

Effect of Media in *E. cloacae*

```
library(pacman)
p_load(data.table, ggplot2, RSQLite)

chem_gen_db <- dbConnect(RSQLite::SQLite(), "../chem_gen.db")
Experiments <- data.table(dbReadTable(chem_gen_db, "Experiments"))
Ryan_Strains <- data.table(dbReadTable(chem_gen_db, "Ryan_Strains"))
dbDisconnect(chem_gen_db)

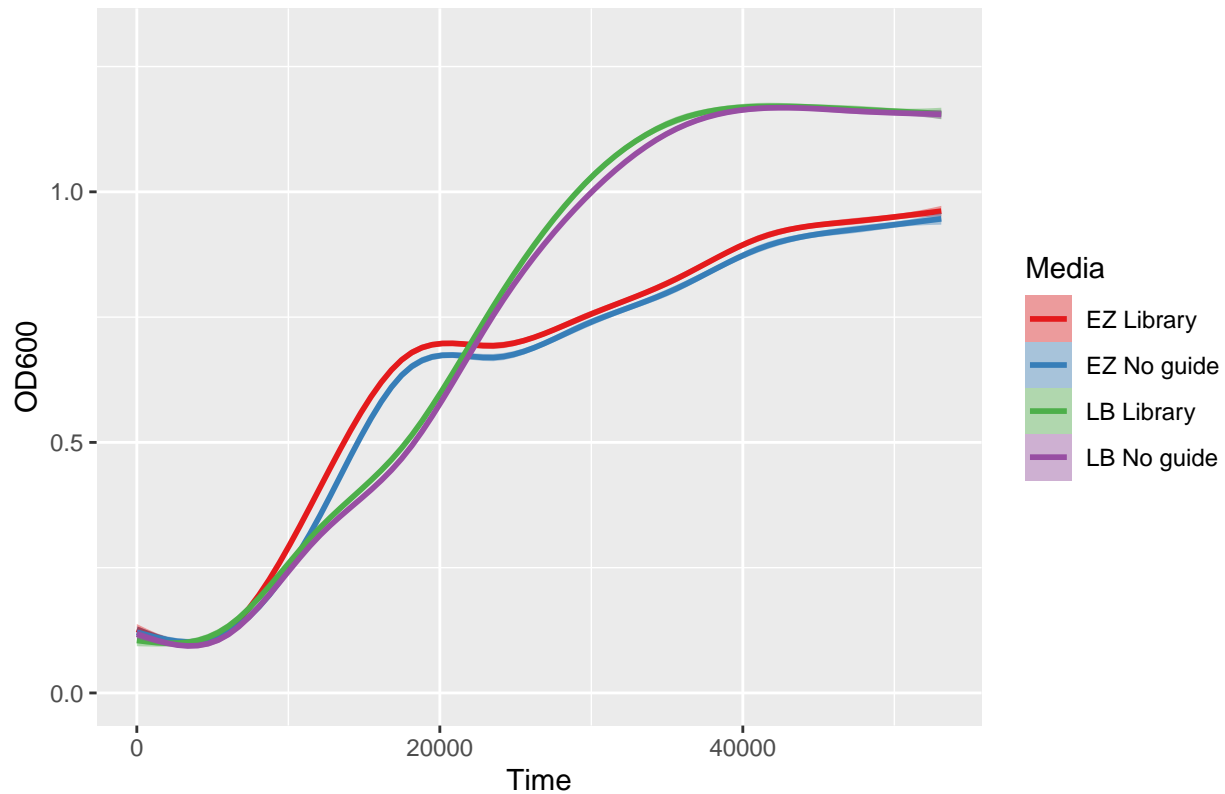
today <- "2022-03-22"

Experiments <- Ryan_Strains[Experiments[Date == today], on = .(Organism)]

for (i in unique(Experiments[!is.na(Species), Species])) {
  this.plot <-
    ggplot(
      Experiments[
        Species == i,
        .(OD600,
          Media = paste(Media, Remark)),
        by = .(Time)],
      aes(x = Time, y = OD600, color = Media, fill = Media)) +
    ylim(0, max(Experiments$OD600)) +
    geom_smooth(formula = y ~ s(x, bs = "cs"), method = "gam") +
    scale_colour_brewer(palette = "Set1") +
    scale_fill_brewer(palette = "Set1") +
    ggtitle(paste(i, "growth curves on", today))

  plot(this.plot)
}
```

Enterobacter cloacae growth curves on 2022-03-22



```
library(pacman)
p_load(data.table, ggplot2, RSQLite)

chem_gen_db <- dbConnect(RSQLite::SQLite(), "../chem_gen.db")
Fitted_Experiments <- data.table(dbReadTable(chem_gen_db, "Fitted_Experiments"))
Ryan_Strains <- data.table(dbReadTable(chem_gen_db, "Ryan_Strains"))
dbDisconnect(chem_gen_db)

today <- "2022-03-22"

Fitted_Experiments <- Ryan_Strains[Fitted_Experiments[Date == today], on = .(Organism)]

for (i in unique(Fitted_Experiments[!is.na(Species), Species])) {
  this.plot <-
    ggplot(
      Fitted_Experiments[
        Species == i,
        .(OD600_fit,
          Media = paste(Media, Remark)),
        by = .(Hour)],
      aes(x = Hour, y = OD600_fit, color = Media, fill = Media)) +
    ylim(0, max(Fitted_Experiments$OD600)) +
    geom_smooth(formula = y ~ s(x, bs = "cs"), method = "gam") +
    scale_colour_brewer(palette = "Set1") +
    scale_fill_brewer(palette = "Set1") +
    ggtitle(paste(i, "FITTED growth curves on", today))
}
```

```
plot(this.plot)  
}
```

