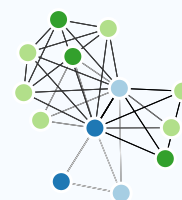






ALBERT FRADERA SOLA

I consider myself both collaborative and adaptable. I am always eager to tackle new and different projects. I am very enthusiastic to always share and develop my data visualization skills as a means towards better science communication. I am an open-minded person and enjoy having great relationships with my colleagues.



My CV as a network

Bullet points (Blue, for  and , and green, for  and ) are linked by year. Enhanced version [here](#)

CONTACT

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 +49 179 3469988



SOFTWARE SKILLS





LANGUAGE SKILLS



EDUCATION

- Current | 2018
- **PhD Candidate in Quantitative Proteomics**
JGU University  Mainz, Germany
 - PhD thesis: Computational approaches to mass spectrometry based quantitative proteomics
- 2017 | 2016
- **M.Sc. in Omics Data Analysis**
University of Vic  Barcelona, Spain
 - Master thesis: Development of a scoring function for finding differential expression - application to Lolium Perenne
 - Erasmus + grant fellow

RESEARCH EXPERIENCE

- Current | 2018
- **PhD Candidate**
Butter laboratory - Institute Molecular Biology  Mainz, Germany
 - PhD candidate with Dr. Falk Butter (F.Butter@imb-mainz.de)
 - Publications: 1 first-author paper (in submission), 5 co-author papers
- 2017
- **Master Student**
Narcis Fernandez-Fuentes - IBERS  Aberystwyth, UK
 - MSc student with Dr. Narcs Fernandez-Fuentes (naf4@aber.ac.uk)
 - Publications: 1 first-author paper, 1 co-author paper

WET LAB PROJECTS AND RELATED SKILLS

- **Immunoprecipitation of RNA-binding proteins in *S. cerevisiae***
 - I was responsible for designing the experimental setup and generating the data for the RNA-binding protein interactome investigation.
 - Keywords: Yeast | Protein Immunoprecipitation | Experimental design
- **Mass spectrometry quantitative proteomics**
 - I used chemical labeling (DML) and label free mass spectrometry sample preparation protocols on several projects
 - Keyword: Mass spectrometry | DML | LFQ | In-gel digestion



DRY LAB PROJECTS AND RELATED SKILLS

- Network-based assignment of RNA-binding proteins functionality

- Function-based networks were created from quantitative proteomics data and made accessible through a shiny app.
- Keywords: Network | Functional analysis | KEGG | GO | R Shiny

- Temporal proteome profiling of *Xenopus* and *Leishmania* species

- Differential expression of proteomes was investigated at various stages
- Clustering (Self Organizing Maps) and dimensionality reduction techniques (Principal Component Analysis) were applied.
- Keywords: Proteome | Differential expression | SOM | PCA | Clustering

- **Scoring function for RNA-Seq differential expression assessment**

- A scoring function was developed around three RNA-Seq differential expression assessment R packages (DESeq2, edgeR, limma+voom)
- Keywords: NGS | RNA-Seq | Quality control | Differential expression

ChIPseq characterization of a novel ATPase in *T. brucei*

- H2A.Z deposition was investigated and visualized with genome tracks
- Keywords: NGS | ChIP-Seq | Genome tracks



SELECTED PUBLICATIONS

- Projects with Genomics Analysis

- 2022 | PLoS Pathogens | <https://doi.org/10.1371/journal.ppat.1010514>
- 2021 | Nature Communications | <https://doi.org/10.1038/s41467-021-22861-2>
- 2021 | PLoS One | <https://doi.org/10.1371/journal.pone.0249636>
- 2019 | PLoS One | <https://doi.org/10.1371/journal.pone.0220518>

- **Projects with Proteomics Analysis**

- 2021 | Journal of Cell Science | <https://doi.org/10.1242/jcs.254300>
- 2020 | RNA | <https://doi.org/10.1261/rna.076281.120>



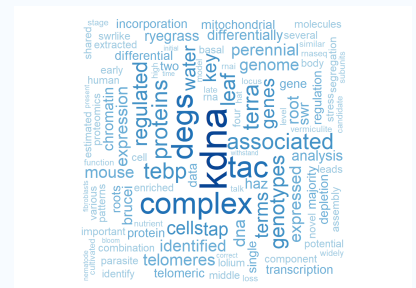
CONFERENCES AND COURSES

Conferences

- 2022 | Statistical data analysis for genome-scale biology |Flash talk
- 2021 | Network biology |Plenary talk
- 2019 | FEBS advanced course |Poster presentation

Courses

- 2022 | Data visualization for scientists
- 2021 | Scientific writing
- 2020 | Convincing scientific presentations



Publication abstract's wordcloud

Document created with the R
packages **pagedown** and
datadrivency.

The source code is available on github.com/AFraderaSola/CV.

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