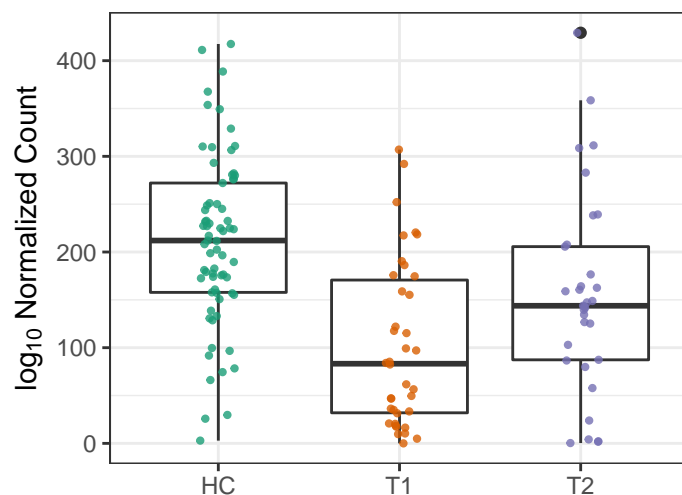


COBALSYN-PWY: adenosylcobalamin

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

HC vs. T2 $p = 0.075$

T1 vs. T2 $p = 0.13$

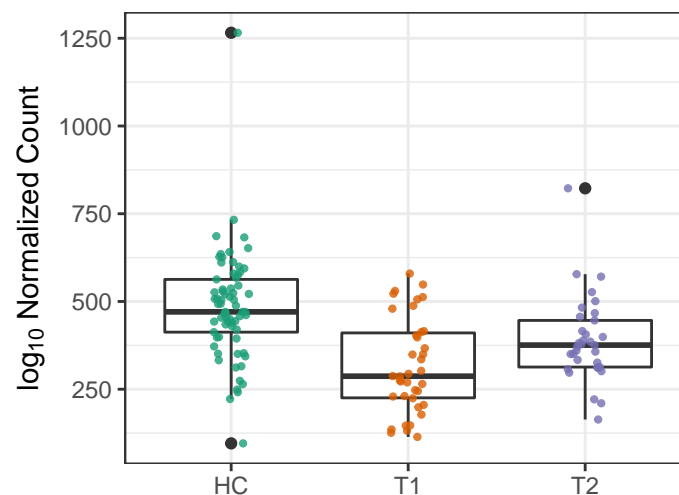


DTDPRHAMSYN-PWY: dTDP-L-rha

HC vs. T1 $p = 1.3e-05$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.13$

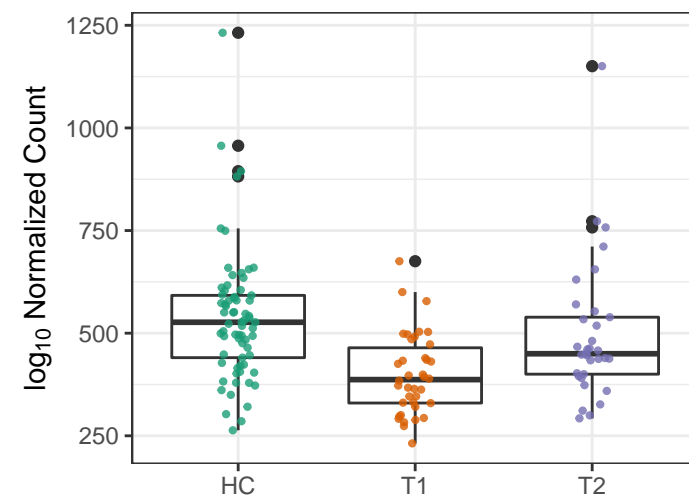


BRANCHED-CHAIN-AA-SYN-PWY

HC vs. T1 $p = 1.7e-05$

HC vs. T2 $p = 0.38$

T1 vs. T2 $p = 0.13$

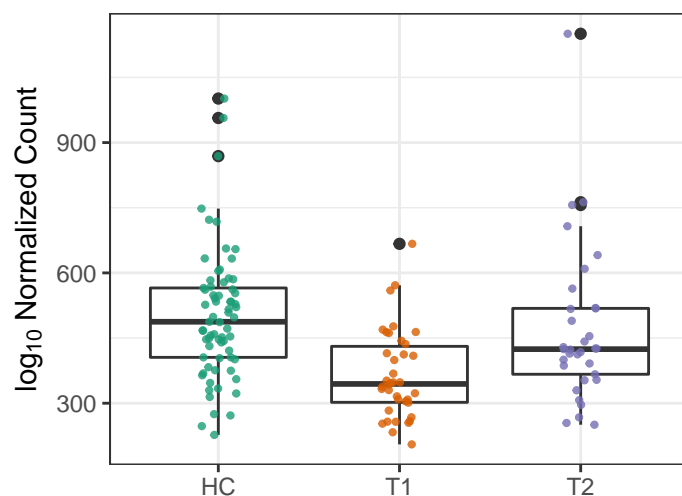


PWY-5103: L-isoleucine biosynthesis

HC vs. T1 $p = 1.7e-05$

HC vs. T2 $p = 0.52$

T1 vs. T2 $p = 0.13$

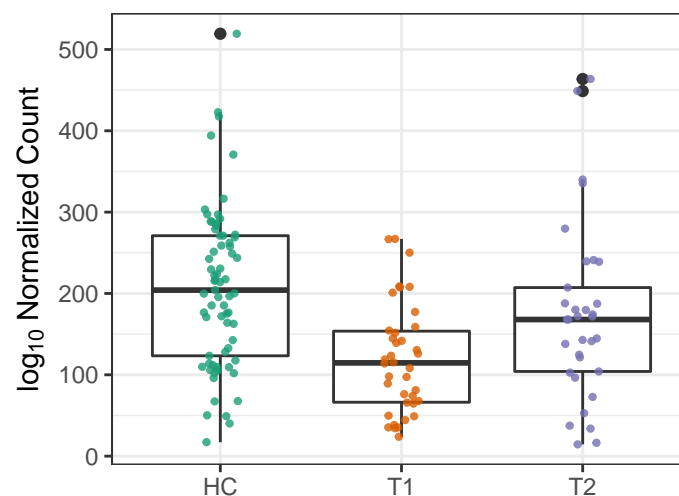


PWY-7242: D-fructuronate degradati

HC vs. T1 $p = 2.9e-05$

HC vs. T2 $p = 0.27$

T1 vs. T2 $p = 0.13$

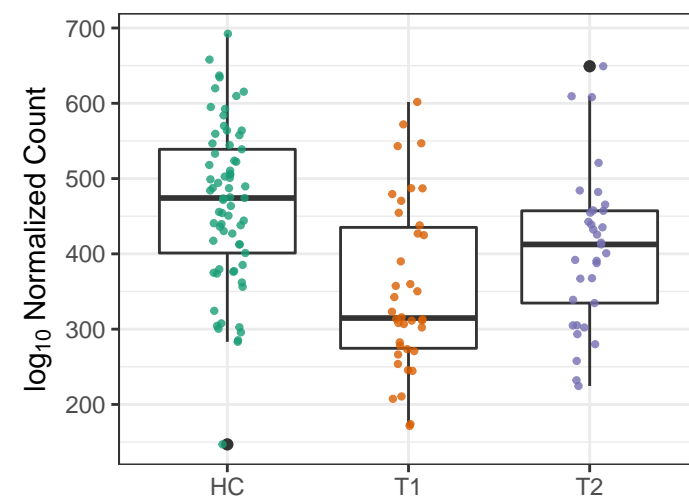


CALVIN-PWY: Calvin-Benson-Bassha

HC vs. T1 $p = 1e-04$

HC vs. T2 $p = 0.07$

T1 vs. T2 $p = 0.14$

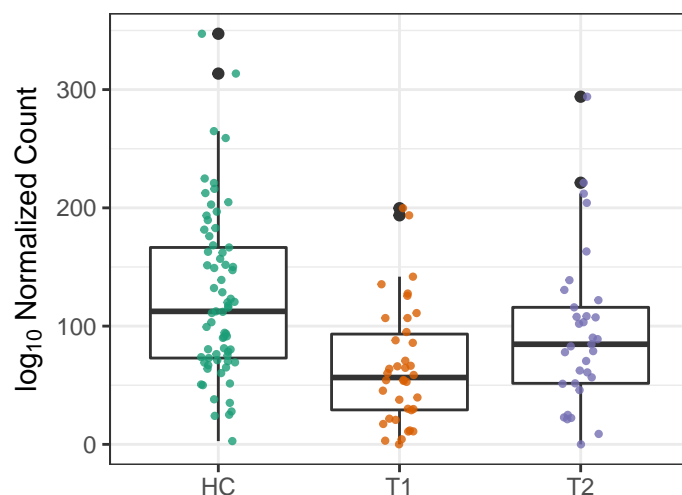


PWY-5177: glutaryl-CoA degradation

HC vs. T1 $p = 1e-04$

HC vs. T2 $p = 0.13$

T1 vs. T2 $p = 0.14$

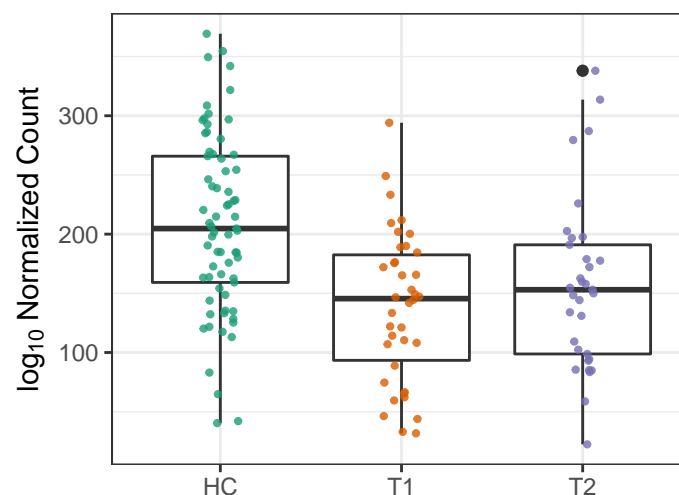


PWY-5347: superpathway of L-methic

HC vs. T1 $p = 1e-04$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.35$

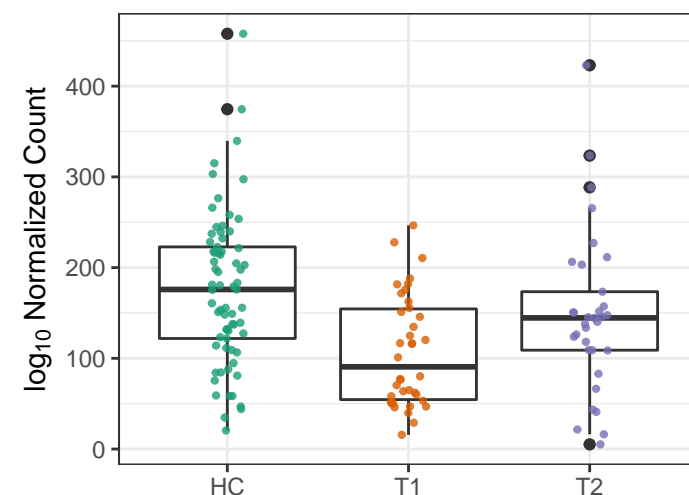


GLUCUROCAT-PWY: superpathway o

HC vs. T1 $p = 0.00015$

HC vs. T2 $p = 0.27$

T1 vs. T2 $p = 0.16$

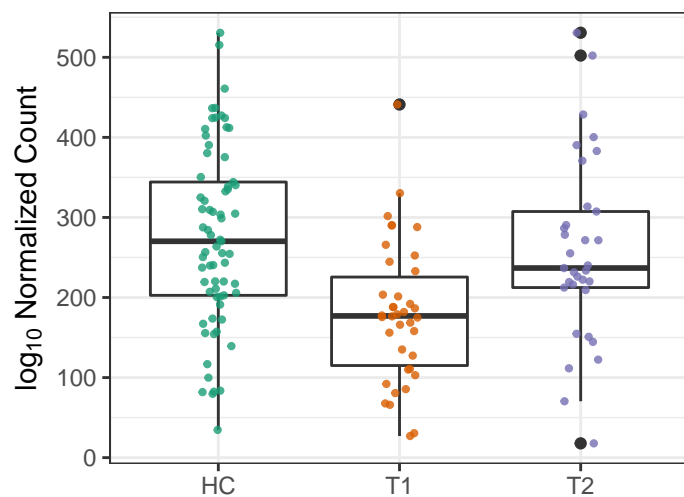


SER-GLYSYN-PWY: superpathway of

HC vs. T1 $p = 0.00015$

HC vs. T2 $p = 0.61$

T1 vs. T2 $p = 0.13$

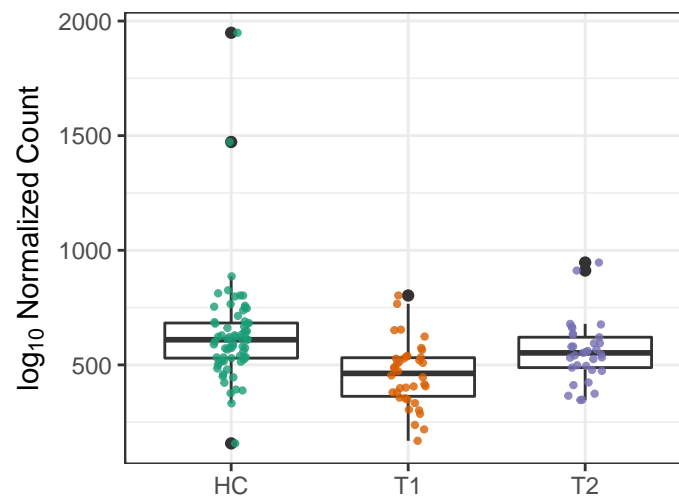


PWY-6151: S-adenosyl-L-methioninir

HC vs. T1 $p = 0.00015$

HC vs. T2 $p = 0.14$

T1 vs. T2 $p = 0.056$

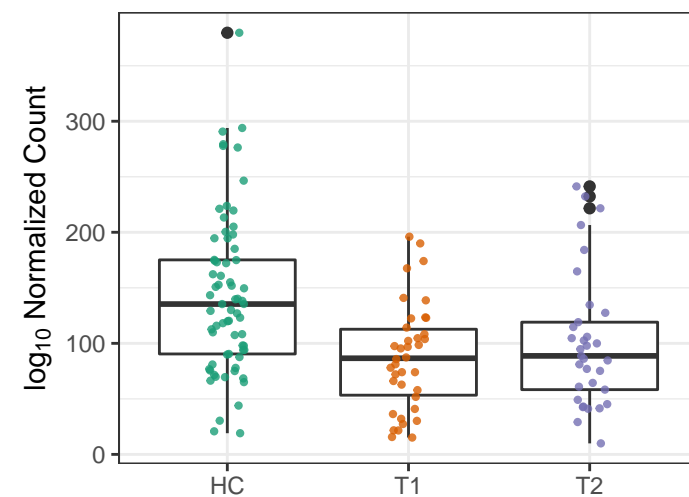


HOMOSER-METSYN-PWY: L-methion

HC vs. T1 $p = 0.00016$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.34$

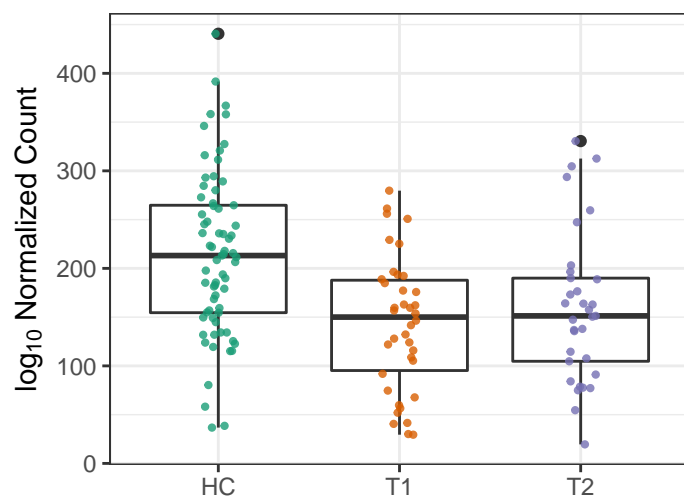


METSYN-PWY: L-homoserine and L-

HC vs. T1 $p = 2e-04$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.39$

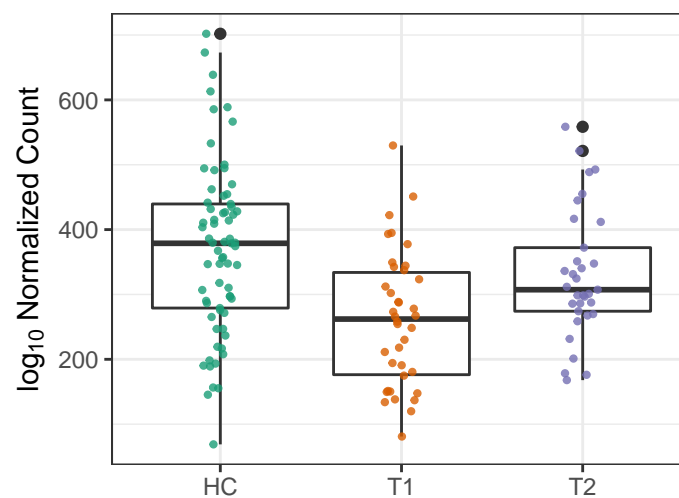


PWY-7357: thiamin formation from pyr

HC vs. T1 $p = 2e-04$

HC vs. T2 $p = 0.21$

T1 vs. T2 $p = 0.13$

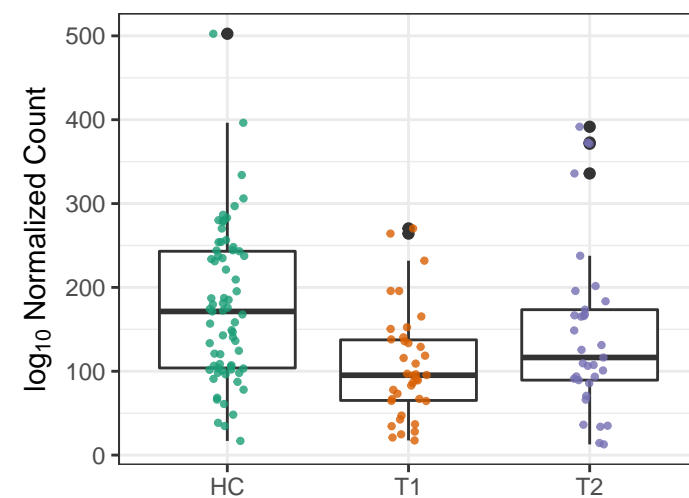


PWY-6507: 4-deoxy-L-threo-hex-4-

HC vs. T1 $p = 0.00021$

HC vs. T2 $p = 0.26$

T1 vs. T2 $p = 0.19$

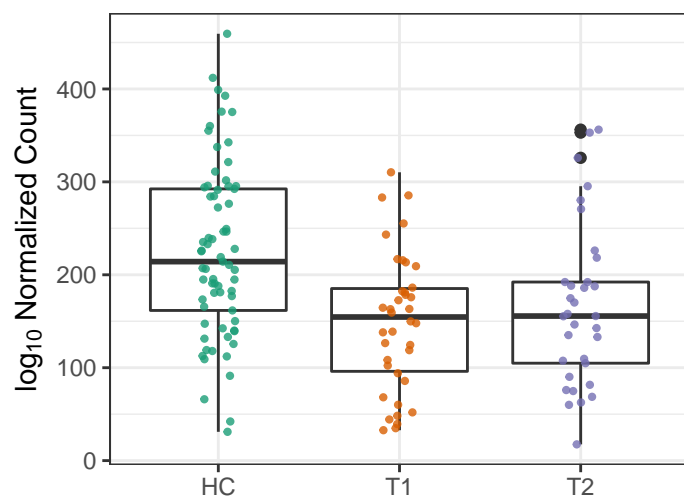


MET-SAM-PWY: superpathway of S-

HC vs. T1 $p = 0.00024$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.43$

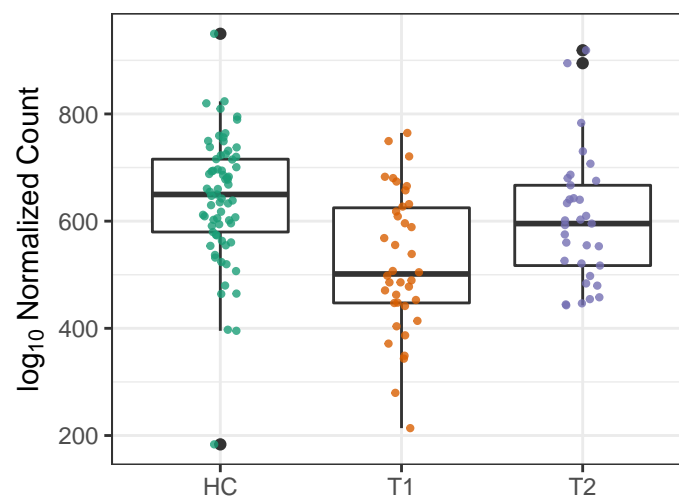


ARO-PWY: chorismate biosynthesis I

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.22$

T1 vs. T2 $p = 0.13$

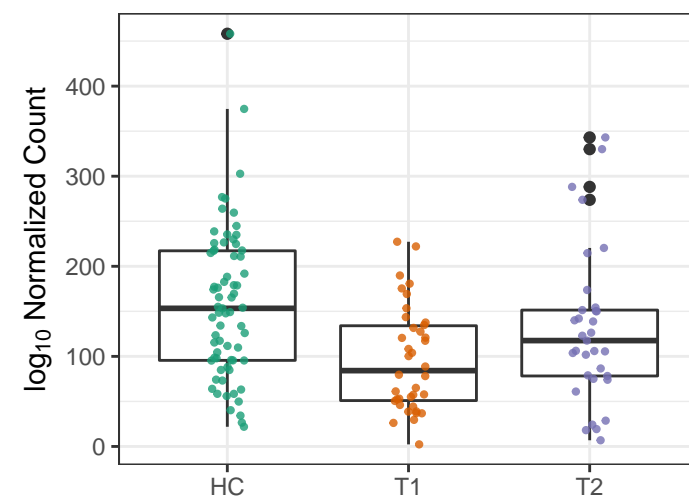


GALACT-GLUCUROCAT-PWY: super

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.26$

T1 vs. T2 $p = 0.21$

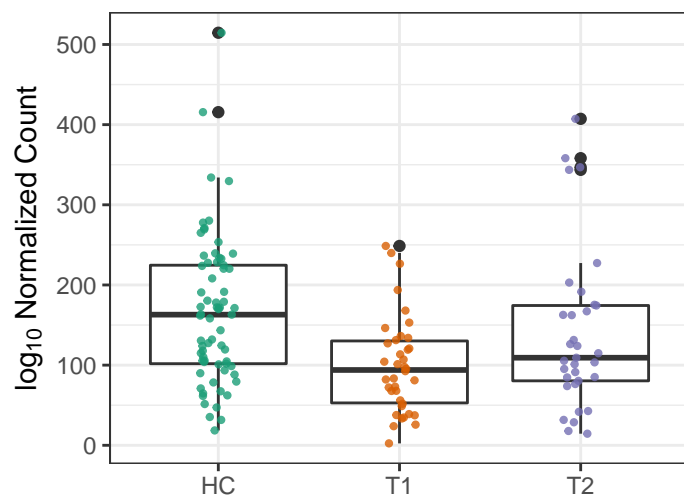


GALACTUROCAT–PWY: D–galacturor

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.34$

T1 vs. T2 $p = 0.2$

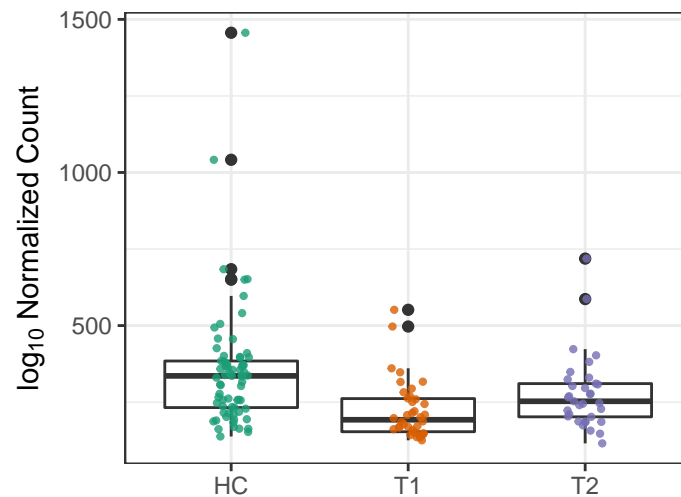


HISTSYN–PWY: L–histidine biosynthe

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.12$

T1 vs. T2 $p = 0.13$

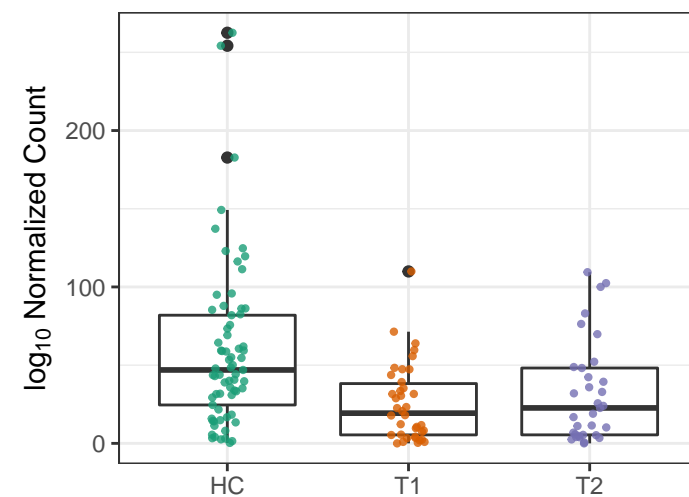


LACTOSECAT–PWY: lactose and gala

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.05$

T1 vs. T2 $p = 0.35$

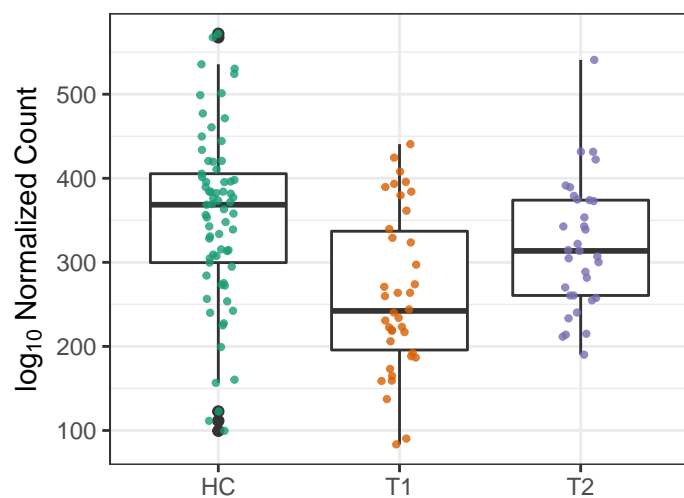


PWY–6317: galactose degradation I (L

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.16$

T1 vs. T2 $p = 0.13$

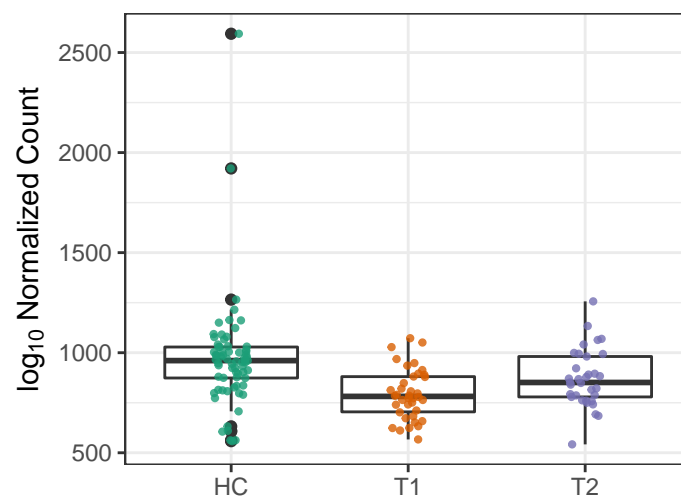


PWY–7219: adenosine ribonucleotide

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.11$

T1 vs. T2 $p = 0.16$

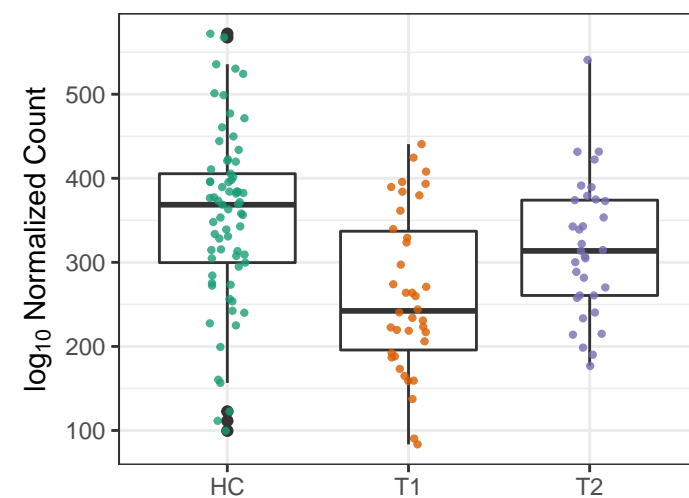


PWY66–422: D–galactose degradation

HC vs. T1 $p = 0.00026$

HC vs. T2 $p = 0.15$

T1 vs. T2 $p = 0.13$

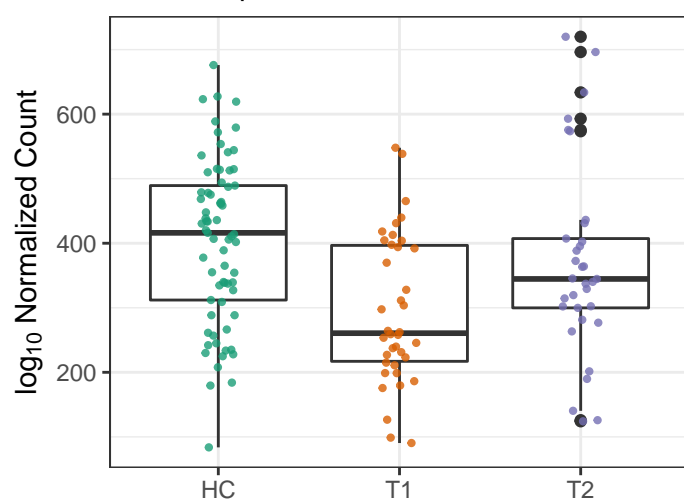


NONOXIPENT–PWY: pentose phosph:

HC vs. T1 $p = 3e-04$

HC vs. T2 $p = 0.4$

T1 vs. T2 $p = 0.14$

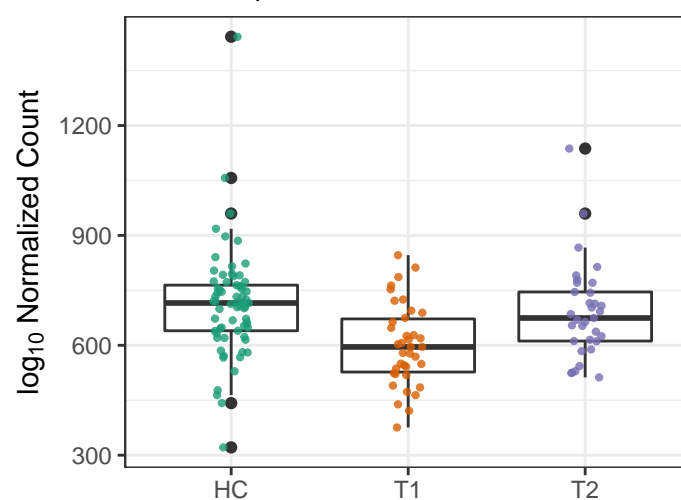


PWY–5686: UMP biosynthesis

HC vs. T1 $p = 0.00032$

HC vs. T2 $p = 0.61$

T1 vs. T2 $p = 0.13$

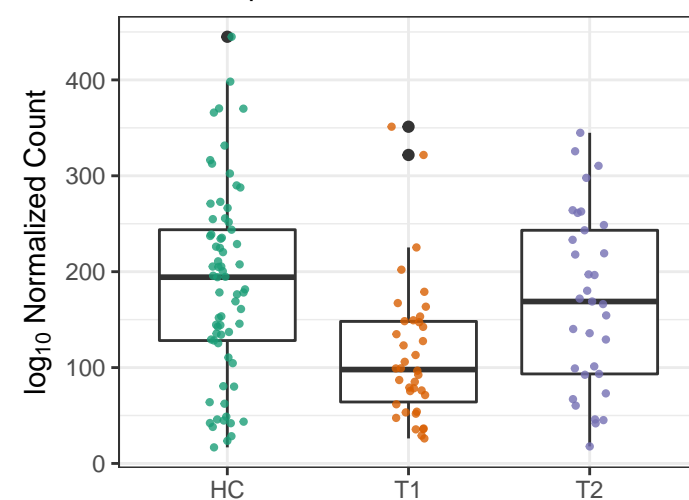


GLYCOGENSYNTH–PWY: glycogen b

HC vs. T1 $p = 0.00048$

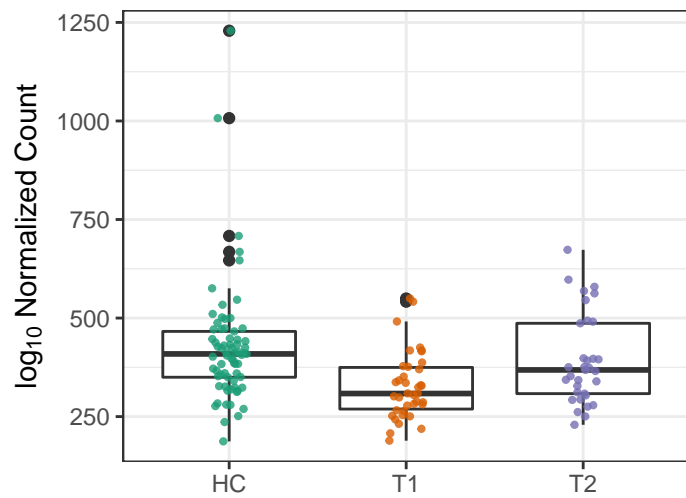
HC vs. T2 $p = 0.55$

T1 vs. T2 $p = 0.13$



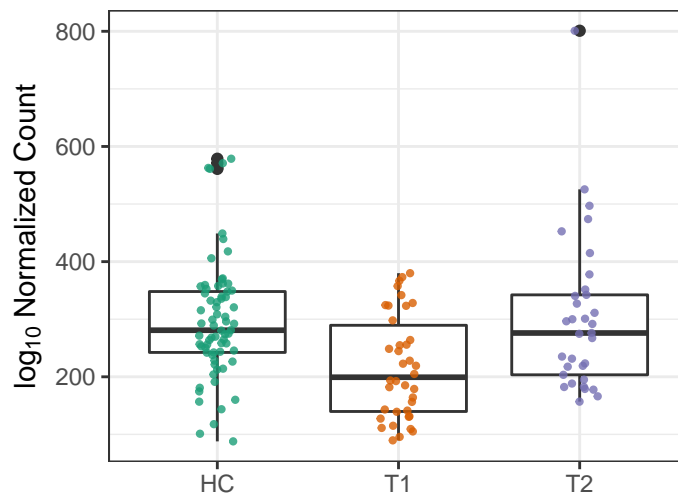
PWY-3001: superpathway of L-isoleu

HC vs. T1 $p = 0.00049$
 HC vs. T2 $p = 0.36$
 T1 vs. T2 $p = 0.13$



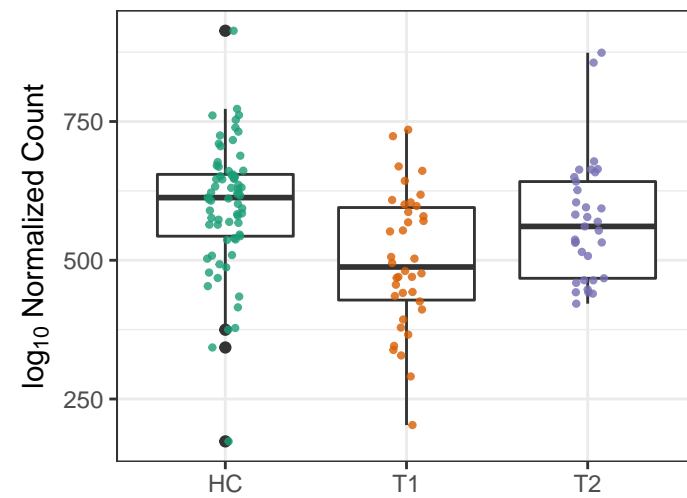
PWY-6123: inosine-5'-phosphate bio:

HC vs. T1 $p = 0.00083$
 HC vs. T2 $p = 0.89$
 T1 vs. T2 $p = 0.13$



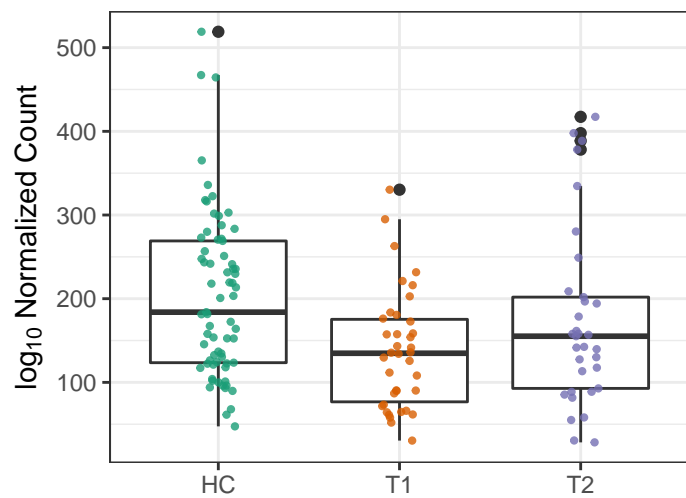
COMPLETE-ARO-PWY: superpathwa

HC vs. T1 $p = 0.0013$
 HC vs. T2 $p = 0.38$
 T1 vs. T2 $p = 0.13$



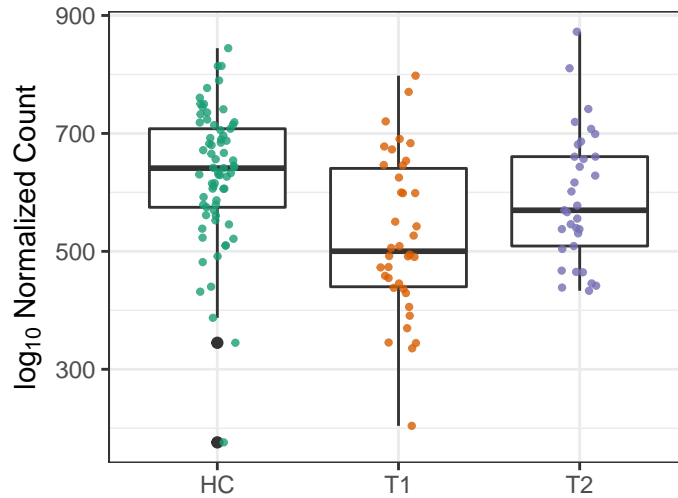
GLCMANNANAUT-PWY: superpathwa

HC vs. T1 $p = 0.0014$
 HC vs. T2 $p = 0.33$
 T1 vs. T2 $p = 0.32$



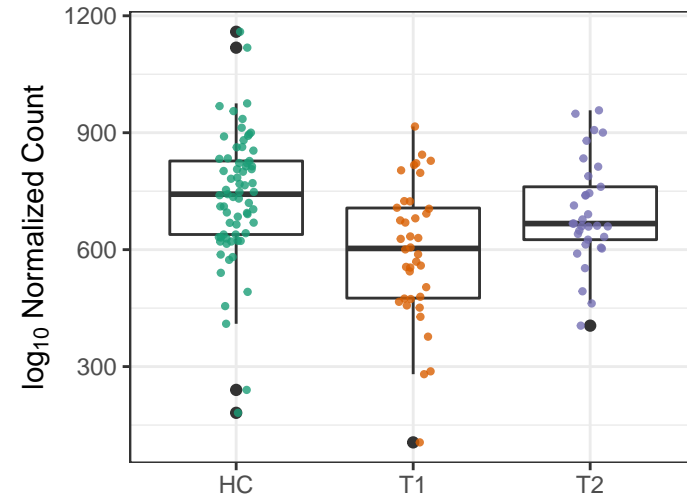
PWY-6163: chorismate biosynthesis fr

HC vs. T1 $p = 0.0014$
 HC vs. T2 $p = 0.23$
 T1 vs. T2 $p = 0.14$



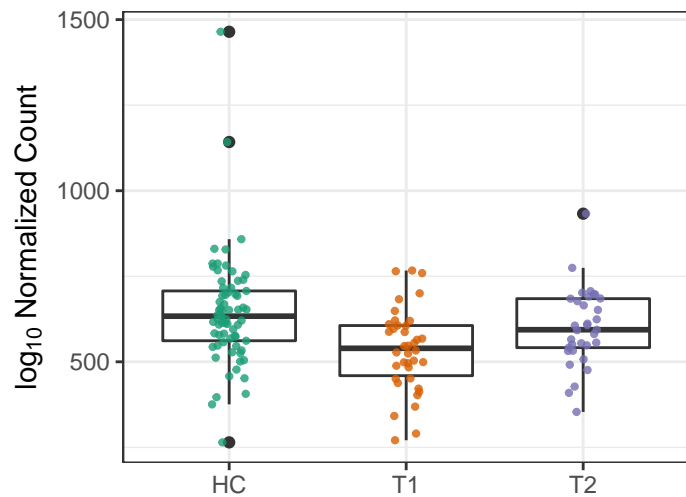
PWY-6737: starch degradation V

HC vs. T1 $p = 0.0014$
 HC vs. T2 $p = 0.33$
 T1 vs. T2 $p = 0.13$



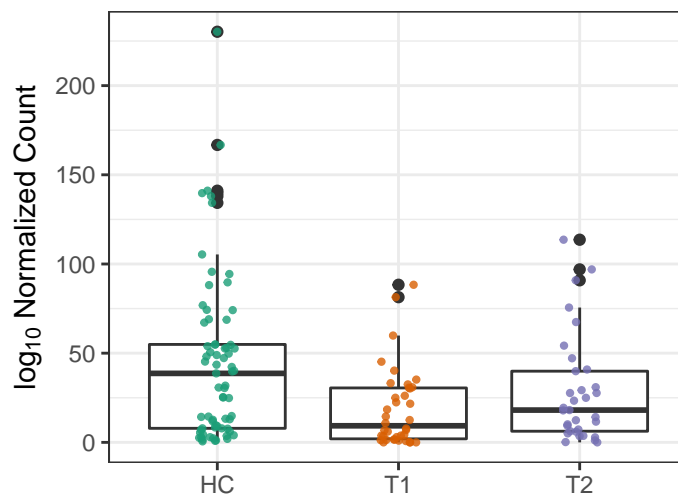
COA-PWY-1: coenzyme A biosynthe

HC vs. T1 $p = 0.0014$
 HC vs. T2 $p = 0.24$
 T1 vs. T2 $p = 0.14$



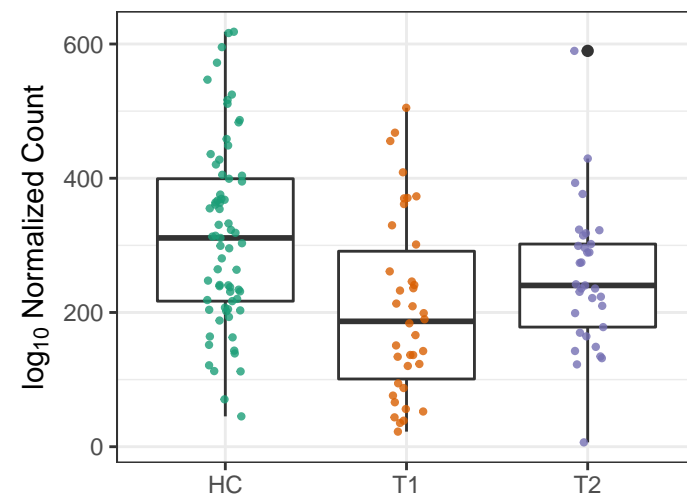
PWY-5304: superpathway of sulfur oxi

HC vs. T1 $p = 0.0014$
 HC vs. T2 $p = 0.13$
 T1 vs. T2 $p = 0.21$



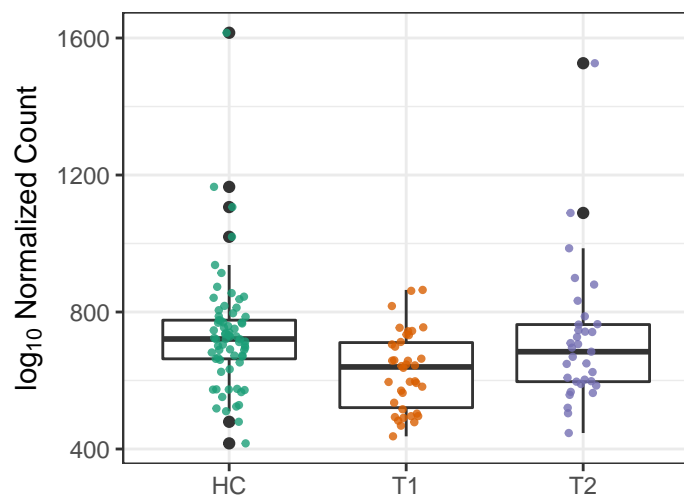
PWY-621: sucrose degradation III (suc

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



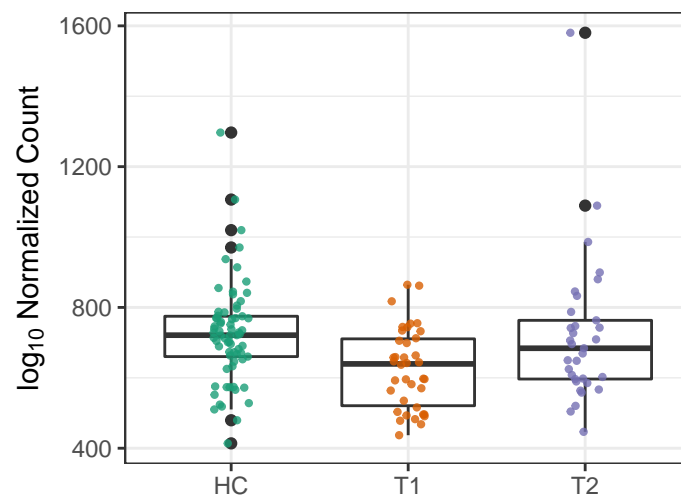
ILEUSYN-PWY: L-isoleucine biosynt

HC vs. T1 $p = 0.0017$
HC vs. T2 $p = 0.78$
T1 vs. T2 $p = 0.14$



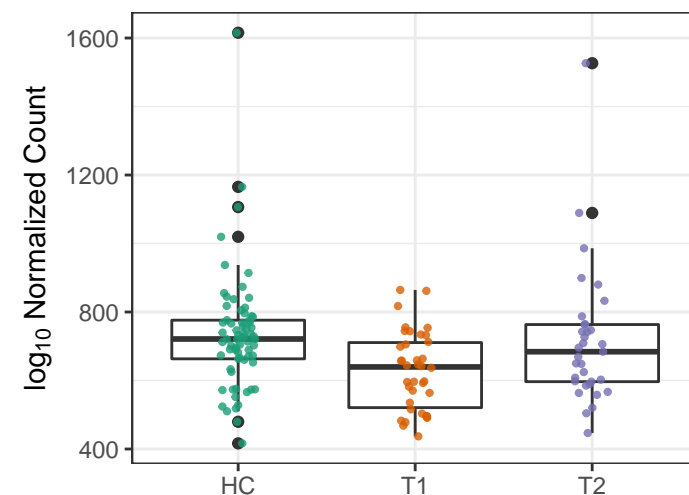
PWY-7111: pyruvate fermentation to l

HC vs. T1 $p = 0.0017$
HC vs. T2 $p = 0.95$
T1 vs. T2 $p = 0.14$



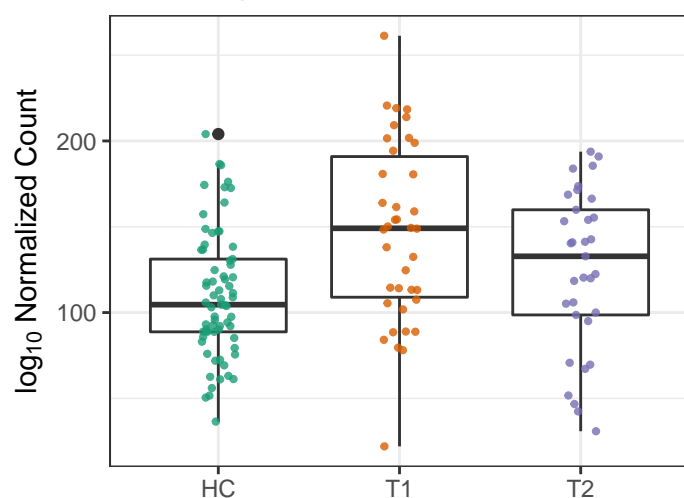
VALSYN-PWY: L-valine biosynthesis

HC vs. T1 $p = 0.0017$
HC vs. T2 $p = 0.78$
T1 vs. T2 $p = 0.14$



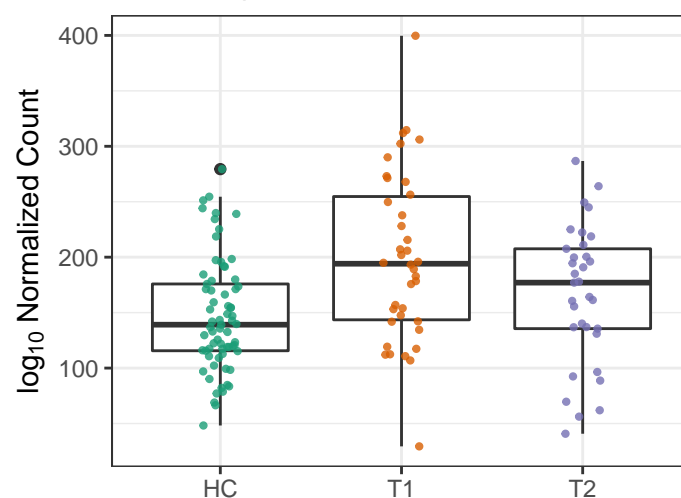
PWY-7184: pyrimidine deoxyribonucle

HC vs. T1 $p = 0.0022$
HC vs. T2 $p = 0.23$
T1 vs. T2 $p = 0.18$



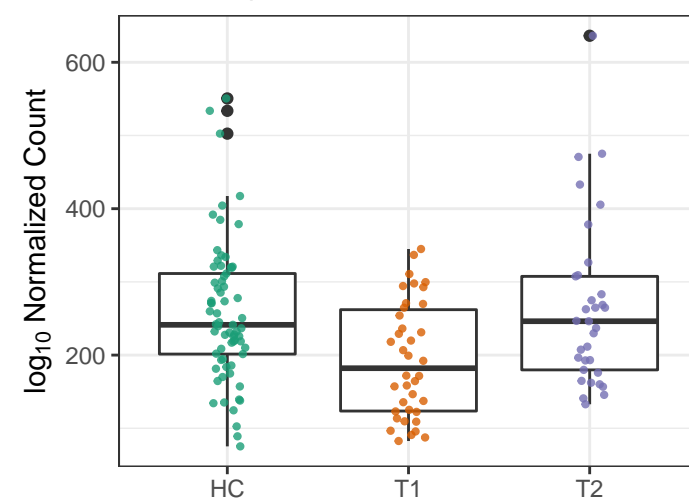
PWY-7228: superpathway of guanosin

HC vs. T1 $p = 0.0027$
HC vs. T2 $p = 0.26$
T1 vs. T2 $p = 0.15$



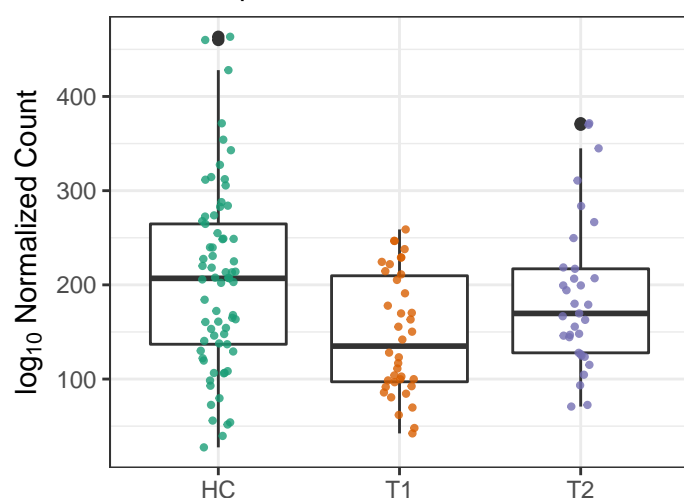
PWY-6124: inosine-5'-phosphate bio

HC vs. T1 $p = 0.0027$
HC vs. T2 $p = 0.85$
T1 vs. T2 $p = 0.13$



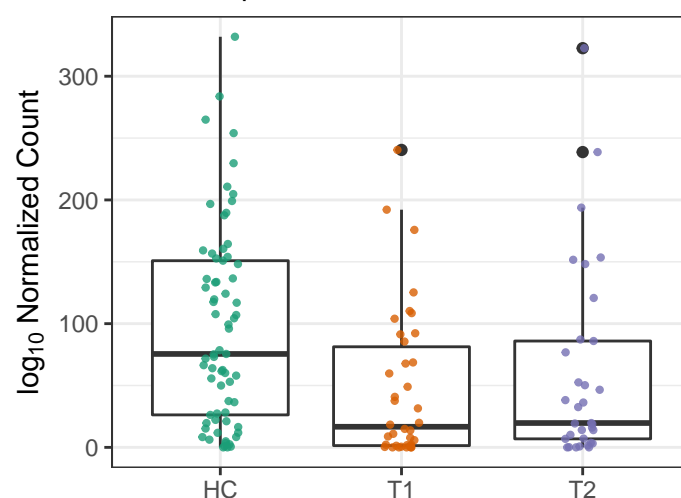
THISYNARA-PWY: superpathway of tl

HC vs. T1 $p = 0.003$
HC vs. T2 $p = 0.52$
T1 vs. T2 $p = 0.14$



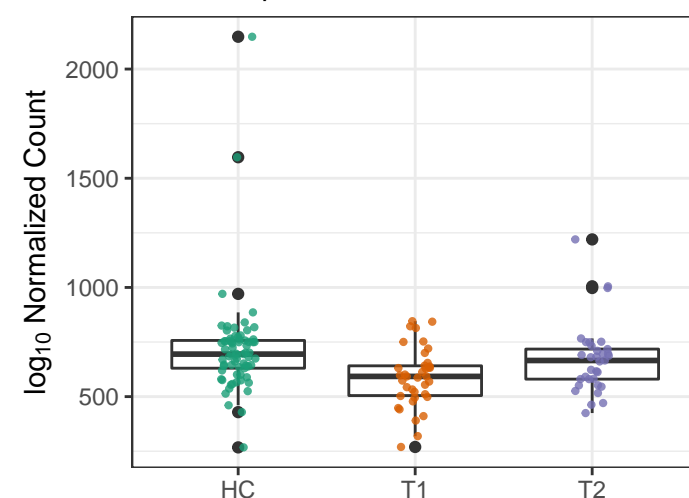
PWY-5367: petroselinate biosynthesis

HC vs. T1 $p = 0.0036$
HC vs. T2 $p = 0.12$
T1 vs. T2 $p = 0.69$



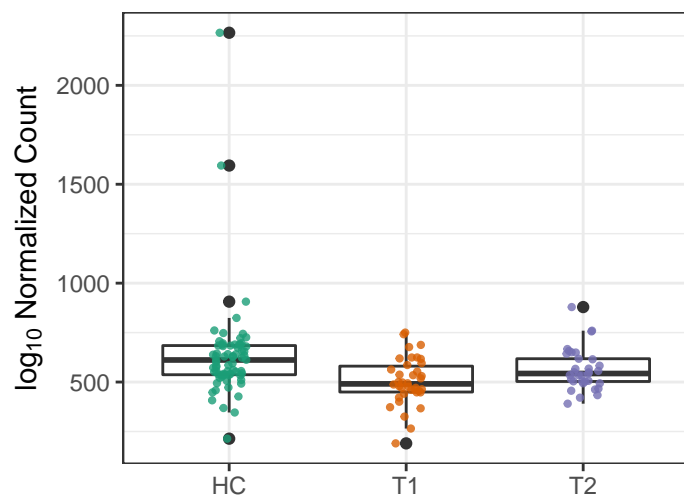
PWY-6387: UDP-N-acetylmuramoyl-

HC vs. T1 $p = 0.0036$
HC vs. T2 $p = 0.37$
T1 vs. T2 $p = 0.19$



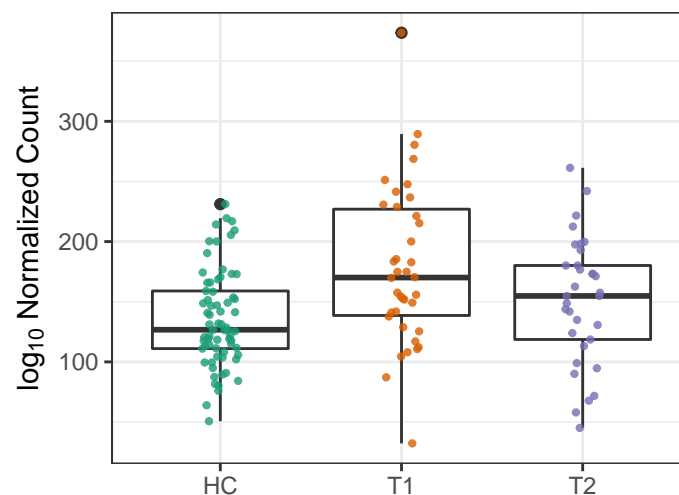
NONMEVIPP-PWY: methylerythritol p

HC vs. T1 $p = 0.004$
 HC vs. T2 $p = 0.14$
 T1 vs. T2 $p = 0.17$



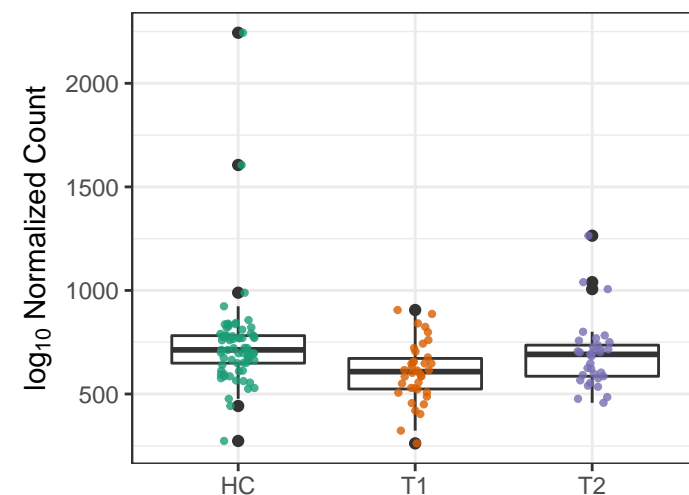
PWY-6125: superpathway of guanosin

HC vs. T1 $p = 0.004$
 HC vs. T2 $p = 0.27$
 T1 vs. T2 $p = 0.16$



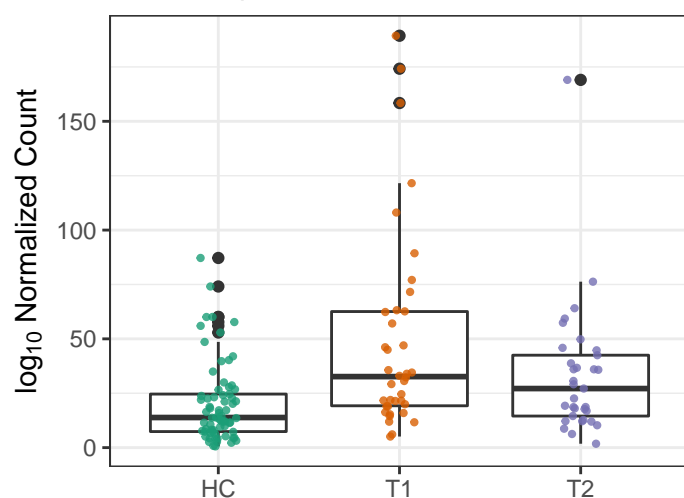
PWY-6386: UDP-N-acetylmuramoyl-

HC vs. T1 $p = 0.004$
 HC vs. T2 $p = 0.36$
 T1 vs. T2 $p = 0.2$



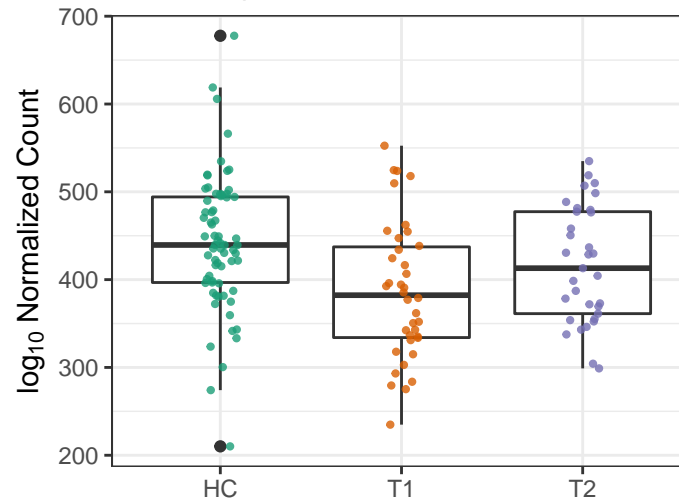
CITRULBIO-PWY: L-citrulline biosynt

HC vs. T1 $p = 0.004$
 HC vs. T2 $p = 0.12$
 T1 vs. T2 $p = 0.16$



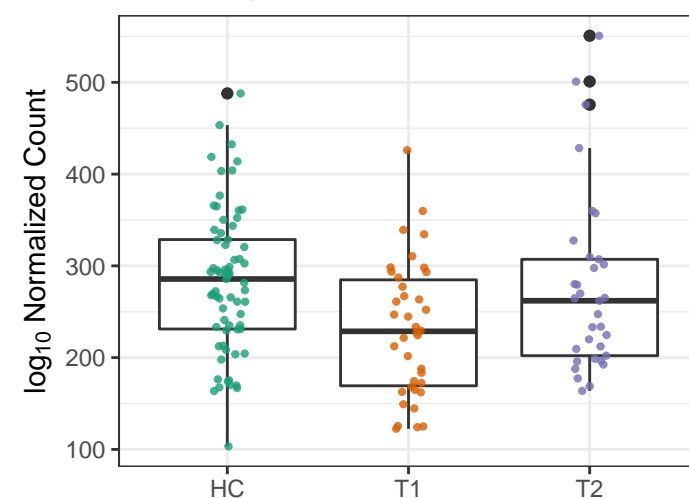
PWY-724: superpathway of L-lysine, l

HC vs. T1 $p = 0.004$
 HC vs. T2 $p = 0.2$
 T1 vs. T2 $p = 0.28$



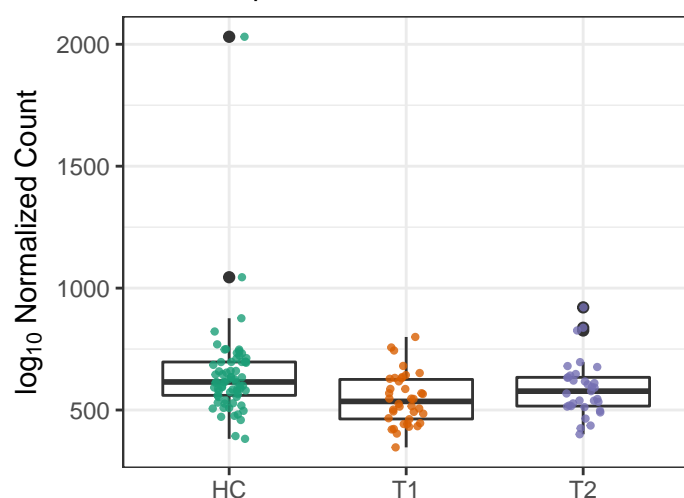
PWY-6609: adenine and adenosine sa

HC vs. T1 $p = 0.0057$
 HC vs. T2 $p = 0.81$
 T1 vs. T2 $p = 0.13$



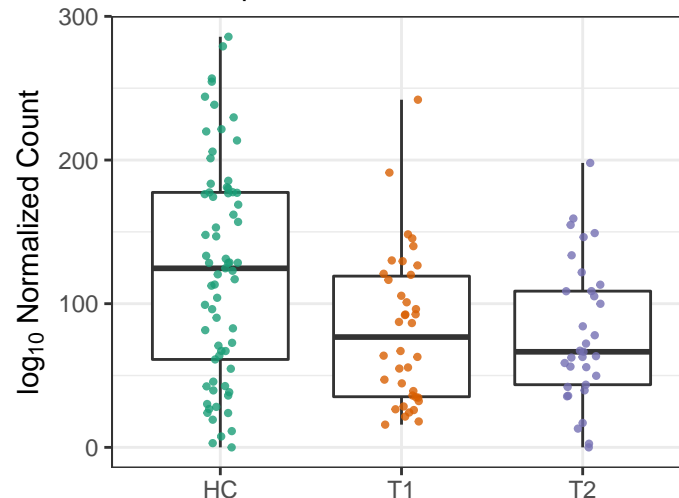
PWY-6121: 5-aminoimidazole ribonu

HC vs. T1 $p = 0.0072$
 HC vs. T2 $p = 0.2$
 T1 vs. T2 $p = 0.22$



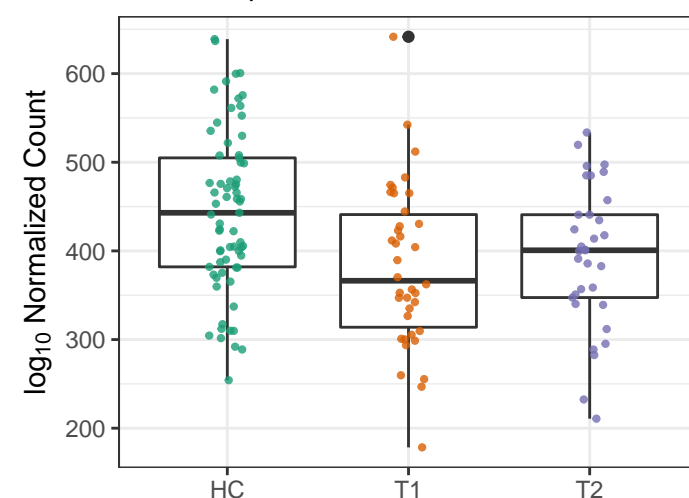
PWY0-781: aspartate superpathway

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



TRNA-CHARGING-PWY: tRNA charg

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

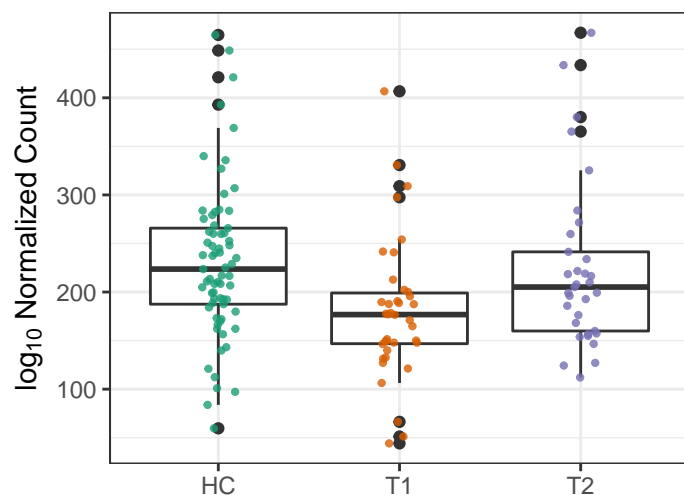


PWY-5100: pyruvate fermentation to a

HC vs. T1 $p = 0.0074$

HC vs. T2 $p = 0.79$

T1 vs. T2 $p = 0.14$

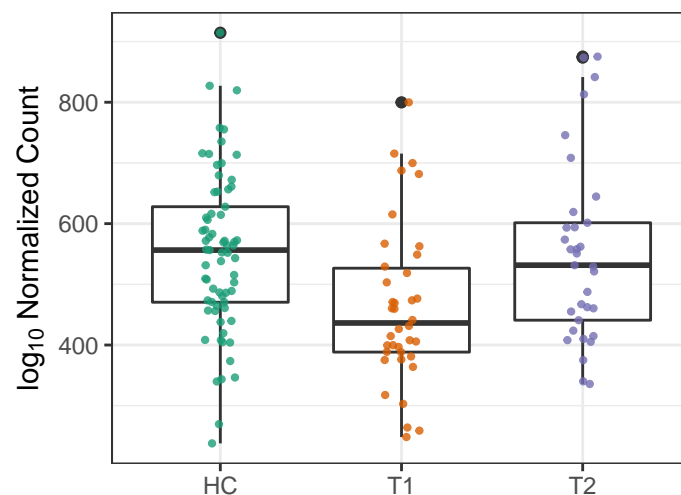


PWY-1042: glycolysis IV (plant cytosol)

HC vs. T1 $p = 0.0074$

HC vs. T2 $p = 0.98$

T1 vs. T2 $p = 0.13$

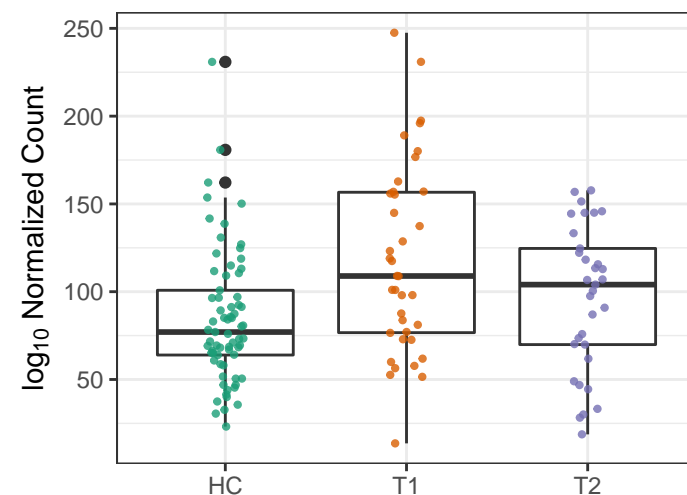


PWY-7197: pyrimidine deoxyribonucleoside

HC vs. T1 $p = 0.0074$

HC vs. T2 $p = 0.31$

T1 vs. T2 $p = 0.18$

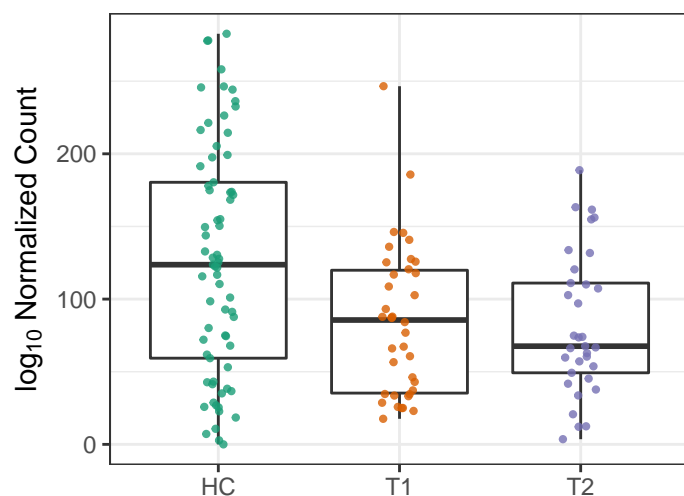


P4-PWY: superpathway of L-lysine, L-proline, and L-glutamate

HC vs. T1 $p = 0.0075$

HC vs. T2 $p = 0.044$

T1 vs. T2 $p = 0.75$

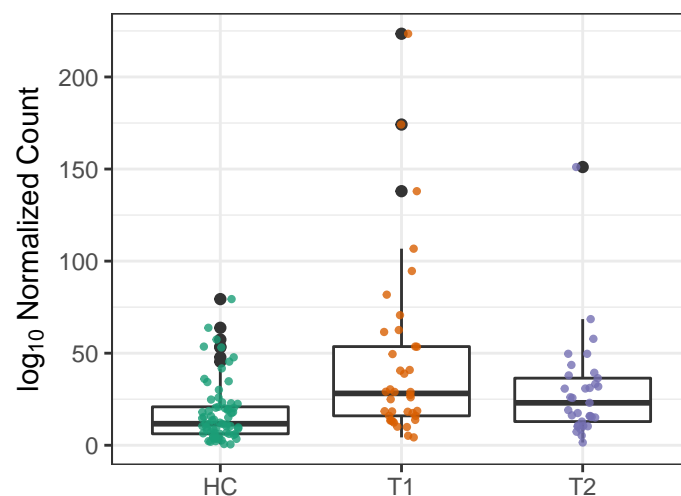


PWY-4984: urea cycle

HC vs. T1 $p = 0.0081$

HC vs. T2 $p = 0.12$

T1 vs. T2 $p = 0.17$

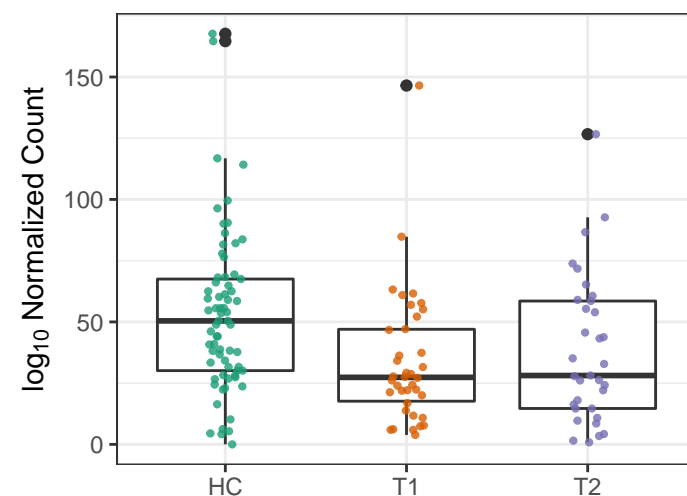


POLYAMSYN-PWY: superpathway of purine metabolism

HC vs. T1 $p = 0.0092$

HC vs. T2 $p = 0.12$

T1 vs. T2 $p = 0.65$

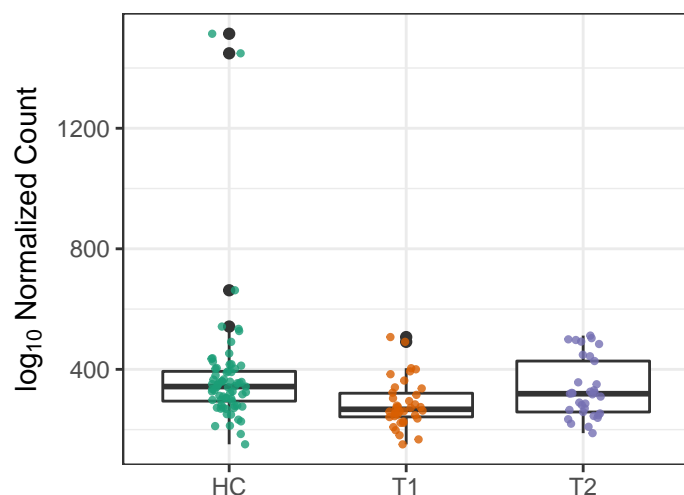


THRESYN-PWY: superpathway of L-threonine

HC vs. T1 $p = 0.0097$

HC vs. T2 $p = 0.31$

T1 vs. T2 $p = 0.15$

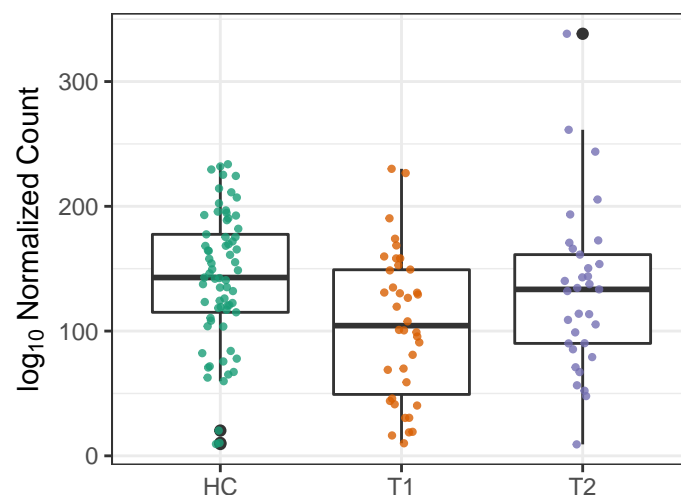


PWY-7199: pyrimidine deoxyribonucleoside

HC vs. T1 $p = 0.011$

HC vs. T2 $p = 0.62$

T1 vs. T2 $p = 0.24$

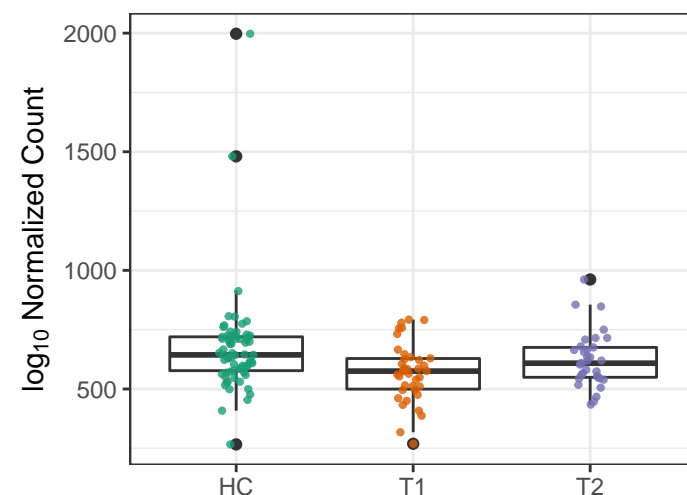


PEPTIDOGLYCANSYN-PWY: peptidoglycan synthesis

HC vs. T1 $p = 0.012$

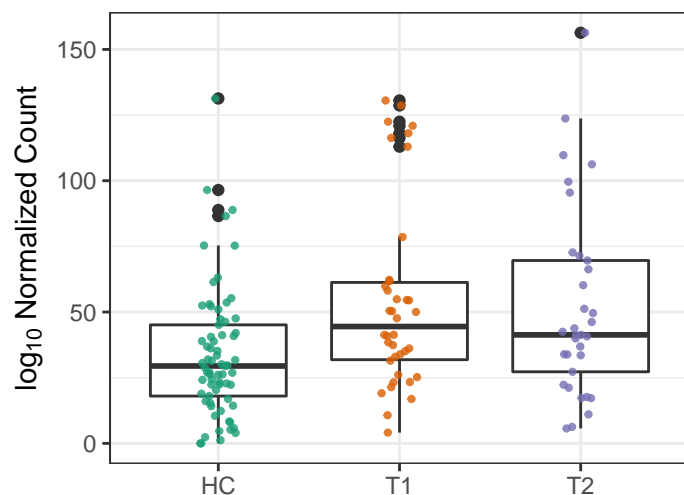
HC vs. T2 $p = 0.28$

T1 vs. T2 $p = 0.24$



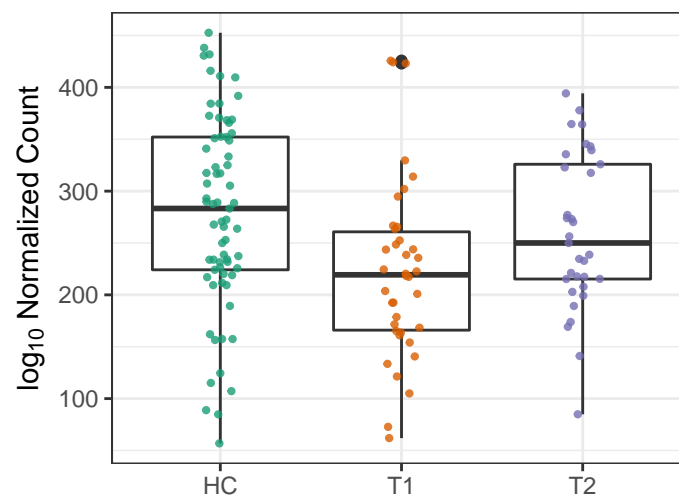
PWY66–399: gluconeogenesis III

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



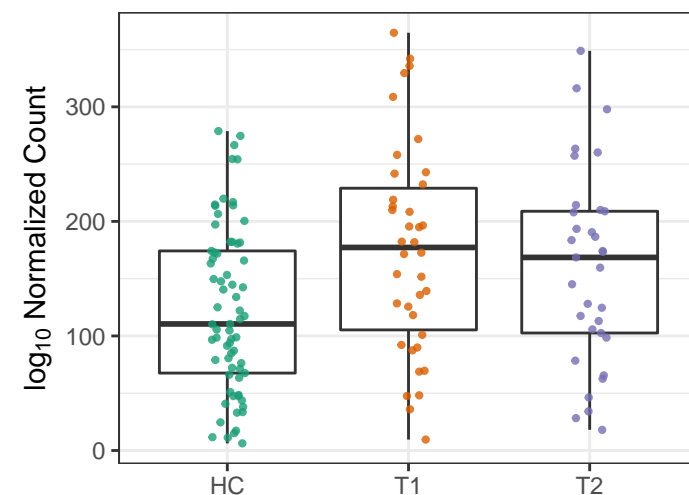
PWY–6527: stachyose degradation

HC vs. T1 $p = 0.013$
HC vs. T2 $p = 0.44$
T1 vs. T2 $p = 0.23$



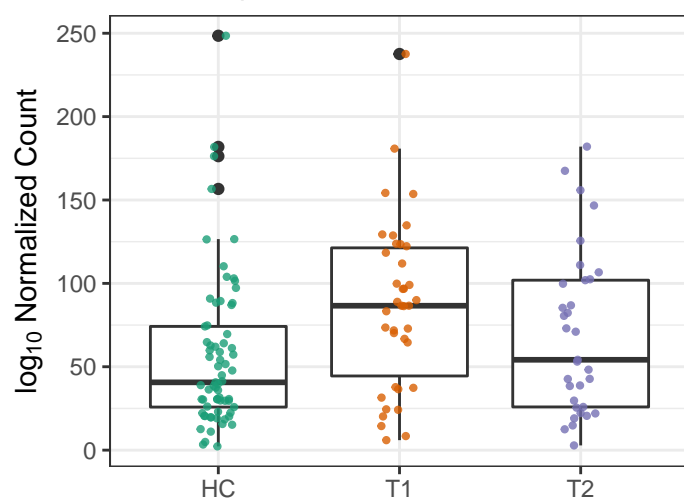
PWY–7663: gondoate biosynthesis (ar

HC vs. T1 $p = 0.015$
HC vs. T2 $p = 0.12$
T1 vs. T2 $p = 0.34$



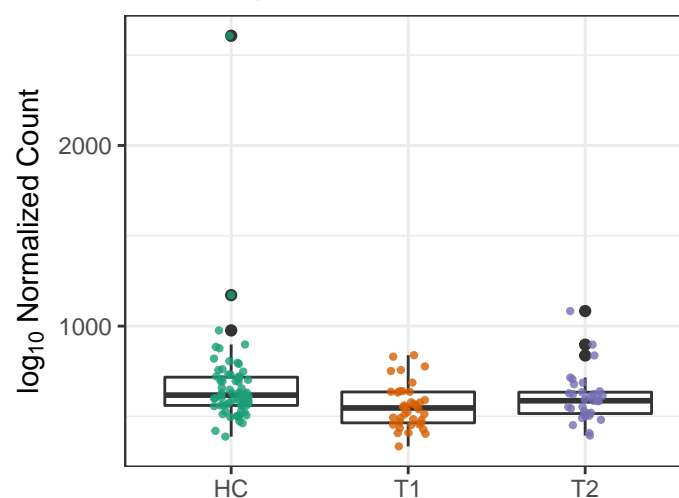
PWY–5154: L–arginine biosynthesis III

HC vs. T1 $p = 0.016$
HC vs. T2 $p = 0.34$
T1 vs. T2 $p = 0.21$



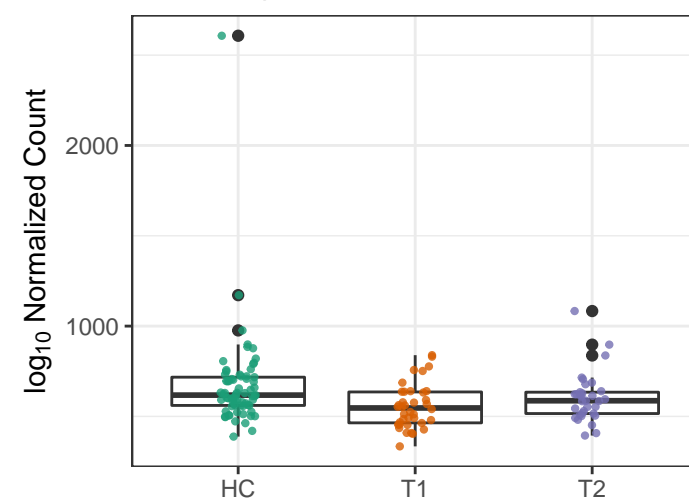
PWY–6122: 5–aminoimidazole ribonu

HC vs. T1 $p = 0.016$
HC vs. T2 $p = 0.21$
T1 vs. T2 $p = 0.24$



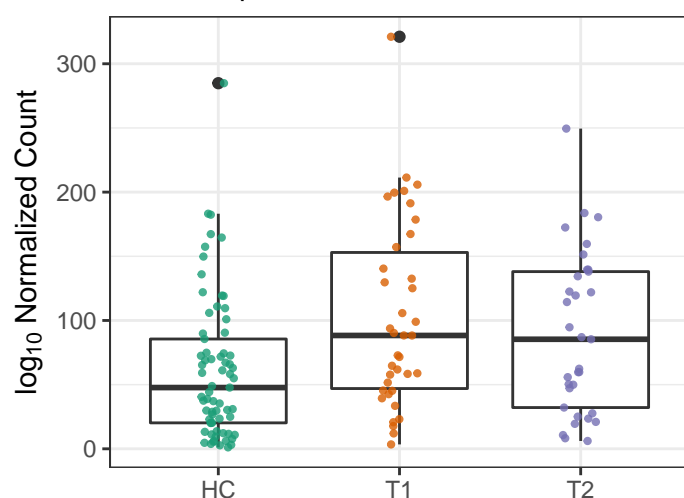
PWY–6277: superpathway of 5–amino

HC vs. T1 $p = 0.016$
HC vs. T2 $p = 0.21$
T1 vs. T2 $p = 0.24$



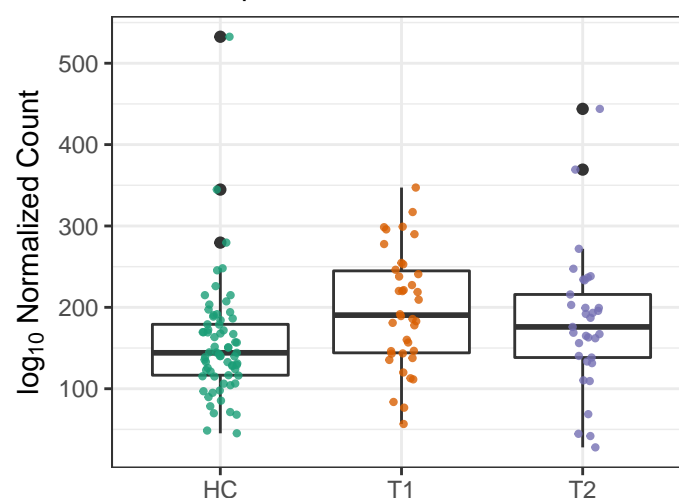
PYRIDOXSYN–PWY: pyridoxal 5'–pho

HC vs. T1 $p = 0.016$
HC vs. T2 $p = 0.12$
T1 vs. T2 $p = 0.35$



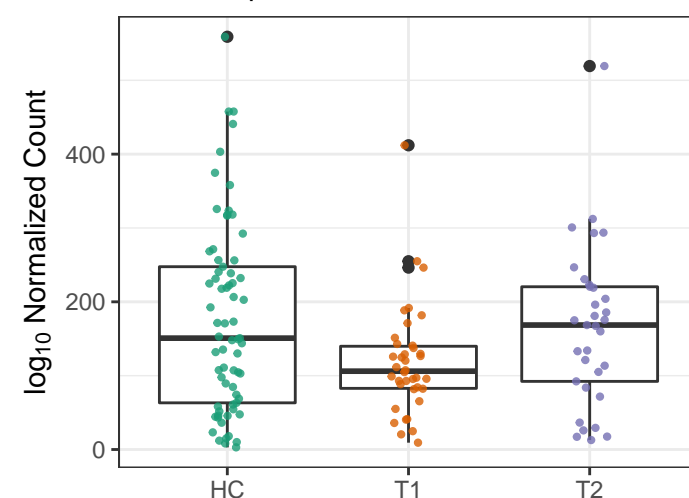
PWY–7208: superpathway of pyrimidin

HC vs. T1 $p = 0.018$
HC vs. T2 $p = 0.26$
T1 vs. T2 $p = 0.61$



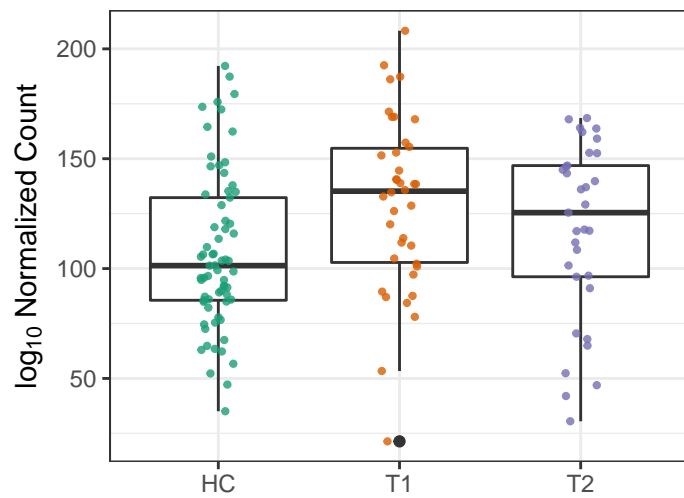
OANTIGEN–PWY: O–antigen building

HC vs. T1 $p = 0.019$
HC vs. T2 $p = 0.79$
T1 vs. T2 $p = 0.14$



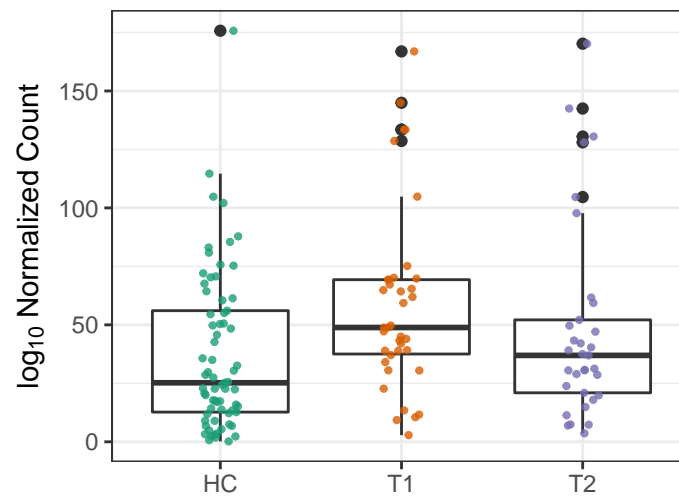
PWY-6545: pyrimidine deoxyribonucle

HC vs. T1 $p = 0.022$
 HC vs. T2 $p = 0.37$
 T1 vs. T2 $p = 0.27$



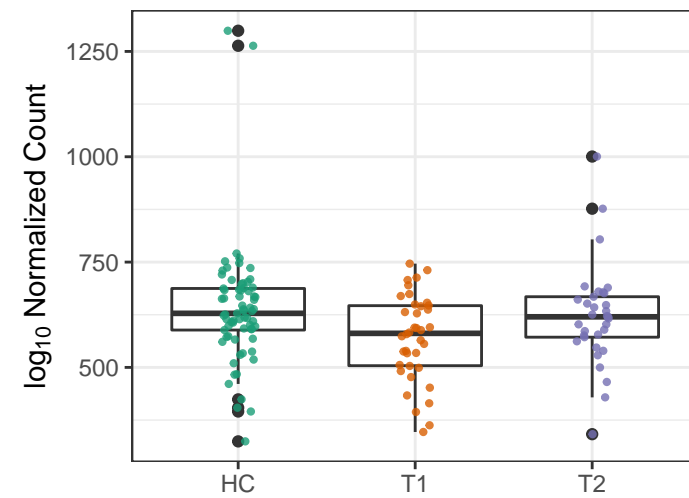
PWY-1269: CMP-3-deoxy-D-manno

HC vs. T1 $p = 0.025$
 HC vs. T2 $p = 0.33$
 T1 vs. T2 $p = 0.3$



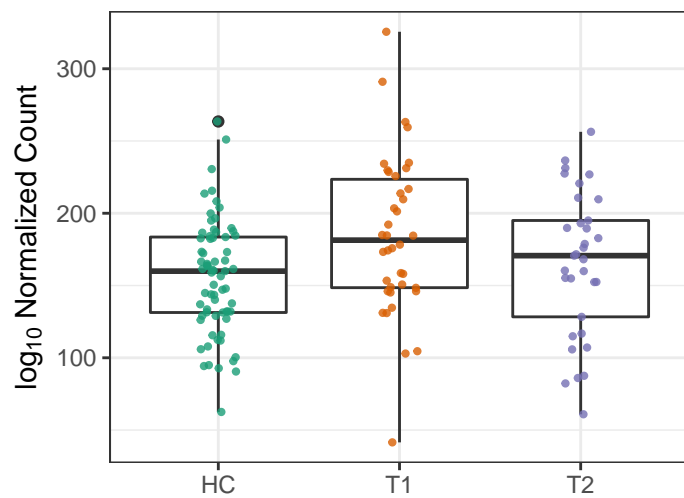
PWY-7221: guanosine ribonucleotide

HC vs. T1 $p = 0.025$
 HC vs. T2 $p = 0.67$
 T1 vs. T2 $p = 0.2$



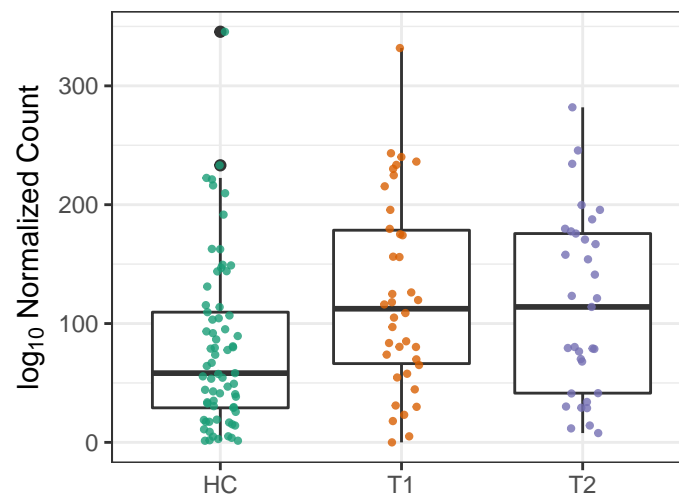
PWY0-166: superpathway of pyrimidin

HC vs. T1 $p = 0.025$
 HC vs. T2 $p = 0.48$
 T1 vs. T2 $p = 0.27$



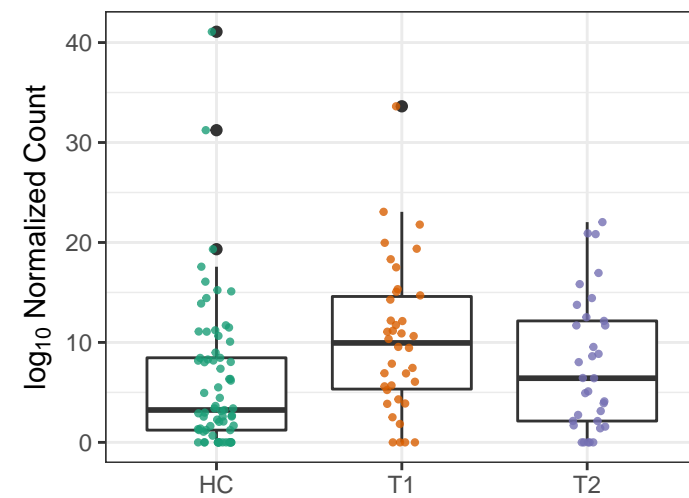
PWY0-845: superpathway of pyridoxal

HC vs. T1 $p = 0.026$
 HC vs. T2 $p = 0.12$
 T1 vs. T2 $p = 0.55$



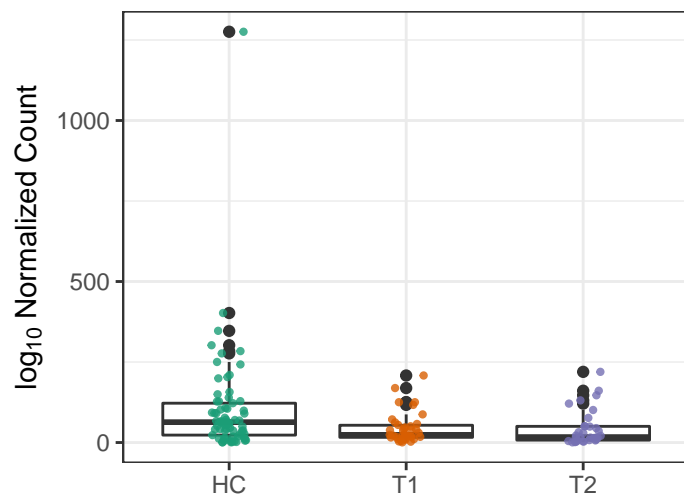
P162-PWY: L-glutamate degradation V

HC vs. T1 $p = 0.027$
 HC vs. T2 $p = 0.42$
 T1 vs. T2 $p = 0.25$



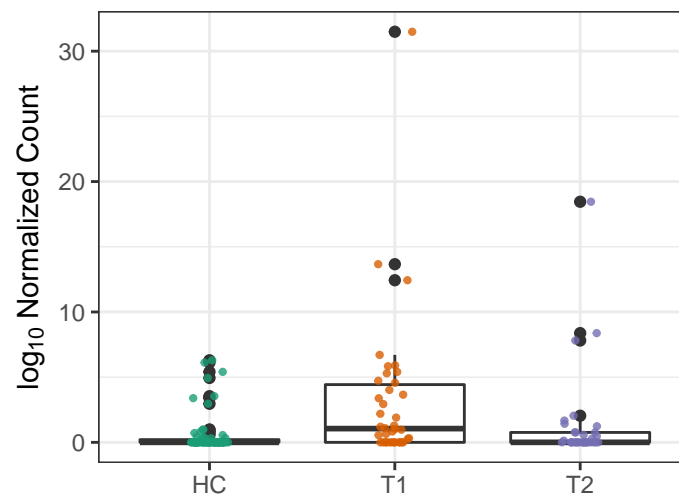
PWY-6147: 6-hydroxymethyl-dihydro

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



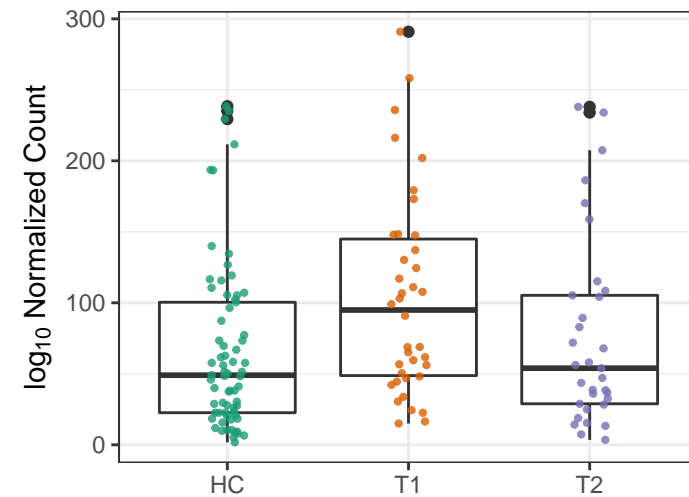
7ALPHADEHYDROX-PWY: cholate de

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.37$
 T1 vs. T2 $p = 0.26$



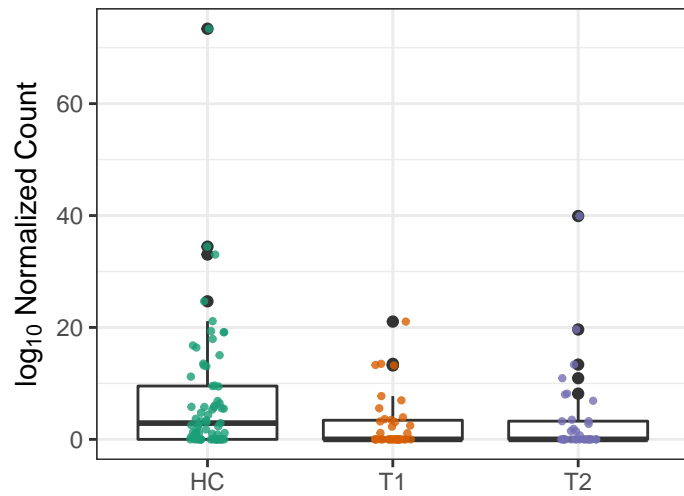
GLYCOLYSIS: glycolysis I (from glucos

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.59$
 T1 vs. T2 $p = 0.22$



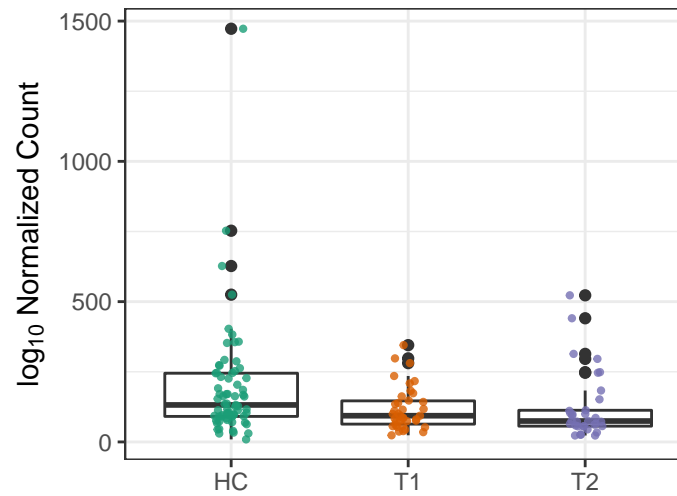
PWY-1861: formaldehyde assimilation

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.21$
 T1 vs. T2 $p = 0.39$



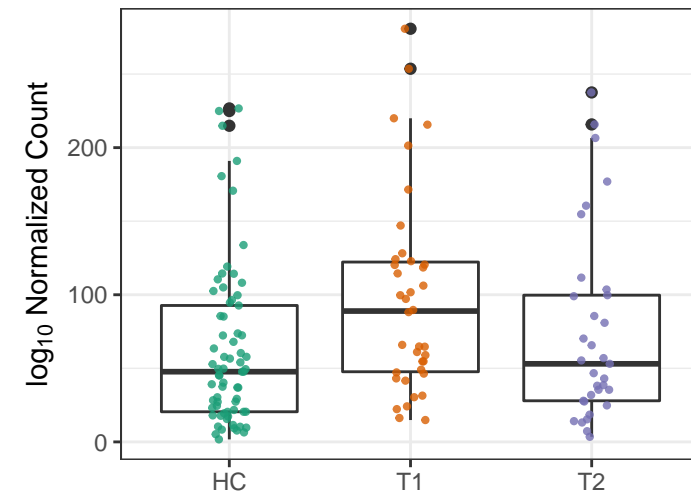
PWY-4981: L-proline biosynthesis II

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.12$
 T1 vs. T2 $p = 0.85$



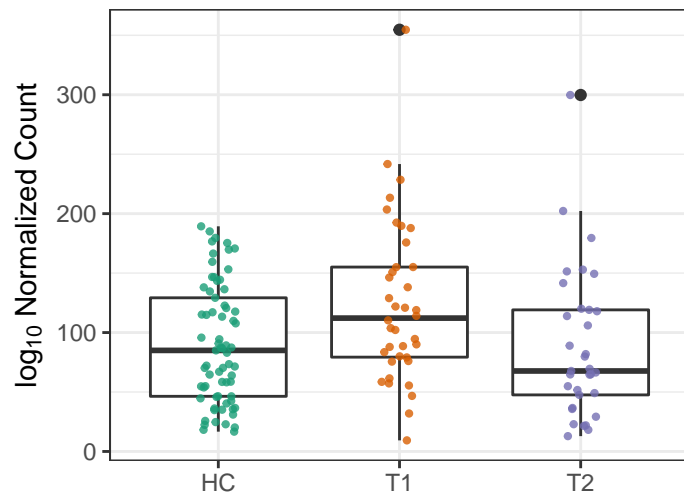
PWY-5484: glycolysis II (from fructose)

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.52$
 T1 vs. T2 $p = 0.24$



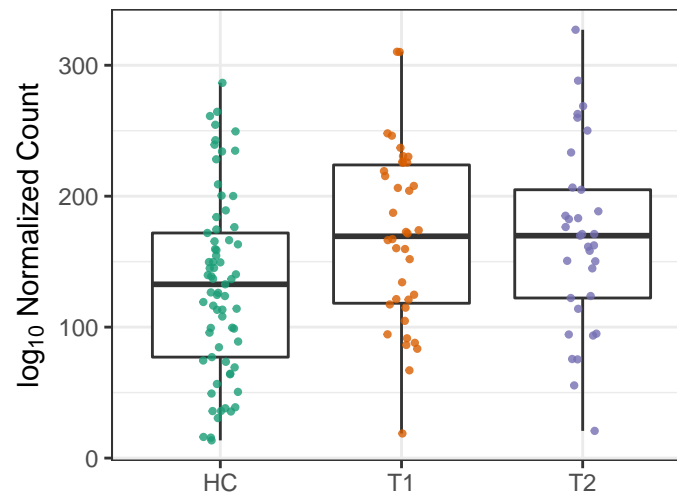
PWY66-409: superpathway of purine r

HC vs. T1 $p = 0.031$
 HC vs. T2 $p = 0.93$
 T1 vs. T2 $p = 0.13$



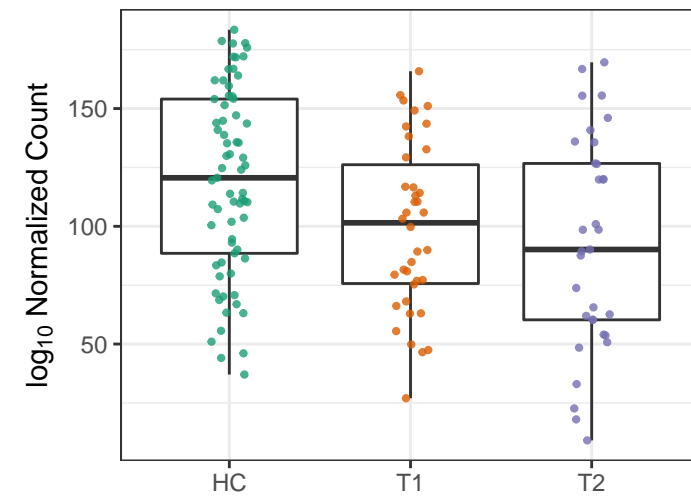
PWY-6168: flavin biosynthesis III (func

HC vs. T1 $p = 0.034$
 HC vs. T2 $p = 0.11$
 T1 vs. T2 $p = 0.69$



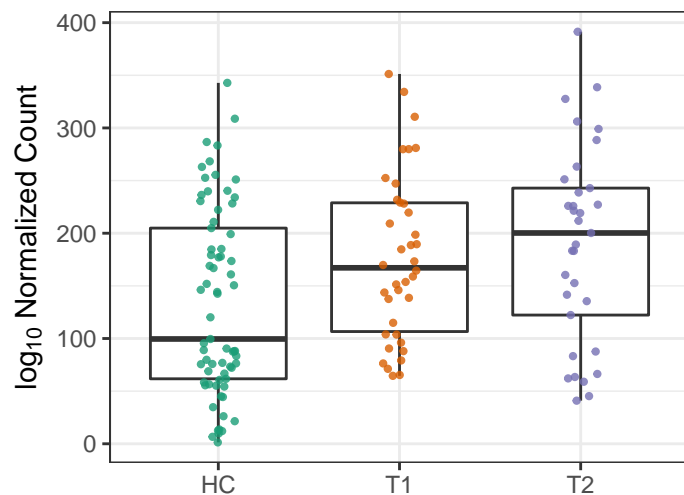
PRPP-PWY: superpathway of histidine

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



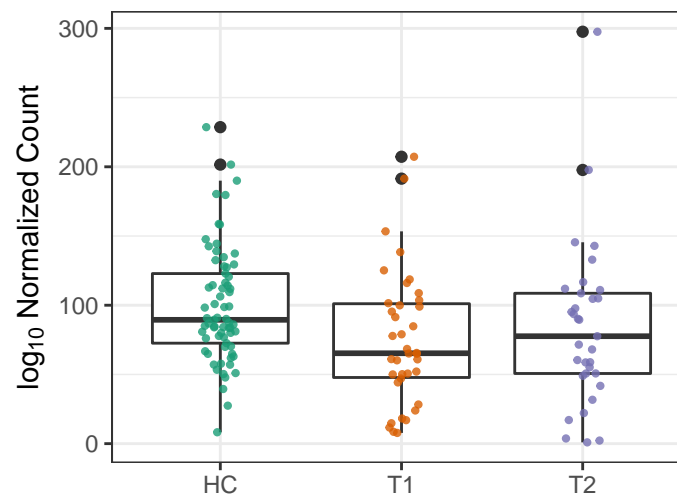
PWY-6897: thiamin salvage II

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



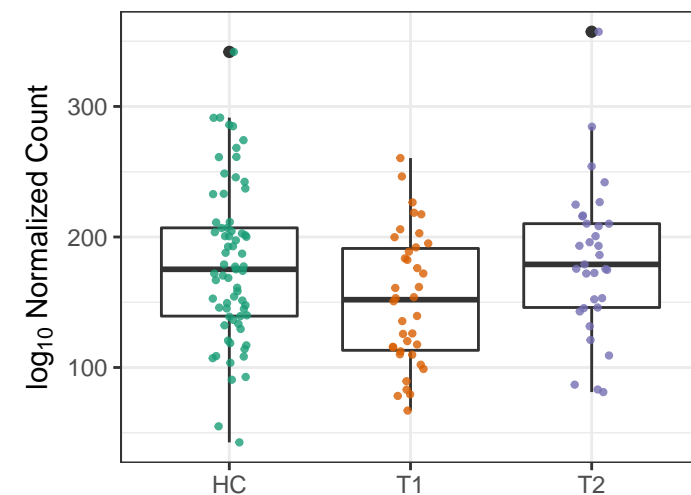
PWY-6305: putrescine biosynthesis IV

HC vs. T1 $p = 0.041$
 HC vs. T2 $p = 0.31$
 T1 vs. T2 $p = 0.39$



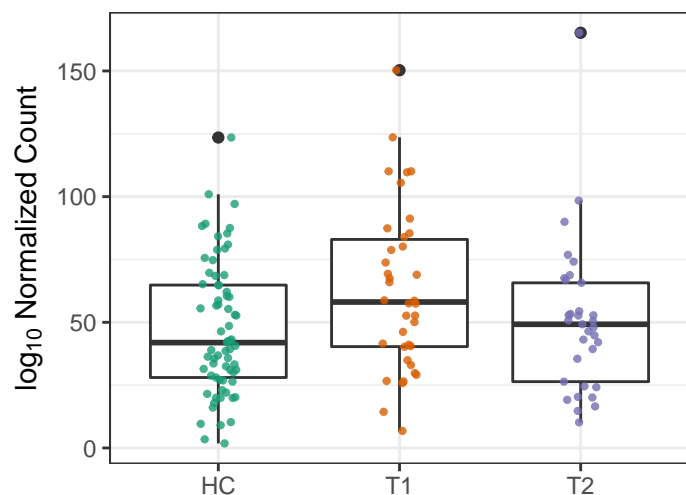
PYRIDNUCSYN-PWY: NAD biosynthe

HC vs. T1 $p = 0.044$
 HC vs. T2 $p = 0.89$
 T1 vs. T2 $p = 0.16$



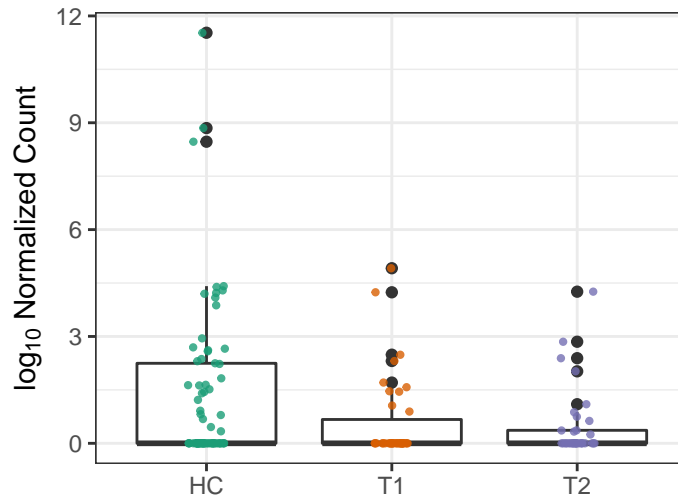
P42–PWY: incomplete reductive TCA c

HC vs. T1 $p = 0.05$
 HC vs. T2 $p = 0.73$
 T1 vs. T2 $p = 0.19$



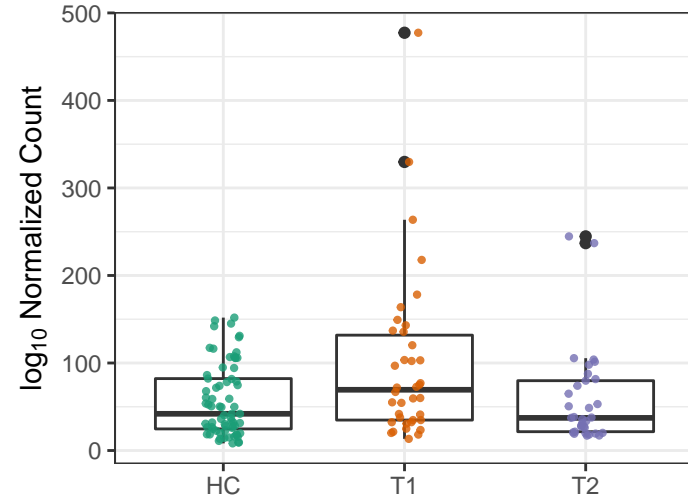
RUMP–PWY: formaldehyde oxidation I

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



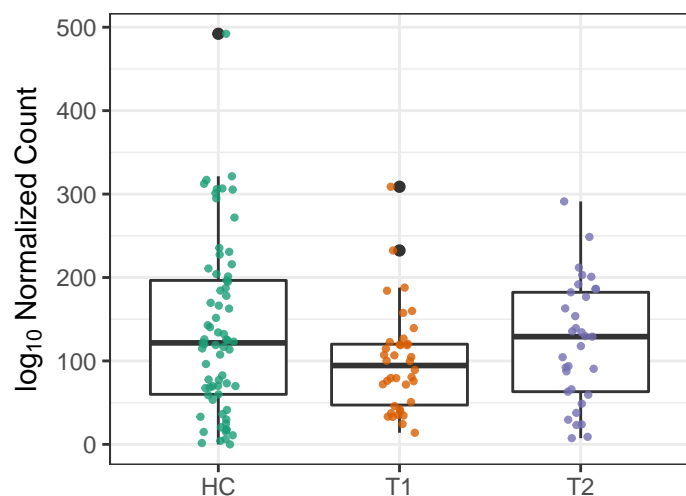
PWY0–1297: superpathway of purine c

HC vs. T1 $p = 0.055$
 HC vs. T2 $p = 0.95$
 T1 vs. T2 $p = 0.056$



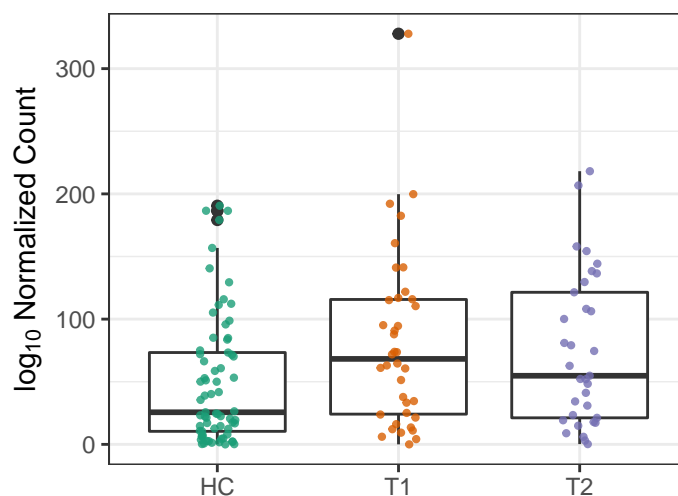
DAPLYSINESYN–PWY: L-lysine biosy

HC vs. T1 $p = 0.066$
 HC vs. T2 $p = 0.56$
 T1 vs. T2 $p = 0.3$



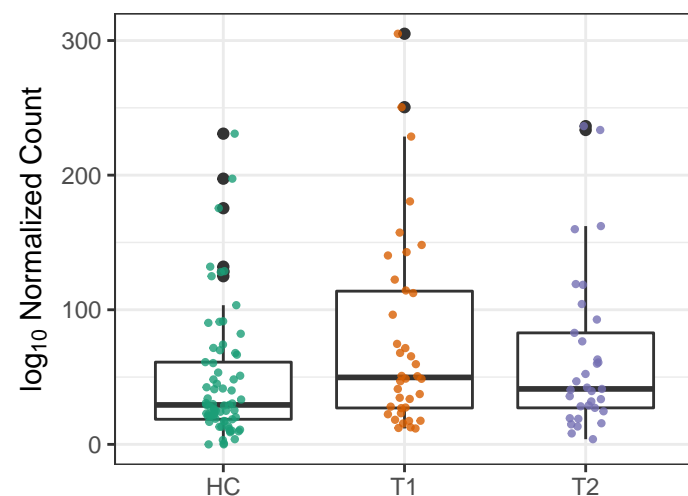
ARGININE–SYN4–PWY: L-ornithine d

HC vs. T1 $p = 0.068$
 HC vs. T2 $p = 0.14$
 T1 vs. T2 $p = 0.66$



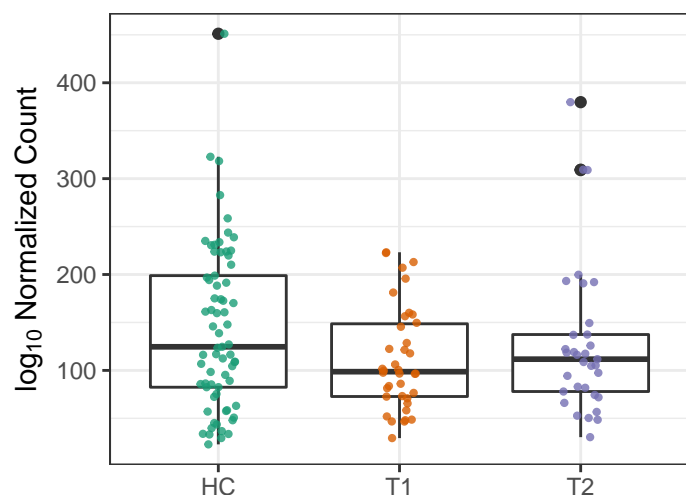
PWY66–400: glycolysis VI (metazoan)

HC vs. T1 $p = 0.068$
 HC vs. T2 $p = 0.26$
 T1 vs. T2 $p = 0.37$



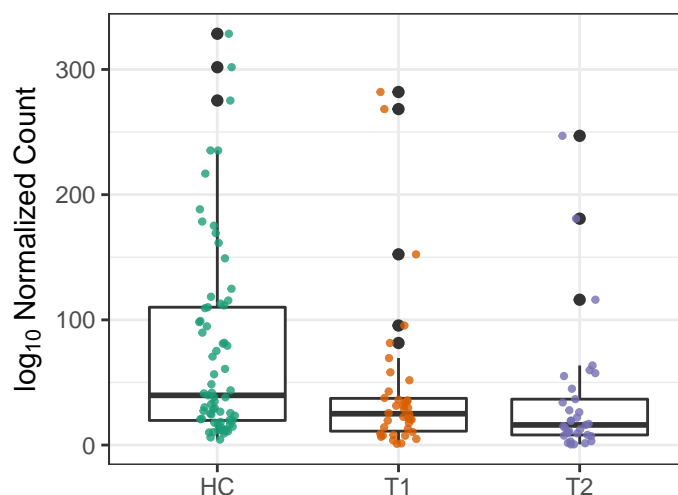
PWY0–1586: peptidoglycan maturati

HC vs. T1 $p = 0.068$
 HC vs. T2 $p = 0.53$
 T1 vs. T2 $p = 0.4$



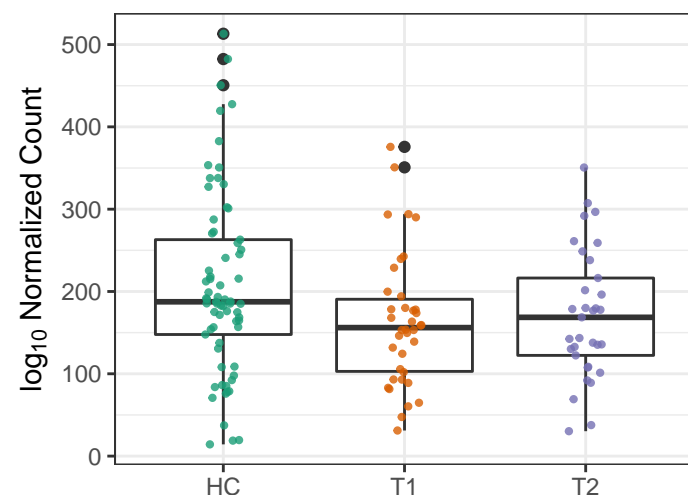
PENTOSE–P–PWY: pentose phosphat

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



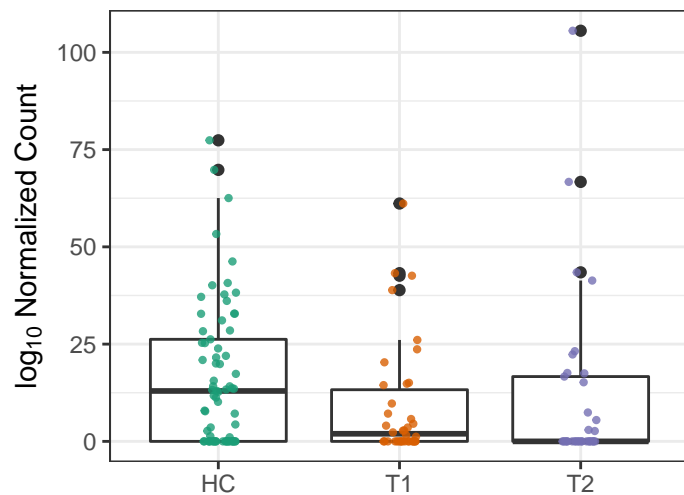
TRPSYN–PWY: L-tryptophan biosynth

HC vs. T1 $p = 0.082$
 HC vs. T2 $p = 0.15$
 T1 vs. T2 $p = 0.86$



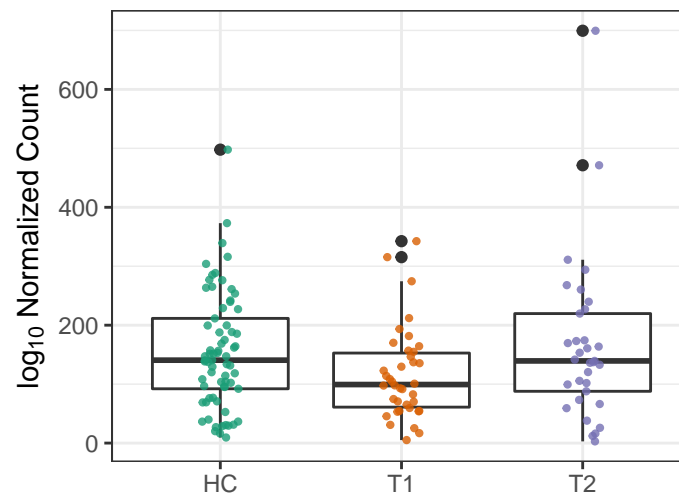
PWY-7209: superpathway of pyrimidin

HC vs. T1 $p = 0.086$
 HC vs. T2 $p = 0.44$
 T1 vs. T2 $p = 0.61$



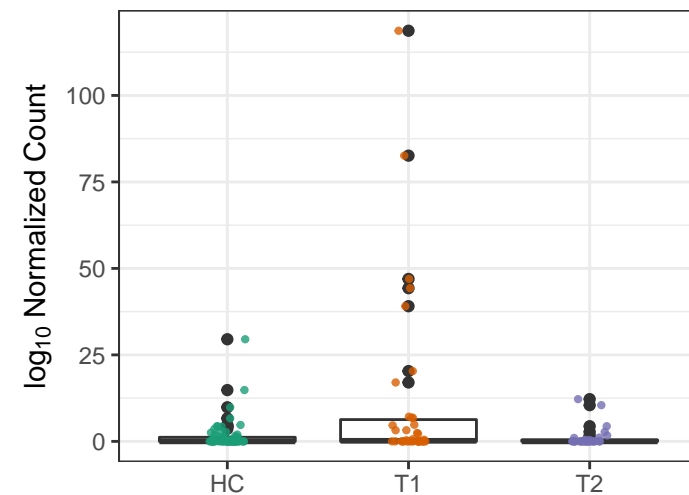
PWY-7234: inosine-5'-phosphate bio:

HC vs. T1 $p = 0.086$
 HC vs. T2 $p = 0.79$
 T1 vs. T2 $p = 0.13$



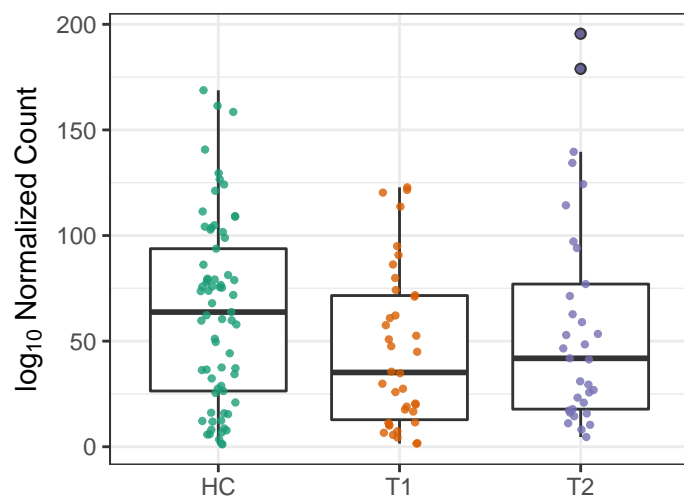
PWY-7013: L-1,2-propanediol degra

HC vs. T1 $p = 0.092$
 HC vs. T2 $p = 0.62$
 T1 vs. T2 $p = 0.14$



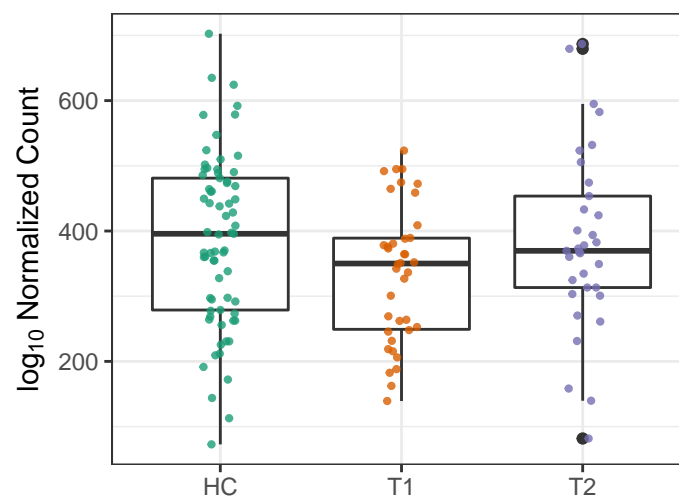
PWY-5989: stearate biosynthesis II (b:

HC vs. T1 $p = 0.094$
 HC vs. T2 $p = 0.71$
 T1 vs. T2 $p = 0.44$



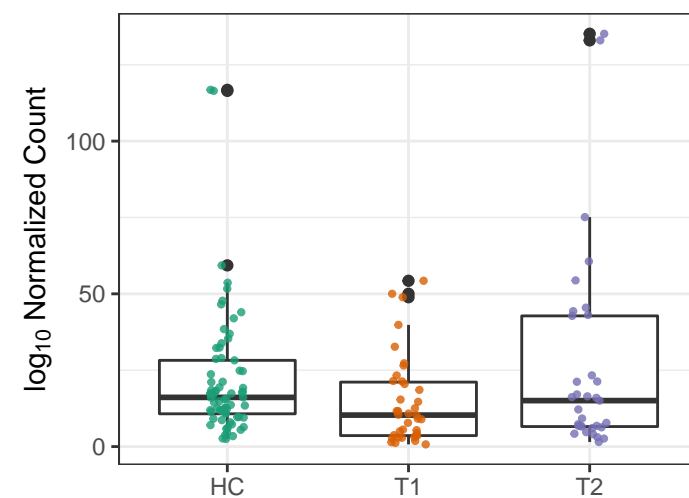
PWY-6385: peptidoglycan biosynthesi

HC vs. T1 $p = 0.094$
 HC vs. T2 $p = 0.96$
 T1 vs. T2 $p = 0.22$



PWY-6588: pyruvate fermentation to a

HC vs. T1 $p = 0.094$
 HC vs. T2 $p = 0.64$
 T1 vs. T2 $p = 0.17$



FOLSYN-PWY: superpathway of tetrahydrofolate biosynthesis and salvage

HC vs. T1 $p = 0.095$
 HC vs. T2 $p = 0.32$
 T1 vs. T2 $p = 0.52$

