Reproducible Publications

John Doe1,✉, and Jane Roe1,2

1 John Doe Center for Technology, John Doe University, Doetown, Germany.  
2 Institute of Technology, John Doe University, Doetown, Germany.

✉ Correspondence: [John Doe <john.doe@jdct.edu>](mailto:john.doe@jdct.edu)

# Abstract

Brief summary of what this paper is about.

# Introduction

## What is reproducibility?

*Reproducibility* in this context means obtaining consistent results using the same input data, calculation steps, methods, and codes, and the same analysis conditions. This definition is synonymous with “computational reproducibility” and the terms are used interchangeably in this report. [1]

# Methods

How was the topic handled? Maybe GitHub[[1]](#footnote-24) was one of the instruments used.

# Results

Here it is: A template for reproducible research.

[Table 1](#tbl-data) shows a summary of the data.

A dotplot of Sepal.Lentgh and Sepal.Width is shown in [Figure 1](#fig-data).

# Discussion

Not everything that glitters is gold. What are the limits of the subject? What is still to be done?

# Conclusions

We are on a good path but not yet finished.

# References

Quarto will include the references here. The position of the reference-list can therefore be adjusted by moving the inclusion of this file within index.qmd.

[1] E. National Academies of Sciences, P. and G. Affairs, E. Committee on Science, B. on R.D. and Information, D. on E. and P. Sciences, C. on A. and T. Statistics, B. on M.S. and Analytics, D. on E. and L. Studies, N. and R.S. Board, D. of B. and S.S. and Education, C. on N. Statistics, C. Board on Behavioral, and C. on R. and R. in Science, Understanding Reproducibility and Replicability, National Academies Press (US), 2019. <https://www.ncbi.nlm.nih.gov/books/NBK547546/> (accessed November 22, 2022).

# Tables

Table 1: Data

|  | Sepal.Length | Sepal.Width | Petal.Length | Petal.Width | Species |
| --- | --- | --- | --- | --- | --- |
|  | Min. :4.300 | Min. :2.000 | Min. :1.000 | Min. :0.100 | setosa :50 |
|  | 1st Qu.:5.100 | 1st Qu.:2.800 | 1st Qu.:1.600 | 1st Qu.:0.300 | versicolor:50 |
|  | Median :5.800 | Median :3.000 | Median :4.350 | Median :1.300 | virginica :50 |
|  | Mean :5.843 | Mean :3.057 | Mean :3.758 | Mean :1.199 | NA |
|  | 3rd Qu.:6.400 | 3rd Qu.:3.300 | 3rd Qu.:5.100 | 3rd Qu.:1.800 | NA |
|  | Max. :7.900 | Max. :4.400 | Max. :6.900 | Max. :2.500 | NA |

# Figures

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | (a) Sepal.Length vs. Sepal.Width. | | |  | | --- | | (b) Petal.Length vs. Petal.Width | |

Figure 1: Data plots.

1. <https://github.com/> [↑](#footnote-ref-24)