Fabrice Lacout

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Clean driving license



MOLECULAR / CELLULAR RESEARCH ASSOCIATE

9 years of experience in innate and adaptive immunity

PROFESSIONAL EXPERIENCE

Oct 2013-Now San Diego, USA

RESEARCH ASSOCIATE - Invivogen

- KO/Kin cell lines development (with CRISPR/Cas9 technology).
- Reporter cell lines design (for assays in the innate immunity field).
- Antibody neutralizing cell lines development.
- Antibodies cloning and ELISA development. Isotype class switching.
- Genotyping of blood samples, associate with a study on pancreatic cancer.
- Setting up structure of a small molecular biology lab.
- Protein purification.
- KIN/KO and Antibody plasmid design.

Feb 2007- Sep 2013 Toulouse, FRANCE

RESEARCH ASSISTANT - Cayla Invivogen

- Sequence research of immunity involved genes, such as immunoglobulins or TLRs.
- Plasmid design and cloning: Gene expression plasmids, siRNA Knock-down plasmid, promoter bearing plasmid, antibody cloning plasmid...
- Random Mutagenesis of reporting gene, by degenerative PCR.
- Homologous recombination on *Escherichia coli* for gene knock out or gene input.
- KO Cell line design.
- Antibody developing from hybridomas.
- -Study of the Dystrophin gene production on a non-CpG plasmid.

Apr 2006 - Sep 2006 Auzeville, FRANCE

INTERNSHIP - Plant-Microbe Interactions Laboratory (LIPM) - CNRS/INRA

- Analysis of a transcription factor from *Arabidopsis Thaliana*.
- Analysis of DNA microarray results.
- Validation of transcription factor impact (activation or repression) by Real Time quantitative PCR.
- Validation of protein production by western blot.
- Phenotype observations of genetically modified plants.

EDUCATION

2005-2006

Toulouse, FRANCE

FIRST SCHOOL YEAR OF THE MASTER OF SCIENCE - University Paul Sabatier.

Subjects studied: Molecular biology, Biochemistry, Genetics.

2002-2005

Toulouse, FRANCE

BACHELOR OF SCIENCE - University Paul Sabatier.

Subjects studied: Molecular biology, Biochemistry, Microbiology, Cell biology, Genetics.

2016

Online courses

PYTHON FOR EVERYBODY, A 5-COURSE SPECIALIZATION - By University of Michigan on

Coursera.

Specialization certificate earned on October 26, 2016.

Courses: Introduction to Python programming language. Python data structures. Using Python to access web data. Using databases with Python. Retrieving, processing, and visualizing data with Python.

SKILLS

BIOLOGY Gene editing.

DNA, RNA extraction.

qRT-PCR, PCR and diverse in-vitro enzymatic reactions.

Protein analysis: Western Blot, Elisa.

Bioassay.

Transfection and cell maintenance.

Basic knowledge in biochemistry, and microbiology.

COMPUTER

Bioinformatics tools: GCK software (for nucleic acid sequences, similar to Vector NTI). Sequences research and analysis: knowledge of main websites and databases (NCBI,

EMBL, Uniprot, Ensembl, IMGT).

Sequence Alignment, primer design, CRISPR guide design.

Database (Filemaker, Sqlite). Word, Excel, Power Point Python programing language.

LANGUAGES

English: fluent. French: fluent. Spanish: beginner.

INTERESTS

HOBBIES Travel, fly fishing, popular science.

Backpacking, Badminton, Surfing. **SPORT**

REFERENCES

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