Test Quarto Markdown

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Table of contents

# Overview

## Text Formatting

Explore various text formatting options in Quarto:

* *Italics*, **bold**, and ***bold italics***
* Superscript2 and subscript2
* ~~Strikethrough~~
* Verbatim code

## Headings

Demonstration of heading levels in Quarto:

# Header 1

## Header 2

### Header 3

#### Header 4

##### Header 5

###### Header 6

## Written Text

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## Lists

* unordered list
  + sub-item 1
  + sub-item 2
    - another item

1. ordered list
2. item 2
   1. sub-item 1
      1. sub-sub-item 1

## Math

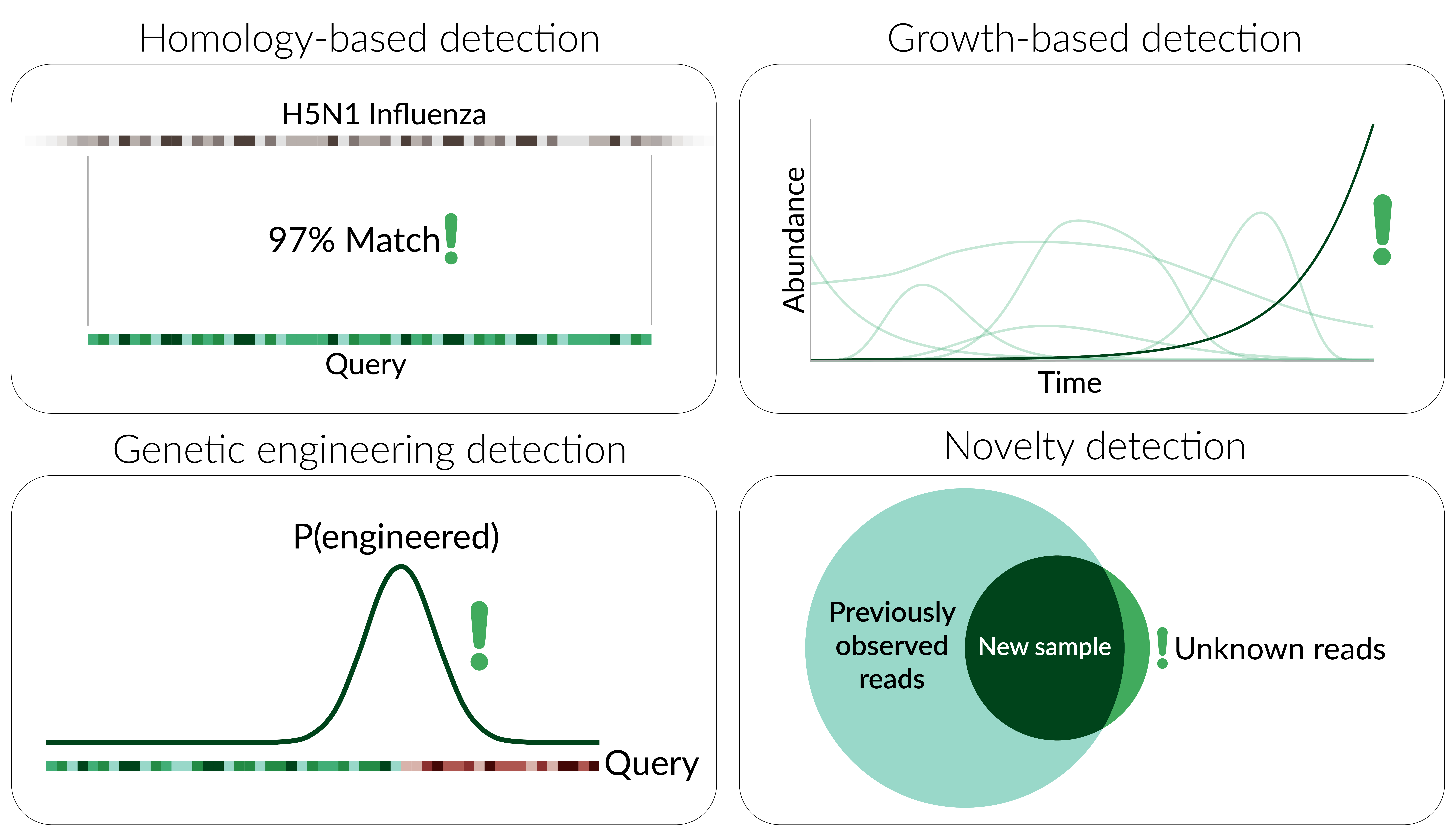
Inline math:

Display math:

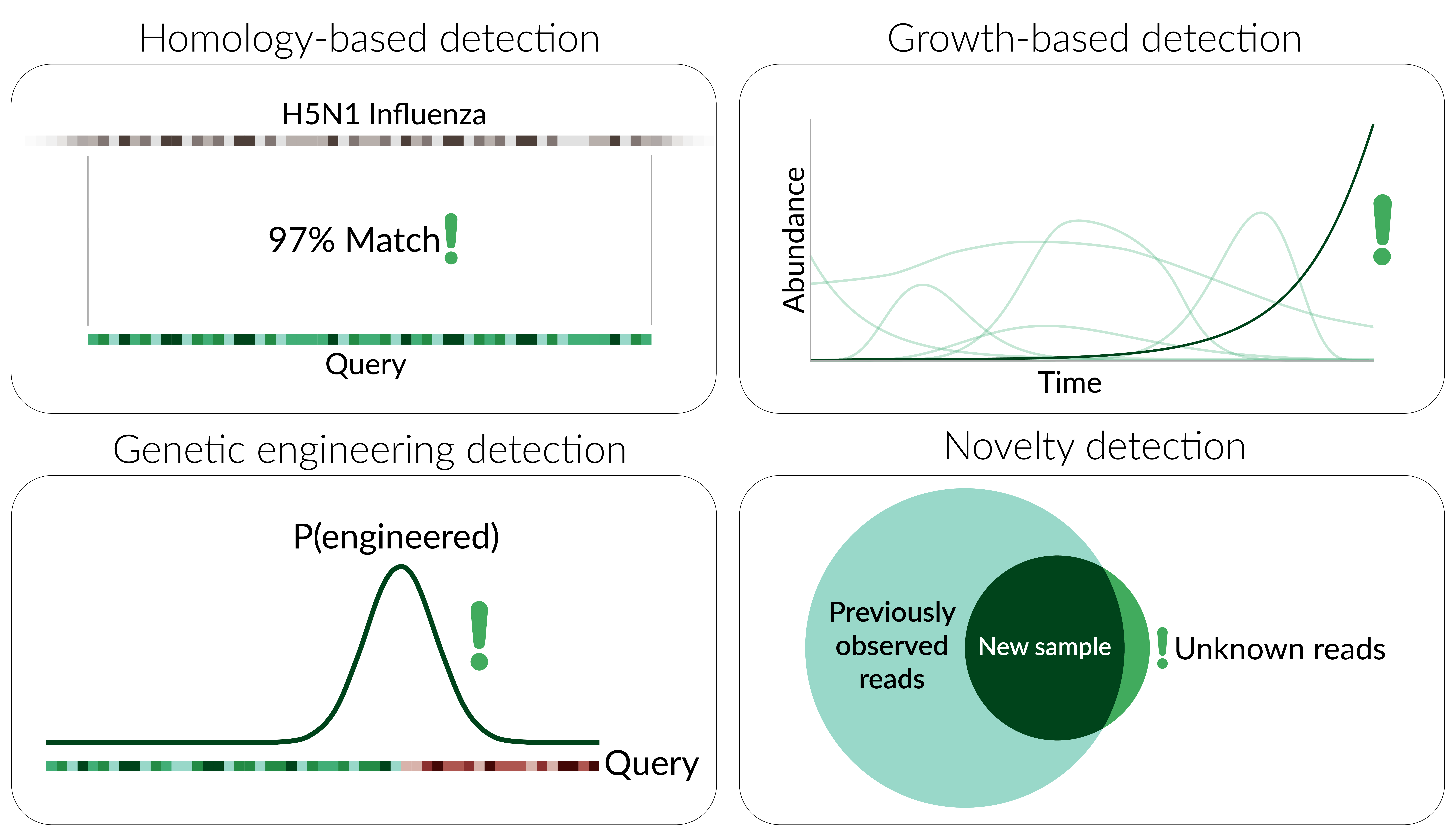
## Quotes

Blockquote

## Figures



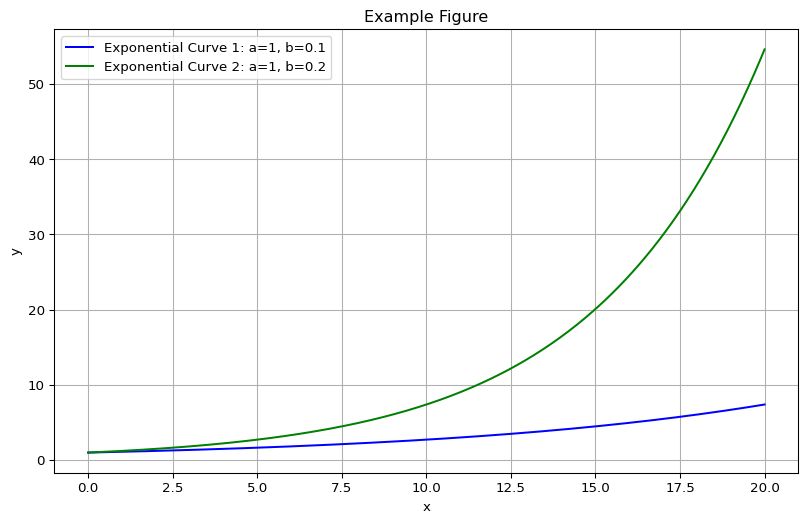
Example Figure



Example Figure at 50% Size

### Figure with Python

import numpy as np  
import matplotlib.pyplot as plt  
from scipy.stats import gamma  
  
# Parameters  
x = np.linspace(0, 20, 400) # x values  
a1, b1 = 1, 0.1 # Exponential curve 1 parameters  
a2, b2 = 1, 0.2 # Exponential curve 2 parameters  
k, theta = 2, 2 # Gamma distribution parameters  
  
# Exponential functions  
exp\_curve1 = a1 \* np.exp(b1 \* x)  
exp\_curve2 = a2 \* np.exp(b2 \* x)  
  
# Gamma distribution  
  
# Plotting  
plt.figure(figsize=(10, 6))  
plt.plot(x, exp\_curve1, label="Exponential Curve 1: a=1, b=0.1", color="blue")  
plt.plot(x, exp\_curve2, label="Exponential Curve 2: a=1, b=0.2", color="green")  
plt.title("Example Figure")  
plt.xlabel("x")  
plt.ylabel("y")  
plt.legend()  
plt.grid(True)  
plt.show()  
  
  
plt.show()



**Figure Caption: Figure 2: Nasal swabs vs Oro-pharyngeal and combined nasal/oro-pharyngeal swabs.** All data is taken from Goddall et al. 2022.

### Figure with R

#| label: fig-mtcars  
#| fig-cap: "MPG vs horsepower, colored by transmission."  
#| column: margin  
  
library(ggplot2)  
mtcars2 <- mtcars  
mtcars2$am <- factor(  
 mtcars$am, labels = c('automatic', 'manual')  
)  
ggplot(mtcars2, aes(hp, mpg, color = am)) +  
 geom\_point() +  
 geom\_smooth(formula = y ~ x, method = "loess") +  
 theme(legend.position = 'bottom')

# Footnotes

Test footnote 1[[1]](#footnote-44) and test footnote 2[[2]](#footnote-45)

# Asides

## Aside with Latex

We know from *the first fundamental theorem of calculus* that for in :

## Aside with a figure

1. This is the first footnote. [↑](#footnote-ref-44)
2. This is the second footnote. [↑](#footnote-ref-45)