

## Research Engineer (IR) position in CRISPR screening applications Centre d'Immunologie de Marseille Luminy (Marseille, France)

A research engineer (IR) position, with salary funded for 2 years by the Canceropôle PACA, is immediately available at the Centre d'Immunologie de Marseille Luminy (CIML, <http://www.ciml.univ-mrs.fr>) to develop CRISPR-based genetic screens dedicated to cancer biology. The successful applicant will be hosted on the CIML genomic platform under the scientific supervision of Sandrine Roulland (Team leader of the Genomic Instability and Human hemopathies lab). CRISPR/Cas9 genome-wide screens are particularly valuable tools to manipulate and interrogate simultaneously the function of virtually any coding or non-coding genes in the genome of mammal cells. Applied to cancer cells and tumor-infiltrating immune cells, such approaches started to reveal new gene functions with key role for cell proliferation, survival, metastasis or drug resistance as well as clinically relevant target therapies.

### Missions:

We are seeking a self-motivated and talented scientist to built-up and develop the latest approaches in functional genomics based on CRISPR and then use these tools to provide scientific, technical and operational support to cancer researchers across the Canceropôle PACA community and abroad. This position offers a unique opportunity to be a main contributor to cutting-edge technology development in an outstanding, competitive scientific environment while being at the interface with multidisciplinary cancer research teams from leading institutes in Nice and Marseille.

The successful candidate's tasks include:

- the development of a CRISPR toolbox to deploy genome-wide genetic screens primarily *in vitro* (library design and amplification, large-scale viral production, traditional and high-throughput molecular biology techniques such as cloning, PCR and NGS library preparation, data collection)
- contributing actively to collaborative research across the Canceropôle PACA community (in house or remotely) by providing guidance in the experimental planning of CRISPR screen experiments and taking responsibilities in training duties
- the writing and dissemination of protocols and preparation of reports/ figures for presentations
- the implementation of novel screening approaches such CRISPR screens combined to single- cell RNAseq or CRISPR screens *in vivo*
- the review of the scientific literature and the incorporation of new findings and techniques into research projects

### Profile

- o PhD in Genetics, Oncology, Virology, Immunology and/or Molecular Biology or equivalent diplomas
- o Excellent technical skills in cell and molecular biology. Ideally, a background in genetic manipulation using technologies such as CRISPR, RNAi, viral transductions is desirable
- o Excitement about innovative technology development
- o Familiar with large-scale molecular biology such as Next Generation Sequencing or 'single cell'

- Strong communication skills in English (oral and written) are particularly valued
- Willingness to work independently and as a part of a team/platform necessary
- Demonstrated ability to think creatively to solve problems
- Excellent organizational and time management skills

### Offer

The position is full-time funded for two years available immediately. We are looking for a person interested in staying for at least 2 years. The salary is based on qualifications and professional experience according to INSERM rules.

Candidates should submit their application to Sandrine Roulland: [roulland@ciml.univ-mrs.fr](mailto:roulland@ciml.univ-mrs.fr) with a cover letter explaining why you would like to join our Institute and highlighting your previous experience with genetic manipulation, CV and contacts for two referees.