

A two-year Post Doctoral position is vacant as from December 1, 2017, at University of Lorraine, Nancy, France.

The framework of this job is defined by the Smartnanotox project (<http://www.smartnanotox.eu/>).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 686098. Our participation in the project is to assess the toxicity of nanomaterials *in vitro* by transcriptome studies. We address main respiratory toxicity pathways for a representative set of nanomaterials, in identifying the molecular initiating events, the key events and the adverse outcome of these pathways. These data will be related to the physico-chemical properties of the nanoparticles and will be of help to modelize bio/nano interrelationship by *in silico* modelling.

The successful candidate will develop co-culture on the air-lung interface (ALI) system developed by Vitrocell® to assess the toxicity of relevant nanomaterials for the consortium.

The candidate will be involved in intensive interdisciplinary collaborations with the 10 partners of the project.

The housing team is moving for a very attractive environment at UMR-CNRS 7198, Institut Jean Lamour, one of the most famous French and European labs on material sciences.

Educational qualifications

The applicant should have a completed PhD in cell biology, or toxicology.

We are seeking candidates with a background in cell biology. Favored practical skills involve co-culture, cell toxicity assays. Air-liquid interface cell exposure system knowledge is an asset. An excellent English language proficiency is mandatory.

Contact Dr Olivier Joubert olivier.joubert@univ-lorraine.fr

Main publications of the group:

Elaboration of Sterically Stabilized Liposomes for S-Nitrosoglutathione Targeting to Macrophages.

Diab R, Virriat AS, Ronzani C, Fontanay S, Grandemange S, Elaissari A, Foliguet B, Maincent P, Leroy P, Duvaj RE, Rihn BH, Joubert O.

J Biomed Nanotechnol. 2016 Jan;12(1):217-30.

Comment on "Protein Corona Fingerprinting Predicts the Cellular Interaction of Gold and Silver Nanoparticles".

Rihn BH, Joubert O.

ACS Nano. 2015 Jun 23;9(6):5634-5. doi: 10.1021/acsnano.5b00459.

Human monocyte response to S-nitrosoglutathione-loaded nanoparticles: uptake, viability, and transcriptome.

Safar R, Ronzani C, Diab R, Chevrier J, Bensoussan D, Grandemange S, Le Faou A, Rihn BH, Joubert O.

Mol Pharm. 2015 Feb 2;12(2):554-61. doi: 10.1021/mp5006382. Epub 2015 Jan 14.

Drug delivery by polymeric nanoparticles induces autophagy in macrophages.

Eidi H, Joubert O, Némós C, Grandemange S, Mograbi B, Foliguet B, Tournebize J, Maincent P, Le Faou A, Aboukhamis I, Rihn BH.

Int J Pharm. 2012 Jan 17;422(1-2):495-503. doi: 10.1016/j.ijpharm.2011.11.020. Epub 2011 Nov 22.