# ADRIÀ MITJAVILA VENTURA

# Bioinformatician at *Istituto Europeo di Oncologia* | MSc

Biotechnologist living around computers, interested in data analysis to support experimental research as well as in pure (bio)computational experiments and in software/pipeline development. More on my website.



**Bioinformatician** 08/2021

Institut Josep Carreras, Vavouri's lab

Padalona, Spain

07/2019

Present

07/2021

09/2017

10/2018

09/2016

06/2017

Bioinformatician

Istituto Europeo di Oncologia, Pasini's lab

Milan, Italy

- Study of Wnt/ $\beta$ catenin signaling pathway -and others- in the context of colorectal cancer and stem cell development.
- Analysis and integration of RNA-seq, ChIP-seq and ATAC-seq data.
- Development of a Snakemake pipeline for ATAC-seq.

Master's thesis student & Research assistant

Instituto de Biomedicina de Sevilla, Gene expression

Seville, Spain

- Study of Xrn1 and Ccr4 roles in yeast nucleosome architecture and gene transcription.
- Analysis of MNase-seq data. Performance and analysis of MNase-qPCR experiments.

Internship & Bachelor's thesis student

Microbial. Sistemes i aplicacions analítiques, S.L.

Girona, Spain

- Microbiological and molecular analyses for pathogen detection and food forensics.
- Study of butyrate effects on the ileal microbiota of colectomized colorectal cancer patients.
- qPCR of intestinal biopsies to detect/quantify bacterial genders.
- Statistical analysis of high-throughput sequencing data to quantify bacteria species.

# **EDUCATION**

**MSc in Bioinformatics and Biostatistics** Universitat Oberta de Catalunya

Online

Present 2017

2018

2018

MSc in Molecular Genetics and Biotechnology

Universidad de Sevilla - Grade: 9.33/10

Seville, Spain

• Master's thesis: Influence of Xrn1 in nucleosome positioning across Saccharomyces cerevisiae genome and its effects in transcription. Grade: 9.2/10

2012 2017

2020

**BSc in Biotechnology** 

Universitat de Girona - Grade: 8.12/10

Girona, Spain

• Bachelor's thesis: Butyrate-induced changes in the diversity of intestinal mucosaassociated microbiota in colorectal cancer patients submitted to a lateral ileostomy. Grade: 9.4/10



PUBLICATIONS (D)



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.



# CONTACT

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# SKILLS

#### Omics data analysis:

Microarray, RNA-/ChIP-/ATAC-/MNase-

#### Programming/scripting:

R/Bioconductor, Python, Bash

#### Other (informatics):

R Markdown, Snakemake, Git, HPC, Conda, Docker

# **Experimental:**

(RT-)(q)PCR, primer design. electrophoresis, WB, MNasedigestion, bacterial culture

# Languages:

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

# DEVELOPMENT

chromHMMviewR **DPomics** (ongoing) ATAC-seq snakemake (ongoing) More on my GitHub profile

References available upon request. Build with pagedown, code here. Last updated on 2021-05-27.