ADRIÀ MITJAVILA VENTURA

Bioinformatician at Istituto Europeo di Oncologia

Biotechnologist living around computers. Interested in data analysis to support experimental research as well as in pure computational experiments and in software/pipeline development.

References available upon request.



07/2019 Present

Bioinformatician

Istituto Europeo di Oncologia

Milan, Italy

Pasini's lab

Analysis of omics data analysis (RNA-seq, ChIP-seq, ATAC-seq) | Comparison of different ATAC-seg peak callers. | Development of an ATAC-seg pipeline for Snakemake.

07/2018 10/2018

Research Assistant

Instituto de Biomedicina de Sevilla

Seville, Spain

Gene expression lab

Analysis of MNase-seg data from Ccr4-mutant yeast.

09/2017

Master's thesis student

Instituto de Biomedicina de Sevilla

Seville, Spain

07/2018

Gene expression lab

Analysis of MNase-seg data from Xrn1-mutant yeast | MNase-gPCR experiments, including MNase DNA digestion, primer desing, qPCRs and analysis.

- Supervisors: Dr. Sebastián Chávez de Diego and Dr. Gabriel Gutierrez Pozo.
- MSc degree in Molecular Genetics and Biotechnology.

07/2017

Internship student

Institut d'Investigació Biomèdica de Girona

Girona, Spain

09/2017

Unit of Diabetes, Endocrinology and Nutrition

Identification of new factors (genetic and bacterial) related to adipose tissue physiology and obesity.

01/2017 06/2017

Bachelor's thesis student

Microbial. Sistemes i aplicacions analítiques, S.L.

Girona, Spain

DNA extraction of intestinal mucosa biopsies | qPCR experiments to detect clusters and families of bacteria | NGS data analysis to quantify bacterial genders in intestinal

- Supervisor: Prof. Jesús García-Gil.
- · BSc degree in Biotecnology.

09/2016 06/2017

Present

Internship student

Microbial. Sistemes i aplicacions analítiques, S.L.

Girona, Spain

Microbiological and molecular analyses of food and water samples to search for pathogens and perform food forensics.



EDUCATION

MSc in Bioinformatics and Biostatistics

Universitat Oberta de Catalunya

Online



CONTACT

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- **D** 0000-0002-0337-1929
- **M** BioBit
- 1-page resumee

SKILLS

Omics data analysis:

Microarray, RNA-seq, ChIP-seq, ATACseq, MNase-seq

Programming/scripting:

R/Bioconductor, Bash, Python

Other:

Snakemake, Conda, Docker, Git

Experimental:

(q)PCR, electrophoresis, molecular cloning, Western blot, MNasedigestion, bacterial/yeast culture

Languages:

Catalan (Native), Spanish (Native), English (IELTS 7.5 - C1), Italian (Basic) 2017 | 2018

MSc in Molecular Genetics and Biotechnology

Universidad de Sevilla

Seville, Spain

- Specialization on Molecular Biology R&D
- Master's thesis: Influence of Xrn1 in nucleosome positioning across <u>Saccharomyces</u> <u>cerevisiae</u> genome and its effects in transcription.

2012 | 2017

BSc in Biotechnology

Universitat de Girona

♀ Girona, Spain

- Specialization in Cellular & Molecular Biotechnology.
- Bachelor's thesis: Butyrate-induced changes in the diversity of intestinal mucosaassociated microbiota in colorectal cancer patients submitted to a lateral ileostomy.



PUBLICATIONS

2020

Xrn1 influence on gene transcription results from the combination of general effects on elongating RNA pol II and gene-specific chromatin configuration

Begley V et al. RNA Biology. DOI: 10.1080/15476286.2020.1845504.

DEVELOPMENT

chromHMMviewR:

Visualize outputs from ChromHMM in R.

DPomics (ongoing):

Shiny app for omics visualization.

DNAme:

Shiny app to convert your name to a DNA sequence.

ATAC-seq snakemake (ongoing):

Snakemake pipeline for ATAC-seq data.

ORGANIZATIONS

ASBTEC:

Board member (2019 - Present) Collaborator (2018 - Present) Member (2017 - Present)

SCB:

Member (2018 - Present)

HONORS & AWARDS

Elite sportsman:

Federación Española de Remo 2015 - 2021

World Rowing U23 Champion:

BLM2x Rotterdam, Netherlands. 2016