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-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.
- \bullet 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 Biotecnology.

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
- amitjavilaventura.github.io
- /amitjavilaventura
- **(i)** 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 MSc in Bioinformatics and Biostatistics 2018 Universitat Oberta de Catalunya Present 2017 2018

MSc in Molecular Genetics and Biotechnology

Universidad de Sevilla

Seville, Spain

Online

- 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 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.

ADDITIONAL EDUCATION

IELTS Academic Exam

DataCamp:

Introduction to Git Introduction to Bash scripting Intermediate Python Data visualization with R (ongoing) Tidyverse fundamentals 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