2014 Summer Internship at F. Hoffmann–La Roche, Ltd., Basel, Switzerland

Research Project: In Silico Disease Modeling in Clinical Pharmacology

The Clinical Pharmacology Department of F. Hoffmann–La Roche, Ltd., Basel is offering a 3-Month Summer Internship in In Silico Disease Modeling from June 2- August 29, 2014.

A disease model is a conceptual representation of the relevant organs, tissues, cells and/or molecules and the processes by which they interact to produce the symptoms, signs and measurable outcomes of a disease and its progression over time. (It may also include the response to pharmacotherapy, i.e. a drug-disease model.) When the parts and processes in the model are described using mathematical equations and solved on a computer, it is called an “In Silico disease model”.

The foreseen project will be focused on developing an In Silico Disease Model of Age-Related Macular Degeneration (AMD), the leading cause of blindness in older adults. The intern will participate in a cross functional group of modelers and clinical pharmacologists and will be supervised by Disease Modeling Scientists from the Clinical Pharmacology department.

Intern applicants should have the following qualifications:

- Minimum of 3-years of undergraduate study in chemical engineering, biological engineering, mathematics, biophysics and/or pharmaceutical science
- Competence in computer programming using MatLab or other In Silico modeling platforms
- Some knowledge of clinical pharmacology and relevant biological and medical concepts
- Previous summer intern experience in academic or corporate setting is desirable
- Fluency in English is required, German and/or French are optional.

Interested candidates should contact:

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