qPCR

2023-07-21

library(tidyverse)

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──
## ✔ dplyr 1.1.2 ✔ readr 2.1.4
## ✔ forcats 1.0.0 ✔ stringr 1.5.0
## ✔ ggplot2 3.4.2 ✔ tibble 3.2.1
## ✔ lubridate 1.9.2 ✔ tidyr 1.3.0
## ✔ purrr 1.0.1
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──
## ✖ dplyr::filter() masks stats::filter()
## ✖ dplyr::lag() masks stats::lag()
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

Converted Cq value to aev with: =10^(-(0.3012 \* E2) + 11.434)

qpcr <- read.csv("../data/SR-qpcr-data-1.csv", header = TRUE)

ggplot(data = qpcr, mapping = aes(x = Subgroup, y = CqMean)) +
 geom\_boxplot() +
 facet\_wrap('Target')

## Warning: Removed 1 rows containing non-finite values (`stat\_boxplot()`).



ggplot(data = qpcr, mapping = aes(x = Subgroup, y = aev)) +
 geom\_boxplot() +
 facet\_wrap('Target') +
 coord\_cartesian(ylim = c(1000, 175000))

## Warning: Removed 1 rows containing non-finite values (`stat\_boxplot()`).



qpcr %>%
 filter(Target == "Cg\_18s(1408/9)") %>%
ggplot(mapping = aes(x = Subgroup, y = aev)) +
 geom\_boxplot() +
 geom\_jitter(aes(color = history), width = 0.1, alpha = 0.7)



qpcr %>%
 filter(Target == "Cg\_GAPDH(1172/3)") %>%
ggplot(mapping = aes(x = Subgroup, y = aev)) +
 geom\_boxplot() +
 geom\_jitter(aes(color = history), width = 0.1, alpha = 0.7)

## Warning: Removed 1 rows containing non-finite values (`stat\_boxplot()`).

## Warning: Removed 1 rows containing missing values (`geom\_point()`).



qpcr %>%
 filter(Target == "Cg\_ATPsynthase(1385/6)") %>%
ggplot(mapping = aes(x = Subgroup, y = aev)) +
 geom\_boxplot() +
 geom\_jitter(aes(color = history), width = 0.1, alpha = 0.7)



qpcr %>%
 filter(Target == "Cg\_citratesynthase(1383/4)") %>%
ggplot(mapping = aes(x = Subgroup, y = aev)) +
 geom\_boxplot() +
 geom\_jitter(aes(color = history), width = 0.1, alpha = 0.7)

