



Pierre BERTRAND

Bioinformatician

Master 2 | Bio-informatique Moléculaire :
Analyse et modélisation | Lyon 1

CONTACT DETAILS



06-56-89-23-20



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69100 VILLEURBANNE

COMPUTING

- C
- Bash
- Python
- R
- **Web:** PHP, CSS, HTML, JS, Flask
- **DataBase:** relational & non-relational
- **Artificial Intelligence :** basics of the automatic learning
- **High Performance Computing :** Slurm

Tools

- **Git:** Versionning
- **Galaxy/Nextflow:** Pipelines creation (+ Nextflow Tower)
- **Rstudio:** Traitement and statistical analysis (DESEQ2)
- **R Shiny :** Interactive visualisation of data
- **BLAST:** Similarities research on databases
- **Bowtie2:** Alignements
- **DBeaver:** Databases administration
- **USEARCH & DADA2:** Microbiome analysis
- **scikit-learn :** Python packages for machine learning

BIOLOGY

- **Omics:** Genomics, Metagenomics, Transcriptomics, Proteomics
- **Molecular biology:** Functioning, interactions and subcellulaire control.
- **Sequencing :** NGS, RNAseq, ChipSeq, ATACseq
- **Structural bioinformatic:** Predictions, characterization of macromolecule structures
- **Ecology:** population genetics and conservation

LANGUAGES

- **French** (mother tongue)
- **English** (B2)
- **Spanish** (B1)
- **Ancien Greek**

PROFILE

I am a master student in bioinformatics with experience thanks to **4 professional internships**.
I am an organized and methodical person because of my personality and my background.
Also
persevering nature, I overcome difficulties in order to carry out my projects.

I am interested in bioinformatics development and data visualization for biology.
The study of our **microbiome** and the **related health issues** are, for me, a substantial interest.

SCHOOLING

MASTER, MOLECULAR BIOINFORMATICS: MODELLING AND ANALYSIS

Université Claude Bernard Lyon1 (69) | 2021 - (M2 ongoing)

LICENCE 3, BIOINFORMATICS, STATISTICS AND MODELLING

Université Claude Bernard Lyon1 (69) | 2020 - 2021

DUT BIOLOGY: BIOINFORMATIC OPTION

Université Clermont-Auvergne, Campus Simone Veil (15) | 2018 - 2020

BIOINFORMATIC INTERNSHIPS

INTERNATIONAL AGENCY

From 06/02/2023 to 30/06/2023
(ongoing)

FOR RESEARCH ON CANCER - LYON (69)

Reuse of the previous pipeline (WSEARCH) to analyze microbiome data in relation to cervical lesions. Improvement of the pipeline with graphical interfaces. Statistical analyses.

INTERNATIONAL AGENCY

From 25/04/2022 to 15/07/2022

FOR RESEARCH ON CANCER - LYON (69)

Benchmarking of several microbiome analysis tools + implementation of pipelines (WSEARCH). Statistical analysis and visualization of results in relation to colorectal cancer.
Presentation of the project to international teams (Lebanon and USA).

GENES DIFFUSION - LILLE (59)

From 31/05/2021 to 02/07/2021

Study of the interaction of the intestinal microbiota with various characteristics of the host organism.

INRAE GAFL - AVIGNON (84)

From 22/04/2020 to 31/07/2020

Genome assembly and annotation of Aphis gossypii (melon aphid) + poster presentation at JOBIM 2020

SEASONAL JOBS

BIOCOOP SHOP - BOURG-EN-BRESSE (01)

Summers 2019 and 2021

Multi-skilled employee: cashier, shelving, cutting, weighing, customer advice.

INTERESTS



Nature:
ornithology,
environment



Gaming:
Video games



Programmation:
Needleman & Wunch
algorithm



Sports:
Swimming, Crossfit,
**Manager of the
university gym (1
year)**