Personal Informations

Name

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Summary

Master's degree in molecular biology, discussing a thesis in biophysical science.

Knowledge in biomolecular techniques (cloning strategies, protein expression and purification), bioinformatics and structural analysis (SAXS, SANS, CD, FT-IR).

Ongoing project

Expression and purification of recombinant snake toxin Crotamine, and structural analysis with SAXS of the pore caused by the interaction between the toxin and Large Unilamellar Vescicles (LUVs).

Education and work experiences

4/11/2019

Start PhD at ILL, Soft Condensed Matter: A neutron reflectometry study of the interaction of glycerophospholipids and the mitochondria-integral phospholipase iPLA2-gamma

01/03/2019 to 30/10/2019

Internship at New York Marche Structural Biology Center (NYMaSBiC) and Molecular Biophysics in Ancona, for production and structural studies of Crotamine

15/02/2019

Master's degree in Molecular biology with 110/110 cum laude at Polytechnic University of Marche (UNIVPM) Ancona, focused on production and SAXS investigations of Crotamine in solution and its interactions with large unilamellar vescicles

03/2018-04/2018

Cristallography Institute CNR, Trieste (TS). Recombinant protein production, protein crystallization and structural analysis with X-ray crystallography.

15/10/2016

Bachelor degree in Biological Science Graduation with 102/110 at UNIVPM, Ancona, with a thesis: Bovine acid glycoprotein, a thermostable version respect human one, analyze with FT-IR

06/2016-07/2016

"Ospedali Riuniti Marche Nord" Hospital. Nucleic Acid amplification, quantitative and qualitative analysis in molecular biology

06/07/2013

High School: Agricultural Science

Research Interests and Techniques

Protein production, structural and energetic analysis.

Cloning, bacterial cell culture, protein expression and purification, Gel Electrophoresis, WB, Chromatography (IMAC, IEX, SEC), FPLC, HPLC, UV-Vis spectrophotometer, FT-IR, Mass Spectrometry, CD, ITC. SAXS/SANS techniques.

Experiences in X-ray and neutrons measurements: BM29 BIO-SAXS Grenoble, ID02 SAXS/WAXS Grenoble, Neutron Back Scattering ILL Grenoble, XRD1 X-ray Crystallography, Elettra.

Schools and conferences

09/2018

Società Italiana Biofisica Pura e Applicata (SIBPA) congress, 10-13 september with poster resentation: Production and SAXS investigations of Crotamine in solution and its interactions with LUVs;

"Giornate Didattiche" for neutrons and neutron scattering

Training Courses

ECDL Certification, Core Level;

Technology Skills

Fortran f90, C++ (base knowledge), Microsoft Office pack, Igor, Gnuplot, Suite Adobe, Autodock, Pymol/Chimera, Genfit.