

# 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.



## EXPERIENCE

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-seq peak callers. | Development of an ATAC-seq pipeline for Snakemake.

07/2018  
|  
10/2018

### Research Assistant

*Instituto de Biomedicina de Sevilla*

📍 Seville, Spain

#### Gene expression lab

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

09/2017  
|  
07/2018

### Master's thesis student

*Instituto de Biomedicina de Sevilla*

📍 Seville, Spain

#### Gene expression lab

Analysis of MNase-seq data from Xrn1-mutant yeast | MNase-qPCR 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  
|  
09/2017

### Internship student

*Institut d'Investigació Biomèdica de Girona*

📍 Girona, Spain

#### 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 biopsies.

- Supervisor: Prof. Jesús García-Gil.
- BSc degree in Biotechnology.

09/2016  
|  
06/2017

### 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.

## CONTACT

🏠 Girona (Spain) - Milan (Italy)  
@ [adria.mitjavila94@gmail.com](mailto:adria.mitjavila94@gmail.com)  
🌐 [amitjavilaventura.github.io](https://amitjavilaventura.github.io)  
🔗 [/amitjavilaventura](https://github.com/amitjavilaventura)  
🆔 0000-0002-0337-1929  
🔗 BioBit

## SKILLS

### Omics data analysis:

Microarray  
RNA-seq  
ChIP-seq  
ATAC-seq  
MNase-seq

### Programming/scripting:

R/Bioconductor  
Bash  
Python

### Other:

Snakemake  
Conda  
Docker  
Git

### Experimental:

DNA extraction...  
(q)PCR  
Electrophoresis  
Western blot  
MNase-digestion  
Bacterial/yeast culture

### Languages:

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



## EDUCATION

2018  
|  
Present

### MSc in Bioinformatics and Biostatistics

Universitat Oberta de Catalunya

📍 Online

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 Saccharomyces cerevisiae 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 mucosa-associated 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](https://doi.org/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.

## ADDITIONAL EDUCATION

### IELTS Academic Exam

### DataCamp:

Introduction to Git  
 Introduction to Bash scripting  
 Intermediate Python  
[Data visualization with R](#) (*ongoing*)  
[Tidyverse fundamentals](#) (*ongoing*)  
[Machine learning fundamentals in R](#) (*ongoing*)  
[Analyzing genomic data in R](#) (*ongoing*)

## 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