Paper or report template

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Abstract

This is a **Quarto** *document.* Quarto uses a simple Markdown formatting syntax for authoring HTML, PDF, and MS Word or .odt documents. For more details on using Quarto see https://quarto.org/.

Here is our abstract. We discovered that medaka fish can eat Arabidpopsis shoop apical meristeme cells to regulate energy metabolism (data not shown). Here is some **text in bold** *italic* underline and superscript.

Introduction

Platynereis dumerilii is a marine annelid… (Ozpolat et al., 2021). It is also the coolest model organism. It lives in shallow sea on seagrass. Ischia is a good sampling location.

Results

Adding references

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). (Jacobs and Ryu, 2023; Jokura et al., 2023)

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)

One easy and techy way is to use the command line:

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

#make sure to use >> and not > otherwise you will overwrite your file!
```

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.

(Lohmann et al., 2023; Lohmann et al., 2001; Ozpolat et al., 2021; Saile et al., 2023; Wu et al., 2020)

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.

Now edit the text, add a few references and press -> Render and see how the changes show up on the rendered document. It is easier and faster to render your document to html. You will get a very nice dynamic layout that you can read in the browser (use Firefox). You can also render into pdf, but you need to install a version of latex for that. An easy alternative to generate a nice pdf is to open the html version in a browser (in this case Chrome gives the best results) and print to a pdf file.

Inserting figures

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:

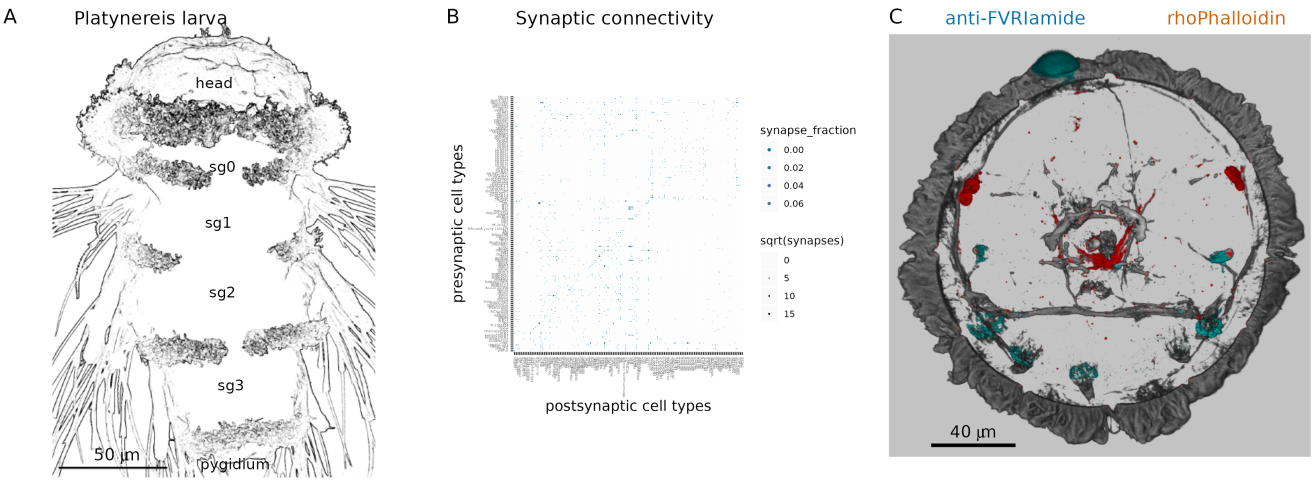

Figure 1: **Figure 1. A figure** (A) A nice picture. (B) legend. (C) (D)

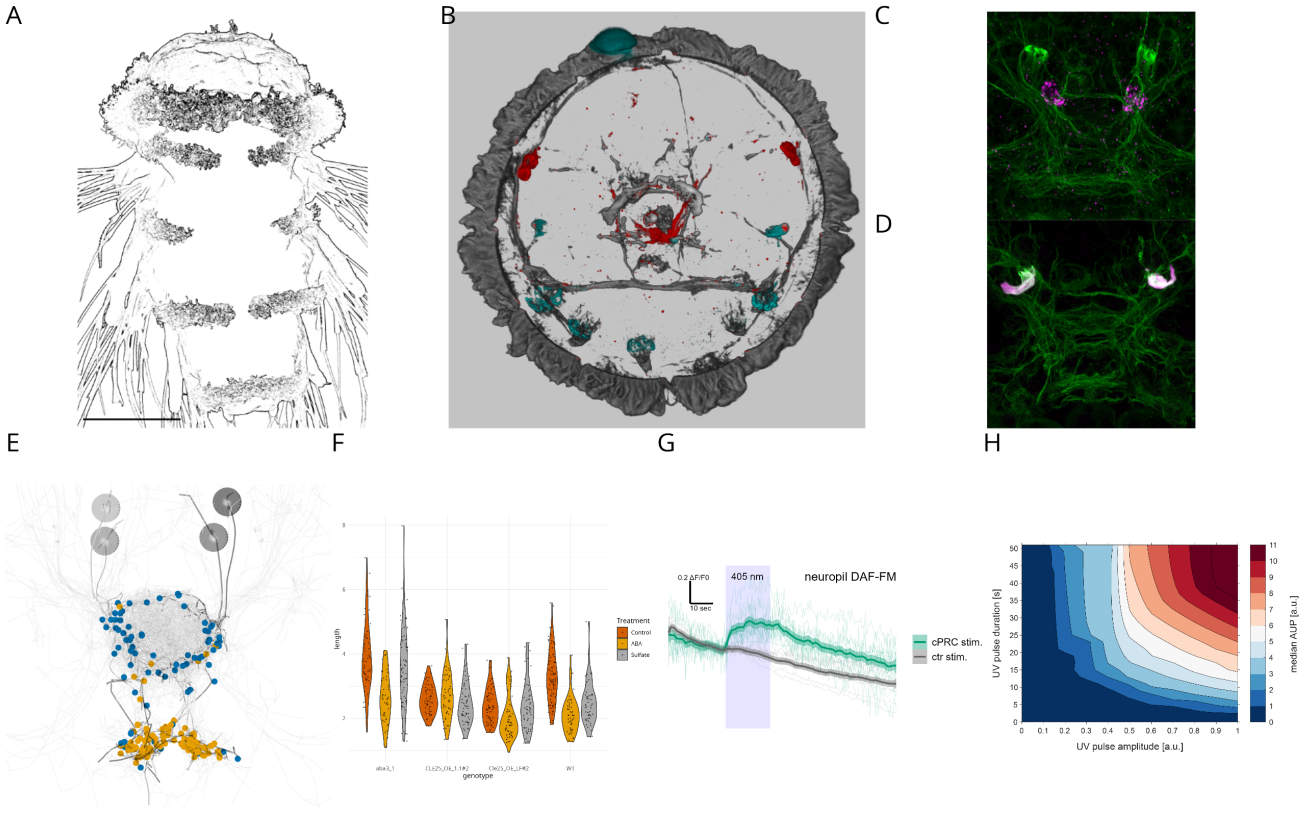

Figure 2: **Figure 1. Our nice figure from yesterday** (A) A nice picture. (B) legend. (C) (D)

Adding 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.

Inserting comments

Inserting comments: You can also use the visual editor and insert -> comment.

Test comment here.

Acknowledgements

We would like to thank the Jekely lab for the R project template we used to write this paper. This work was funded by xy funding agency.

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: 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 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 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				
v	n	f		f

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 (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)	AfI2 restriction enzyme	New England Biolabs	R0520L	NA

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