

Figure-3B-Stacked-Barplot.R

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```
# This Script Generates Figure 3B
# Script By: Eishani Kumar Sokolowski
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```
# Empty the environment & suppress warnings
rm(list = ls())
options(warn=-1)
```

```
# Loading libraries
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##   filter, lag
```

```
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```
library(ggplot2)
library(tidyverse)
```

```
## — Attaching core tidyverse packages — tidyverse 2.0.0 —
## ✓ forcats 1.0.0 ✓ stringr 1.5.1
## ✓ lubridate 1.9.3 ✓ tibble 3.2.1
## ✓ purrr 1.0.2 ✓ tidyr 1.3.1
## ✓ readr 2.1.5
```

```
## — 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
```

```

library(grid)
library(ggpubr)

# Loading the files
ERS.specific.distal.opening <- read.csv("ERS.specific_opening_distal_DAPs.csv")
ERS.specific.distal.opening$Type <- c("ERS specific Distal")
INF.specific.distal.opening <- read.csv("INF.specific_opening_distal_DAPs.csv")
INF.specific.distal.opening$Type <- c("INF specific Distal")
Shared.distal.opening <- read.csv("ERS.INF.shared_opening_distal_DAPs.csv")
Shared.distal.opening$Type <- c("Shared Distal")
ERS.specific.proximal.opening <- read.csv("ERS.specific_opening_proximal_DAPs.csv")
ERS.specific.proximal.opening$Type <- c("ERS specific Proximal")
INF.specific.proximal.opening <- read.csv("INF.specific_opening_proximal_DAPs.csv")
INF.specific.proximal.opening$Type <- c("INF specific Proximal")
Shared.proximal.opening <- read.csv("ERS.INF.shared_opening_proximal_DAPs.csv")
Shared.proximal.opening$Type <- c("Shared Proximal")

# Making a dataframe
final.df <- rbind(ERS.specific.distal.opening,
                  ERS.specific.proximal.opening,
                  INF.specific.distal.opening,
                  INF.specific.proximal.opening,
                  Shared.distal.opening,
                  Shared.proximal.opening)

# Summarizing
final.df <- final.df[-c(1:5)]
summary <- as.data.frame(table(final.df))
summary$Total <- sum(summary$Freq)
summary$Percent <- round(summary$Freq/summary$Total*100)
summary$Opening <- c("Opening")

# Making stacked barplot
p <- ggplot(summary, aes(fill=Type, y=Percent, x=Opening)) +
  geom_bar(position="fill", stat="identity", color="black")+theme_classic()+
  scale_fill_manual(values=c("forestgreen",
                             "olivedrab3",
                             "darkorange2",
                             "tan1",
                             "saddlebrown",
                             "navajowhite3"))

# View
ggarrange(p, nrow = 1, ncol = 2)

```

