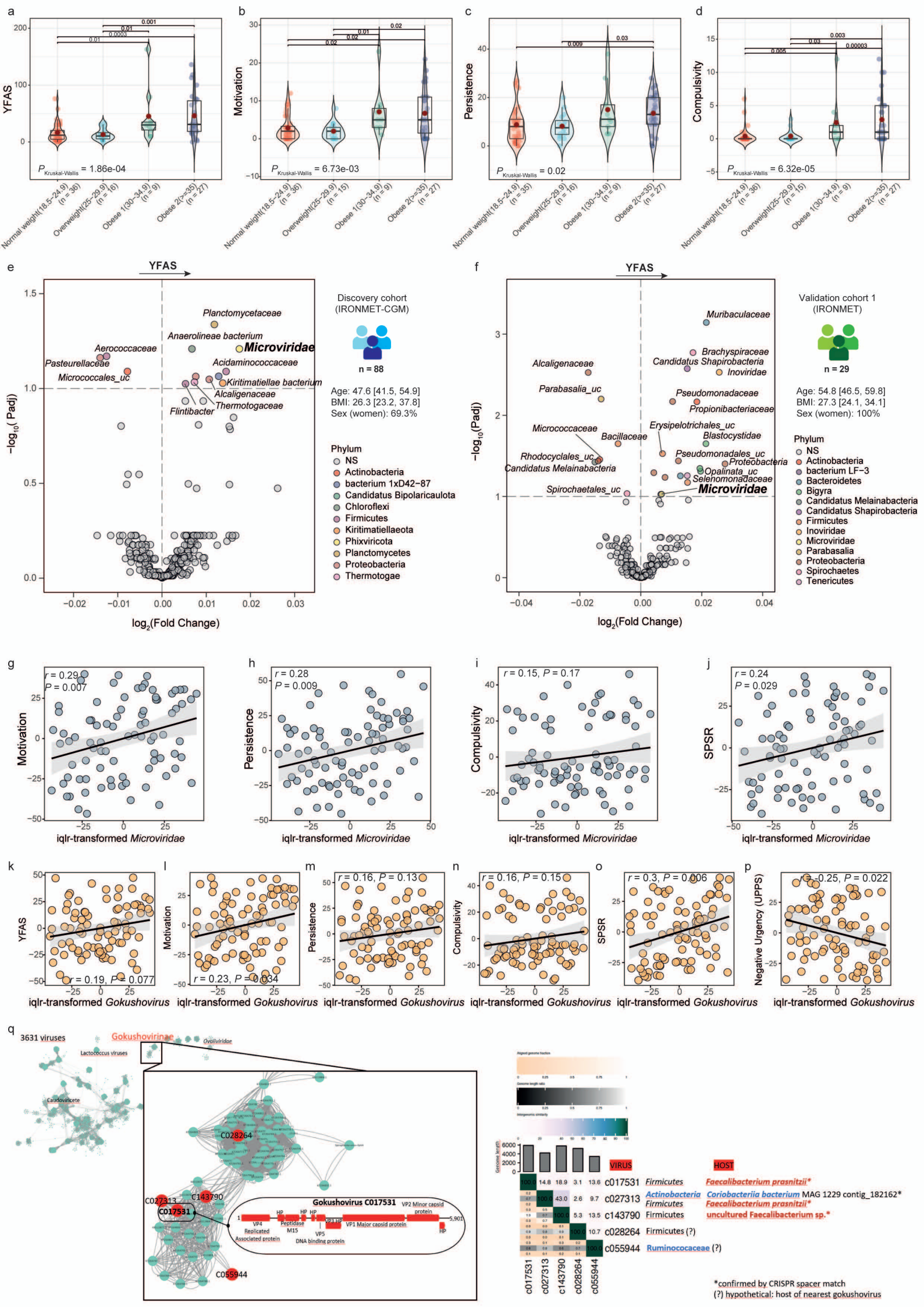
a
YFAS
$P_{Kruskal-Wallis}$ = 1.86e-04
b
Motivation
$P_{Kruskal-Wallis}$ = 6.73e-03
c
Persistence
$P_{Kruskal-Wallis}$ = 0.02
d
Compulsivity
$P_{Kruskal-Wallis}$ = 6.32e-05
Normal weight(18.5~24.9) (n = 36)
Overweight(25~29.9) (n = 16)
Obese 1(30~34.9) (n = 9)
Obese 2(>=35) (n = 27)
e
YFAS
Discovery cohort (IRONMET-CGM)
n = 88
Age: 47.6 [41.5, 54.9]
BMI: 26.3 [23.2, 37.8]
Sex (women): 69.3%
Planctomycetaceae
Anaerolineae bacterium
Microviridae
Aerococcaceae
Pasteurellaceae
Micrococcales_uc
Acidaminococcaceae
Kiritimatiellae bacterium
Alcaligenaceae
Thermotogaceae
Flintibacter
$-\log_{10}$(Padj)
$\log_2$(Fold Change)
Phylum
NS
Actinobacteria
bacterium 1xD42−87
Candidatus Bipolaricaulota
Chloroflexi
Firmicutes
Kiritimatiellaeota
Phixviricota
Planctomycetes
Proteobacteria
Thermotogae
f
YFAS
Validation cohort 1 (IRONMET)
n = 29
Age: 54.8 [46.5, 59.8]
BMI: 27.3 [24.1, 34.1]
Sex (women): 100%
Muribaculaceae
Brachyspiraceae
Candidatus Shapirobacteria
Inoviridae
Alcaligenaceae
Parabasalia_uc
Pseudomonadaceae
Propionibacteriaceae
Micrococcaceae
Erysipelotrichales_uc
Bacillaceae
Blastocystidae
Rhodocyclales_uc
Pseudomonadales_uc
Proteobacteria
Candidatus Melainabacteria
Opalinata_uc
Selenomonadaceae
Spirochaetales_uc
Microviridae
$-\log_{10}$(Padj)
$\log_2$(Fold Change)
Phylum
NS
Actinobacteria
bacterium LF−3
Bacteroidetes
Bigyra
Candidatus Melainabacteria
Candidatus Shapirobacteria
Firmicutes
Inoviridae
Microviridae
Parabasalia
Proteobacteria
Spirochaetes
Tenericutes
g
r = 0.29
P = 0.007
Motivation
iqlr-transformed Microviridae
h
r = 0.28
P = 0.009
Persistence
iqlr-transformed Microviridae
i
r = 0.15, P = 0.17
Compulsivity
iqlr-transformed Microviridae
j
r = 0.24
P = 0.029
SPSR
iqlr-transformed Microviridae
k
YFAS
r = 0.19, P = 0.077
iqlr-transformed Gokushovirus
l
Motivation
r = 0.23, P = 0.034
iqlr-transformed Gokushovirus
m
r = 0.16, P = 0.13
Persistence
iqlr-transformed Gokushovirus
n
r = 0.16, P = 0.15
Compulsivity
iqlr-transformed Gokushovirus
o
r = 0.3, P = 0.006
SPSR
iqlr-transformed Gokushovirus
p
r = -0.25, P = 0.022
Negative Urgency (UPPS)
iqlr-transformed Gokushovirus
q
3631 viruses
Gokushovirinae
Ovoliviridae
Lactococcus viruses
Caudoviricete
C028264
C027313
C143790
C017531
C055944
Gokushovirus C017531
VP2 Minor capsid protein
VP4 Replicated Associated protein
Peptidase M15
VP3 HP
VP1 Major capsid protein
VP5 DNA binding protein
HP
Genome length
VIRUS
HOST
c017531 Firmicutes Faecalibacterium prasnitzii*
c027313 Actinobacteria Coriobacteriia bacterium MAG 1229 contig_182162*
Firmicutes Faecalibacterium prasnitzii*
c143790 Firmicutes uncultured Faecalibacterium sp.*
c028264 Firmicutes (?)
c055944 Ruminococcaceae (?)
*confirmed by CRISPR spacer match
(?) hypothetical: host of nearest gokushovirus