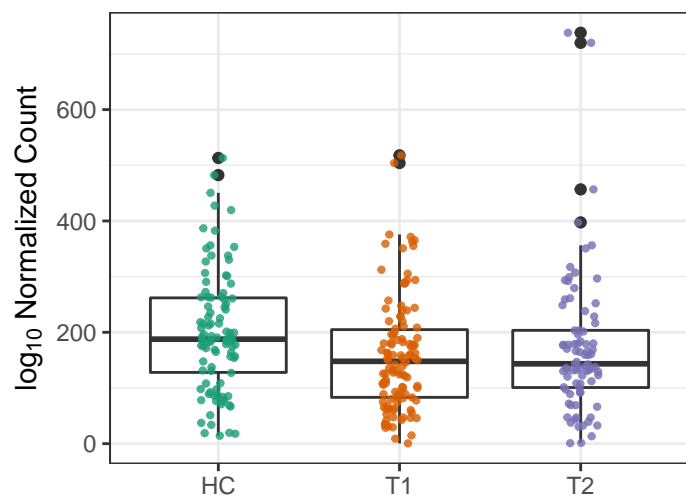
ANAEROFRUCAT-PWY: homolactic fermentation

HC vs. T1  $p = 0.011$   
 HC vs. T2  $p = 0.35$   
 T1 vs. T2  $p = 0.18$



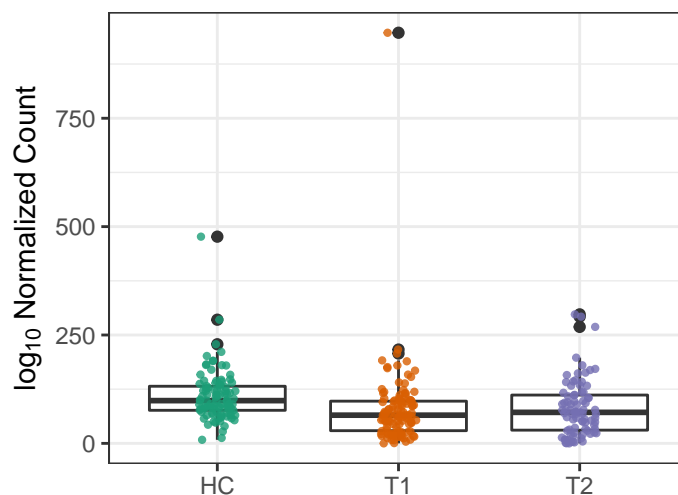
### TRPSYN-PWY: L-tryptophan biosynth

HC vs. T1  $p = 0.015$   
 HC vs. T2  $p = 0.22$   
 T1 vs. T2  $p = 0.57$



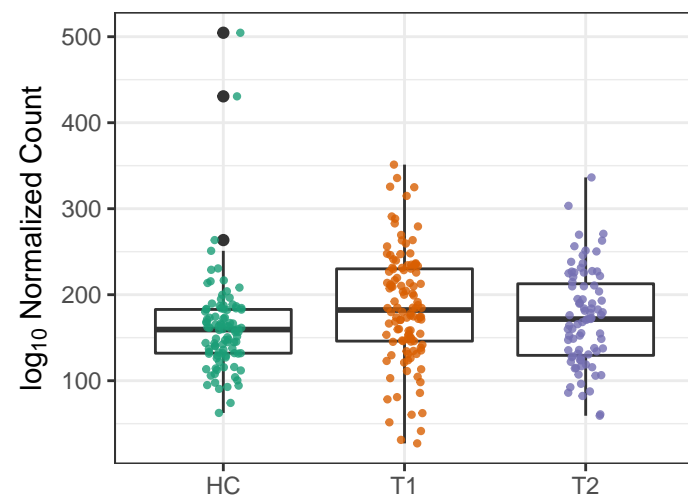
### PWY-6305: putrescine biosynthesis IV

HC vs. T1  $p = 0.016$   
 HC vs. T2  $p = 0.017$   
 T1 vs. T2  $p = 0.11$



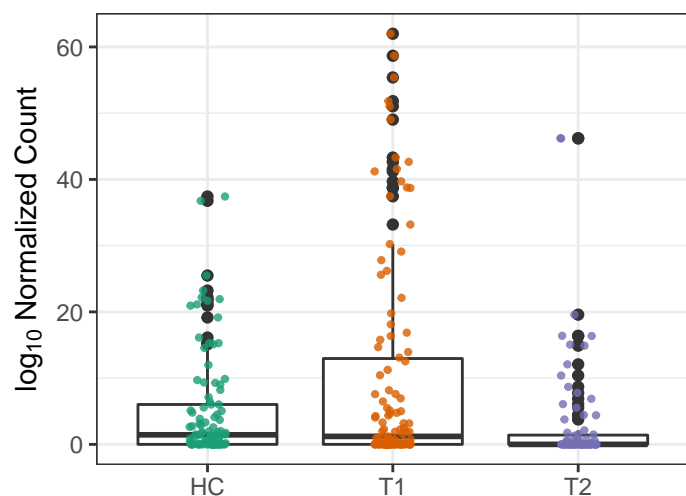
### PWY0-166: superpathway of pyrimidin

HC vs. T1  $p = 0.018$   
 HC vs. T2  $p = 0.32$   
 T1 vs. T2  $p = 0.35$



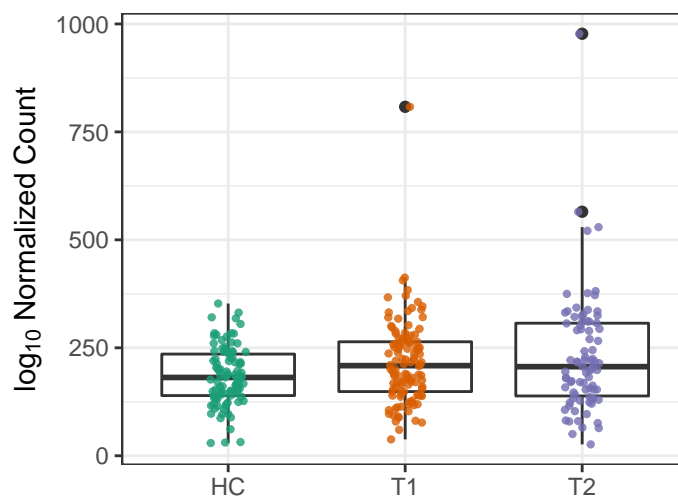
### PWY-5505: L-glutamate and L-glutam

HC vs. T1  $p = 0.019$   
 HC vs. T2  $p = 0.19$   
 T1 vs. T2  $p = 0.0038$



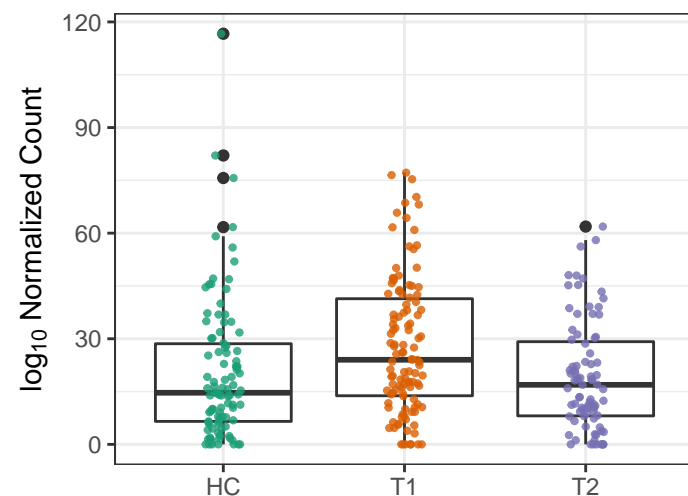
### PWY-6703: preQ0 biosynthesis

HC vs. T1  $p = 0.019$   
 HC vs. T2  $p = 0.04$   
 T1 vs. T2  $p = 0.92$



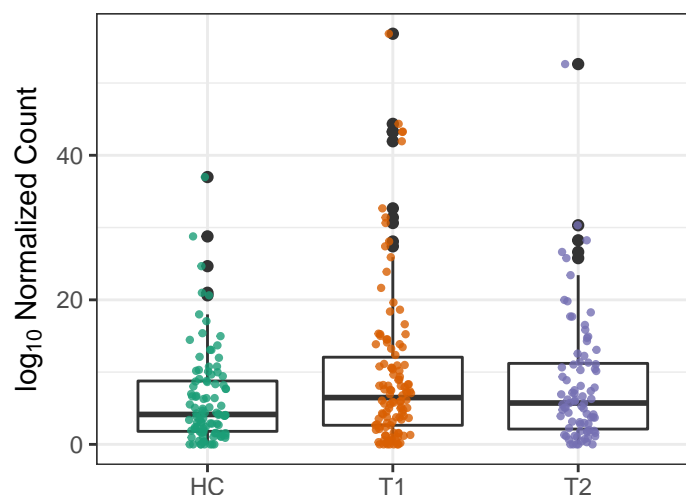
### PWY-5676: acetyl-CoA fermentation t

HC vs. T1  $p = 0.019$   
 HC vs. T2  $p = 0.74$   
 T1 vs. T2  $p = 0.0057$



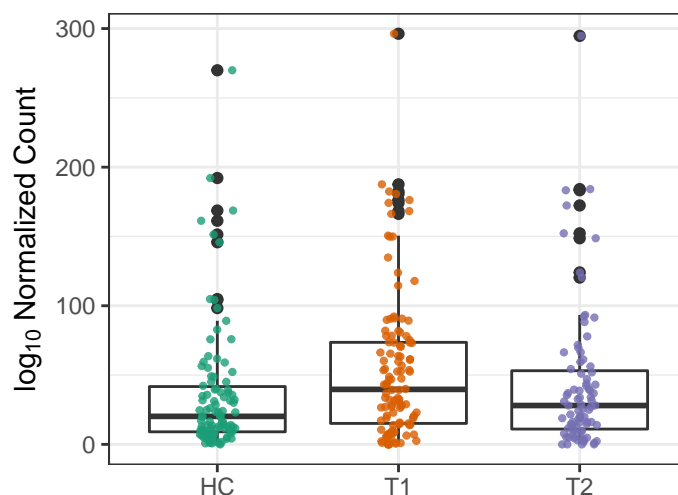
### HEME-BIOSYNTHESIS-II: heme biosy

HC vs. T1  $p = 0.021$   
 HC vs. T2  $p = 0.19$   
 T1 vs. T2  $p = 0.25$



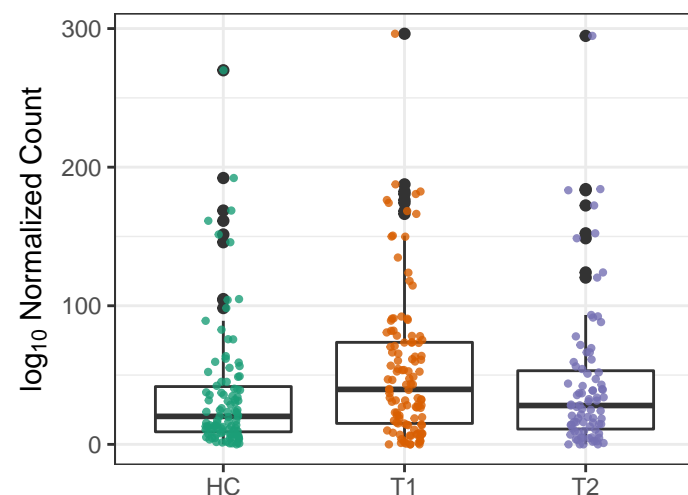
### PWY4FS-7: phosphatidylglycerol biosy

HC vs. T1  $p = 0.021$   
 HC vs. T2  $p = 0.45$   
 T1 vs. T2  $p = 0.057$



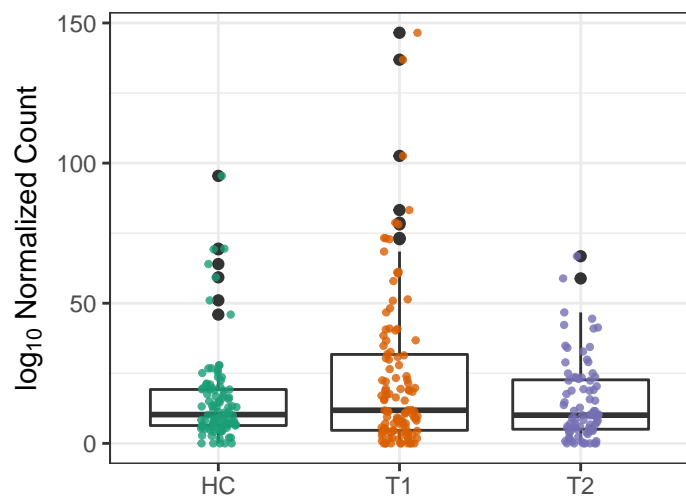
### PWY4FS-8: phosphatidylglycerol biosy

HC vs. T1  $p = 0.021$   
 HC vs. T2  $p = 0.45$   
 T1 vs. T2  $p = 0.057$



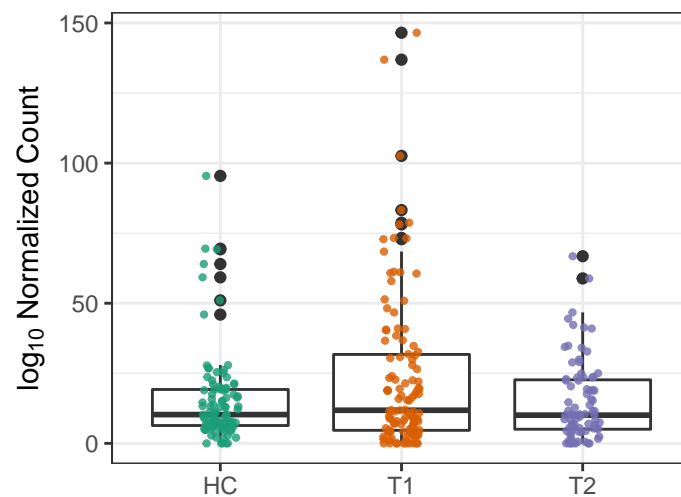
PWY-5897: superpathway of menaquin

HC vs. T1  $p = 0.024$   
 HC vs. T2  $p = 0.9$   
 T1 vs. T2  $p = 0.024$



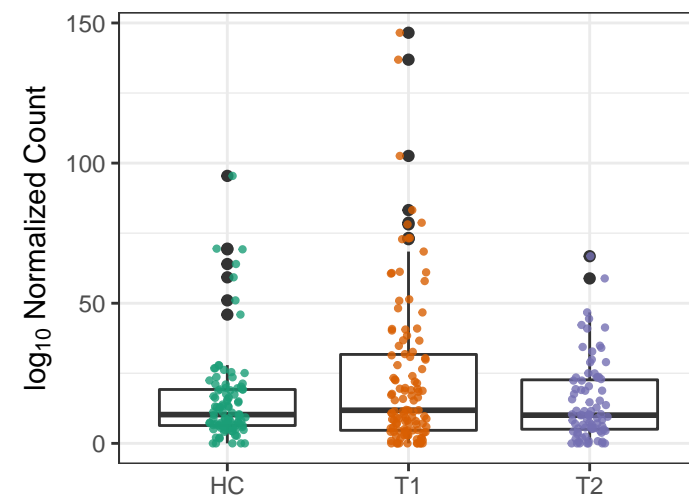
PWY-5898: superpathway of menaquin

HC vs. T1  $p = 0.024$   
 HC vs. T2  $p = 0.9$   
 T1 vs. T2  $p = 0.024$



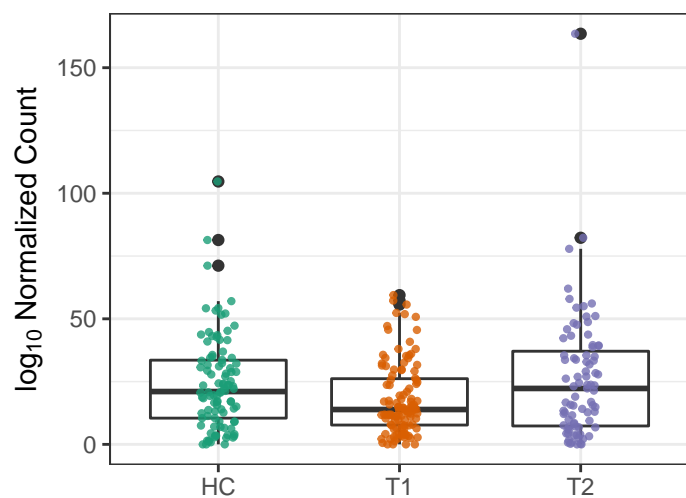
PWY-5899: superpathway of menaquin

HC vs. T1  $p = 0.024$   
 HC vs. T2  $p = 0.9$   
 T1 vs. T2  $p = 0.024$



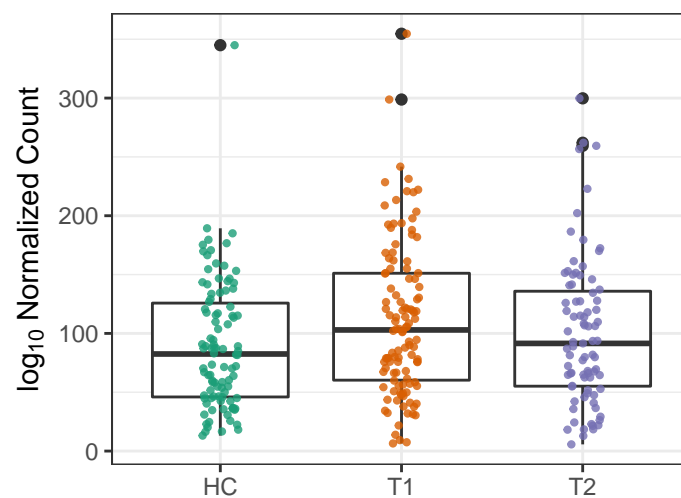
PWY-6595: superpathway of guanosin

HC vs. T1  $p = 0.024$   
 HC vs. T2  $p = 0.74$   
 T1 vs. T2  $p = 0.049$



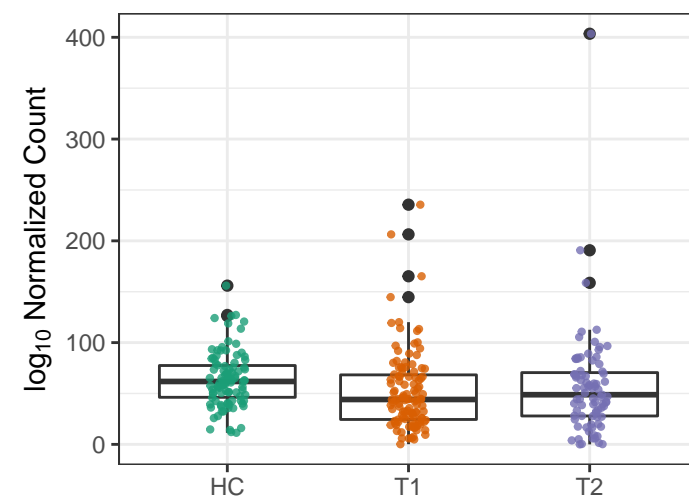
PWY66-409: superpathway of purine r

HC vs. T1  $p = 0.025$   
 HC vs. T2  $p = 0.34$   
 T1 vs. T2  $p = 0.086$



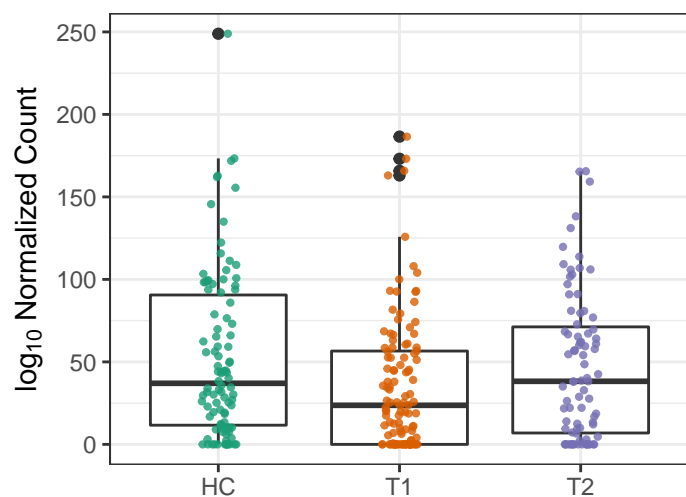
SALVADEHYPOX-PWY: adenosine nu

HC vs. T1  $p = 0.026$   
 HC vs. T2  $p = 0.35$   
 T1 vs. T2  $p = 0.54$



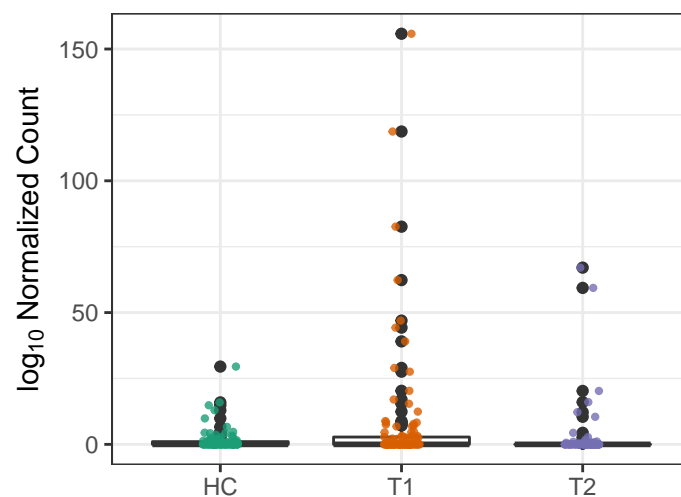
PWY-7456: mannan degradation

HC vs. T1  $p = 0.026$   
 HC vs. T2  $p = 0.58$   
 T1 vs. T2  $p = 0.065$



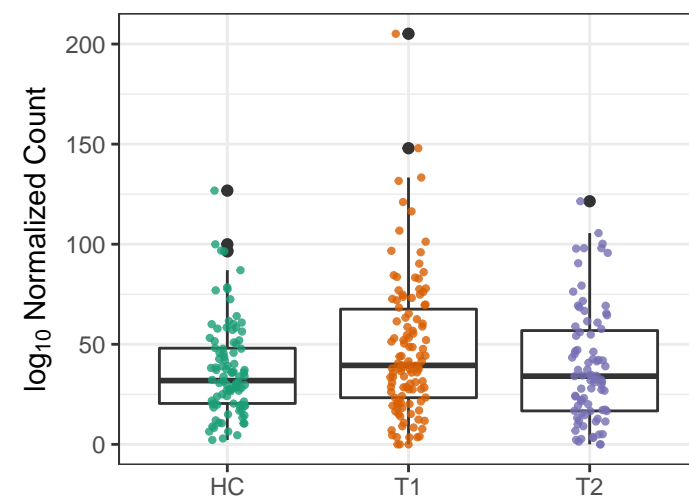
PWY-7013: L-1,2-propanediol degra

HC vs. T1  $p = 0.026$   
 HC vs. T2  $p = 0.55$   
 T1 vs. T2  $p = 0.059$



HEXITOLDEGSUPER-PWY: superpat

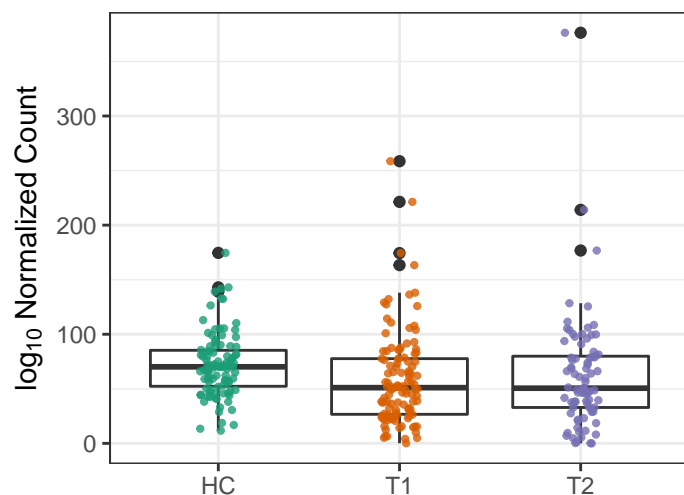
HC vs. T1  $p = 0.028$   
 HC vs. T2  $p = 0.73$   
 T1 vs. T2  $p = 0.049$





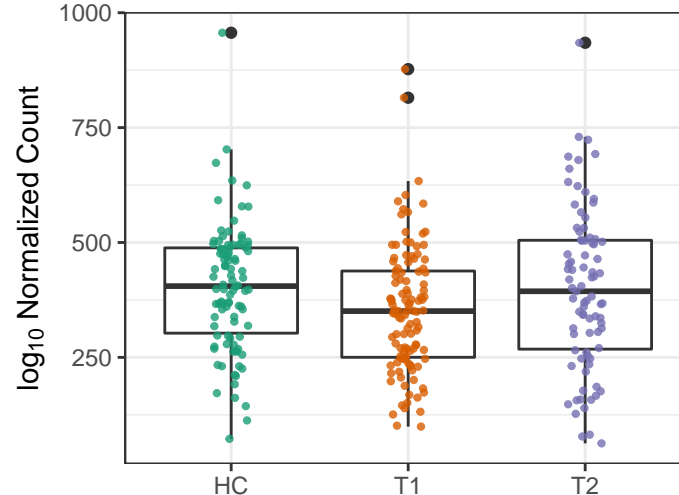
PWY-6608: guanosine nucleotides de

HC vs. T1  $p = 0.028$   
 HC vs. T2  $p = 0.22$   
 T1 vs. T2  $p = 0.74$



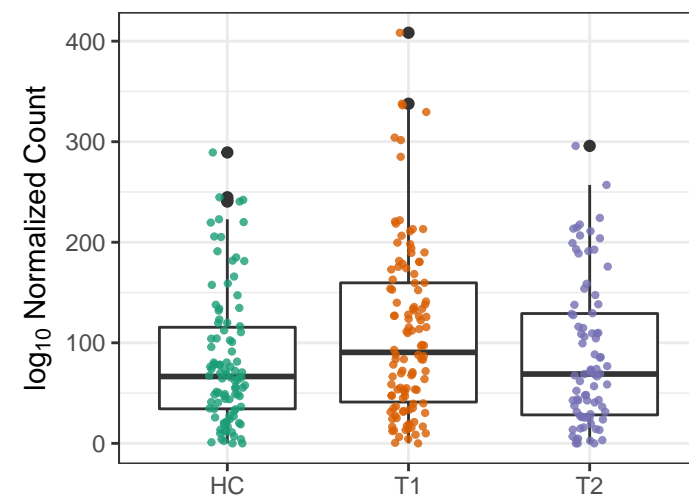
PWY-6385: peptidoglycan biosynthes

HC vs. T1  $p = 0.028$   
 HC vs. T2  $p = 0.91$   
 T1 vs. T2  $p = 0.031$



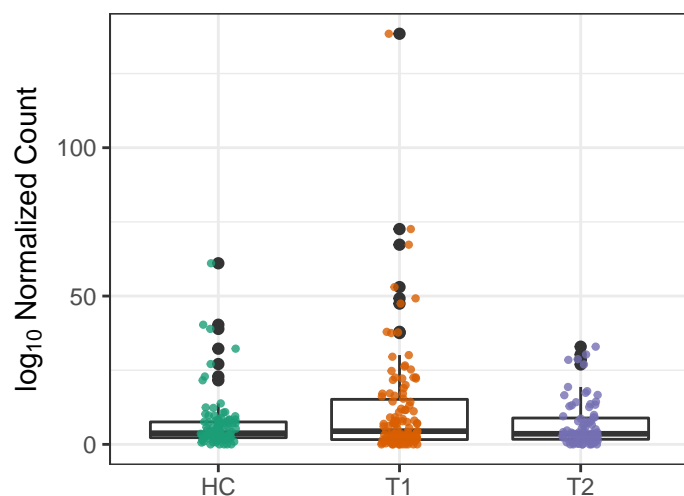
PWY-7560: methylerythritol phosphate

HC vs. T1  $p = 0.03$   
 HC vs. T2  $p = 0.74$   
 T1 vs. T2  $p = 0.096$



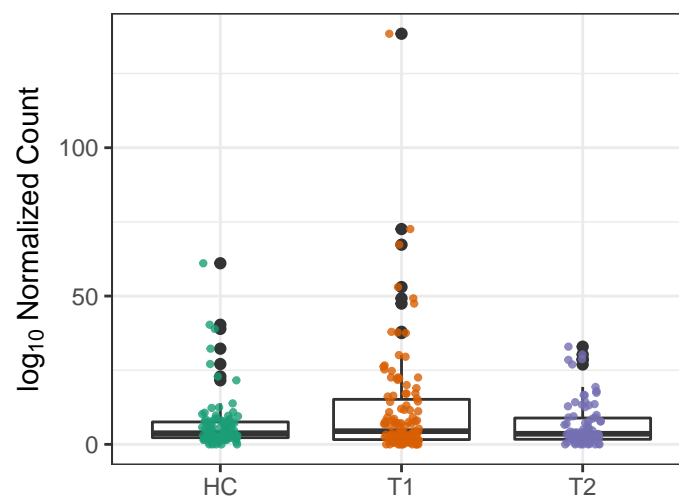
PWY-5791: 1,4-dihydroxy-2-naphtho

HC vs. T1  $p = 0.032$   
 HC vs. T2  $p = 0.96$   
 T1 vs. T2  $p = 0.02$



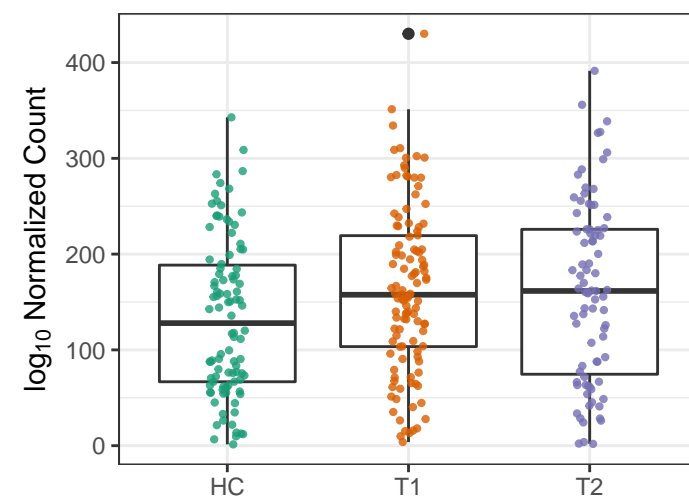
PWY-5837: 1,4-dihydroxy-2-naphtho

HC vs. T1  $p = 0.032$   
 HC vs. T2  $p = 0.96$   
 T1 vs. T2  $p = 0.02$



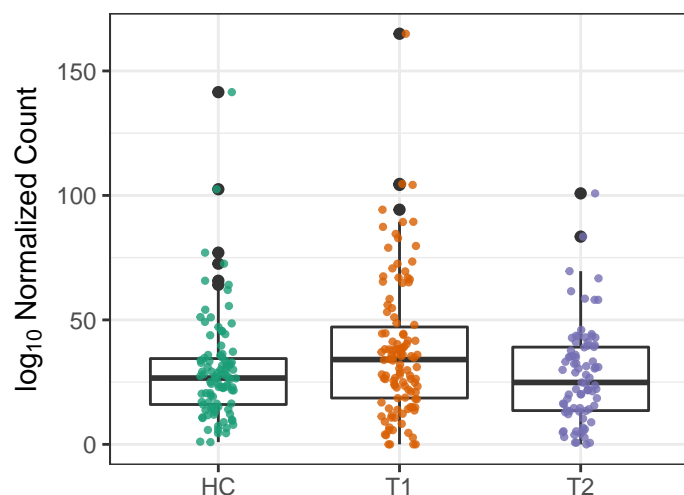
PWY-6897: thiamin salvage II

HC vs. T1  $p = 0.032$   
 HC vs. T2  $p = 0.1$   
 T1 vs. T2  $p = 0.49$



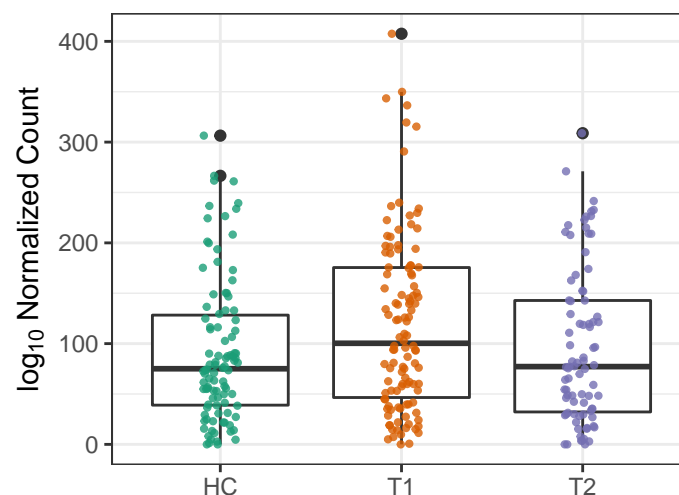
P441-PWY: superpathway of N-acetyl

HC vs. T1  $p = 0.033$   
 HC vs. T2  $p = 0.71$   
 T1 vs. T2  $p = 0.0063$



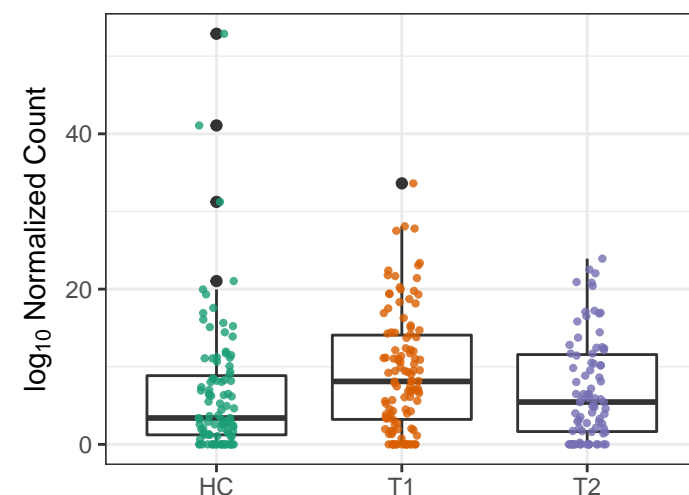
PWY-6270: isoprene biosynthesis I

HC vs. T1  $p = 0.038$   
 HC vs. T2  $p = 0.76$   
 T1 vs. T2  $p = 0.1$



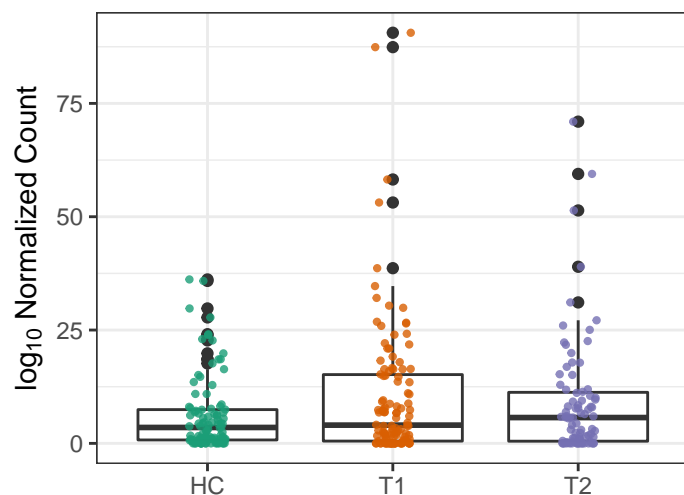
P162-PWY: L-glutamate degradation V

HC vs. T1  $p = 0.039$   
 HC vs. T2  $p = 0.74$   
 T1 vs. T2  $p = 0.028$



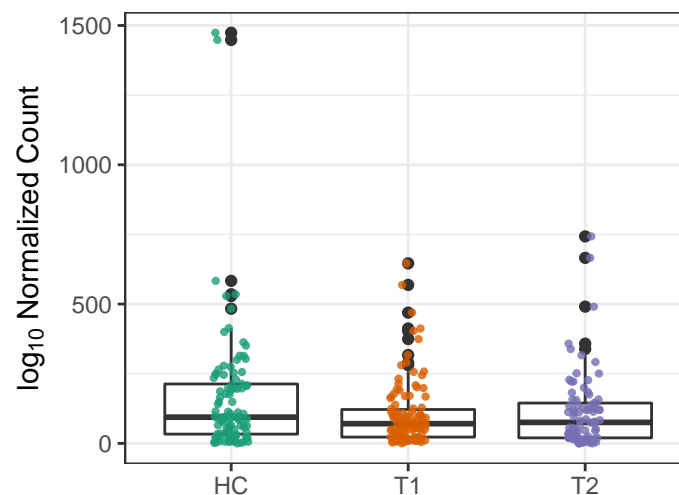
PWY-6531: mannitol cycle

HC vs. T1  $p = 0.04$   
HC vs. T2  $p = 0.17$   
T1 vs. T2  $p = 0.35$



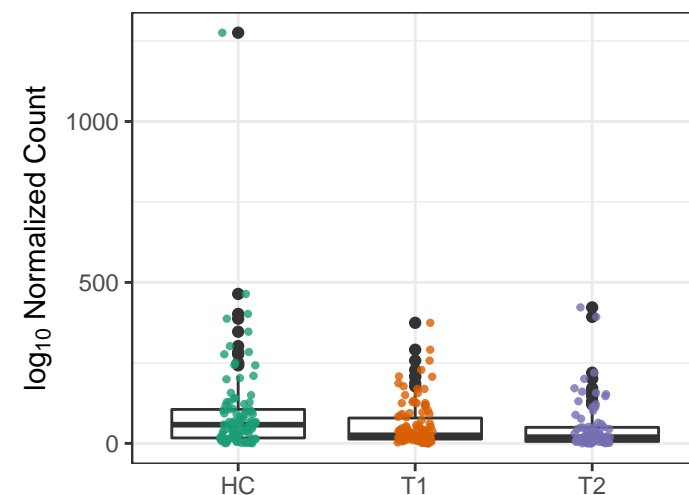
UDPNAGSYN-PWY: UDP-N-acetyl-

HC vs. T1  $p = 0.04$   
HC vs. T2  $p = 0.13$   
T1 vs. T2  $p = 0.25$



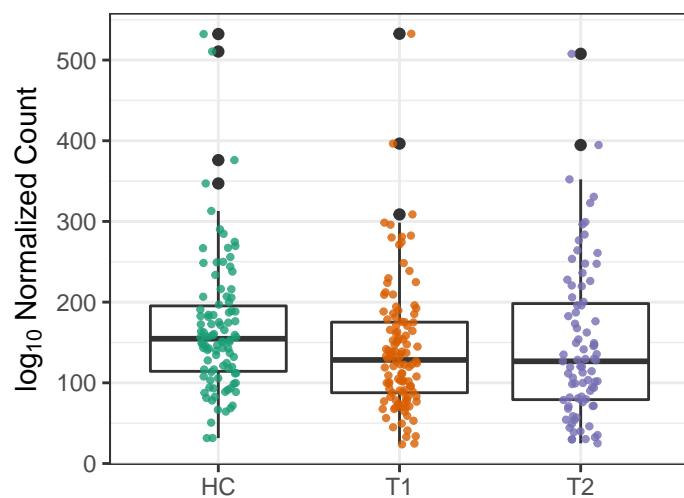
PWY-6147: 6-hydroxymethyl-dihydro

HC vs. T1  $p = 0.04$   
HC vs. T2  $p = 0.04$   
T1 vs. T2  $p = 0.88$



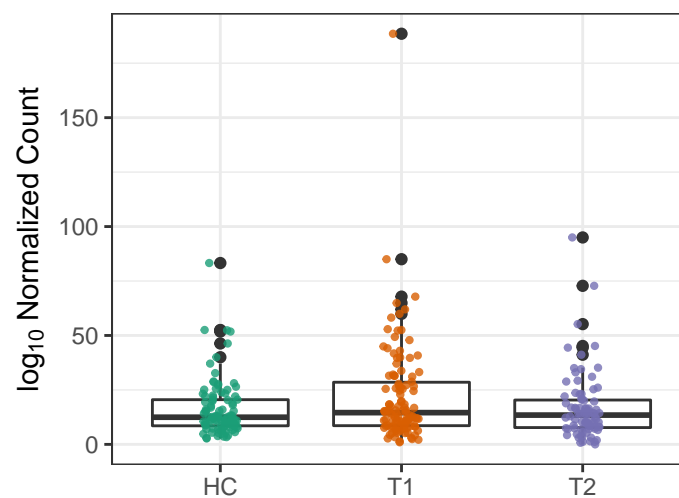
PWY-4242: pantothenate and coenzym

HC vs. T1  $p = 0.042$   
HC vs. T2  $p = 0.22$   
T1 vs. T2  $p = 0.36$



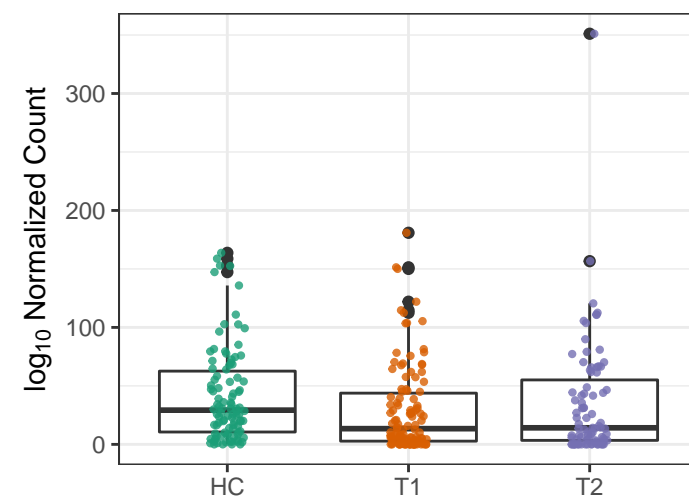
HEMESYN2-PWY: heme biosynthesis

HC vs. T1  $p = 0.046$   
HC vs. T2  $p = 0.89$   
T1 vs. T2  $p = 0.27$



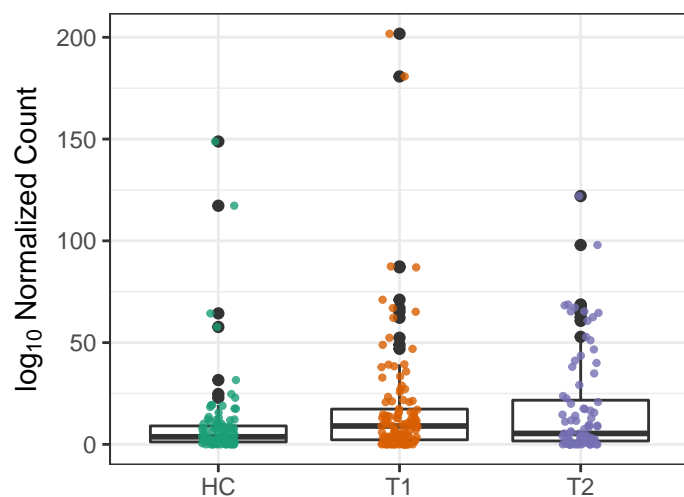
PWY-5941: glycogen degradation II (e

HC vs. T1  $p = 0.048$   
HC vs. T2  $p = 0.47$   
T1 vs. T2  $p = 0.51$



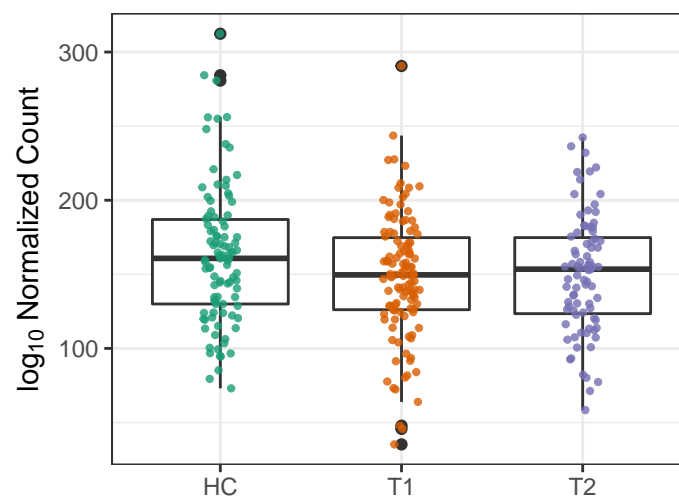
FASYN-ELONG-PWY: fatty acid elong

HC vs. T1  $p = 0.054$   
HC vs. T2  $p = 0.065$   
T1 vs. T2  $p = 0.84$



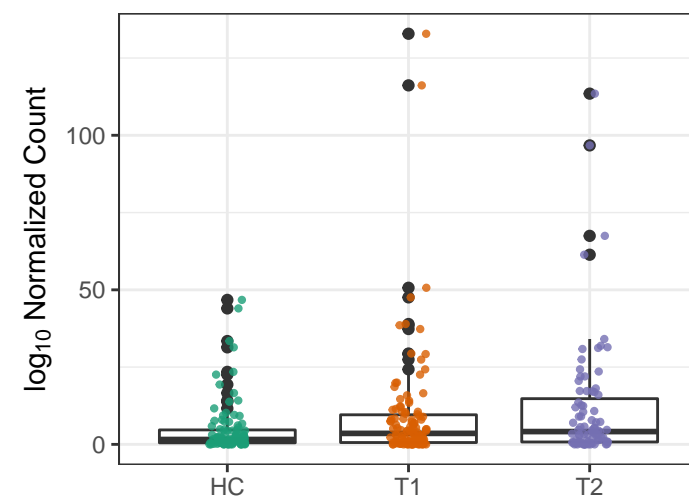
PWY-7187: pyrimidine deoxyribonucle

HC vs. T1  $p = 0.054$   
HC vs. T2  $p = 0.12$   
T1 vs. T2  $p = 0.49$



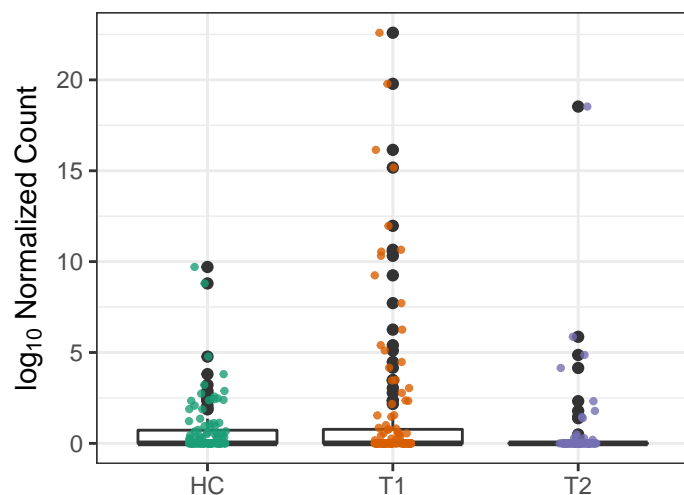
PWY-5384: sucrose degradation IV (s

HC vs. T1  $p = 0.055$   
HC vs. T2  $p = 0.03$   
T1 vs. T2  $p = 0.42$



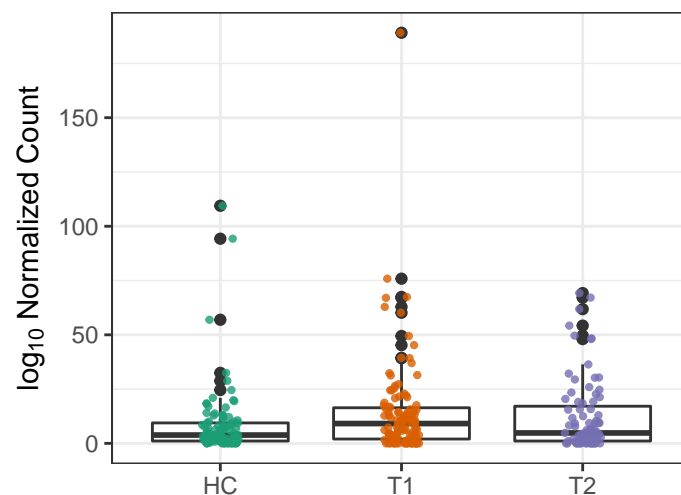
PWY-7399: methylphosphonate degrad

HC vs. T1  $p = 0.056$   
 HC vs. T2  $p = 0.53$   
 T1 vs. T2  $p = 0.055$



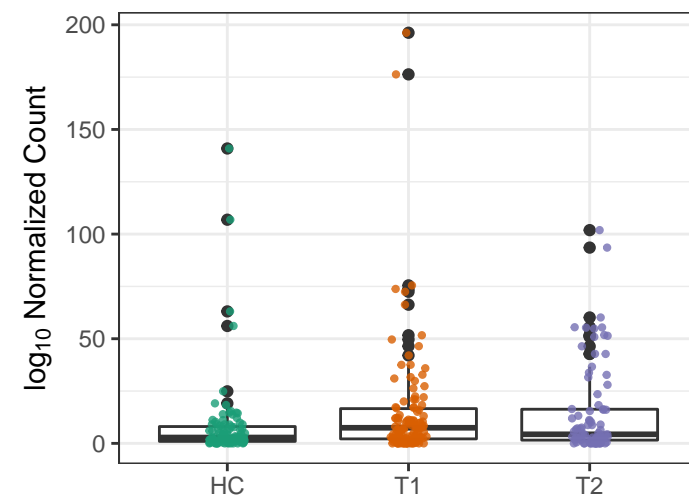
BIOTIN-BIOSYNTHESIS-PWY: biotin

HC vs. T1  $p = 0.06$   
 HC vs. T2  $p = 0.23$   
 T1 vs. T2  $p = 0.58$



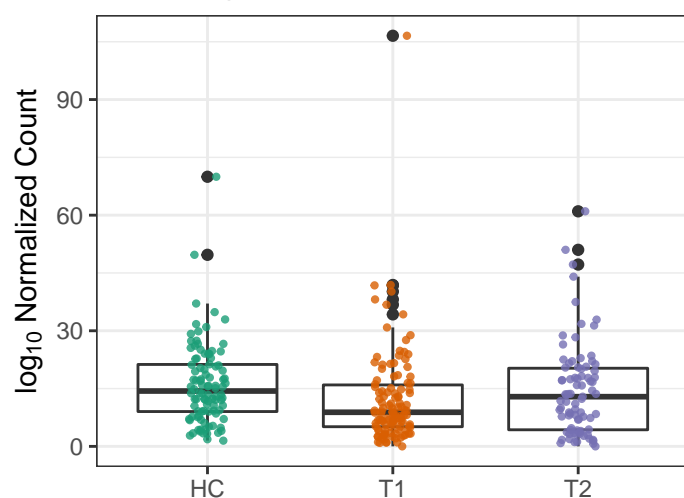
PWY0-862: (5Z)-dodec-5-enoate bio

HC vs. T1  $p = 0.062$   
 HC vs. T2  $p = 0.085$   
 T1 vs. T2  $p = 0.95$



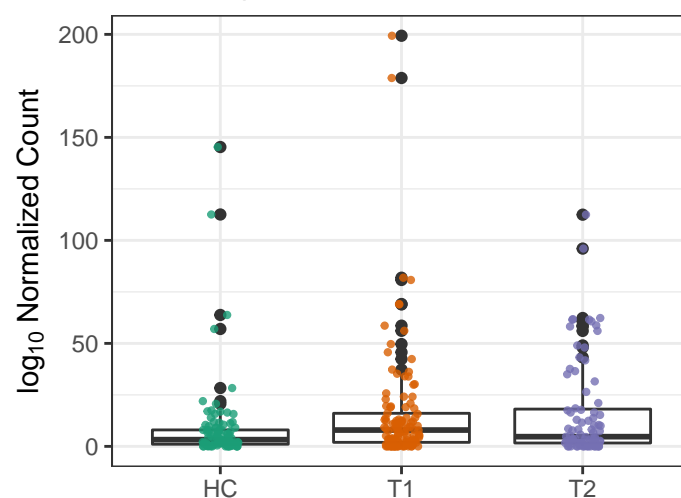
GOLPDLCAT-PWY: superpathway of g

HC vs. T1  $p = 0.064$   
 HC vs. T2  $p = 0.47$   
 T1 vs. T2  $p = 0.37$



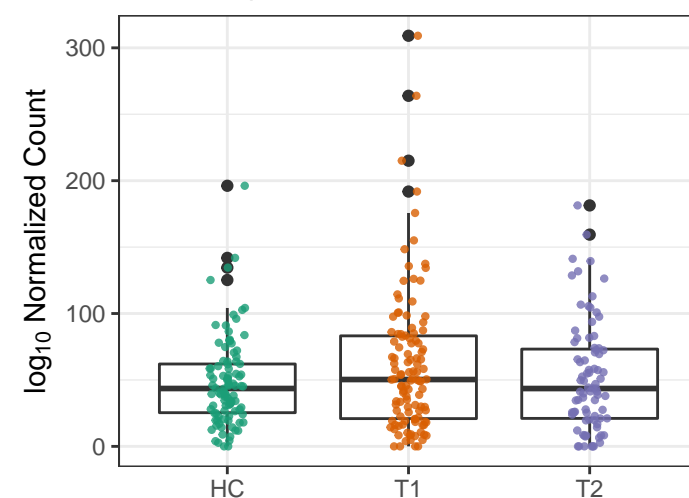
PWY-7664: oleate biosynthesis IV (an

HC vs. T1  $p = 0.067$   
 HC vs. T2  $p = 0.075$   
 T1 vs. T2  $p = 0.87$



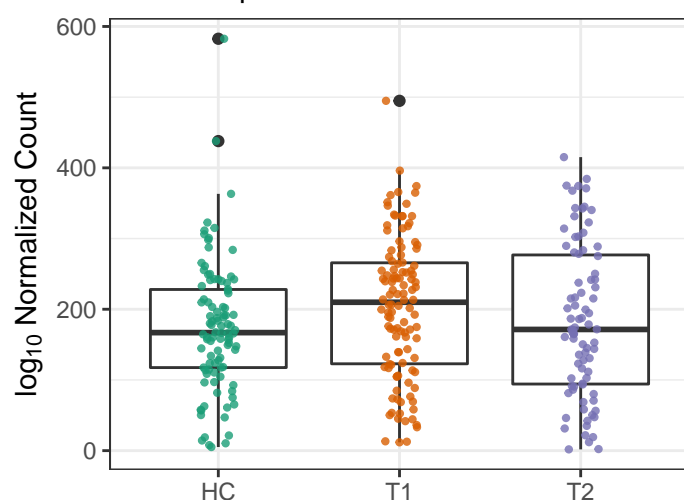
PWY0-1261: anhydromuropeptides re

HC vs. T1  $p = 0.067$   
 HC vs. T2  $p = 0.61$   
 T1 vs. T2  $p = 0.16$



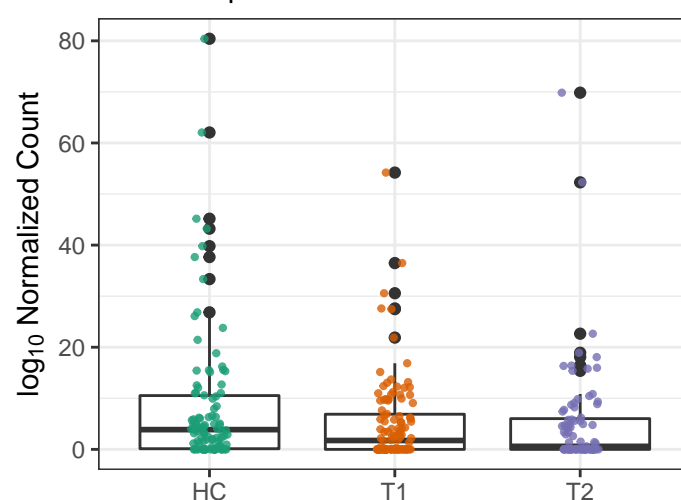
PWY-5973: cis-vaccenate biosynthesi

HC vs. T1  $p = 0.07$   
 HC vs. T2  $p = 0.67$   
 T1 vs. T2  $p = 0.016$



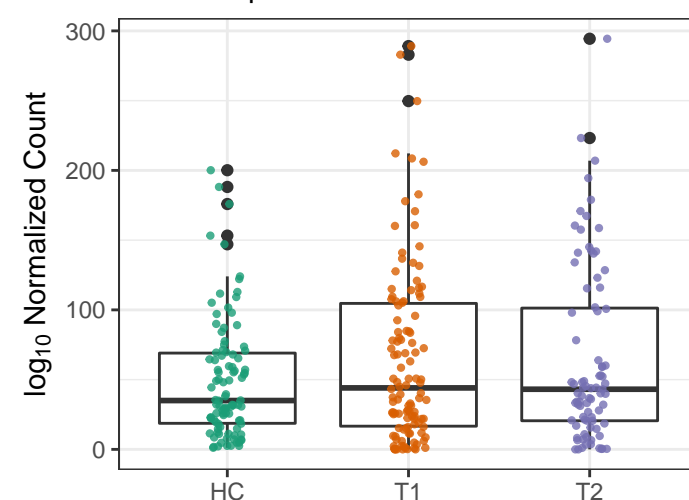
CRNFORCAT-PWY: creatinine degrad

HC vs. T1  $p = 0.071$   
 HC vs. T2  $p = 0.17$   
 T1 vs. T2  $p = 0.86$



PWY-5101: L-isoleucine biosynthesis

HC vs. T1  $p = 0.08$   
 HC vs. T2  $p = 0.14$   
 T1 vs. T2  $p = 0.91$

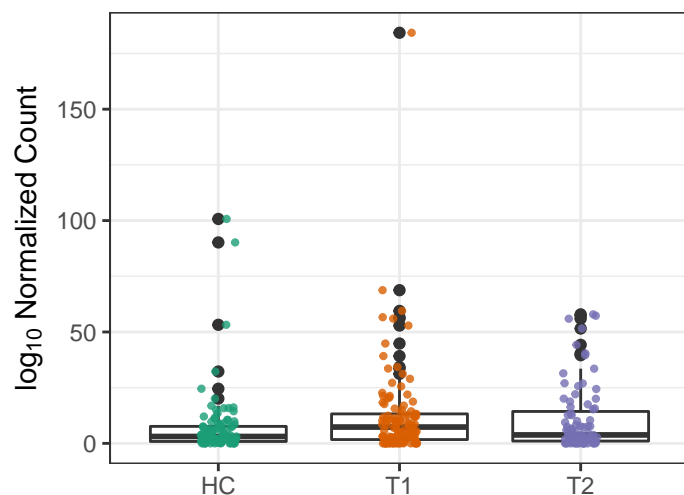


PWY-6519: 8-amino-7-oxononanoate

HC vs. T1  $p = 0.089$

HC vs. T2  $p = 0.26$

T1 vs. T2  $p = 0.64$

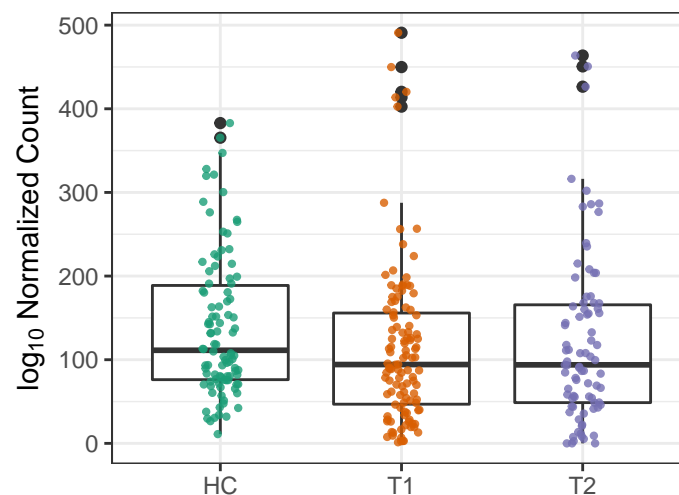


PWY-5104: L-isoleucine biosynthesis

HC vs. T1  $p = 0.092$

HC vs. T2  $p = 0.34$

T1 vs. T2  $p = 0.36$

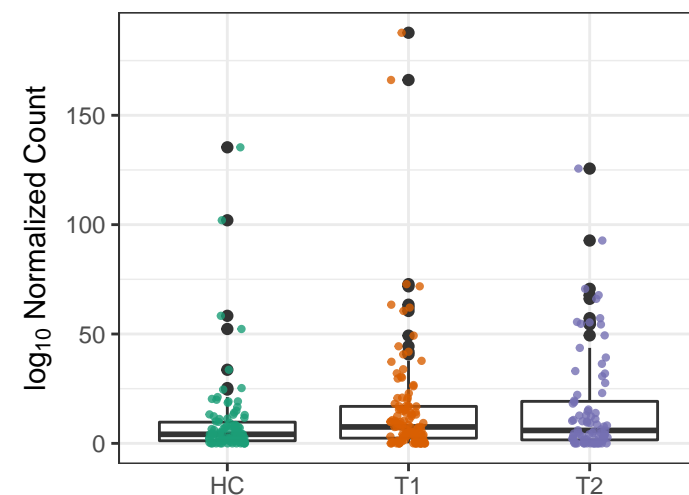


PWY-6282: palmitoleate biosynthesis

HC vs. T1  $p = 0.093$

HC vs. T2  $p = 0.092$

T1 vs. T2  $p = 0.84$

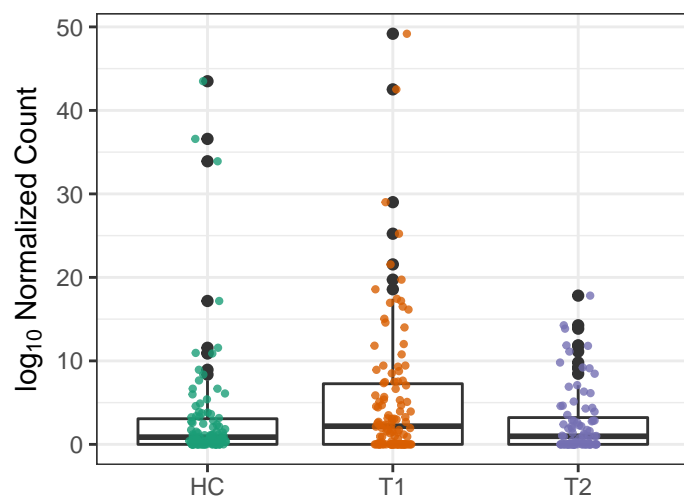


PWY-7328: superpathway of UDP-gluc

HC vs. T1  $p = 0.093$

HC vs. T2  $p = 0.68$

T1 vs. T2  $p = 0.014$

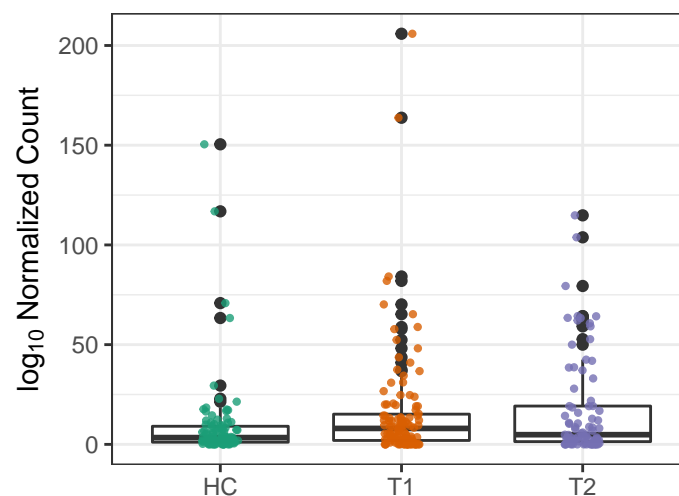


PWYG-321: mycolate biosynthesis

HC vs. T1  $p = 0.095$

HC vs. T2  $p = 0.078$

T1 vs. T2  $p = 0.68$

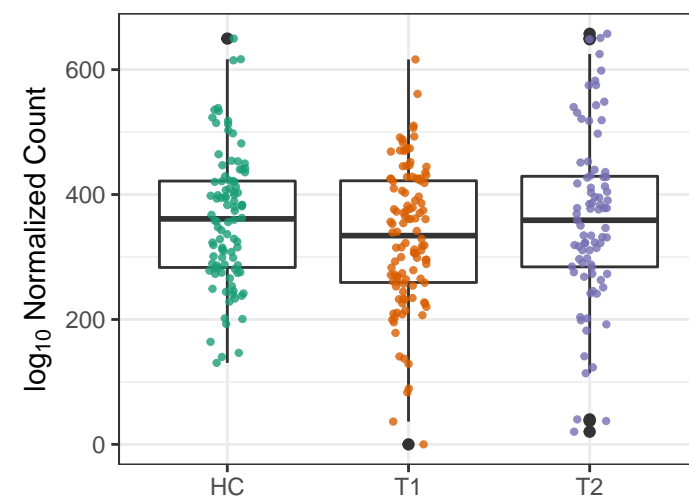


ANAGLYCOLYSIS-PWY: glycolysis III

HC vs. T1  $p = 0.097$

HC vs. T2  $p = 0.96$

T1 vs. T2  $p = 0.078$



P42-PWY: incomplete reductive TCA cycle

HC vs. T1  $p = 0.099$

HC vs. T2  $p = 0.76$

T1 vs. T2  $p = 0.021$

