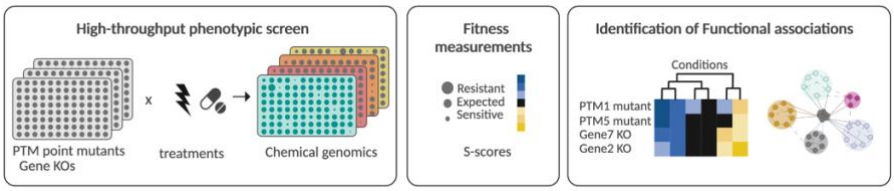
# Master Thesis in Epigenetics

**Histone Post-Translational Modifications (PTMs) regulate chromatin functions allowing the cells to adapt to fluctuating environments.** Mutations in histone PTMs and their regulators are associated with the onset and progression of cancer. A small subset of histone PTMs are very well characterized, however, due to the lack of unbiased systematic methods the function of most of them and how they are regulated in a context-specific manner remains a mystery. Now, we are ready to tackle this long-standing question in biology by using a new approach based on reverse genetics and chemical genomics using ***S. cerevisiae*** as a model organism. Are you interested in joining our group for your master's thesis and be part of this journey?

We combine **cutting-edge high-throughput methodologies based on reverse genetics, chemical genomics** and computational analysis with classical **molecular biology** techniques using yeast. Our group is based at the Functional Biology and Genomics Institute (IBFG) in Salamanca, Spain. IBFG is a joint centre between the Spanish Research Council (CSIC) and the University of Salamanca.

*More info:*

- ***Viéitez C**, et al. High-throughput functional characterization of protein phosphorylation sites in yeast,* ***Nature Biotechnology, 2022**.*
- ***Viéitez C**, et al. A genetic analysis reveals novel histone residues required for transcriptional reprogramming upon stress,* ***Nucleic Acids Res, 2020**.*
- IBFG website https://ibfg.usal-csic.es/cristina-vieitez.html
- Lab Website https://sites.google.com/view/cristinavieitezlab/home

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