User Input I

```r
########## User Input Below ############

#User Input I: Steps 1-3 below must be changed to tailor the analysis to a specific data set on a local computer.

#Step 1: Select your working directory (the folder with the input file)
setwd("C:/Users/pippi/Downloads")


#Step 2: Select your input CSV file
plate_no <- 'ROS_flg22.csv'


#Step 3: Name the treatments and/or lines used.
#Per specific experiment, please change sample names accordingly from A to H, OR from 1 to 12 as on the plate.
#The number and order of labels matters!! This is because the code counts the number (needs 8 or 12) and uses the order.
#Please do NOT use duplicate treatment names. Does not combine to a single group.
#Please avoid using a backslash in any treatment names!! Please also avoid "NA" as a label when using ANOVA!
treatment <- c(
  'Sample1',  'Sample2', 'Sample3', 'Sample4',  'Sample5',
  'Sample6', 'Sample7', 'Sample8'
)


#################
```

User Input II

```r
#User Input II: Options 1-4 can be changed per user's specific needs.

#Option 1: Run a One-Way ANOVA test with Tukey HSD post-hoc?
#Code will run the test if TRUE is selected. If FALSE is selected, it will not.
ANOVA <- TRUE

#################
#Option 2: Run a two-sided t-test?
#If yes, type TRUE; if no, type FALSE.
#If an error message says data is too similar, write FALSE and use ANOVA or do t-test by hand.
t_test <- TRUE

#################
#Option 3: Include graphs?
#If you want graphs of the fluorescence curves and a bar plot comparing the total sum of fluorescence, type TRUE. Otherwise, type FALSE.
GRAPHS <- TRUE

#Option 3 addition: Graph with SEM or SD?
#If you want to use SEM (standard error of mean) on the bar plots, type TRUE
#If you want to use SD (standard deviation) on the bar plots, type FALSE
SEM_CHOOSE <- TRUE

#################
#Option 4: How does your input file look?
#If your plate reader output lists wells by A1,A2,A3.... then type TRUE.
#If your reader output lists A1,B1,C1.... then type FALSE.
orientation <- FALSE

#################



############################################
#END OF USER INPUT
########################################################################################################
```

Supplemental Figure S3