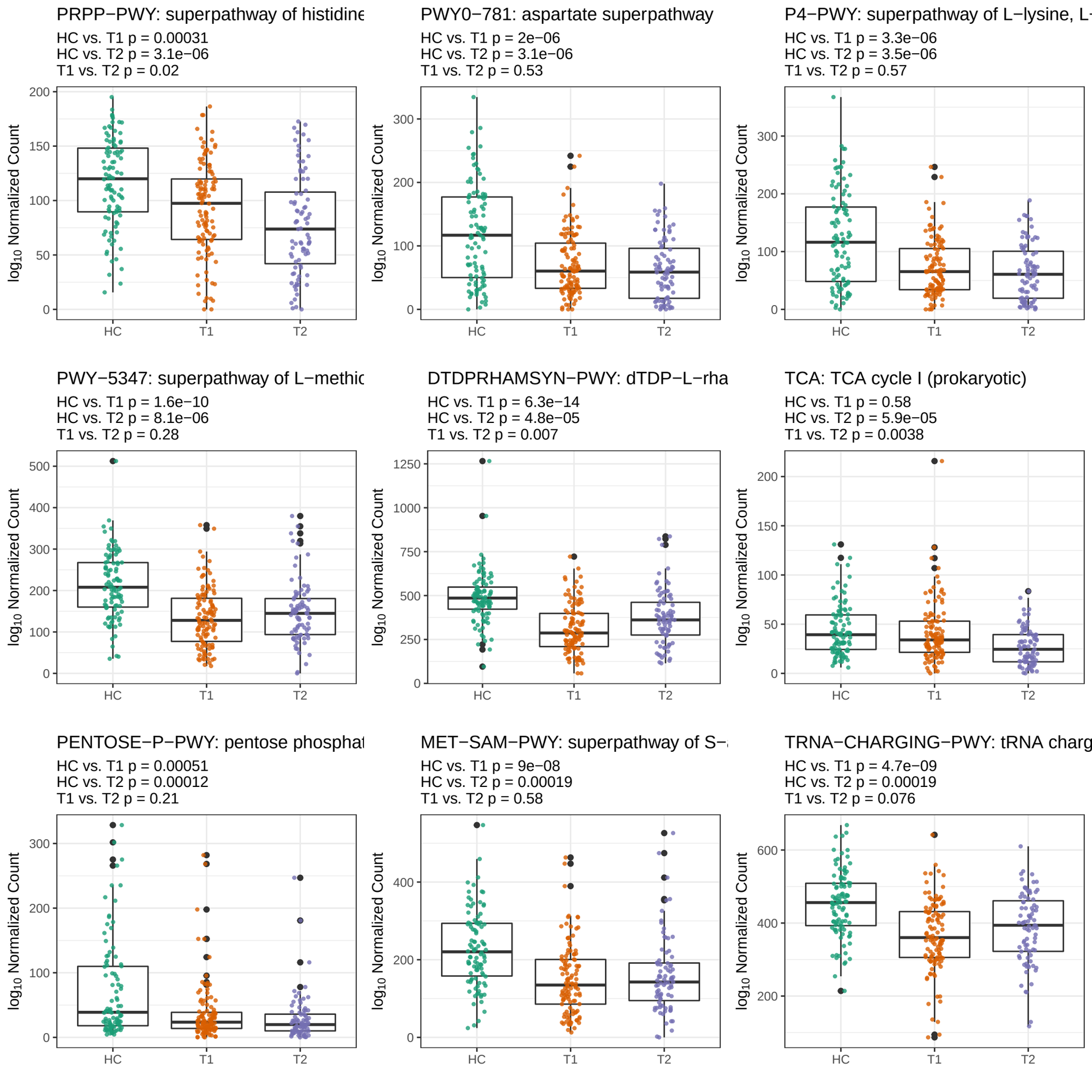
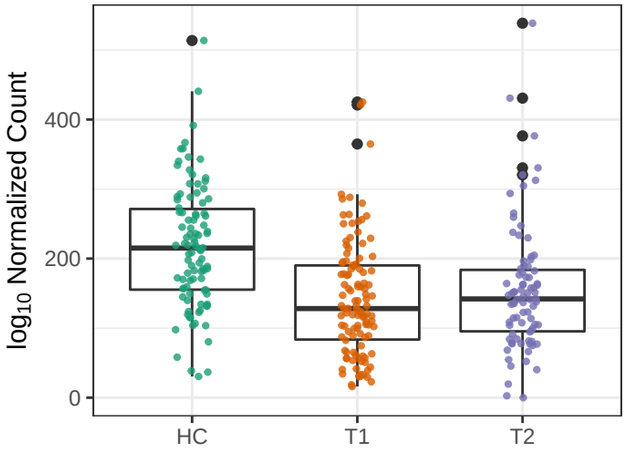

PRPP−PWY: superpathway of histidine
HC vs. T1 p = 0.00031
HC vs. T2 p = 3.1e−06
T1 vs. T2 p = 0.02
PWY0−781: aspartate superpathway
HC vs. T1 p = 2e−06
HC vs. T2 p = 3.1e−06
T1 vs. T2 p = 0.53
P4−PWY: superpathway of L−lysine, L−
HC vs. T1 p = 3.3e−06
HC vs. T2 p = 3.5e−06
T1 vs. T2 p = 0.57
PWY−5347: superpathway of L−methic
HC vs. T1 p = 1.6e−10
HC vs. T2 p = 8.1e−06
T1 vs. T2 p = 0.28
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
TCA: TCA cycle I (prokaryotic)
HC vs. T1 p = 0.58
HC vs. T2 p = 5.9e−05
T1 vs. T2 p = 0.0038
PENTOSE−P−PWY: pentose phosphat
HC vs. T1 p = 0.00051
HC vs. T2 p = 0.00012
T1 vs. T2 p = 0.21
MET−SAM−PWY: superpathway of S−
HC vs. T1 p = 9e−08
HC vs. T2 p = 0.00019
T1 vs. T2 p = 0.58
TRNA−CHARGING−PWY: tRNA charg
HC vs. T1 p = 4.7e−09
HC vs. T2 p = 0.00019
T1 vs. T2 p = 0.076
log10 Normalized Count
HC
T1
T2

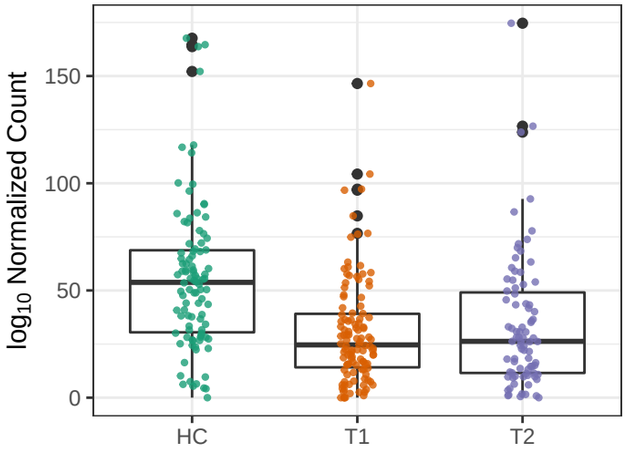
METSYN−PWY: L−homoserine and L−

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



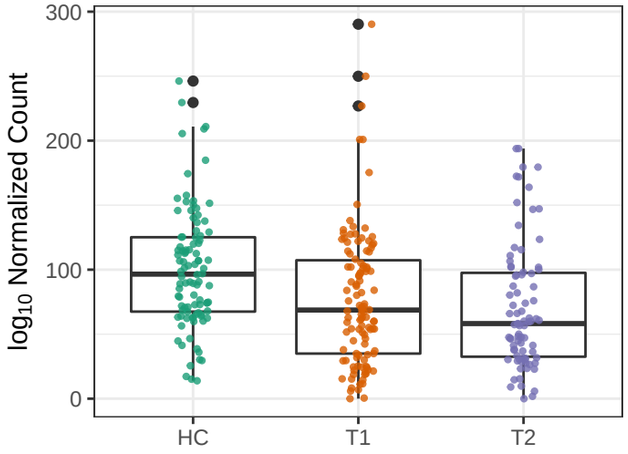
POLYAMSYN−PWY: superpathway of p

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



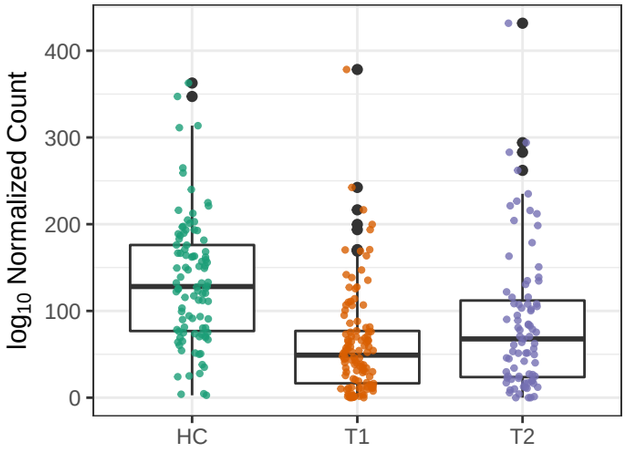
HSERMETANA−PWY: L−methionine bi

HC vs. T1 p = 0.0029
HC vs. T2 p = 0.0011
T1 vs. T2 p = 0.58



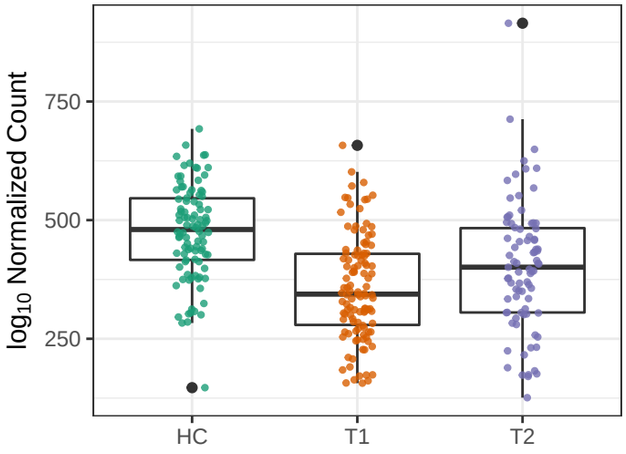
PWY−5177: glutaryl−CoA degradation

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



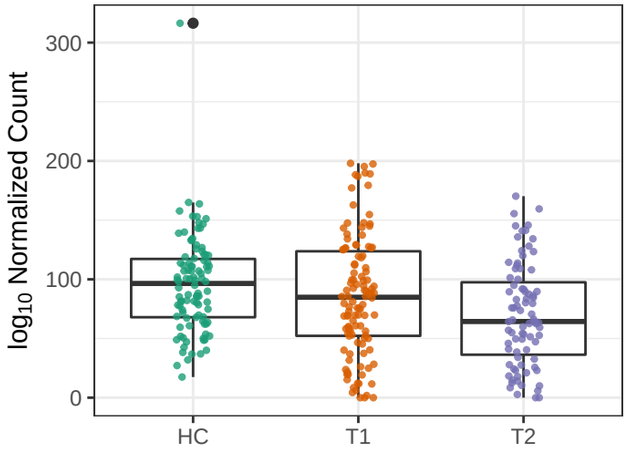
CALVIN−PWY: Calvin−Benson−Bassha

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



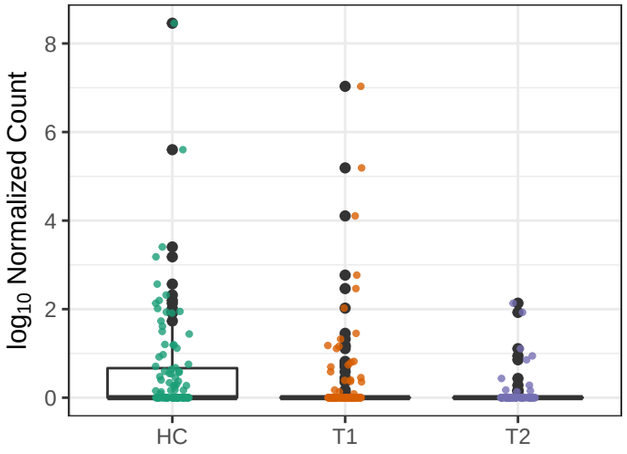
PWY−7211: superpathway of pyrimidin

HC vs. T1 p = 0.22
HC vs. T2 p = 0.0018
T1 vs. T2 p = 0.01



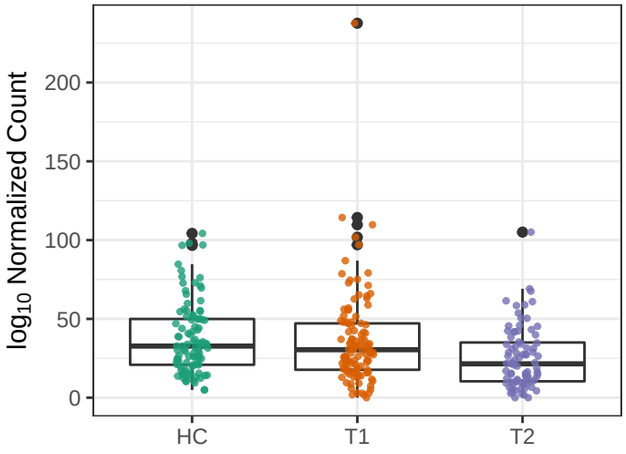
PWY−5692: allantoin degradation to glyc

HC vs. T1 p = 0.11
HC vs. T2 p = 0.0024
T1 vs. T2 p = 0.064



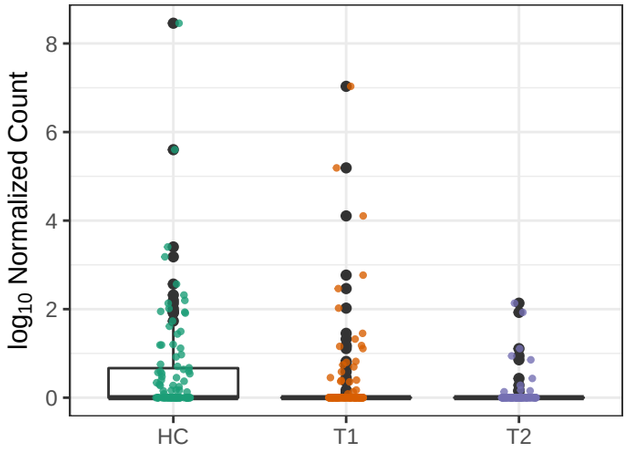
PWY−6969: TCA cycle V (2−oxoglutara

HC vs. T1 p = 0.8
HC vs. T2 p = 0.0024
T1 vs. T2 p = 0.0089



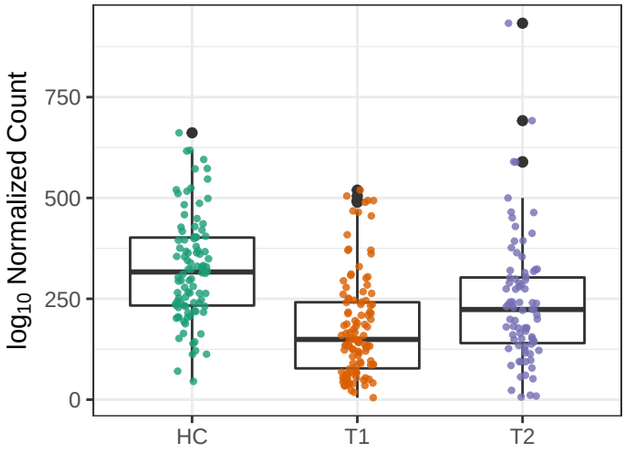
URDEGR−PWY: superpathway of allanto

HC vs. T1 p = 0.11
HC vs. T2 p = 0.0024
T1 vs. T2 p = 0.064



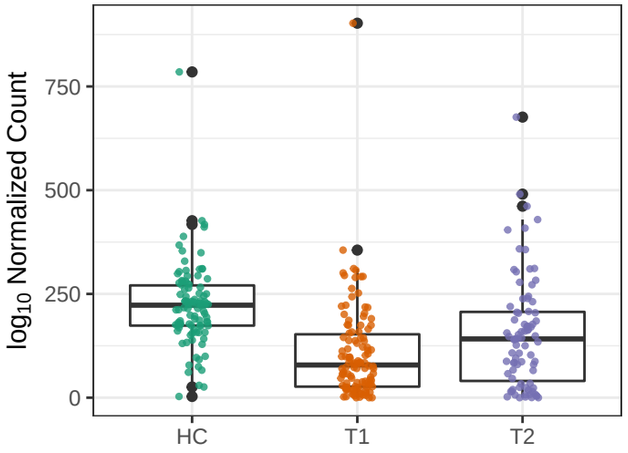
PWY−621: sucrose degradation III (suc

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



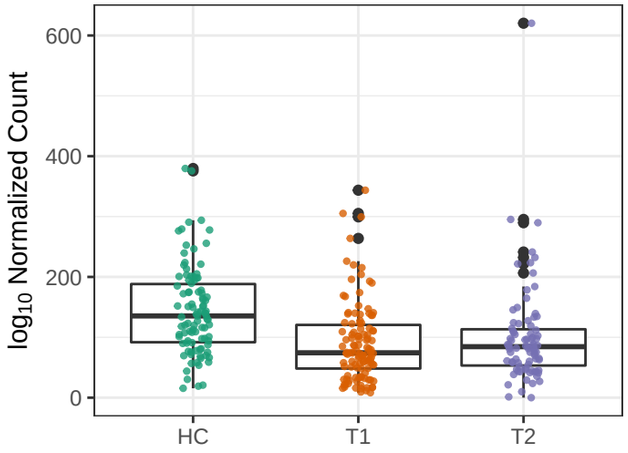
COBALSYN−PWY: adenosylcobalamir

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



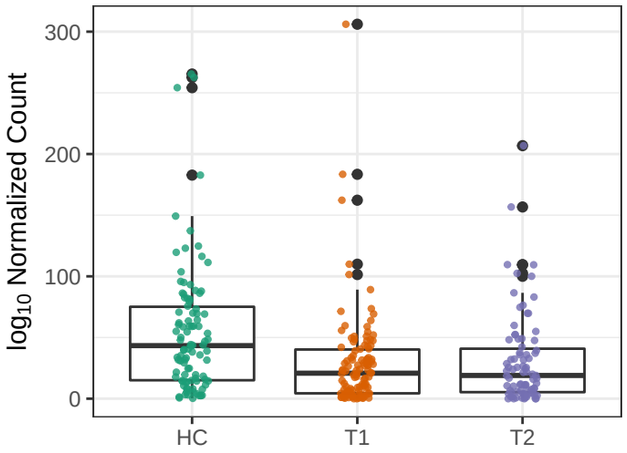
HOMOSER−METSYN−PWY: L−methic

HC vs. T1 p = 7.4e−07
HC vs. T2 p = 0.0034
T1 vs. T2 p = 0.37



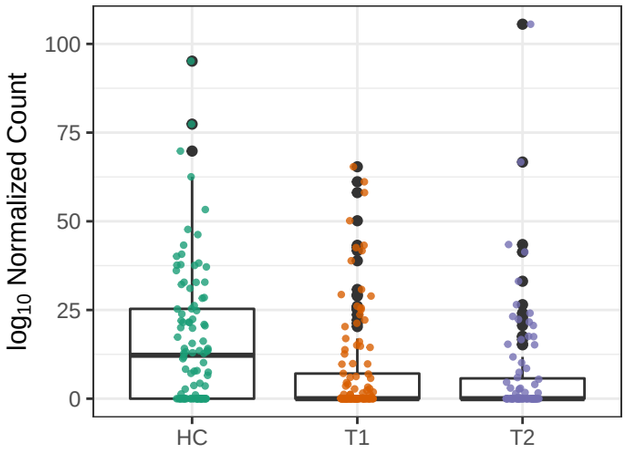
LACTOSECAT−PWY: lactose and gala

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



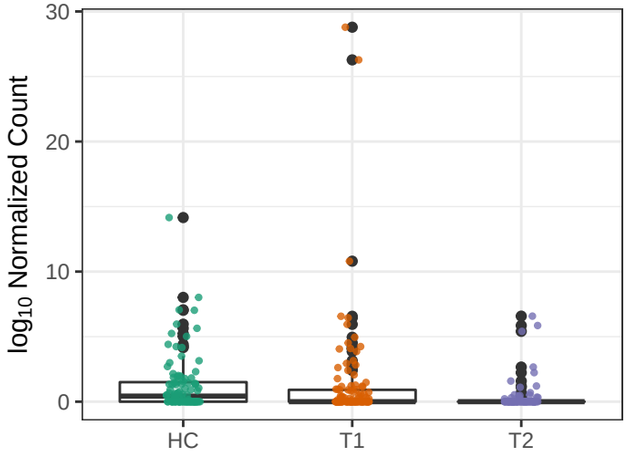
PWY−7209: superpathway of pyrimidin

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



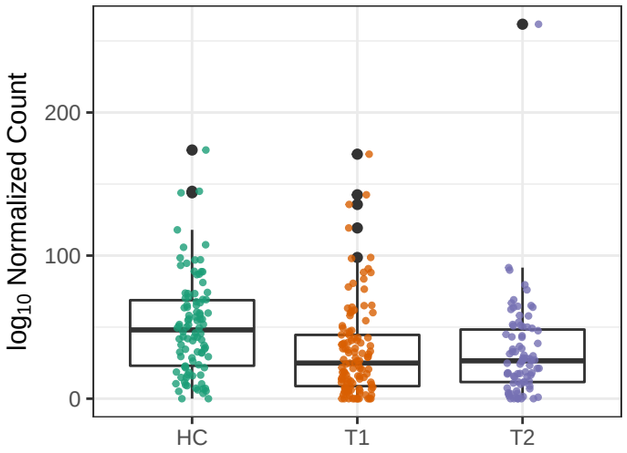
PWY490−3: nitrate reduction VI (assimi

HC vs. T1 p = 1
HC vs. T2 p = 0.0068
T1 vs. T2 p = 0.071



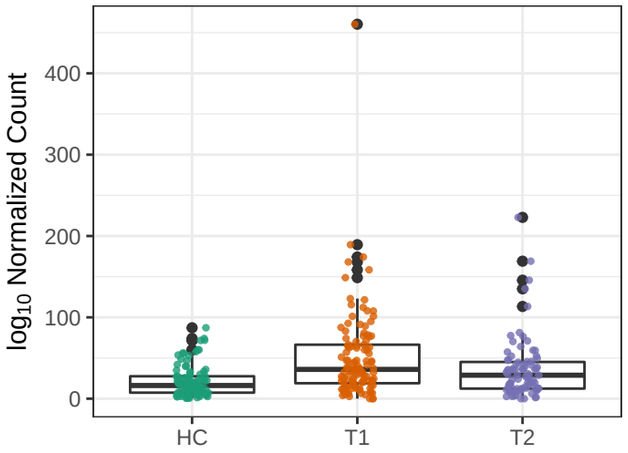
ARG+POLYAMINE−SYN: superpathwa

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



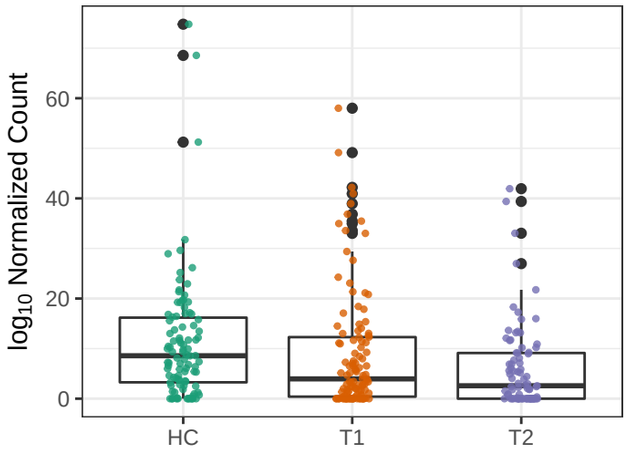
CITRULBIO−PWY: L−citrulline biosynth

HC vs. T1 p = 2.8e−06
HC vs. T2 p = 0.014
T1 vs. T2 p = 0.086



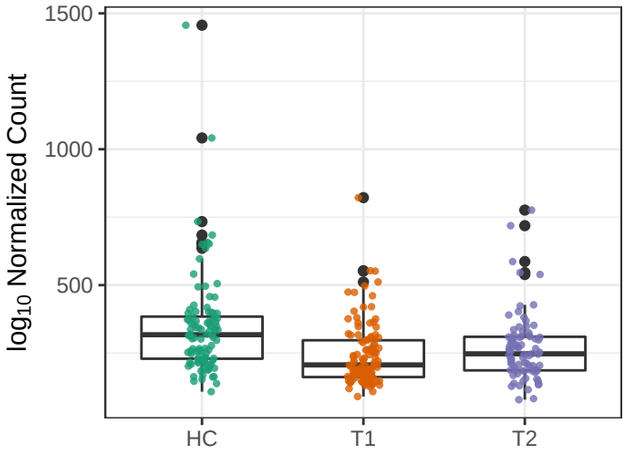
FAO−PWY: fatty acid β−oxidation I

HC vs. T1 p = 0.28
HC vs. T2 p = 0.014
T1 vs. T2 p = 0.065



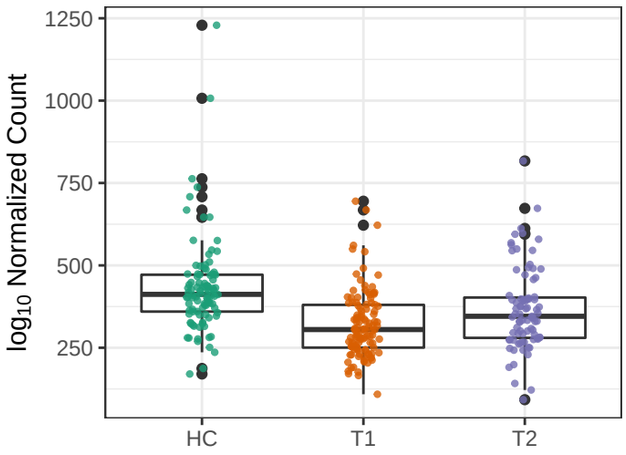
HISTSYN−PWY: L−histidine biosynthe

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



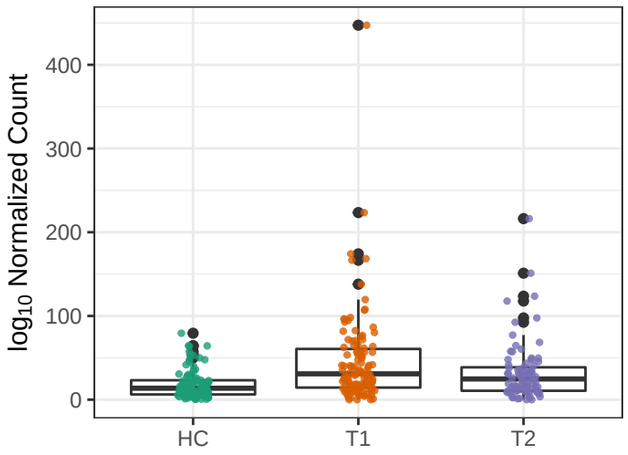
PWY−3001: superpathway of L−isoleu

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



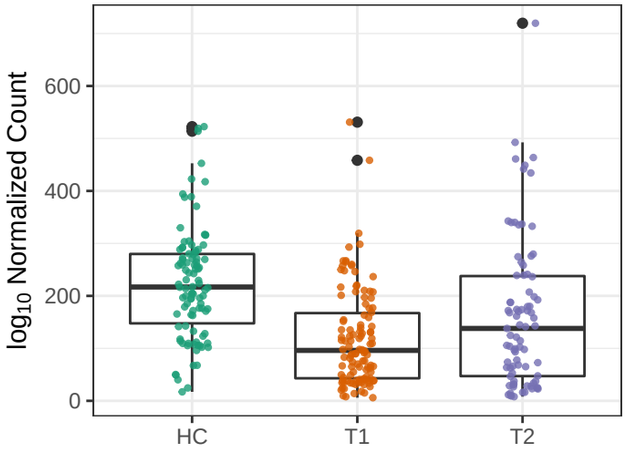
PWY−4984: urea cycle

HC vs. T1 p = 6.9e−06
HC vs. T2 p = 0.014
T1 vs. T2 p = 0.092



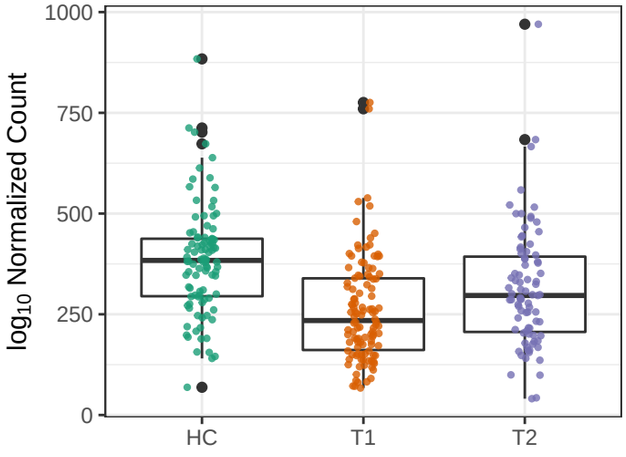
PWY−7242: D−fructuronate degradatic

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



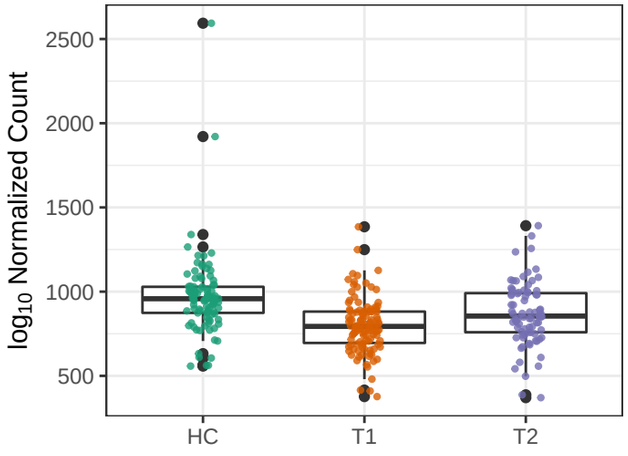
PWY−7357: thiamin formation from py

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



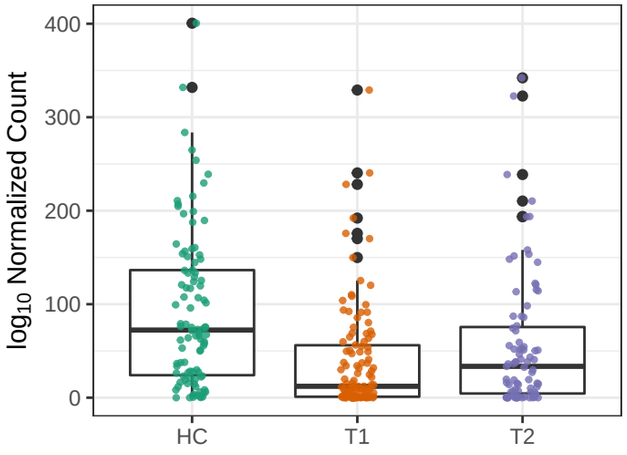
PWY−7219: adenosine ribonucleotide

HC vs. T1 p = 1.8e−07
HC vs. T2 p = 0.015
T1 vs. T2 p = 0.015



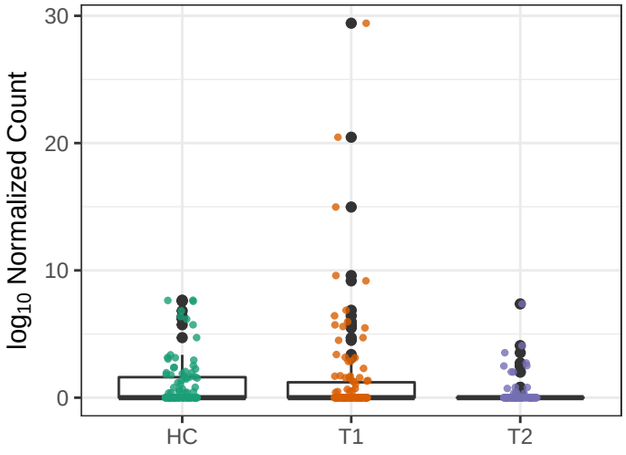
PWY−5367: petroselinate biosynthesis

HC vs. T1 p = 1.9e−06
HC vs. T2 p = 0.015
T1 vs. T2 p = 0.47



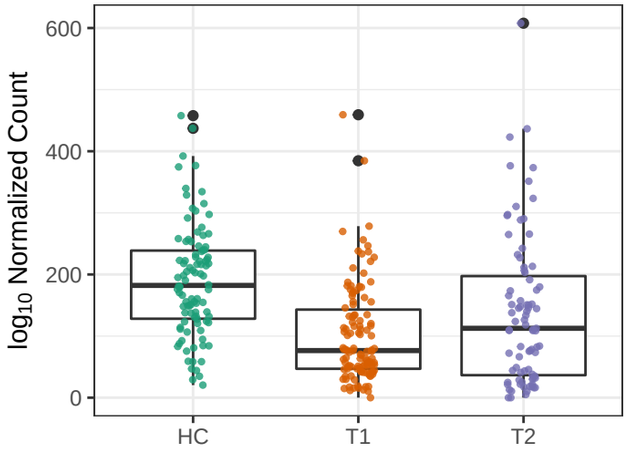
PWY−6263: superpathway of menaquin

HC vs. T1 p = 0.52
HC vs. T2 p = 0.015
T1 vs. T2 p = 0.041



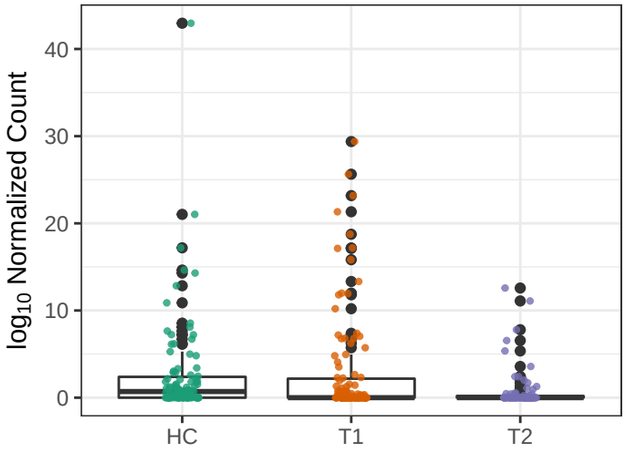
GLUCUROCAT−PWY: superpathway o

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



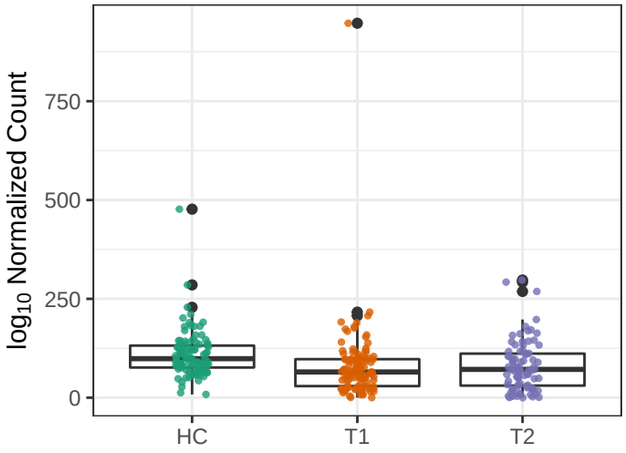
KETOGLUCONMET−PWY: ketogluconа

HC vs. T1 p = 0.9
HC vs. T2 p = 0.017
T1 vs. T2 p = 0.01



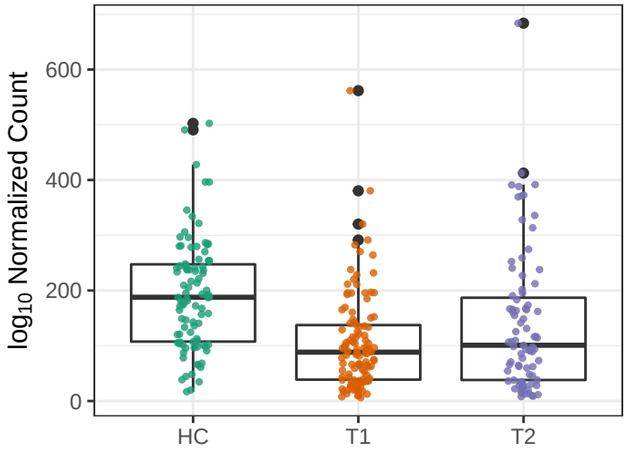
PWY−6305: putrescine biosynthesis IV

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



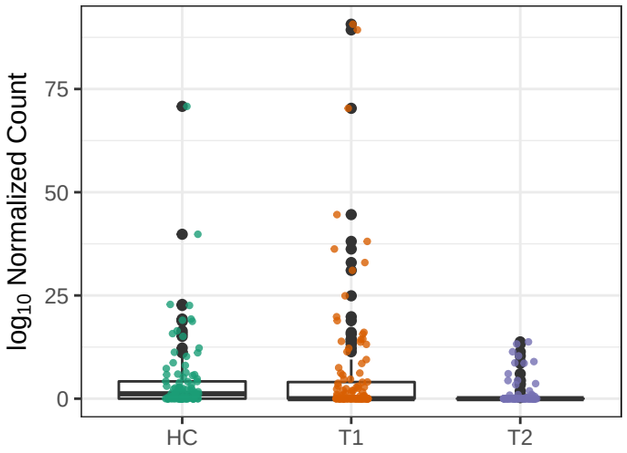
PWY−6507: 4−deoxy−L−threo−hex−4−

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



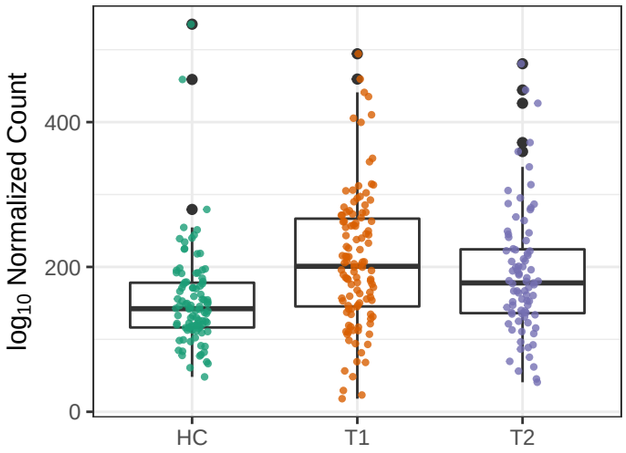
PWY−7204: pyridoxal 5'−phosphate sal

HC vs. T1 p = 0.4
HC vs. T2 p = 0.017
T1 vs. T2 p = 0.019



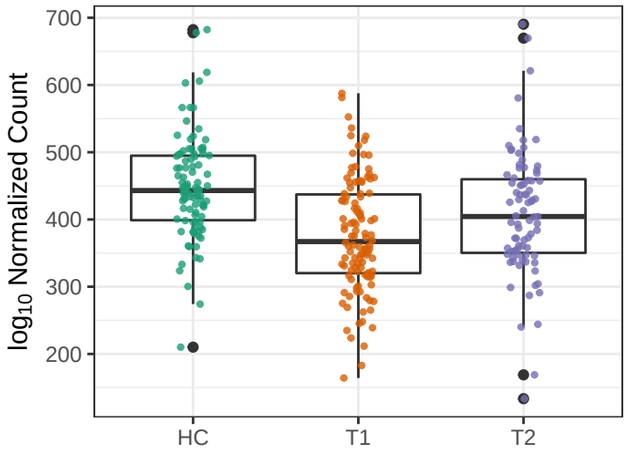
PWY−7228: superpathway of guanosin

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



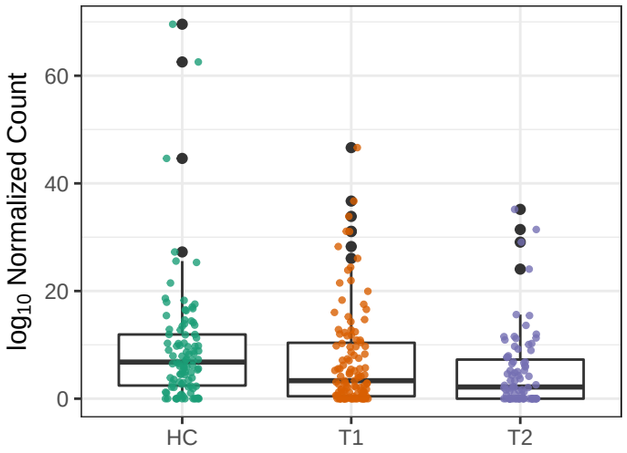
PWY−724: superpathway of L−lysine, L

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



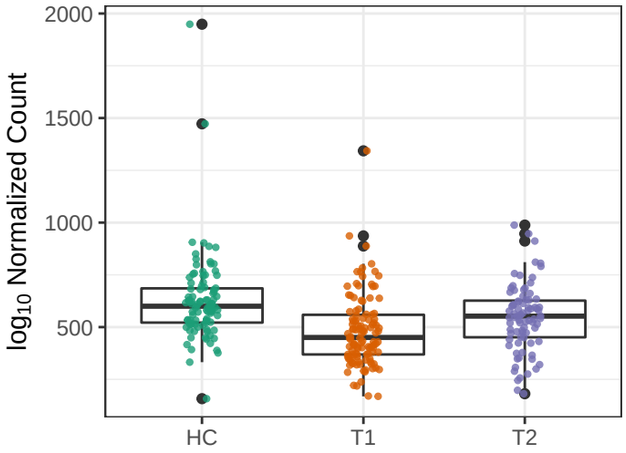
PWY−5136: fatty acid β−oxidation

HC vs. T1 p = 0.23
HC vs. T2 p = 0.018
T1 vs. T2 p = 0.094



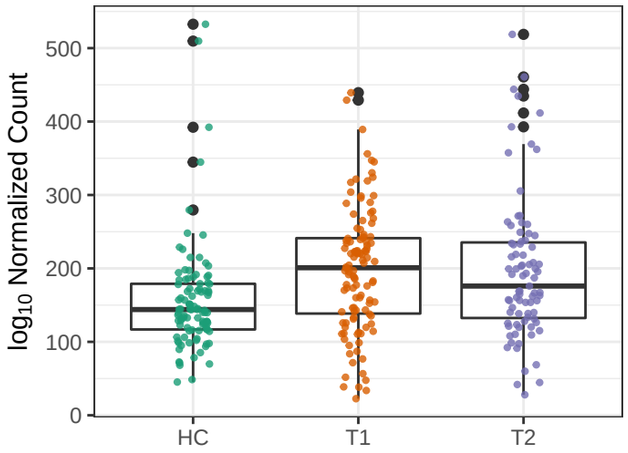
PWY−6151: S−adenosyl−L−methionir

HC vs. T1 p = 1.6e−06
HC vs. T2 p = 0.02
T1 vs. T2 p = 0.0062



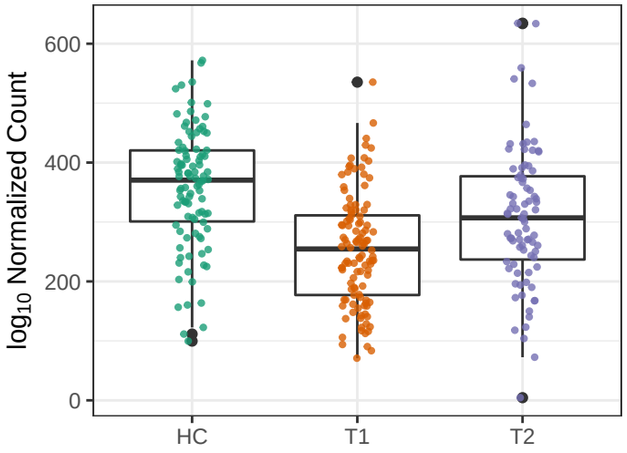
PWY−7208: superpathway of pyrimidin

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



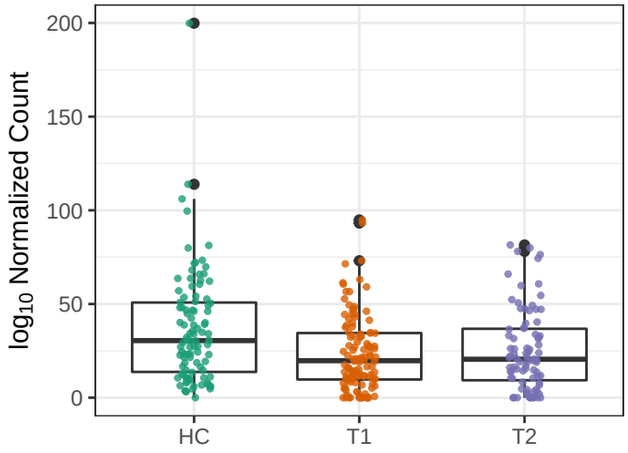
PWY66−422: D−galactose degradation

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



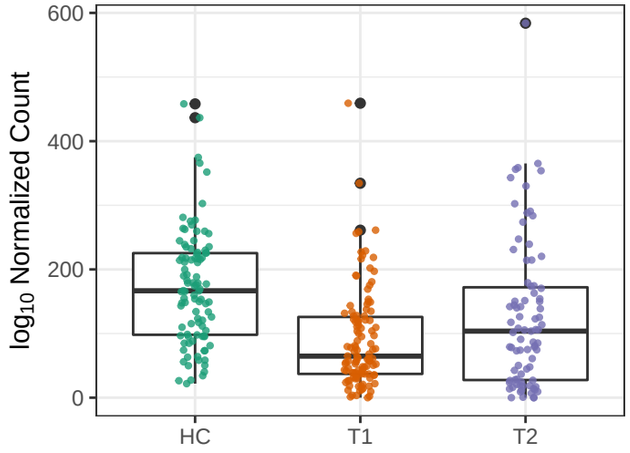
FOLSYN−PWY: superpathway of tetral

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



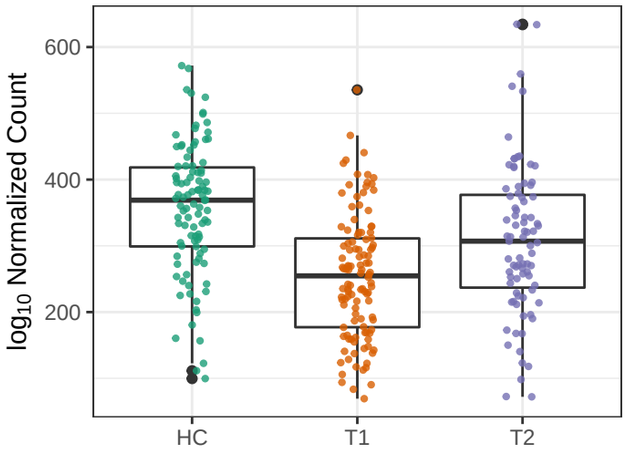
GALACT−GLUCUROCAT−PWY: super

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



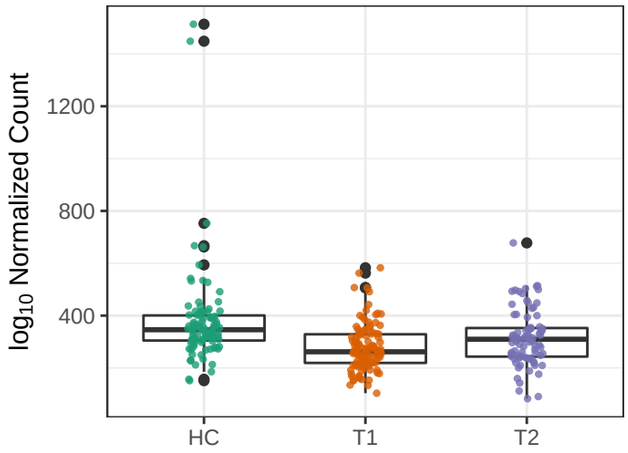
PWY−6317: galactose degradation I (L

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



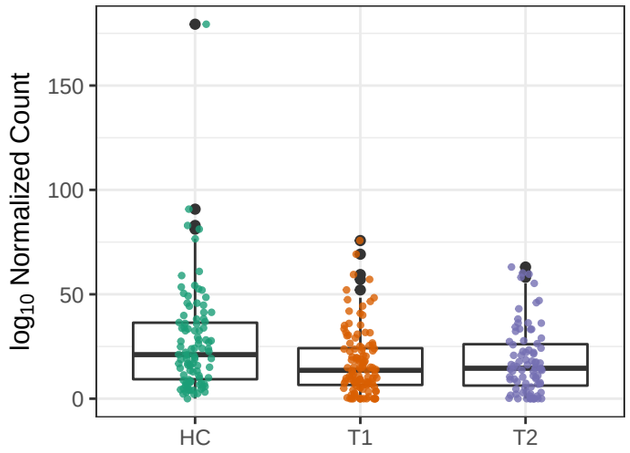
THRESYN−PWY: superpathway of L−

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



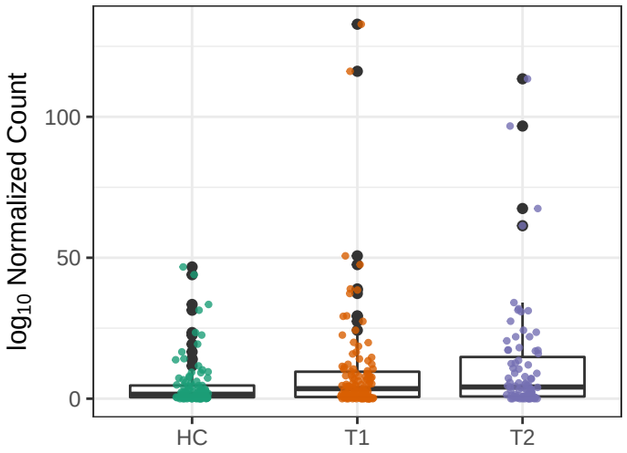
PWY−6612: superpathway of tetrahydr

HC vs. T1 p = 0.0037
HC vs. T2 p = 0.028
T1 vs. T2 p = 0.72



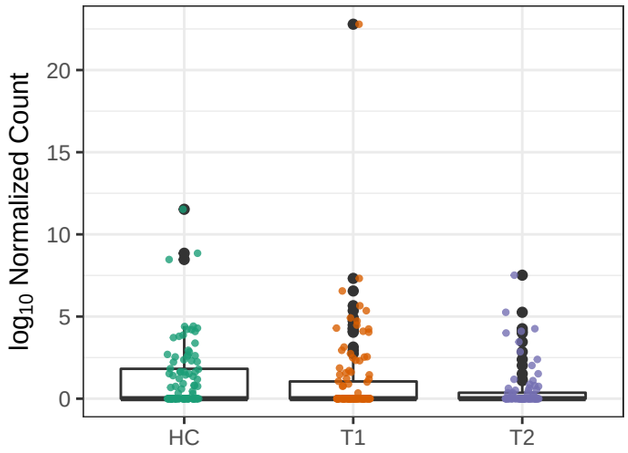
PWY−5384: sucrose degradation IV (s

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



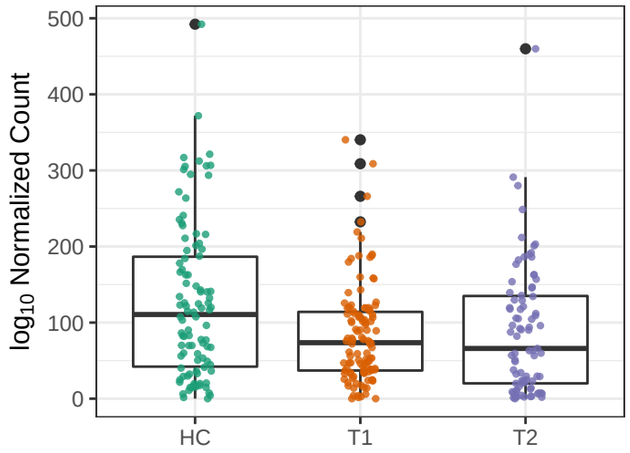
RUMP−PWY: formaldehyde oxidation I

HC vs. T1 p = 0.56
HC vs. T2 p = 0.039
T1 vs. T2 p = 0.2



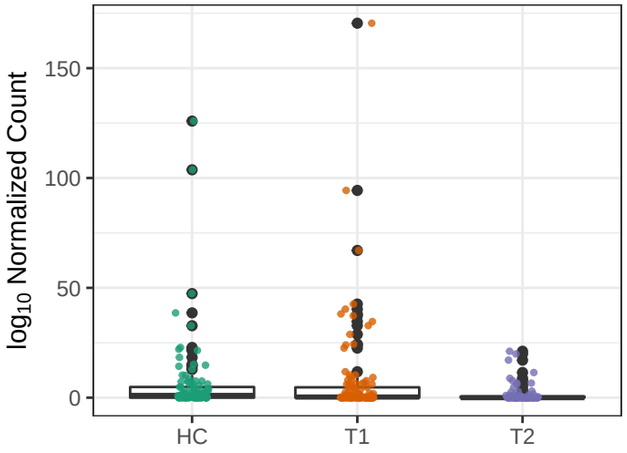
DAPLYSINESYN−PWY: L−lysine biosy

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



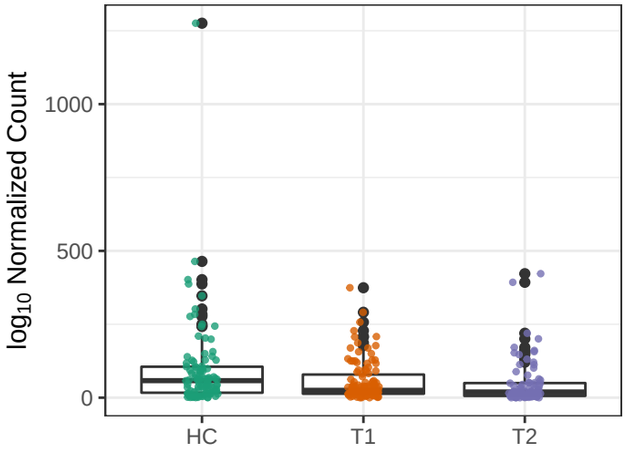
GLUCOSE1PMETAB−PWY: glucose a

HC vs. T1 p = 0.85
HC vs. T2 p = 0.04
T1 vs. T2 p = 0.017



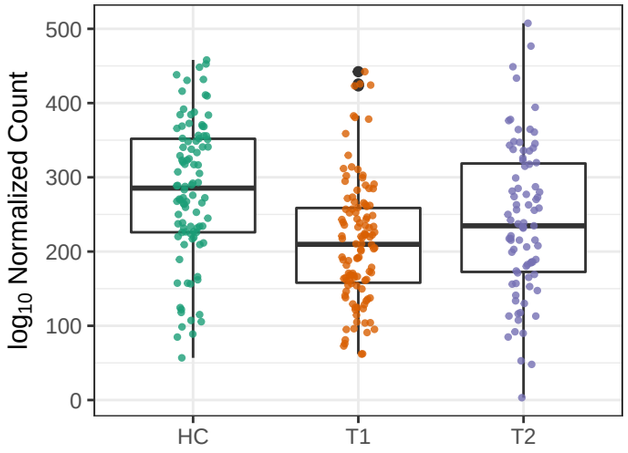
PWY−6147: 6−hydroxymethyl−dihydrc

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



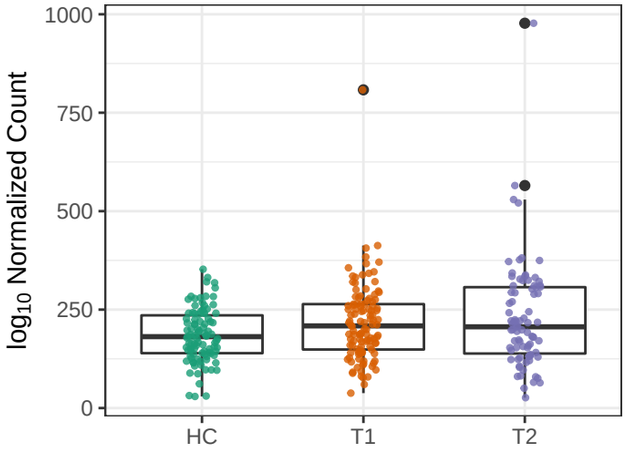
PWY−6527: stachyose degradation

HC vs. T1 p = 5.6e−07
HC vs. T2 p = 0.04
T1 vs. T2 p = 0.12



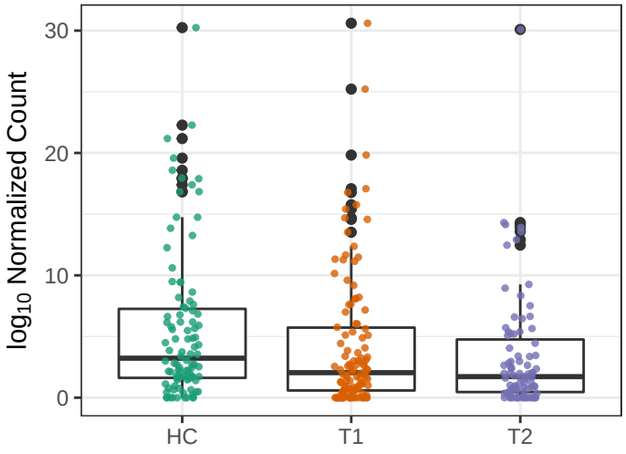
PWY−6703: preQ0 biosynthesis

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



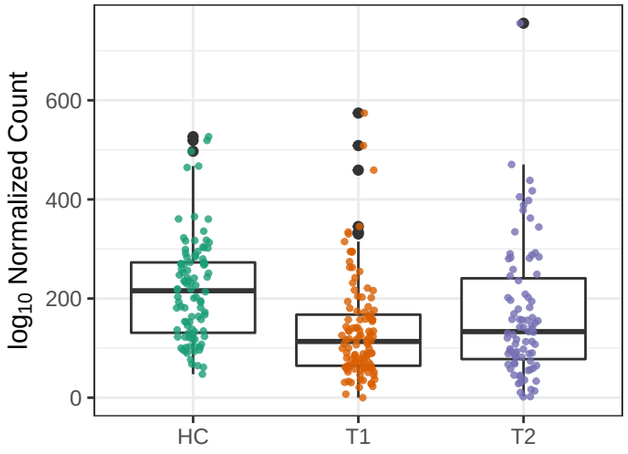
PWY−7115: C4 photosynthetic carbon a

HC vs. T1 p = 0.18
HC vs. T2 p = 0.04
T1 vs. T2 p = 0.21



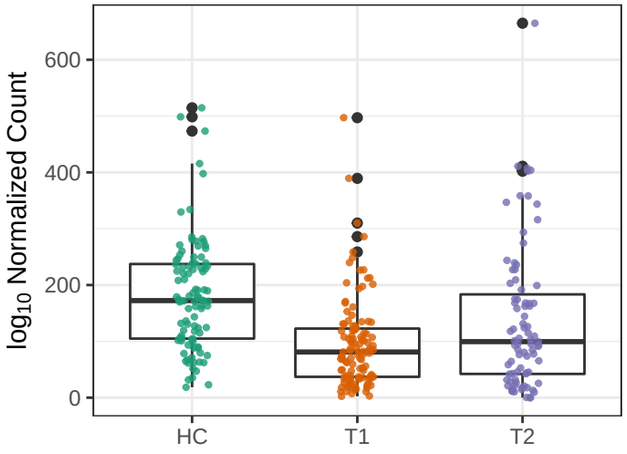
GLCMANNANAUT−PWY: superpathwa

HC vs. T1 p = 1.8e−07
HC vs. T2 p = 0.04
T1 vs. T2 p = 0.042



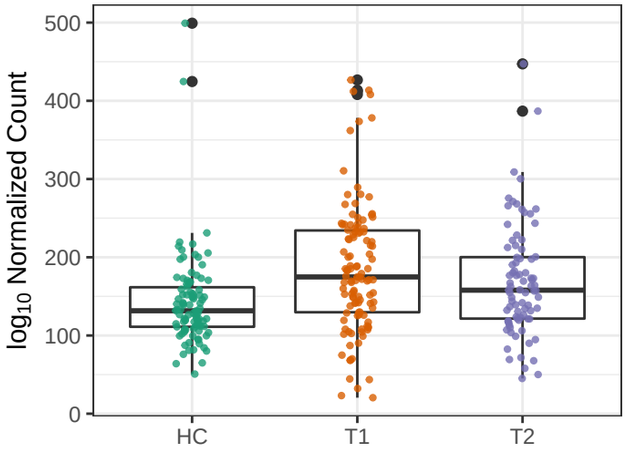
GALACTUROCAT−PWY: D−galacturor

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



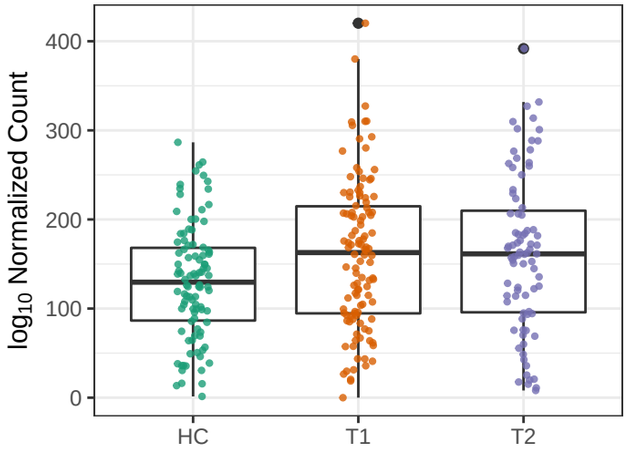
PWY−6125: superpathway of guanosir

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



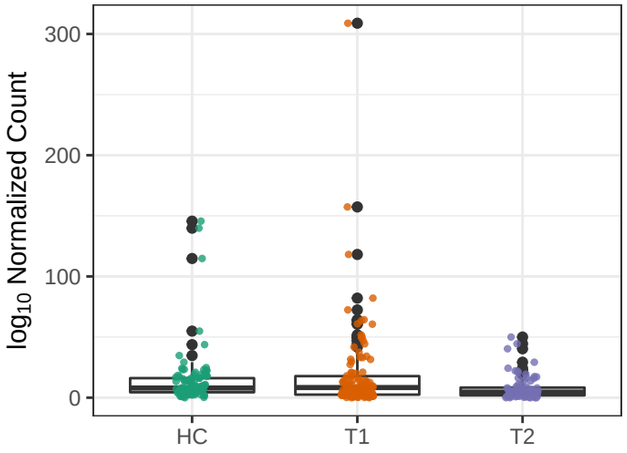
PWY−6168: flavin biosynthesis III (fung

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



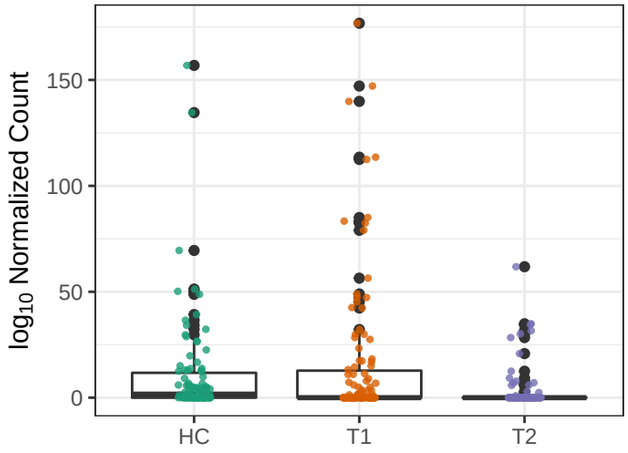
PWY0−1061: superpathway of L−alani

HC vs. T1 p = 0.44
HC vs. T2 p = 0.041
T1 vs. T2 p = 0.0089



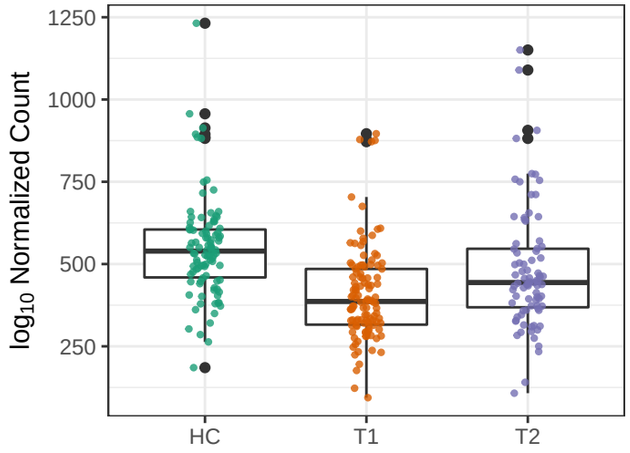
PWY−6895: superpathway of thiamin d

HC vs. T1 p = 0.39
HC vs. T2 p = 0.041
T1 vs. T2 p = 0.0091



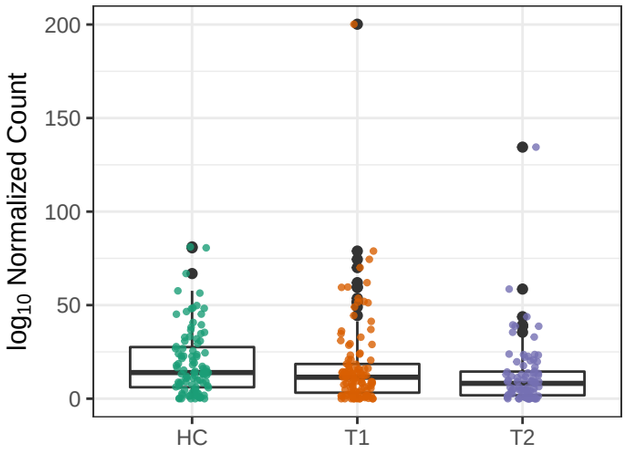
BRANCHED−CHAIN−AA−SYN−PWY

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



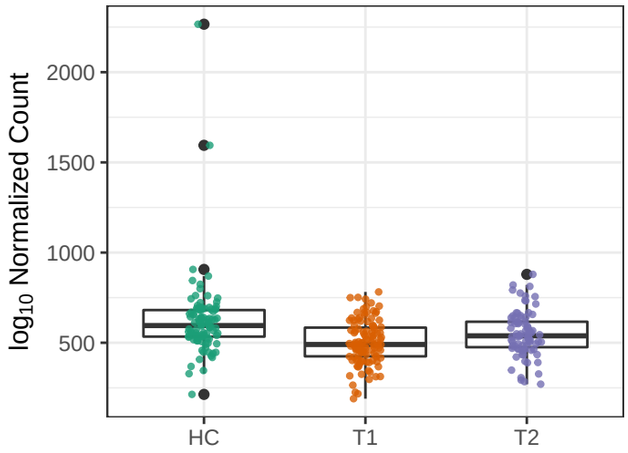
FUCCAT−PWY: fucose degradation

HC vs. T1 p = 0.61
HC vs. T2 p = 0.044
T1 vs. T2 p = 0.14



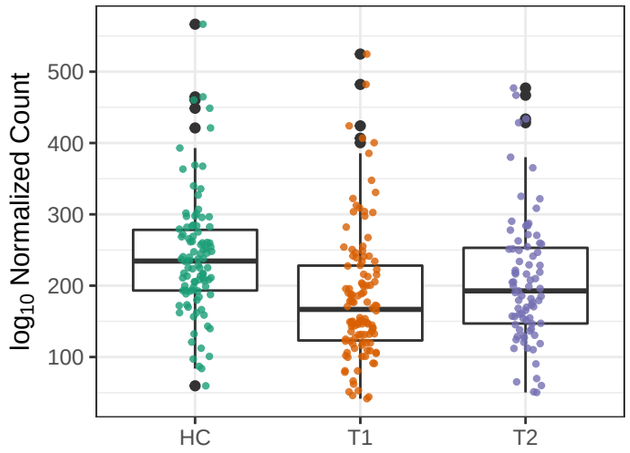
NONMEVIPP−PWY: methylerythritol p

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



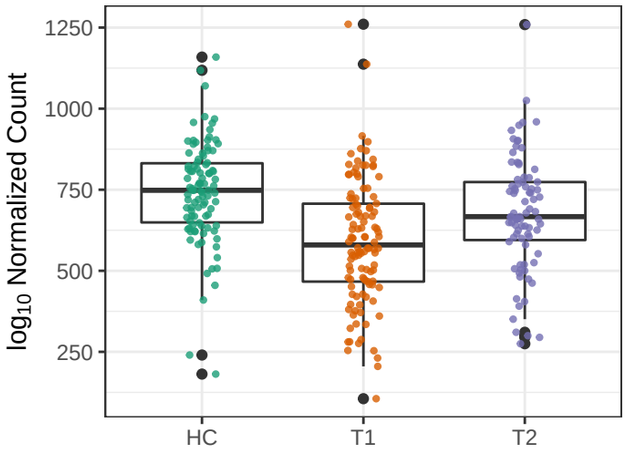
PWY−5100: pyruvate fermentation to a

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



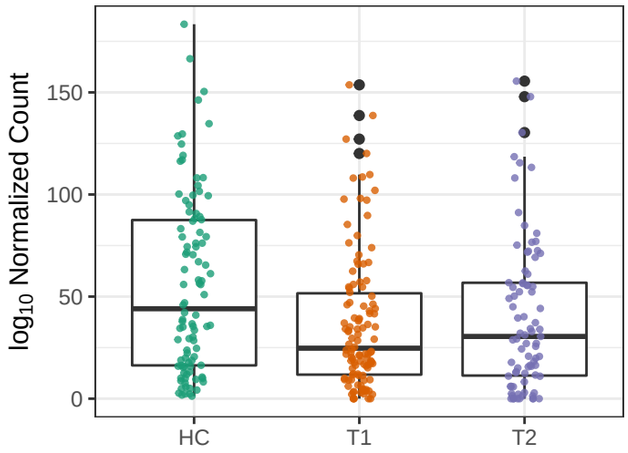
PWY−6737: starch degradation V

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



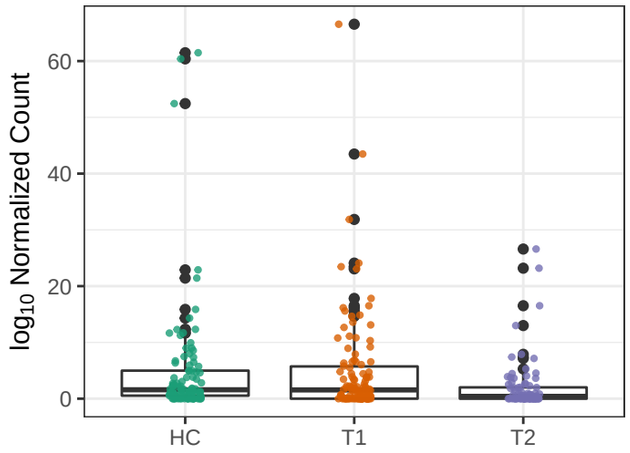
PYRIDNUCSAL−PWY: NAD salvage p

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



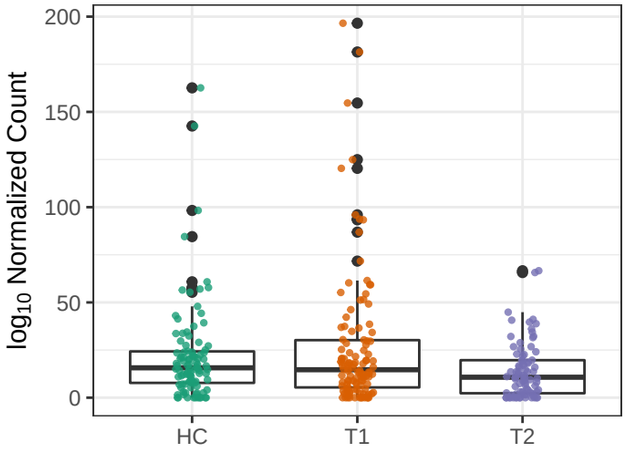
REDCITCYC: TCA cycle VIII (helicobac

HC vs. T1 p = 0.92
HC vs. T2 p = 0.048
T1 vs. T2 p = 0.01



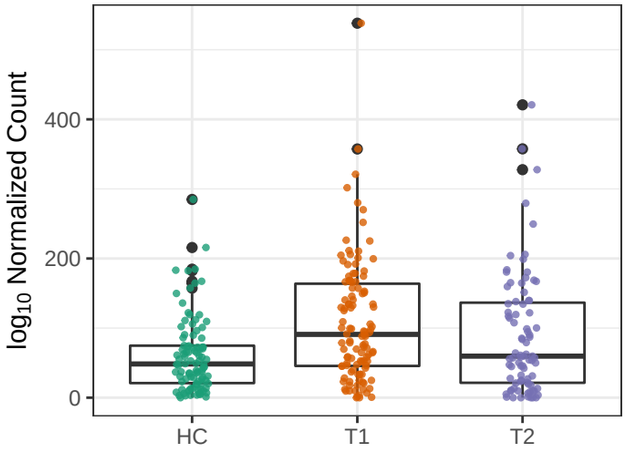
THISYN−PWY: superpathway of thiami

HC vs. T1 p = 0.44
HC vs. T2 p = 0.048
T1 vs. T2 p = 0.01



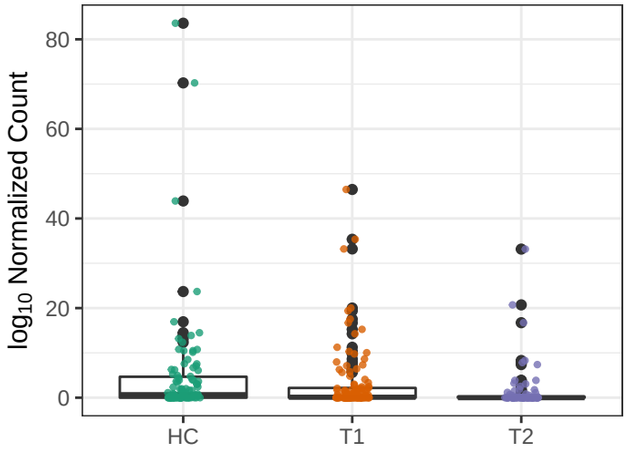
PYRIDOXSYN−PWY: pyridoxal 5'−pho

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



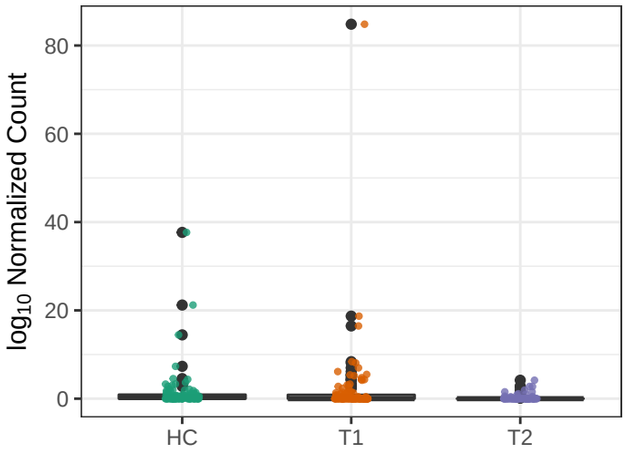
PWY−561: superpathway of glyoxylate c

HC vs. T1 p = 0.38
HC vs. T2 p = 0.052
T1 vs. T2 p = 0.07



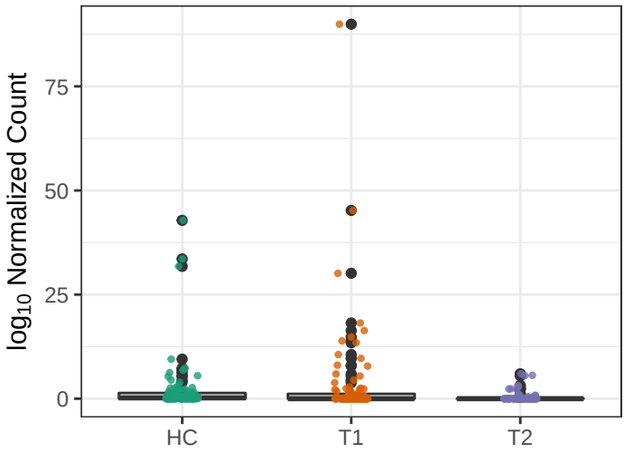
PWY−5705: allantoin degradation to gly

HC vs. T1 p = 0.69
HC vs. T2 p = 0.056
T1 vs. T2 p = 0.016



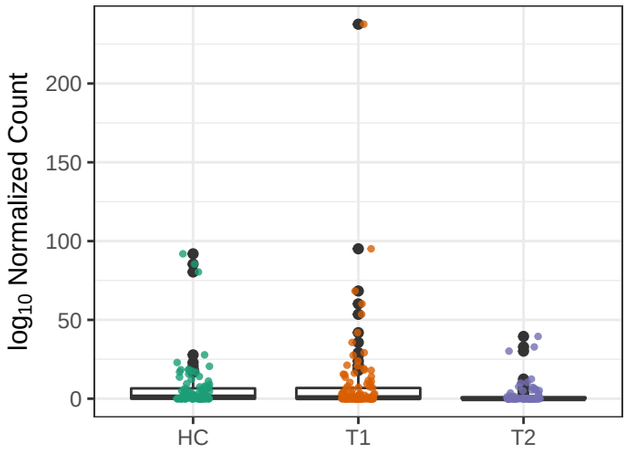
PWY−2723: trehalose degradation V

HC vs. T1 p = 0.57
HC vs. T2 p = 0.063
T1 vs. T2 p = 0.023



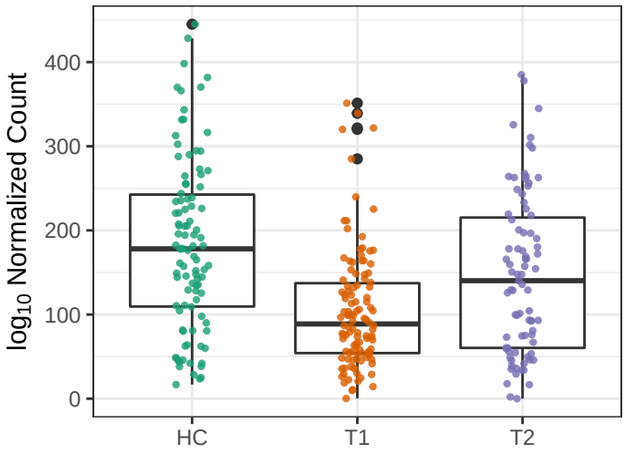
P105−PWY: TCA cycle IV (2−oxoglutar

HC vs. T1 p = 0.58
HC vs. T2 p = 0.063
T1 vs. T2 p = 0.017



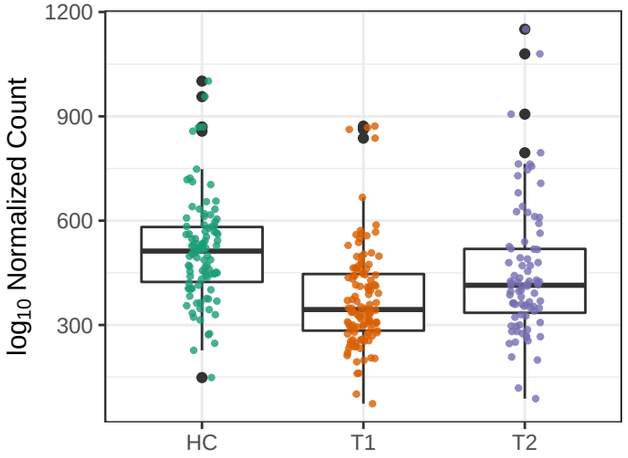
GLYCOGENSYNTH−PWY: glycogen b

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



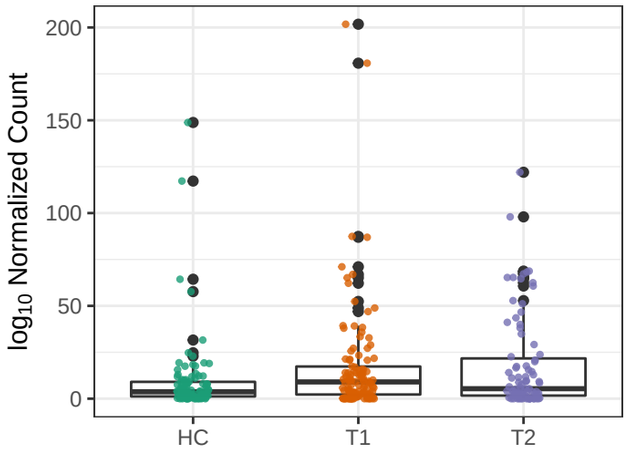
PWY−5103: L−isoleucine biosynthesis

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



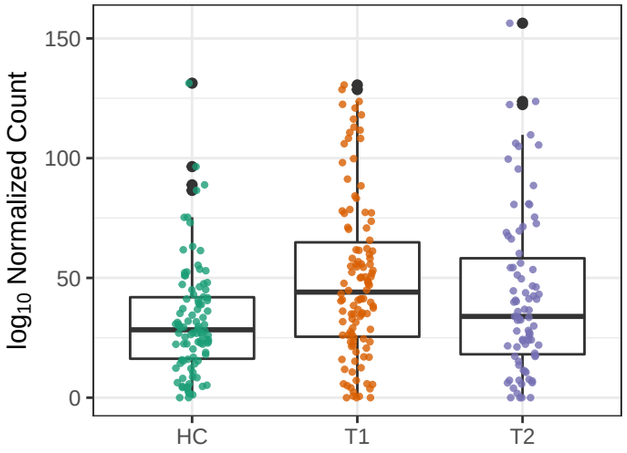
FASYN−ELONG−PWY: fatty acid elong

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



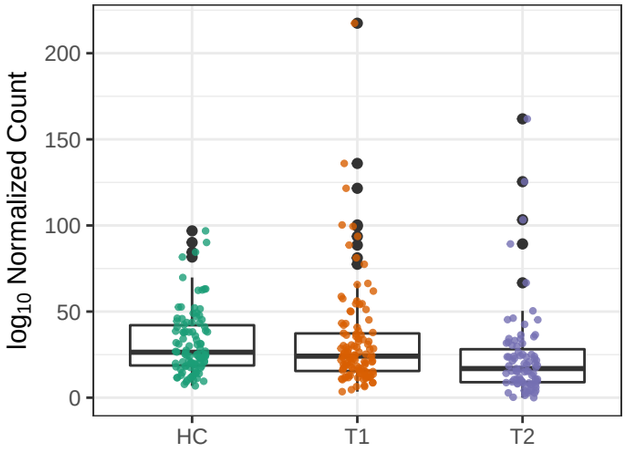
PWY66−399: gluconeogenesis III

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



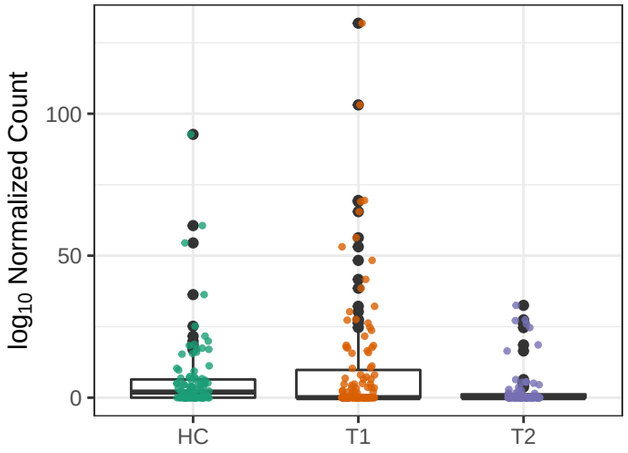
PWY−5690: TCA cycle II (plants and fu

HC vs. T1 p = 0.83
HC vs. T2 p = 0.068
T1 vs. T2 p = 0.045



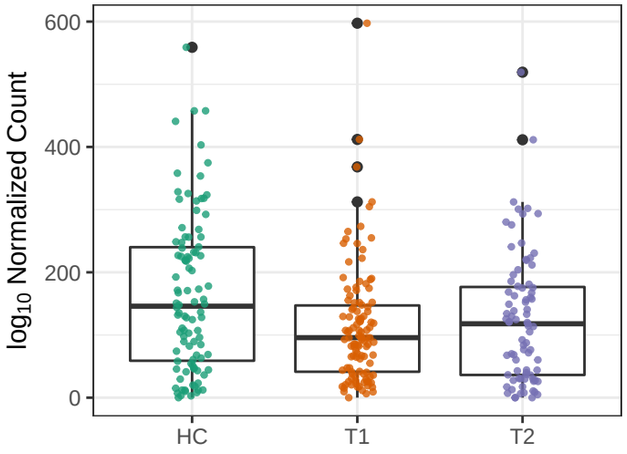
PWY−5838: superpathway of menaqui

HC vs. T1 p = 0.22
HC vs. T2 p = 0.068
T1 vs. T2 p = 0.0083



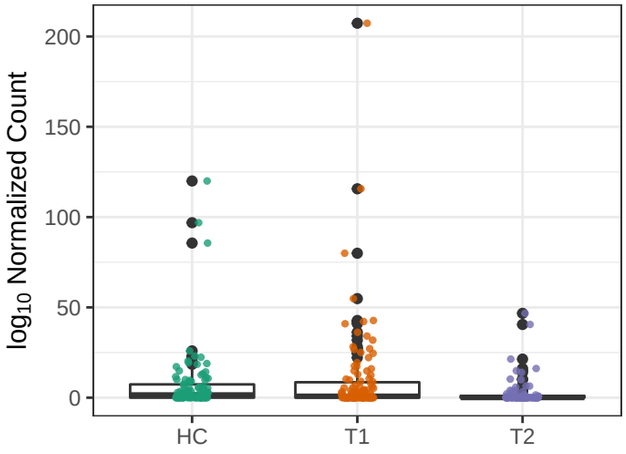
OANTIGEN−PWY: O−antigen building

HC vs. T1 p = 0.0029
HC vs. T2 p = 0.07
T1 vs. T2 p = 0.12



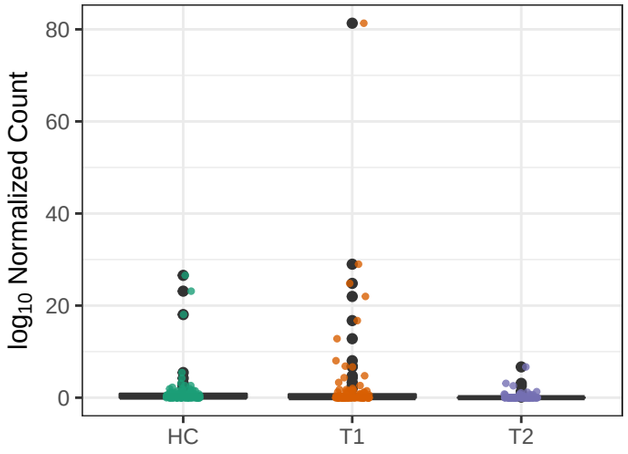
GLYCOLYSIS−TCA−GLYOX−BYPASS:

HC vs. T1 p = 0.56
HC vs. T2 p = 0.07
T1 vs. T2 p = 0.01



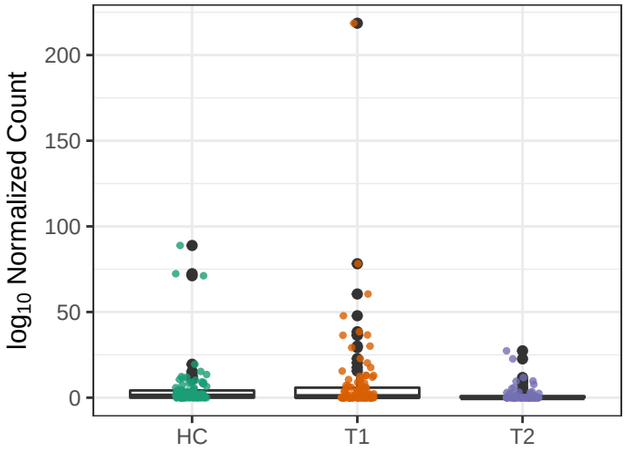
METHGLYUT−PWY: superpathway of m

HC vs. T1 p = 0.44
HC vs. T2 p = 0.07
T1 vs. T2 p = 0.03



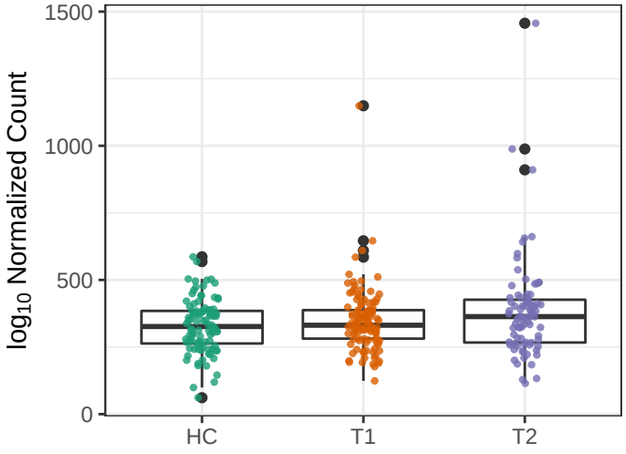
GLYOXYLATE−BYPASS: glyoxylate cyc

HC vs. T1 p = 0.44
HC vs. T2 p = 0.07
T1 vs. T2 p = 0.0089



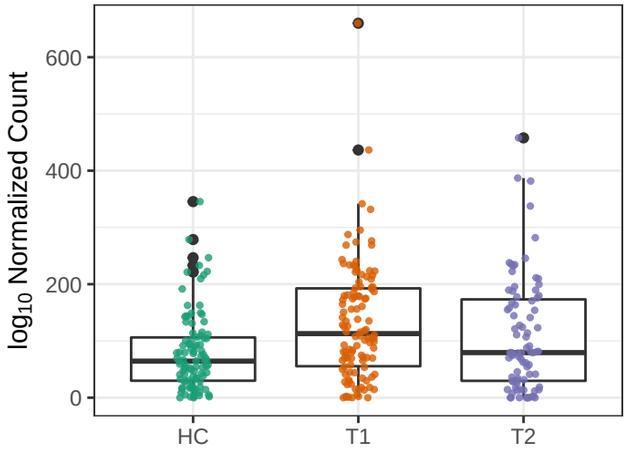
PANTO−PWY: phosphopantothenate I

HC vs. T1 p = 0.3
HC vs. T2 p = 0.07
T1 vs. T2 p = 0.54



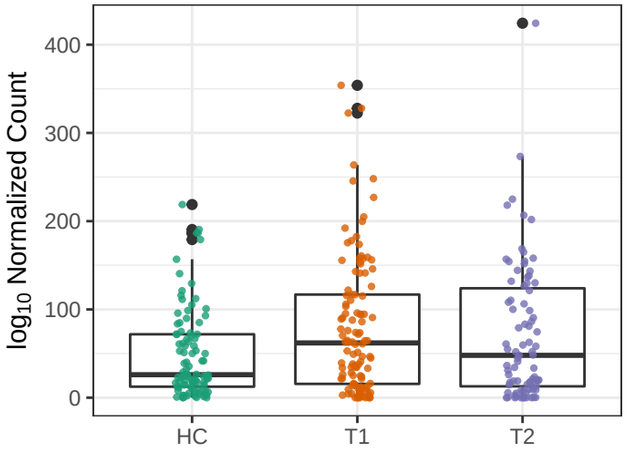
PWY0−845: superpathway of pyridoxal

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



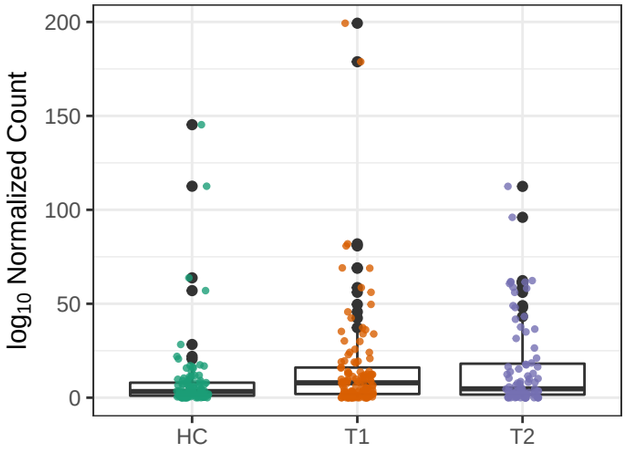
ARGINE−SYN4−PWY: L−ornithine d

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



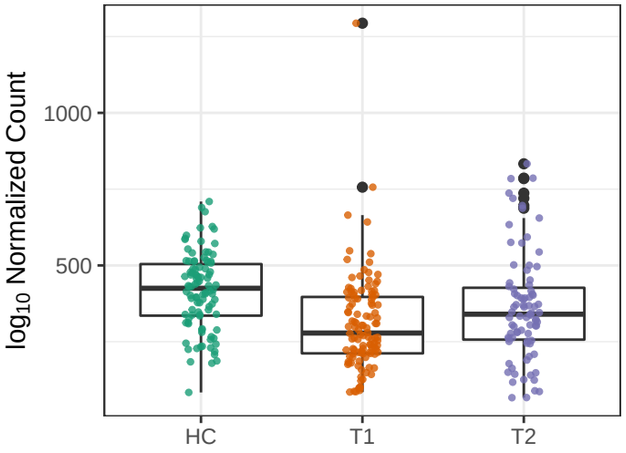
PWY−7664: oleate biosynthesis IV (an

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



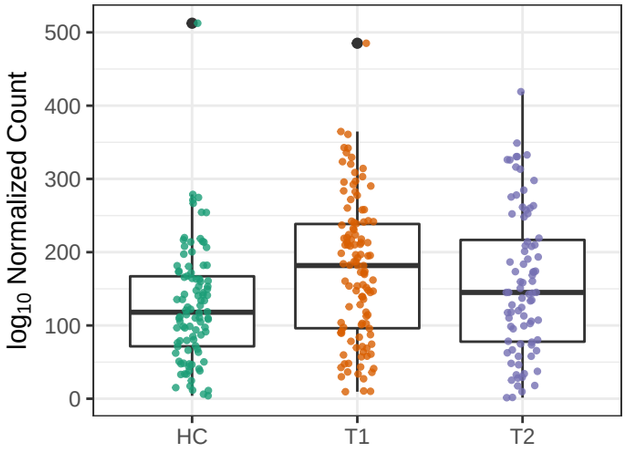
NONOXIPENT−PWY: pentose phosph

HC vs. T1 p = 1.7e−06
HC vs. T2 p = 0.075
T1 vs. T2 p = 0.017



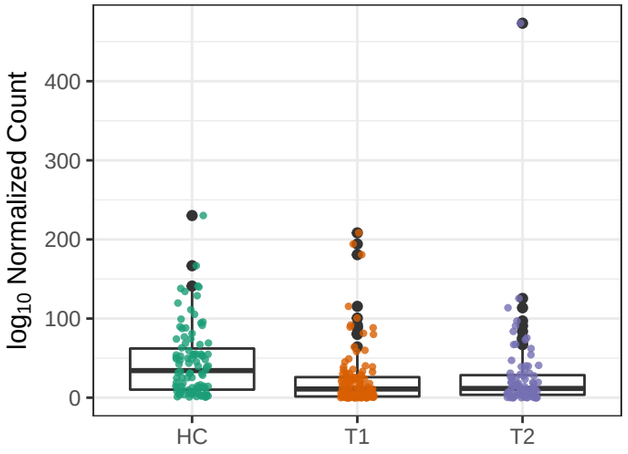
PWY−7663: gondoate biosynthesis (ar

HC vs. T1 p = 0.00031
HC vs. T2 p = 0.075
T1 vs. T2 p = 0.024



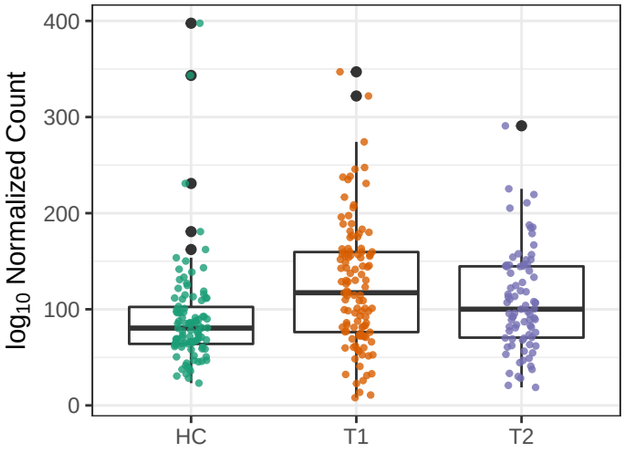
PWY−5304: superpathway of sulfur oxi

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



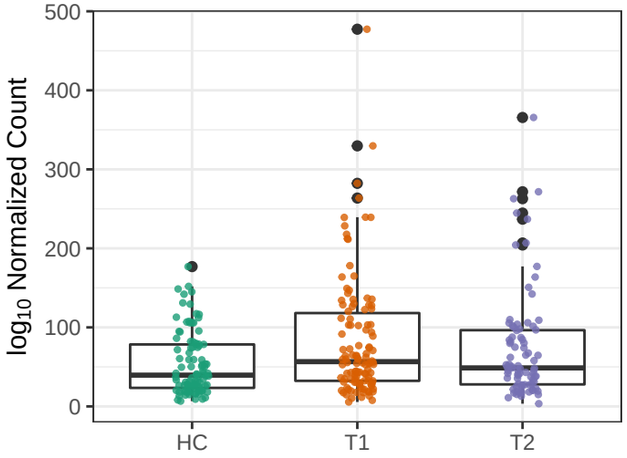
PWY−7197: pyrimidine deoxyribonucle

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



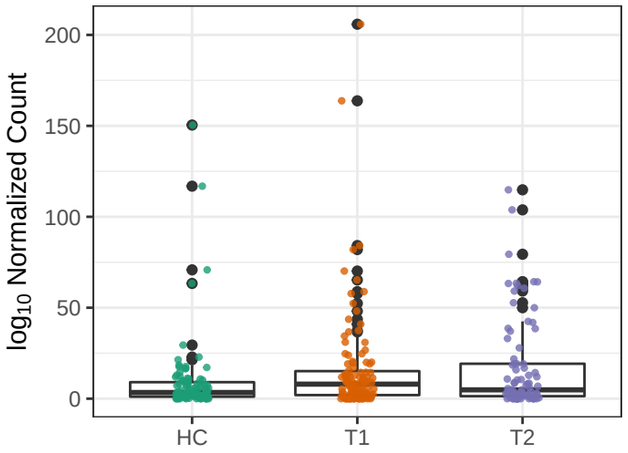
PWY0−1297: superpathway of purine d

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



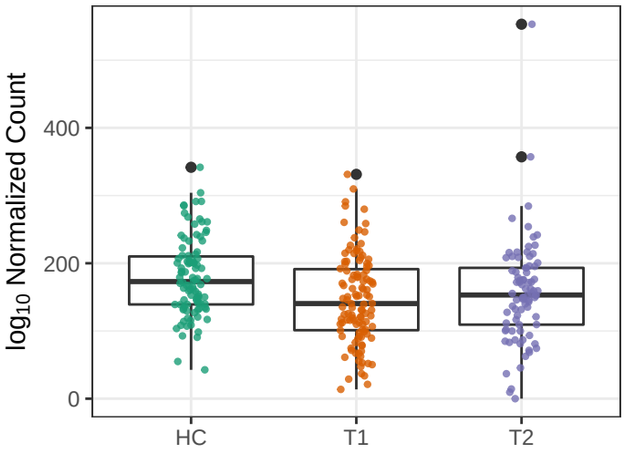
PWYG−321: mycolate biosynthesis

HC vs. T1 p = 0.095
HC vs. T2 p = 0.078
T1 vs. T2 p = 0.68



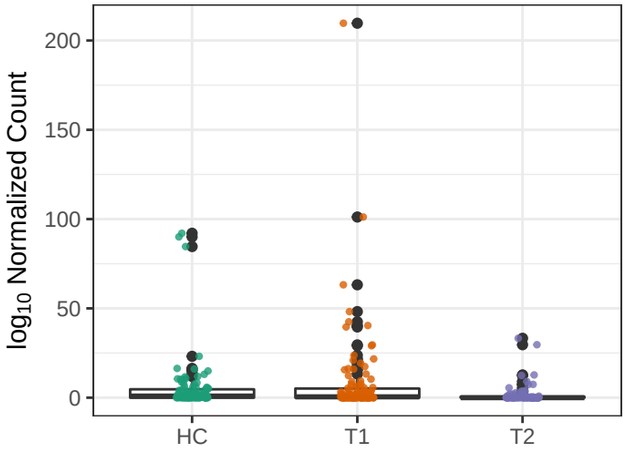
PYRIDNUCSYN−PWY: NAD biosynthe

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



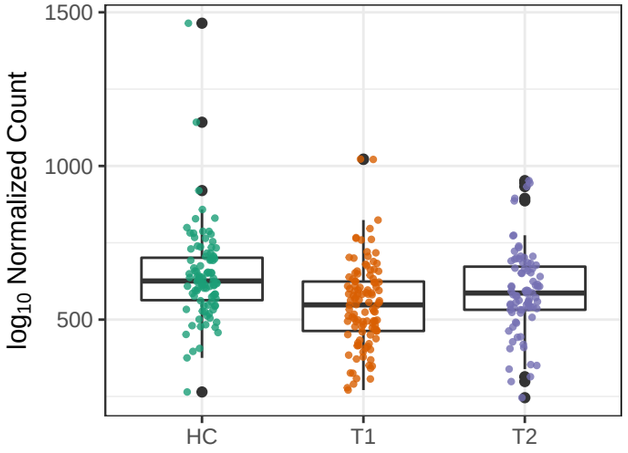
TCA−GLYOX−BYPASS: superpathway

HC vs. T1 p = 0.51
HC vs. T2 p = 0.078
T1 vs. T2 p = 0.012



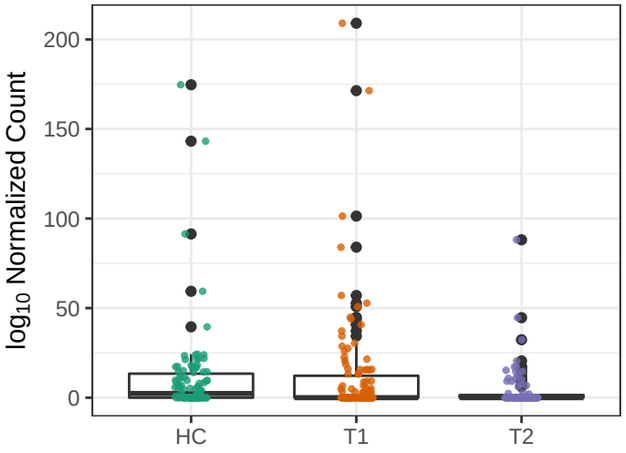
COA−PWY−1: coenzyme A biosynthe

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



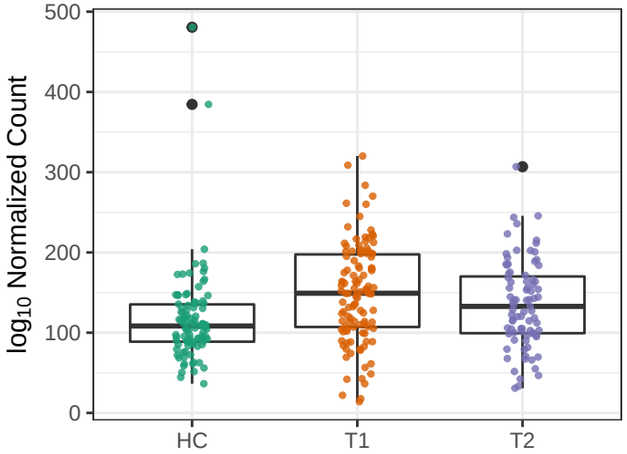
ENTBACSYN−PWY: enterobactin biosy

HC vs. T1 p = 0.84
HC vs. T2 p = 0.08
T1 vs. T2 p = 0.053



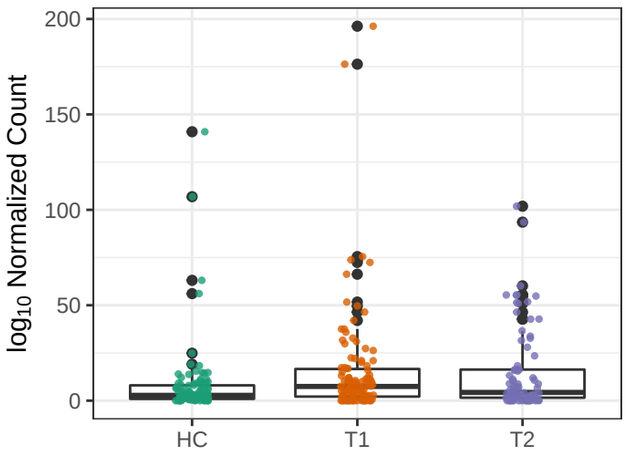
PWY−7184: pyrimidine deoxyribonucle

HC vs. T1 p = 0.00045
HC vs. T2 p = 0.082
T1 vs. T2 p = 0.21



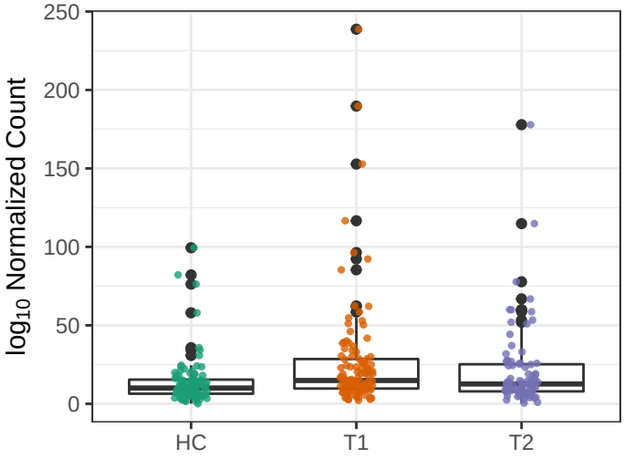
PWY0−862: (5Z)−dodec−5−enoate bio

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



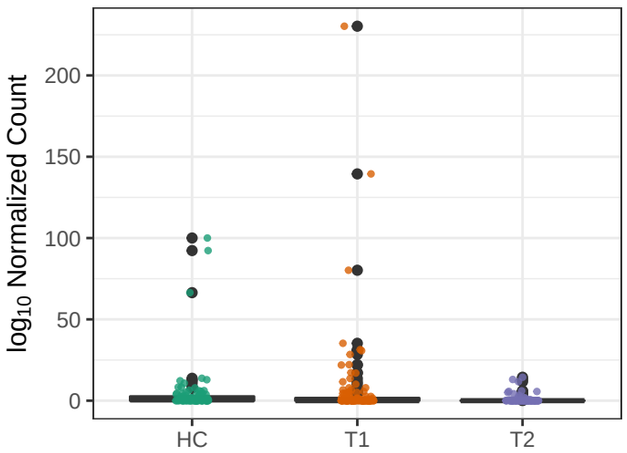
P161−PWY: acetylene degradation

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



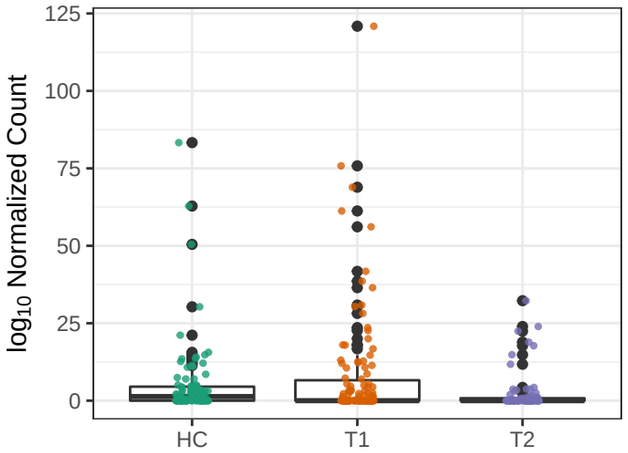
PWY−7315: dTDP−N−acetylthomosam

HC vs. T1 p = 0.53
HC vs. T2 p = 0.089
T1 vs. T2 p = 0.049



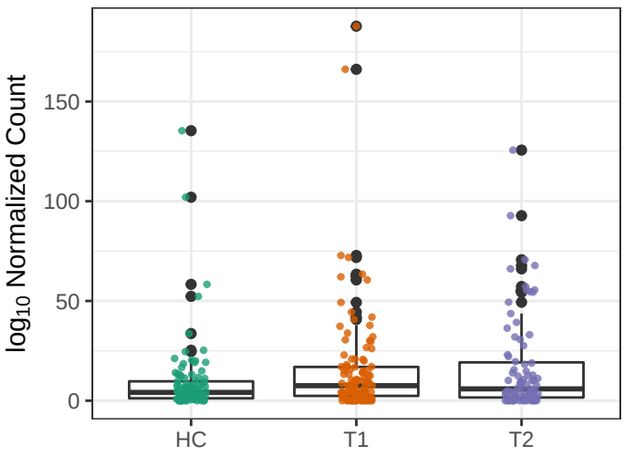
PWY−5861: superpathway of demethyl

HC vs. T1 p = 0.29
HC vs. T2 p = 0.092
T1 vs. T2 p = 0.0089



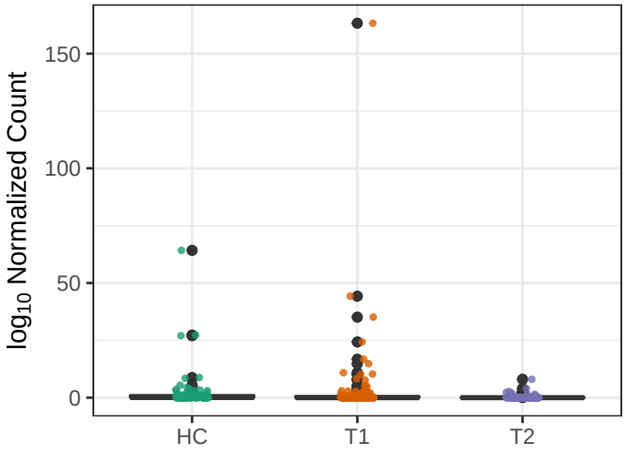
PWY−6282: palmitoleate biosynthesis

HC vs. T1 p = 0.093
HC vs. T2 p = 0.092
T1 vs. T2 p = 0.84



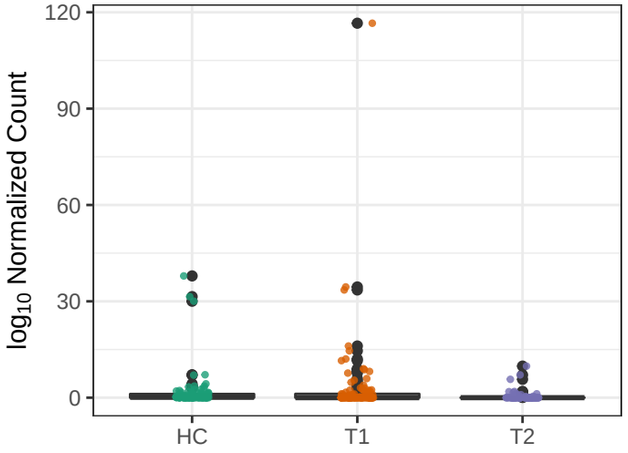
PWY−7409: phospholipid remodeling (

HC vs. T1 p = 0.53
HC vs. T2 p = 0.092
T1 vs. T2 p = 0.027



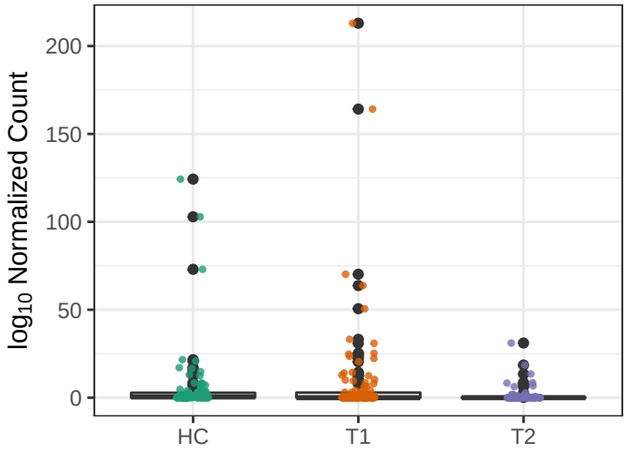
GLYCOL−GLYOXDEG−PWY: superpat

HC vs. T1 p = 0.49
HC vs. T2 p = 0.094
T1 vs. T2 p = 0.02



PWY−6891: thiazole biosynthesis II (Ba

HC vs. T1 p = 0.54
HC vs. T2 p = 0.094
T1 vs. T2 p = 0.038



FUC−RHAMCAT−PWY: superpathway of fucose and rhamnose degradation

HC vs. T1 p = 0.57
HC vs. T2 p = 0.097
T1 vs. T2 p = 0.02