

Short text describing your project

Master « Sciences, Technologie, Sante » Mention « In Silico Drug Design »

Second Year

OFFER AN INTERNSHIP **Academic Year 2014 – 2015**

Send to Mrs Pr Camproux: anne-claude.camproux@univ-paris-diderot.fr



Name of the head of laboratory or company: Prof. Maurizio Sironi Adress: Via Golgi 19, 20133, Milano E-mail: Maurizio.sironi@unimi.it Name of training supervisor: Stefano Pieraccini Phone number: +390250314248 Fax: +390250314300 E-mail: Stefano.pieraccini@unimi.it Professional Specialty training: Research a few key words to describe the subject of training: protein-protein interactions, free energy calculation, molecular docking Title of internship: Design of peptides and small molecules targeting protein-protein interactions this subject is a first step towards a thesis: No

Protein-protein interactions (PPIs) are an emerging pharmacological target. The design of small, drug like molecules targeting PPIs is a complex task which can rely on standard drug design techniques only to a limited extent, requiring different, creative approaches. In our research group we have studied the problem of PPIs modulation with peptides and small molecules in reference to the antitumor target tubulin and the antibacterial target FtsZ. We are currently moving our attention to different targets in the antitumor and antimicrobial field. The student who choses our lab for his/her internship will learn how to use molecular dynamics simulations, free energy computation methods and molecular docking techniques in the design process of PPIs modulators, and will work on some steps of the process on a specific target.

Send by e-mail: laurence.muller-wurtz@univ-naris-diderot.fr