

Master « Sciences, Technologie, Santé »
Mention « In Silico Drug Design »
Second Year



OFFER AN INTERNSHIP
Academic Year 2012 – 2013

Send to Mrs Pr Camproux :

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Name of the head of laboratory or company: Prof. T. Hackeng

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Name of training supervisor: Gerry Nicolaes & Kanin Wichapong

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Specialty training : Research Professional

a few key words to describe the subject of training : structural bioinformatics – virtual screening - hit identification - lead optimization - direct binding analysis

Title of internship: Targetting of Annexin A5 through structure-based virtual ligand screening.

this subject is a first step towards a thesis: Yes - No

Short texte describing your project

Annexin A5, discovered in our laboratory as vascular anticoagulant protein (VAC), is a protein that is present in human blood and that has many functions. Though discovered as an anticoagulant protein, currently Annexin A5 is believed to be mainly important for cellular processes such as apoptosis and necrosis. We are using biotechnological techniques to use Annexin in theragnositcs of cardiovascular disease as well as in novel cancer treatments. Since endogenous Annexin has functions in cell-signalling, this also makes it an attractive target for novel pharmacological therapies, which are facilitated by a number of high resolution crystal strucures as well as the detailed mechanistical information on the functions of the protein.

In this project we aim to discover and optimize small molecules or peptides that inhibit the cellular functions of Annexin A5 through a structural bioinformatics approach.

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