Figure-3B-Pie-Chart.R

sokole

2024-07-26

```
# This Script Generates Figure 3B
# Script By: Eishani Kumar Sokolowski

# 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
```

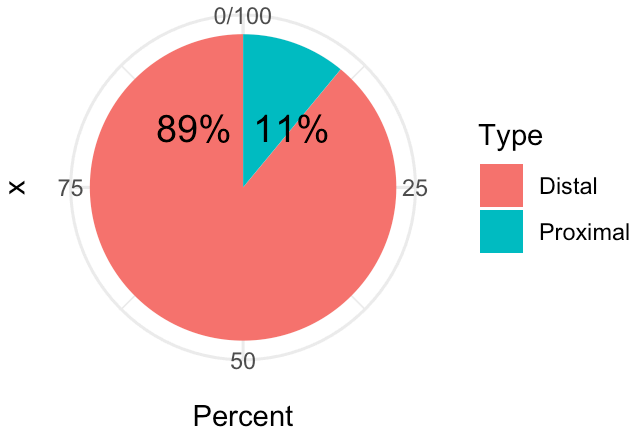
```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
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$Type <- c("Distal")
INF.specific.distal.opening <- read.csv("INF.specific_opening_distal_DAPs.csv")
INF.specific.distal.opening$Type <- c("Distal")
Shared.distal.opening <- read.csv("ERS.INF.shared_opening_distal_DAPs.csv")
Shared.distal.opening$Type <- c("Distal")
ERS.specific.proximal.opening <- read.csv("ERS.specific_opening_proximal_DAPs.csv")
ERS.specific.proximal.opening$Type <- c("Proximal")
INF.specific.proximal.opening <- read.csv("INF.specific_opening_proximal_DAPs.csv")
INF.specific.proximal.opening$Type <- c("Proximal")
Shared.proximal.opening <- read.csv("ERS.INF.shared_opening_proximal_DAPs.csv")
Shared.proximal.opening$Type <- c("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$Total*100)
summary$Label <- paste0(summary$Percent, "%")

# Making pie chart
p <- ggplot(summary, aes(x="", y=Percent, fill=Type)) +
  geom_bar(stat="identity", width=1) +
  coord_polar("y", start=0) +
  geom_text(label = summary$Label, size=5) + theme_minimal()

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


0/100
89%
11%
75
25
50
Percent
Type
Distal
Proximal