

PROPOSITION STAGE M2 ISDD

Master Training at the Cardiovascular research Institute Maastricht, the Netherlands

At the Biochemistry department of the Cardiovascular research Institute Maastricht (CARIM), part of the Maastricht University there is an internship vacancy for a motivated master student in in Silico Drug Design.

The 3D structure-function group in the department is lead by Dr. Gerry Nicolaes and focuses on the understanding and exploitation of structure-function relationships of proteins that are relevant to cardiovascular disease.

Virtual ligand screens are being performed to target various proteins, such as to gain more information on basic mechanisms involved in protein-protein or protein-membrane binding and furthermore are hits being developed into potential new drugs to be used in the treatment of cardiovascular disease. This work is done both within the in silico, as well as in the « wet biochemistry » environment, where structural knowledge is being combined and verified by use of classical biochemistry, recombinant DNA techniques including protein expression and purification and surface plasmon resonance (Biacore) and fluorescence microscopy. We are directly affiliated to the Maastricht University Medical Center and perform (mouse) in vivo experiments whenever this is needed.

A student could work on the targeting of activated protein C, streptokinase, as well as on PPAR's, all proteins being involved in heart disease.

More detailed info on potential projects is available on request via e-mail : g.nicolaes@maastrichtuniversity.nl

You will find some general information on our group via our homepage at: <http://www.unimaas.nl/3dstructure-function>

Maastricht has a reputation of being the most Burgundic city in the Netherlands, with a very internationally orientated university that reflects the « euregio » in which Maastricht is situated with both Germany (Aachen) and Belgium (Liege) within a 25 km distance. Maastricht has a rich student life and has excellent connection to France via train (Thalys) or by car.