

## **Postdoctoral Position in mesenchymal stem cells (MSC) engineering/ biology**

A 2 years postdoctoral position in the frame of an Interreg V project (European community funding) is available in the *Cell Engineering, Cellular Immunotherapy and Translational approaches* team, headed by Pr D. Bensoussan and Pr M.T. Rubio at *IMoPA Laboratory* (CNRS/Lorraine University Unit), Vandoeuvre-lès-Nancy (France).

The IMPROVE-STEM project (Interreg project developing new bioMaterials for **PRO**liferation and in **Vitro** Expansion of **STEM** cells) aims to develop an integrated set of tools necessary for the in vitro amplification of mesenchymal stem cells to promote their application in cell therapy. These tools will rely on the adoption of microcarriers whose surface will be optimized to ensure a control of the adhesion/detachment of the cells, on the design of a bioreactor whose operating conditions will be adapted for the culture of adherent cells and on the development of methods adapted to quality control of the cells. This project involves many universities (Liege University, Lorraine University, Kaiserslautern University) as well as research centers (LIST, INM, CNRS). The multidisciplinary consortium involved brings together advanced skills in materials science, bioprocess engineering and stem cell biology that forms the basis of a Platform of Excellence in the culture of mesenchymal stem cells.

The successful candidate will investigate the effect of culture conditions on Wharton Jelly mesenchymal stem cells (WJ-MSC) quality with focus on cell senescence and immunomodulatory/anti-apoptotic properties. The work involves in vitro cell culture, flow cytometry, molecular studies of gene and protein expression, development of non-invasive methods to follow senescence development during culture. Prior research experience in stem cell culture, cell biology, gene and protein expression and flow cytometry are highly desired.

Applicants must have a Ph.D. in Cell Biology/Biomedical Science or related sciences. Candidates should have excellent communication and organizational skills; be highly motivated and passionate about research; and have strong documentation, oral and interpersonal skills. The candidate will be able to communicate effectively with scientists from various backgrounds (chemists, physicists, material scientists and engineers) and will be motivated to work in an interdisciplinary team.

**Salary:** €35,000 - €40,000 per annum (gross salary)

**Start date:** Position is available from January 2017

**To Apply:** Applications (covering letter, CV, and the contact details of three referees) should be sent, via e-mail to Natalia de Isla (Natalia.De-Isla@univ-lorraine.fr)

**Closing date for receipt of applications is 12.00 pm on Monday 11<sup>th</sup> December 2017.**