

## Paper 5: Extended Pathways Paper

The goal for the Extended Pathways Paper is to write up the remainder of your project. **This is due by Week 15T start of class as a hard copy** (to allow time for me to give feedback and return for potential revision during final exam week). Follow similar formatting to the instructions in Paper2. **Note that completion of this assignment is necessary for an 'A- or above', but it is NOT necessary otherwise.** See Dr. Yang if you are not sure if you should do this.

The extended paper will build on your Paper2/4 report, and involve:

- (1) Extending your **Results** section from Paper2/4 to additionally discuss your gene model annotation and dot plot results (note that this would include two additional questions and key results), along with any associated discrepancies;
- (2) Changing your **Conclusion** into a larger **Discussion** section, which still summarizes the main conclusions and addresses supporting evidence and potential discrepancies, but also (1) connects your findings to broader context of the field, (2) develops a further question to answer based on your current findings, and (3) introduces a potential future experiment or analysis to address this further question;
- (3) Cites at least TWO more primary research articles that are appropriately cited and referenced using Pechenik format. At least one must relate to your target species *or* target gene, and the other can have broader context (You are welcome to use the Hickner et al (2016) study from Journal Club 2 as one of the two references – it often fits well in the second category).

To extend your Results section, you will need to refer to additional figures – you must include the Custom Genome Browser with your annotated gene model and the protein alignment and dot plot comparing to your target gene in *D. melanogaster*. You should NOT treat the other target species (from your groupmates) as your own results. You do not need to refer to those results, but if you do, you should cite their project as an additional reference in your Discussion (see below for Reference Format). No additional tables are mandatory, but you may include one if you deem it important for understanding your point(s).

Consider that the addition of new results will involve thinking more about your transitions and narrative. With three key results, you must decide how to structure your objectives/methods – whether all together in your first paragraph for all three parts of the project, or separated into different paragraphs following the previous key result. I have seen it work both ways. For either method, make sure you consider how in your first 1-2 sentences you write to give an overarching sense of what readers will see as they read. Also, think about the flow of your message/findings/interpretation as you work your new analyses into the paper.

### Reference Format for unpublished research by your classmates:

Write lab mates' names in Pechenik format here. (unpublished). Pathways Project:

Targetgenesymbol\_Targetspeciessymbol.

In-text citation: (Targetgenesymbol\_Targetspeciessymbol, Pathways Project)