





# BIOCHEMIST

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## Scientific Experience

-  **2015-2016**  
(12 months) **Research Assistant**, Jacobs University (Biophysics Group): Bremen, Germany  
Thematic axis: Antibiotic resistance (IMI ND4BB Translocation project)  
Cloning, expression and purification of outer membrane proteins in Gram negative bacteria (*E. coli* and *P.aeruginosa*) for the electrophysiologists of the team.  
Isolation and characterization of a new porin from mycobacteria for a DNA sequencing technology (collaboration with Oxford Nanopore Technologies).
-  **2013**  
(6 months) **Engineer Assistant**, Calixar: Lyon, France  
Thematic axis: Improving the process of purification of the membrane proteins of influenza A virus H1N1 (patent).  
Expression and purification of Native and functional influenza A virus Matrix 2 proton selective ion channel (submitted to JBC for publication)
-  **2011**  
(8 months) **Biochemistry engineer**, R&D Pharmaceutical System, Becton Dickinson: Grenoble, France  
Management of a project in collaboration with 3 French laboratories.  
Thematic axis: influence of the composition of containers (syringes) on the stability of therapeutic proteins (IgG and monoclonal antibody). Work in GMP environment.
-  **2009-2010**  
(10 months) **Research assistant**, Institute for Structural Biology (Pneumococcus Group): Grenoble  
Thematic axis: Host-pathogen interaction (*Streptococcus pneumoniae*).  
Project on the interaction between pilus adhesin RrgA of *S. pneumoniae* and human lung epithelial cells.

## Education

- 2010: **Msc. of Structural and Functional Biochemistry**, University Claude Bernard, Lyon
- 2008: **Bsc. double degree in Biology and Chemistry**, University Joseph Fourier, Grenoble
- 2005: **Preparatory class for engineering school**, Valentin school, Valence
- 2004: **BTS (equivalent of DEC) in Biochemistry**, Louise Michel school, Grenoble

## Skills

- **Protein study:** expression and purification of soluble and membrane proteins, SDS-PAGE, western blot, DLS, MFI, ELISA test.
- **Chromatography:** HPLC, FPLC, SEC, IEC, IMAC, TLC, IAC.
- **Microbiology:** bacterial culture. Strain Identification.
- **Molecular Biology:** plasmid cloning, electrophoresis, PCR, site directed mutagenesis.
- **Virology:** manipulation of influenza A virus proteins.
- **Cell Culture:** eukaryotic cell culture (HeLa cells, lung A549 cells), immunofluorescence localization of the proteins.
- **Softwares:** Microsoft Office, Pymol, ExPaSy.
- **Languages:** French (native), English (scientific: working in English since 1 year), German (notions).

## Additional activities and Hobbies

- 2005-2015: Life guard at swimming pool (National life guard certificate).
- 2007/2008 and 2015: Educator in the youth sector (school holidays and preschool 6-17 yrs)
- 2010/2015: Interim missions (inventory, distribution of cultural newspaper), work in an organic farm
- Cooking.
- Sports: horse riding (level 7), swimming (competition), skiing, fishing, hiking.