My Super Awesome Research Paper

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```
library(tidyverse)
library(readxl)
library(knitr)
```

Introduction

Ipsum odio nibh tempus curabitur hendrerit urna dapibus montes magna himenaeos. Quam vivamus odio fermentum quisque imperdiet a vehicula felis dignissim. Etiam montes nulla litora magnis justo himenaeos id diam. Commodo arcu magna ligula varius. Posuere ridiculus nisi vitae fringilla ullamcorper sociosqu dignissim pellentesque cum ridiculus tempus quis eu dictum augue elementum purus mauris.

Sit cum accumsan cras nibh volutpat netus iaculis. Ultricies elementum eget mollis arcu risus habitasse dictumst mi. Potenti ultrices leo sem felis pellentesque conubia ligula orci fames. Netus proin tempor iaculis sollicitudin himenaeos netus etiam nulla varius pharetra. Lacus aptent neque ut congue molestie interdum commodo class placerat molestie cras vitae donec ultricies?

```
elrod_dat <- read_excel("data/Elrod_2020_2_17_Treated_Virgin.xlsx",
                        col_names = c("sample", "value"))

kable(head(elrod_dat))
```

sample	value
1A	399.1983
1A	368.6850
1A	383.7466
1B	420.4819
1B	410.5082
1B	409.2122

```
elrod_tidy <- elrod_dat %>%
  mutate(
    group = str_extract(sample, "[A-C]$"),
    sample = as.numeric(str_replace(sample, "[A-C]$", ""))
  ) %>%
  group_by(group, sample) %>%
  summarize(
    min = min(value),
    max = max(value),
    median = median(value)
  )
```

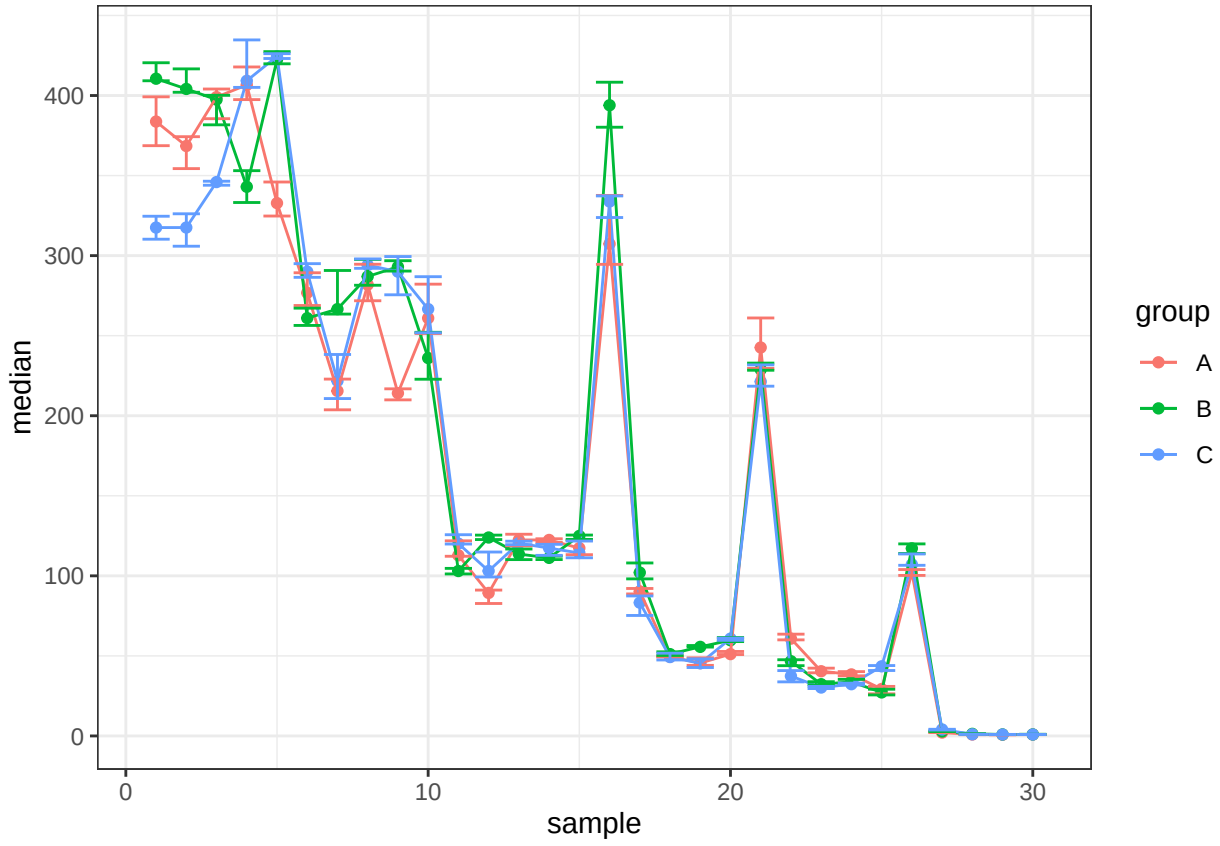
```
kable(head(elrod_tidy))
```

group	sample	min	max	median
A	1	368.6850	399.1983	383.7466
A	2	354.3487	374.2854	368.4673
A	3	385.5298	404.0765	399.0363
A	4	397.4524	417.8496	406.6212
A	5	324.7343	345.9969	332.8127
A	6	268.8548	289.2921	276.7879

Including Plots

Ipsum fermentum cubilia dictumst pretium sodales pharetra porttitor odio malesuada primis nascetur. Curabitur mus pulvinar nulla egestas ullamcorper class. Mattis rutrum vestibulum orci rutrum litora suspendisse ullamcorper vulputate venenatis suscipit.

```
elrod_tidy %>%
  ggplot(aes(sample, median, color = group)) +
  geom_point() +
  geom_line() +
  geom_errorbar(aes(ymin = min, ymax = max)) +
  theme_bw()
```



Using python

Sit cum accumsan cras nibh volutpat netus iaculis. Ultricies elementum eget mollis arcu risus habitasse dictumst mi. Potenti ultrices leo sem felis pellentesque conubia ligula orci fames. Netus proin tempor iaculis sollicitudin himenaeos netus etiam nulla varius pharetra. Lacus aptent neque ut congue molestie interdum commodo class placerat molestie cras vitae donec ultricies?

```
{using-python, eval = FALSE} library(reticulate) use_python("/usr/bin/python")
import pandas as pd
```