

## **TOMSBio lab TFM proposals**

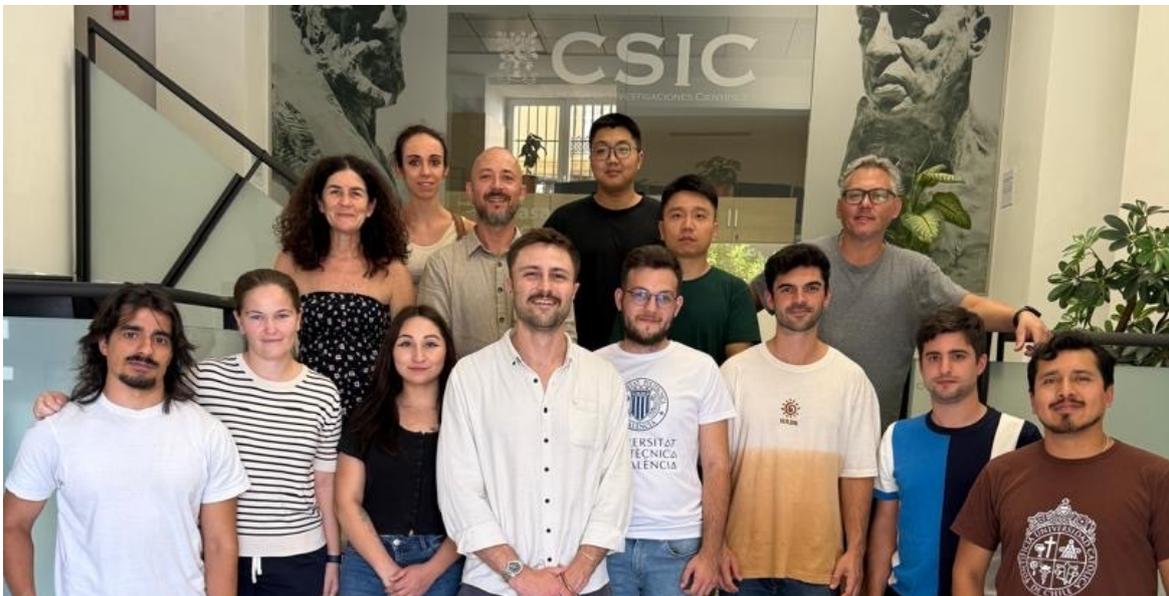
This year, the ***Transcriptional Orchestration of Metabolism studied through Systems Biology lab*** offers a range of final year master's project (TFM) proposals from which to choose from:

- Multiomics integration to study the transcriptional regulation of cannabinoid and terpenoid pathways in *Cannabis sativa*
- Genome sequencing and multiomics integration to study the unknown metabolic pathway leading to the production of the alkaloid boldine in *Peumus boldus*
- Using network theory to study non-coding RNA regulation of stilbenoid metabolism in *Vitis vinifera*
- Genomic Insights into Three Locally Adapted Diatoms from the Albufera Coastal Lagoon

Further details on each proposal can be found in the individual pdfs.

### ***About the lab***

Our main interest is the study of specialised metabolites and how they are produced in different species of interest. We recognise that both experimental and bioinformatic approaches are required for an in-depth understanding of biology at a systematic level whilst still engaging in hypothesis-driven research. The lab has a well-established bioinformatics team that will be able to offer their expertise and guidance. Previous bioinformatic work in the lab includes the generation of whole genome co-expression networks, DAP-seq analyses in a range of plant species, development of structural genome annotation tools and full-stack development of the [PlantaeViz](#) portal.



**We hope to hear from prospective 1st and 2nd year students looking for a lab to carry out a final year master's project. Feel free to contact us with any questions you may have!**

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