

# New paper template

Author 1<sup>1,2,\*</sup>, Author 2<sup>1,2</sup>, Author 3<sup>3</sup>, Author 4<sup>E4</sup>

<sup>1</sup>Heidelberg University, Centre for Organismal Studies (COS), 69120 Heidelberg, Germany

<sup>2</sup>Affiliation 2

<sup>3</sup>Affiliation 3

<sup>4</sup>Affiliation 4

\*Correspondence: xy@cos.uni-heidelberg.de

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## Abstract

This is an R **Markdown** document. <sup>Markdown</sup> is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

**text in bold** *italic* underline

## Introduction

You can add references either by referring to their id in the .bib file e.g., (Marinković et al., 2019), or by switching to the visual editor (Cogwheel in the .Rmd menu -> Use Visual Editor). [Jokura et al. (2023)](Jokura et al., 2023)(Jacobs and Ryu, 2023)

It is now a test to edit the text and see how the changes show up on GitHub.

Test of git show.

In the visual editor mode, go to 'Insert' -> @ Citation

You can select a Zotero library, PubMed, CrossRef etc. and insert the citations. (Jacobs and Ryu, 2023)

The easiest way is to use the command line:

```
curl -LH "Accept: application/x-bibtex" https://doi.org/10.7554/eLife.91258.1 >> references.bib
```

*Platynereis dumerilii* is a marine annelid... (Ozpolat et al., 2021)

The references are stored in manuscript/references.bib (need to be defined in the Yaml header). This file will automatically updated when you insert a new reference through the Visual editor > Insert > Citations.

In this documents, references will be formatted in the style of eLife. This is defined in the Yaml header under: csl: elife.csl. The elife.csl file is saved in the /manuscript folder.

If you would like to use a different citation format, download the respective .csl file (e.g., from the Zotero style repository <https://www.zotero.org/styles>), save it in the /manuscript folder of the project and change the Yaml to csl: your\_favourite\_journal.csl.

## Results

### Inserting Figures

Test comment here.

You can add your figures into the rendered document. We saved the figures into /manuscript/figures or /manuscript/figure\_supplements and can insert them from there. We use `knitr::include_graphics` for this. The title and legend can also be edited, as will as the width of the output figure. Test comment behaviour:

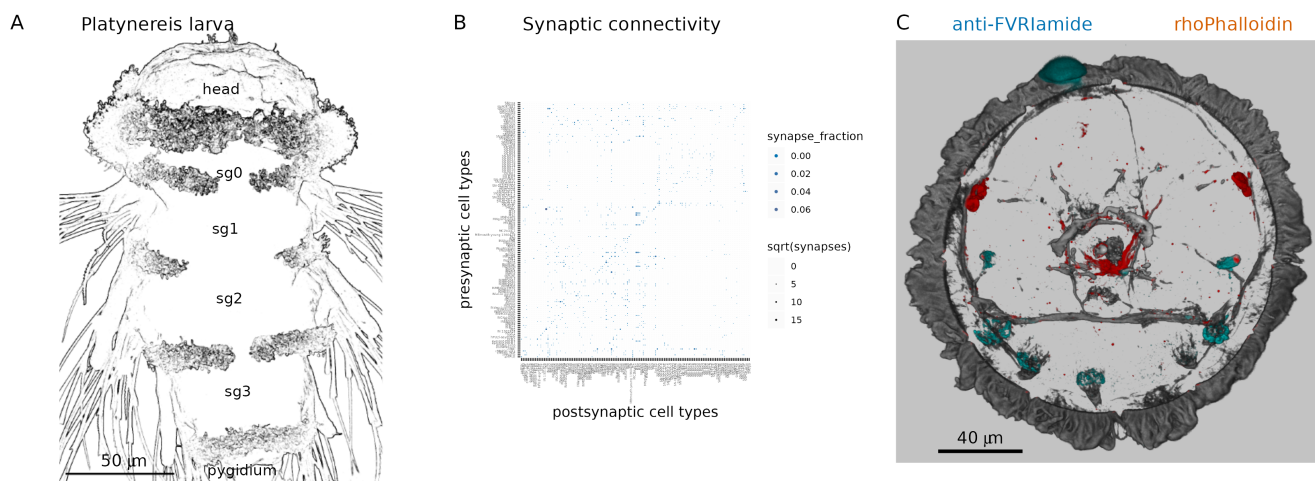


Figure 1: **Figure 1.** A figure (A) A nice picture. (B) legend. (C) (D)

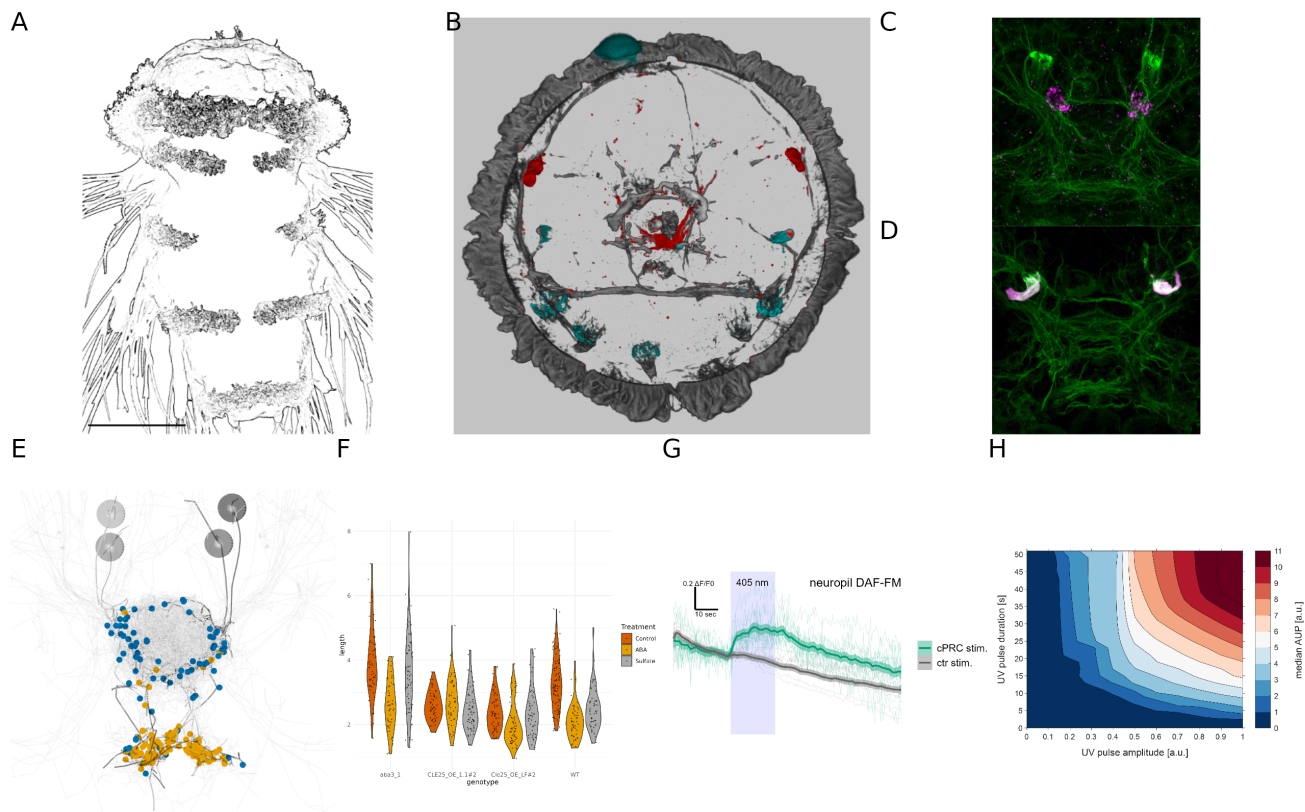


Figure 2: **Figure 1. Our nice figure from yesterday** (A) A nice picture. (B) legend. (C) (D)

## Equations

Equations can also be inserted, Insert -> Display Math:

$$\bar{X} = \frac{\sum_{i=1}^n x_i}{n}$$

## Sourcing code and working with variable

The mean value of Nanog expression was 0.0909 indicating that Nanog is downregulated. The 'analysis/scripts/statistics\_for\_paper.R' script is sourced and it runs but the output is not included in the knitted output. But we can access the variables defined in the sourced script simply by adding ' r var\_name ' between ' backticks, in this case max\_PRC value is 21 (now this number comes from our sourced script).

If we update the data, the script can recalculate the variable we want to refer to in the text and update the number.

## Acknowledgements

We would like to thank the Jekely lab for the R project template ([https://github.com/JekelyLab/new\\_paper\\_template](https://github.com/JekelyLab/new_paper_template)) we used to write this paper. This work was funded by ...

## Materials and Methods

You can insert tables from source data, such as .csv or Excel files and render them in html with the tinytable package.

Alternatively, you can use the Markdown grid table format. For more complex tables, you can use the [tablesgenerator](#) online grid table editor/converter (e.g. converts csv or excel files).

The output may differ between html and pdf, for most consistent results use the grid table format described [here](#).

## Key Resources Table

Warning: package 'tinytable' was built under R version 4.3.3

Warning: The `placement` argument in `tt()` is deprecated. Please use this instead: `theme\_tt(table, 'placement')`

Reagent type (species) or resource	Designation	Source or reference	Identifiers	Additional information
biological sample (N. vectensis)	larval, juvenile and adult N. vectensis	Specimens obtained from the Marine Invertebrate Culture Unit of the University of Exeter	N/A	NA
biological sample (cDNA)	cDNA obtained from N. vectensis	this study	N/A	RNA extracted with Trizol and cDNA synthesized with cDNA synthesis kit according to manufacturers recommendation
biological sample (peptide extract)	peptide extracts obtained from N. vectensis	this study	N/A	Peptides extracted from N. vectensis according to protocol explained in Material and Methods
genetic reagent (cDNA synthesis)	SuperScript™ III First-Strand Synthesis System	Invitrogen (from ThermoFisher)	18080051	NA
genetic reagent (Polymerase)	Q5® Hot Start High-Fidelity DNA Polymerase	New England Biolabs	M0493L	NA
genetic reagent (DNA assembly)	NEBuilder® HiFi DNA Assembly Master Mix	New England Biolabs	E2621L	NA
genetic reagent (restriction enzyme)	EcoRV restriction enzyme	New England Biolabs	R3195L	NA
genetic reagent (restriction enzyme)	Afl2 restriction enzyme	New England Biolabs	R0520L	NA

Table 1: Grid Table example

Col1	Col2	Col3	Col4	Col5
a	b	c	d	e
d				

### Complex grid table example

This table was generated by `tt()` as the output of an `r` chunk in a Quarto doc. For larger multi-page tables, this method gives correct page breaks in the pdf and html outputs. You can change the relative column widths with `{tbl-colwidths="[10,20,20,20,30]"}` placed after the table caption declaration at the end.

Table 2: More complex Grid Table example

Reagent type (species) or resource	Designation	Source or reference	Identifiers	Additional information
biological sample (N. vecten- sis)	larval, juvenile and adult N. vectensis	Specimens obtained form the Marine Invertebrate Culture Unit of the University of Exeter	N/A	NA
biological sample (cDNA)	cDNA obtained from N. vectensis	this study	N/A	RNA extracted with Trizol and cDNA synthesized with cDNA synthesis kit according to manufacturers recommendation
biological sample (peptide extract)	peptide extracts obtained from N. vectensis	this study	N/A	Peptides extracted from N. vectensis according to protocol explained in Material and Methods
genetic reagent (cDNA synthe- sis)	SuperScript™ III First-Strand Synthesis System	Invitrogen (from ThermoFisher)	18080051	NA

Reagent type (species) or resource	Designation	Source or reference	Identifiers	Additional information
genetic reagent (Poly- merase)	Q5® Hot Start High-Fidelity DNA Polymerase	New England Biolabs	M0493L	NA
genetic reagent (DNA as- sembly)	NEBuilder® HiFi DNA Assembly Master Mix	New England Biolabs	E2621L	NA
genetic reagent (restric- tion enzyme)	EcoRV restriction enzyme	New England Biolabs	R3195L	NA
genetic reagent (restric- tion enzyme)	Afl2 restriction enzyme	New England Biolabs	R0520L	NA

## References

- Jacobs EAK, Ryu S. 2023. Larval zebrafish as a model for studying individual variability in translational neuroscience research. *Frontiers in Behavioral Neuroscience* **17**. doi:[10.3389/fnbeh.2023.1143391](https://doi.org/10.3389/fnbeh.2023.1143391)
- Jokura K, Ueda N, Gühmann M, Yañez-Guerra LA, Słowiński P, Wedgwood KCA, Jékely G. 2023. Nitric oxide feedback to ciliary photoreceptor cells gates a UV avoidance circuit. doi:[10.7554/elife.91258.1](https://doi.org/10.7554/elife.91258.1)
- Marinković M, Berger J, Jékely G. 2019. Neuronal coordination of motile cilia in locomotion and feeding. *Philosophical Transactions of the Royal Society B: Biological Sciences* **375**:20190165. doi:[10.1098/rstb.2019.0165](https://doi.org/10.1098/rstb.2019.0165)
- Ozpolat BD, Randel N, Williams EA, Bezares-Calderón LA, Andreatta G, Balavoine G, Bertucci PY, Ferrier DEK, Gambi MC, Gazave E, Handberg-Thorsager M, Hardege J, Hird C, Hsieh Y-W, Hui J, Mutemi KN, Schneider SQ, Simakov O, Vergara HM, Vervoort M, Jékely G, Tessmar-Raible K, Raible F, Arendt D. 2021. The Nereid on the rise: Platynereis as a model system. *Zenodo*. doi:[10.5281/ZENODO.4907400](https://doi.org/10.5281/ZENODO.4907400)