**Post Doctorant /Engineer Role of p53 isoforms in cancer cell invasion of colorectal cancer**

**Title : Post Doctorant /Engineer in Biochemistry and/or Cell Biology in vitro**

**Missions**

A funded postdoctoral/Engineer position starting early 2020 is available in the ‘Dynamics of cancer cell invasion’ group supervised by Pierre Roux within Centre de Recherche en Biologie cellulaire de Montpellier (CRBM, <http://www.crbm.cnrs.fr>), to study the mechanical and migratory properties of tumour cells.

The team investigates the cellular invasion mechanisms associated with the defects of the p53 tumor suppressor during tumor progression. The development program is part of the field of targeted therapy associated with a biomarker in oncology.

**Activities**

The main objective of the project is to decipher the mechanisms p53 isoforms control in inducing cancer cell invasion through the identification of partners and targets using high-throughput analysis.

**Competences**

We are looking for a highly motivated scientist with validated experience in cancer cell biology. Training in cell culture, biochemistry and molecular cell biology, as well as in transcriptomic analysis is necessary. Experience or background in cancer cells and invasion assays would be useful. Applications from candidates with a strong track-record of publications in peer-reviewed journals, a PhD in biology and a relevant postdoctoral experience will be considered. A high personal motivation to develop a challenging project is required. The position is funded by a 26 months.

* PhD in cancer-research applicable field (e.g. molecular biology, cell biology)
* successful publication record
* experience with high throughput analysis, cell biology and cellular models of cancer

.**Context**

p53 is the most famous cancer gene, however there remain many enigmas concerning the correlation of its expression with cancer and much of the reason for these enigmas is the natural existence of multiple alternatively spliced transcripts from this gene. The team recently showed that one alternatively spliced isoform of p53, Δ133p53ß, promotes cancer stem cell potential, cell invasion, Epithelial-to-Mesenchymal Transition and metastasis, independently of p53 mutation status. At this point, we validated this metastasis specific isoform as a biomarker that can predict patients with shorter disease-free survival in breast cancers and rectal tumors. However how invasive cancer cells generate invasive p53 isoforms and what are the mechanisms these invasive p53 isoforms control to promote cancer invasion are still unclear.

The team is housed at the Centre for research in Cell Biology in Montpellier (CRBM; http://www.crbm.cnrs.fr).