

# Jérémy Martin

## Data Scientist for Life Science

MSc, Bioinformatics and System Biology

Social: [LinkedIn](#) / [Github](#) / [Web](#) / [ResearchGate](#)

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Driver Licence: A | B



### Bio/informatics Skills

- Linux
- R / RStudio
- Python
- Transcriptomics
- Hi-C
- NGS
- Alphafold
- Snakemake
- HPC-SLURM
- Git

### Clinical Biology Skills

- Microbiology
- Biochemistry
- Molecular Biology
- Immunology
- Parasitology
- Haematology
- Haemostasis

### Languages

- French (native)
- English (B2)
- Spanish (C1)

### Hobbies

- High-Tech (hardware)
- Travel (Europe, South America)
- Moto

### References

- Dr Gaudenzio, Nicolas
- Dr Basso, Lilian

(Contact upon request)

### Works Experiences in Bioinformatics

Since 07/2021

#### Bioinformatics Engineer

**INSERM – Toulouse Institute for Infectious and Inflammatory Disease.**

**Temporary Position at N. GAUDENZIO research lab.**

- Analyses of data generated by the lab.
- Summarise and presentation of results.
- Development of pipeline to automate analysis.
- Proof of concept applying machine learning on transcriptomics data.
- Supervision of MSc Bioinformatics interns.
- Formation of PhD student to scRNA seq analysis.
- Formation of biologists at R.
- Peptidomics and proteomics analysis.
- Integration of multiomics data.
- Professional watches.

#### MSc internship

**INSERM – Toulouse Institute for Infectious and Inflammatory Disease.**

**6-Months internship at N. GAUDENZIO research lab.**

- Development of an analysis pipeline for scRNA seq analysis.
- Analysis of scRNA seq data from sensory neurons and immune cells.
- Neuro-immune interactome study.

#### MSc internship

**INRAE – GenPhySe**

**2-Months internship with T. FARRAUT**

- Development of a pipeline for Hi-C analysis
- Obtention of a chromosomic map of a region of interest
- Wrap the pipeline into a Snakemake workflow for reproducibility

01/2021 –  
06/2021

07/2020 –  
09/2020

### Works Experiences in Clinical Biology

02/2016 –  
09/2017

#### Polyvalent technician

**Labosud – INOVIE**

**Permanent position as polyvalent technician.**

- Attached to the 'HEMATO' division: haematology, immune-haematology, haemostasis.
- Formation of the new arrivals on the pole HEMATO.
- Realization of in-vitro diagnostics (IVD) test in biochemistry, microbiology, immune-/haematology and haemostasis.
- Realization of 'small manual techniques' in immunology and serology.

#### Clinical technician

**IUCT Oncopole, EFS, Cedibio, Proxilab31, Biofusion**

**Several temporary and fixed-term positions**

- Blood sampling in clinic and on peripheral sites.
- Multi-skilled technician on technical platform.
- Handling of labile blood products and shipping to the French Laboratory of Fractionation and Biotechnology (LFB) for the preparation of blood-derived drugs.
- Standard management of histological samples.
- Manual and automatized immunohistochemistry
- Specialized in pathological cytology

07/2014 –  
02/2016

## Education

2019 – 2021

### **MSc Bioinformatics and System Biology**

#### **Université Paul Sabatier**

Theoretical and practical training allowing the acquisition of multidisciplinary skills in Biology, Computer Science, Bioanalysis, Mathematics and Data management necessary to meet the needs in this field.

Introduction to Machine Learning applied to biology and to modeling of system biology (acquisition of the competence mechanism in *S. pneumoniae*).

Tutored Project: benchmarking of read counting tools and characterization of a difference in the calculation of the sequencing depth.

2017 – 2019

### **BSc in Biology, Biochemistry, Microbiology and Molecular Biology**

#### **Université Paul Sabatier**

Theoretical and practical training in the techniques of Biochemistry, Molecular Biology and Microbiology applied in the field of Biotechnology.

Choice of optional courses: plant improvement, professional project, advanced immunology and project management.

2012 – 2014

### **Advanced Technician's Certificate in Medical Biology Analysis**

#### **Lycée Dr Lacroix**

Theoretical and practical training in Biochemistry, Molecular Biology, Microbiology, Immunology and Haematology. Sensibilisation of IVD techniques. Acquisition of laboratory techniques, awareness of quality, GBEA and ISO 15189.

## Publications:

[Under-review at Science Advanced] **3-D Deconvolution of human skin immune architecture with Multiplex Annotated Tissue Imaging System (MANTIS)**. Preprint available: BioRxiv; DOI:10.1101/2023.01.13.523748. Manon Scholaert, Raissa Houmadi, **Jérémy Martin**, Nadine Serhan, Marie Tauber, Emilie Braun, Lilian Basso, Eric Merle, Pascal Descargues, Manuelle Viguier, Cécile Lesort, Benoît Chaput, Jean Kanitakis, Denis Jullien, Cristina Bulai Livideanu, Laurence Lamant, Emeline Pagès, Nicolas Gaudenzio.

[Under-review at Immunity] **Single-cell landscape of mast cell populations across organs reveals insights into cell diversity in mice and humans**. Not available. Marie Tauber, Lilian Basso, **Jérémy Martin**, Luciana Bostan, Marlene Magalhaes Pinto, Guilhem Thierry, Raissa Houmadi, Nadine Serhan, Alexia Lose, Camille Bleriot, Jasper Kamphuis, Mirjana Grujic, Lena Kjellen, Gunnar Pejler, Carle Paul, Xinzhong Dong, Stephen Galli, Laurent Reber, Florent Ginhoux, Marc Bajenoff, Rebecca Gentek, Nicolas Gaudenzio.

**The neuronal tyrosine kinase receptor ligand ALKAL2 mediates persistent pain**. *JCI* 2022, Jun 15;132(12). Manon Defaye, Mircea C Iftinca, Vinicius M Gadotti, Lilian Basso, Nasser S Abdullah, Méliissa Cuména, Francina Agosti, Ahmed Hassan, Robyn Flynn, **Jérémy Martin**, Vanessa Soubeyre, Gaetan Poulen, Nicolas Lonjon, Florence Vachiere-Lahaye, Luc Bauchet, Pierre Francois Mery, Emmanuel Bourinet, Gerald W Zamponi, Christophe Altier.

## Presentations:

**Single-cell landscape of mast cell populations across organs reveals insights into cell diversity**. Genotoul Bioinfo Biostat Day. Talk presentation. INRAe, Auzeville (31) – 01/12/2022.

**Consideration of data heterogeneity and automation of single-cell RNA seq processing**. Scientific Day by Toulouse Genopole. Talk presentation. CBI, Toulouse (31) – 11/07/2022.