



**Post-doctoral research position
("Experienced researcher still in his/her early career") in
Molecular modeling of nanoparticles for drug delivery**

A post-doctoral fellowship is available for a period of two years in the department Structure, Design & Informatics at SANOFI R&D, Vitry-sur-Seine, France, as part of the Marie Curie Initial Training Network NANODRUG (<http://www.nanodrug.qmul.ac.uk/>). The NANODRUG Network is constituted by 13 academic or industrial research teams from 7 European countries or the USA. It provides an exceptional training platform for young scientists to acquire interdisciplinary competencies in the field of nanomedicine and more specifically in the discovery and development of nanoparticles for drug delivery. The successful candidate will attend yearly summer schools, participate in network meetings, and complete research placements in other NANODRUG teams for at least 2 weeks per year.

The project of this fellowship is dedicated to molecular modeling studies on the interactions of drugs with nanoparticles used as carriers and of drug-loaded nanoparticles with the pharmacologic compartments during drug delivery, in particular in dermatologic applications. Thus, molecular modeling will be based on data characterizing physico-chemical properties of and drug release from nanoparticles. Methods will focus on the application of coarse-grain molecular dynamics simulations. The ultimate objective is to develop approaches and methods for prediction and design of optimal polymer/compound or liposome/compound combinations in the development of novel drugs.

Candidates must hold a PhD degree in Material Sciences, Chemistry or related fields. They must have experience documented by peer-refereed publications in the application of computer simulations of large (bio)polymeric systems, ideally by coarse-grain methods. They must have excellent skills in programming/scripting and a strong background in (bio)physics. Outstanding commitment to successfully perform research and meet the project objectives is required as well as capacities in team work and interdisciplinary communication. Mastering scientific English, both written and spoken, is essential; knowledge of French is beneficial although not required.

The starting date of the fellowship is September/October 2012. The position is available for a fixed term of 24 months. The appointment will be on a fixed gross salary in the range of 38000 to 45000 Euros/year for 37.5 working hours/week including a single or married person's mobility allowance as appropriate. Social security, vacation days etc. apply according to French standards.

As this fellowship is financed via a Marie Curie Initial Training Network eligibility rules apply. The applicants may not be nationals of the state in which the project and research is to be carried out, in this case France. Also, applicants may not have lived, worked or studied in France for more than 12 months during the 3 years immediately prior to the time of application. "Experienced researcher still in his/her early career" must, at the time of recruitment by the host organization, be in possession of a doctoral degree AND have a maximum of five years of full time research experience from the date in which the undergraduate degree was obtained. Please, note that any time of unemployment should be clearly identifiable in the CV. This eligibility criterion is calculated at the date of appointment.

Interested candidates are asked to carefully read the job description and eligibility criteria.

If you meet the requirements and wish to contribute to this project we welcome your application before August 16, 2012. Please, address Curriculum Vitae and letter of motivation to Anke Steinmetz, PhD at SANOFI / LGCR / SDI, Centre de Recherche Vitry-Alfortville, 13, quai Jules Guesde, 94403 Vitry-sur-Seine Cedex, France; e-mail: anke.steinmetz@sanofi.com. In the application, please, include name and contact details of three scientific referees and a statement detailing how you meet the Marie Curie eligibility rules.

Shortlisted candidates will have to attend an interview in Vitry-sur-Seine/France (close to Paris).

As we are not able to reply to all of the applicants who are not shortlisted, we take the opportunity here to thank all candidates for their interest and application.