Peaks and valleys of prolactin during parental care

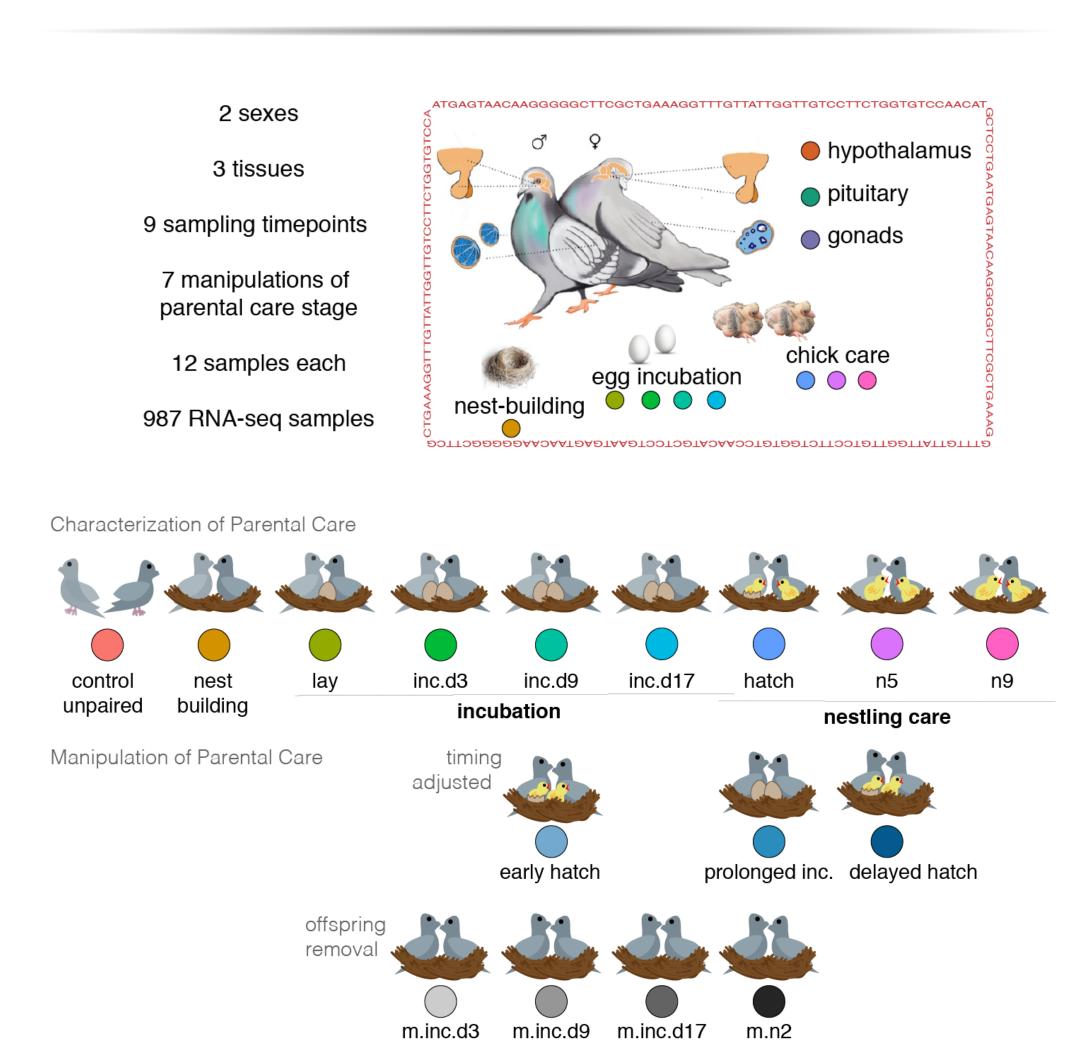
Rayna M. Harris (@raynamharris)*1, Suzanne H. Austin*2, Victoria Ferrar¹, April Booth¹, Rechelle Viernes¹, Jesse Krause¹, Andrew Lang³, Matthew MacManes³, Rebecca M. Calisi (@BeccaCalisi)¹

*co-first authors, 1. University of California, Davis, 2. Oregon State University, 3. University of New Hampshire

Research background

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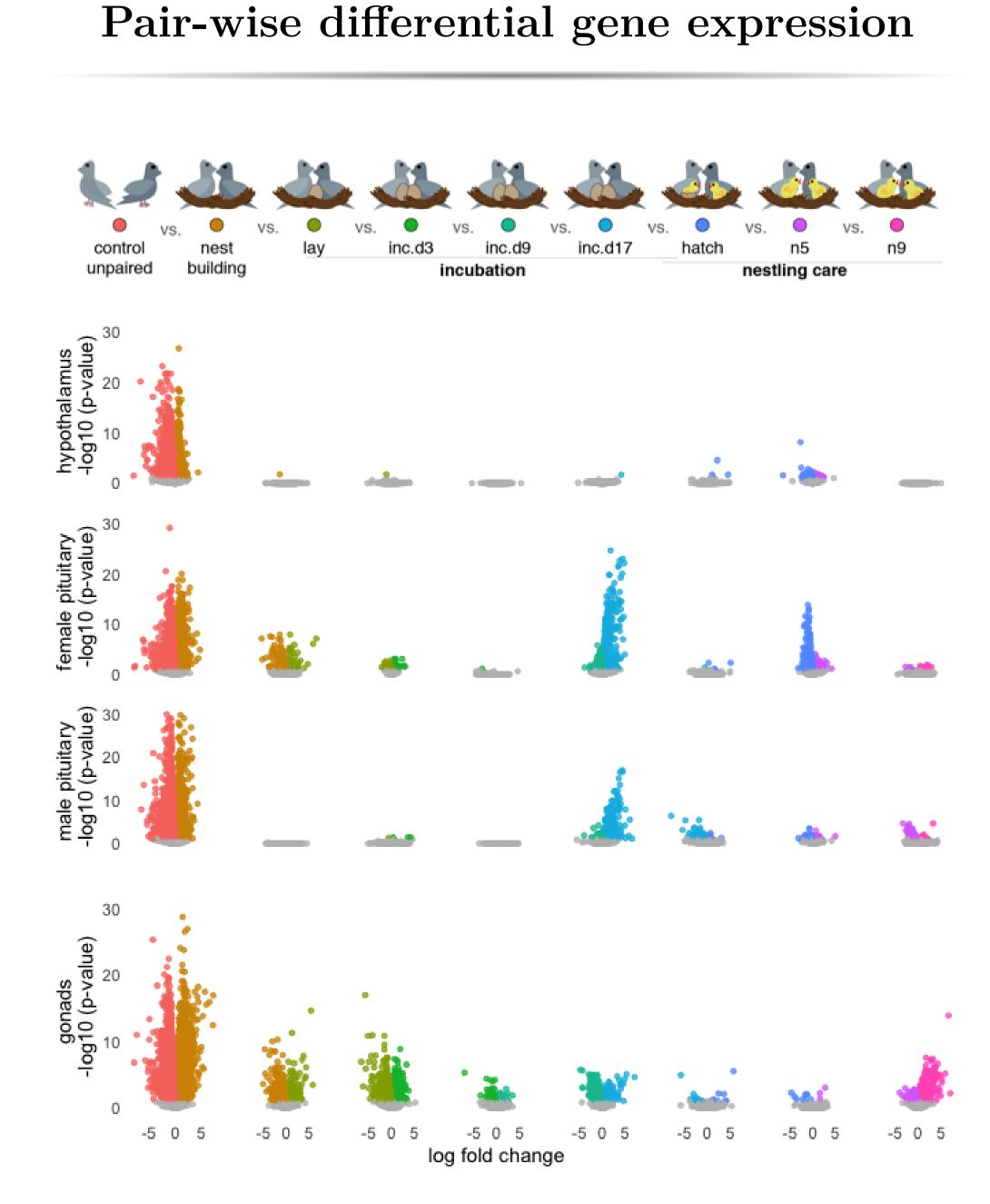
Using a bi-parental pigeon to explore how systems change over the course of parental care



For more information visit http://calisilab.ucdavis.edu/.

All the data and analyses are available on GitHub at https://github.com/macmanes-lab/
DoveParentsRNAseq. This poster can be read online at https://macmanes-lab.github.io/
DoveParentsRNAseq/.

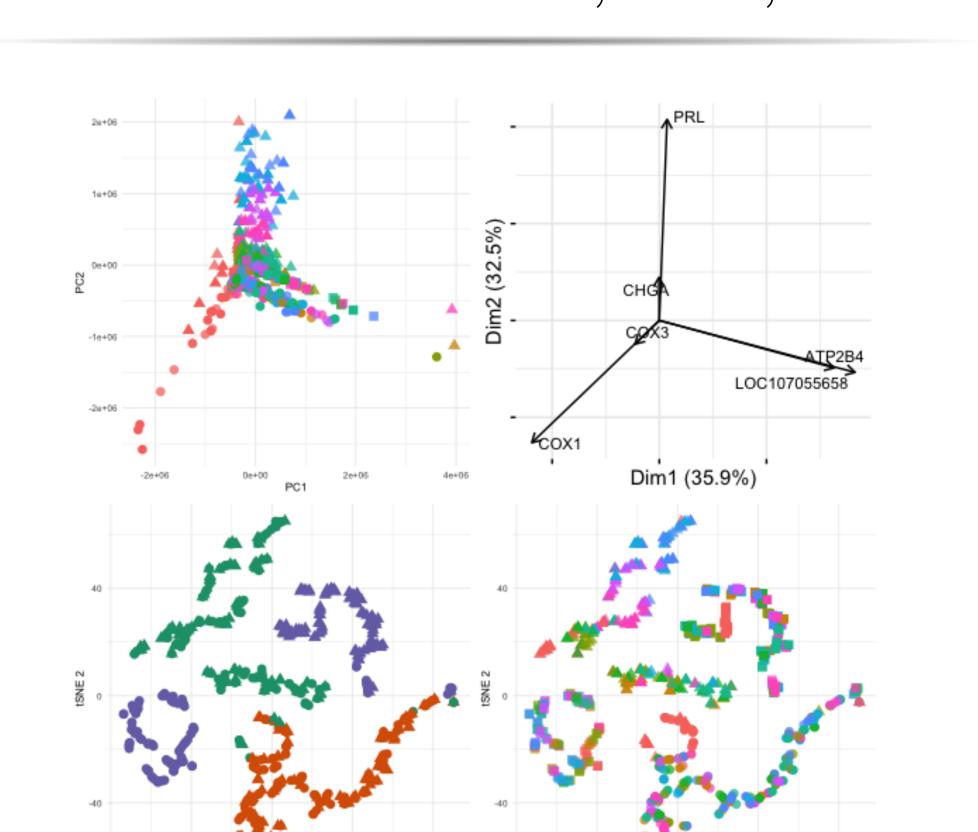
Characterization of parental care gene expression



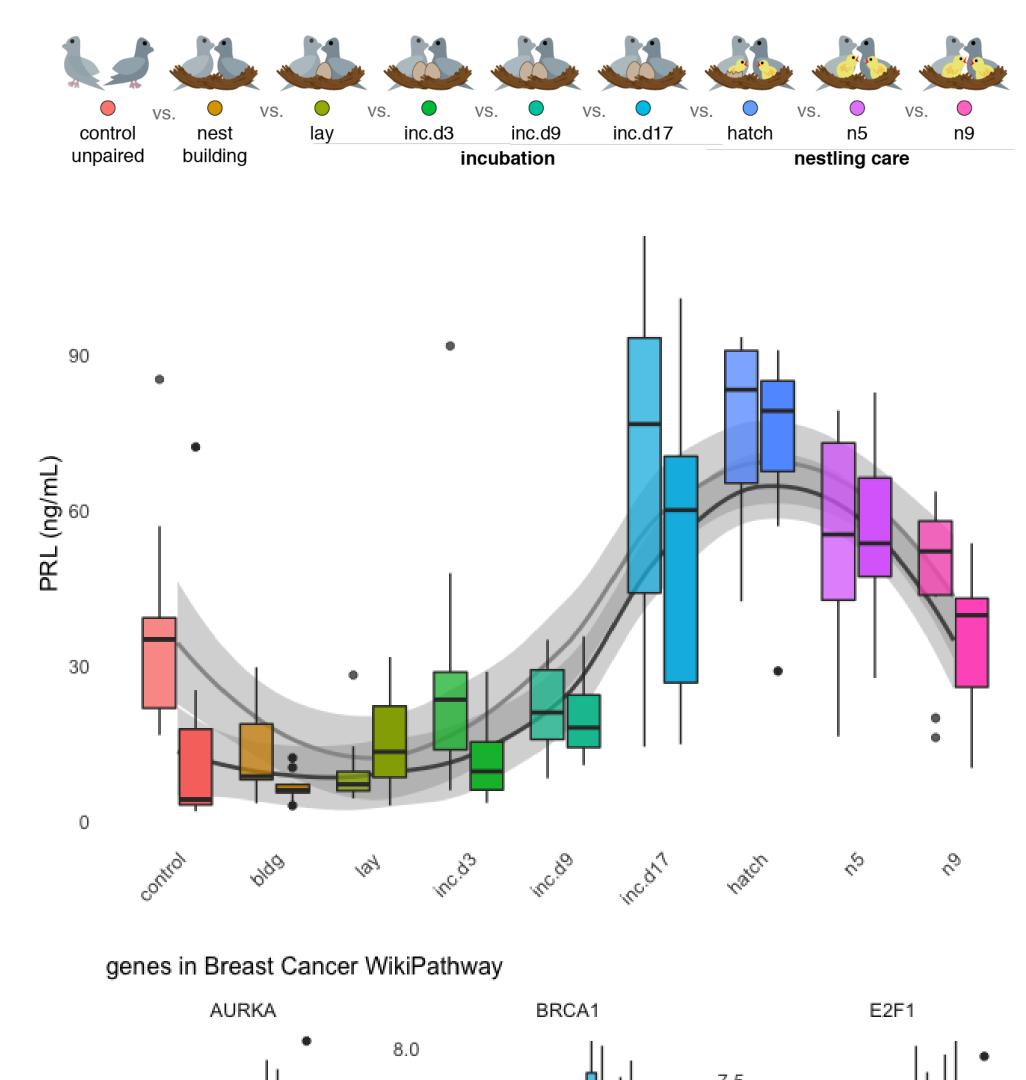
Noticable large changes in gene expression include:

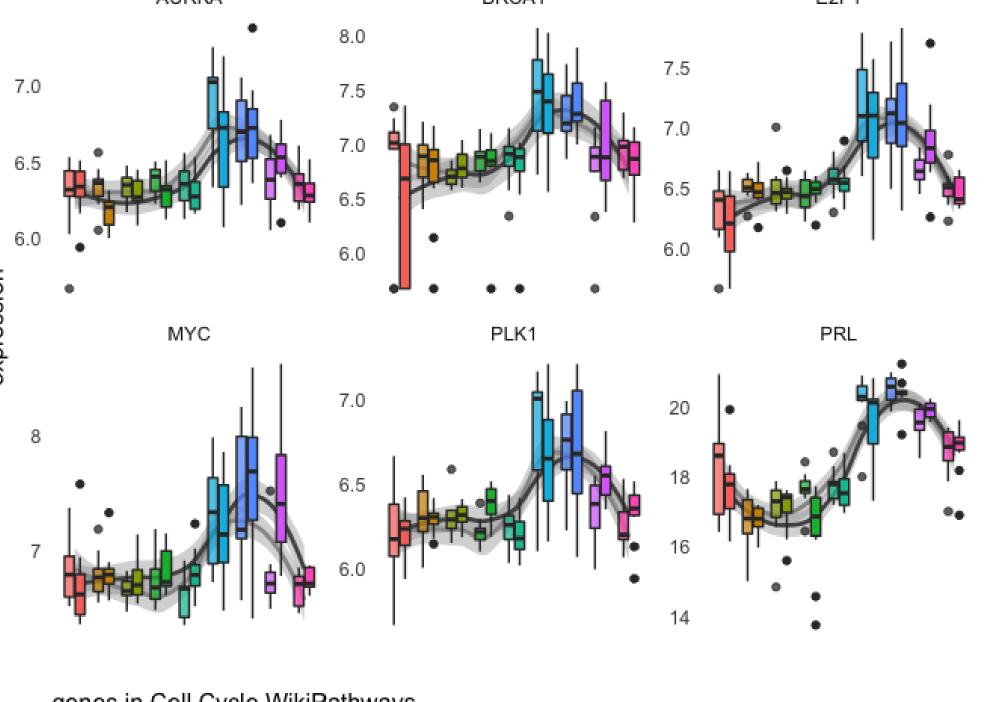
- control to nest-building transition alters expression of 1000s of genes
- incubation day 9 to 17 transition alters expression of 1000s of genes

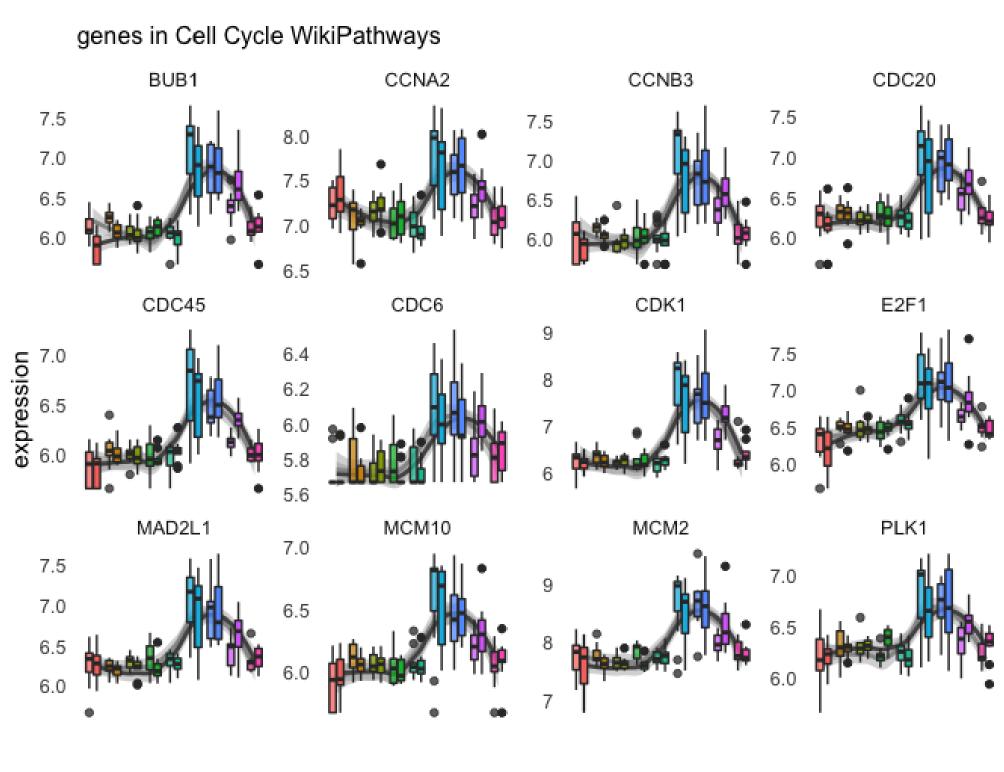
Variance due to treament, tissue, and sex



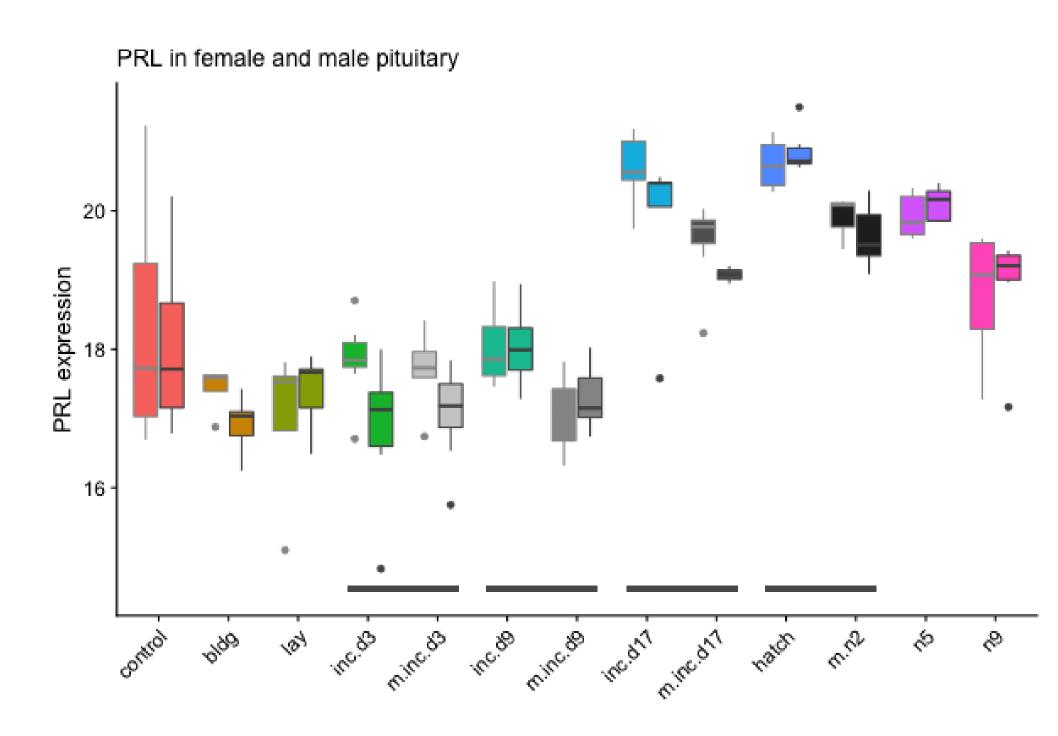
Prolactin explains a lot

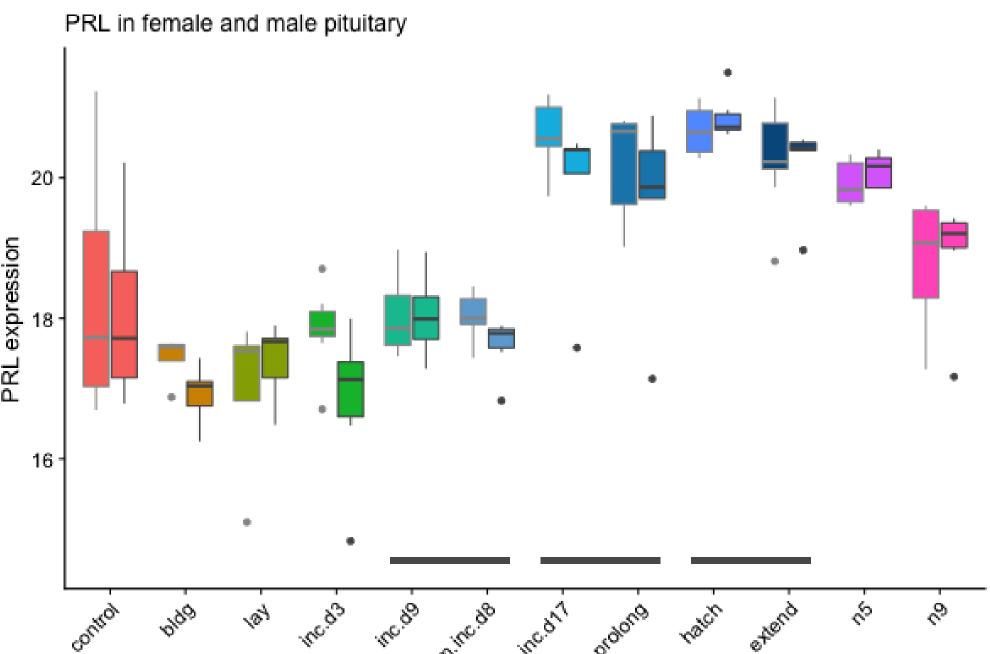






Manipulation





Next steps

- Create an open source R package.
- Share tutorials for how to use the function.

Acknowledgements

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