CRISPR®

SCREEN ACTION, AN INITIATIVE OF THE CANCEROPÔLE PROVENCE-ALPES-CÔTE D'AZUR

A CRISPR BASED GENETIC SCREENING PLATFORM
FROM DESIGN TO IMPLEMENTATION & CANDIDATE IDENTIFICATION

EXPERIMENTAL DESIGN
- Choice of CRISPR modalities (knock-out, interference, activation)
- Assistance in model generation (cell lines /primary cells , in vivo ..)
- Phenotypic readouts (cell sorting, single-cell, inter-cellular screens ...)
- Definition of tasks and timelines

THE CRISPR TOOLBOX
- Generation of cell lines stably expressing Cas9
- Pooled CRISPR library design, construction, amplification, NGS validation
- Large-scale viral library production
- Guidance in transduction/cell culture library screening
- Library preparation and sequencing

R&D
- Optimization of lentiviral delivery in target cells difficult to transduce
- Combining CRISPR with single-cell genomics
- Assay optimization for novel screen modalities

BIOINFORMATICS
- Preliminary data analysis and hit calling
- Development of computational tools for complex dataset analysis

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SANDRINE ROULLAND - CIML
B-CELL IMMUNOLOGY & LYMPHOMA ONCOGENESIS
- Loss of function/ activation & drug-modifier screens
- CRISPR knock-out screens & single cell RNA-seq

ELS VERHOEYEN - C3M
LENTIVIRAL VECTOROLOGY FOR HEMATOPOIETIC CELLS
- Novel lentiviral pseudotypes for CRISPR libraries
- Novel gene editing tools for CRISPR validation

THE ACTION LEADERS
A MULTI-SITE PLATFORM BASED IN NICE AND MARSEILLE

GENOME-WIDE CRISPR SCREENS

SINGLE CELL ANALYSIS

LENTIVIRAL VECTOR OPTIMIZATION

WET-LAB & BIOINFORMATICS

SALVATORE SPICUGLIA - TAGC
EPIGENETIC REGULATION IN NORMAL T CELLS & ONCOGENESIS
- CRISPR interference screens
- Custom libraries targeting non-coding regions
- Bioinformatic analysis

BERNARD MARI - IPCM
NON-CODING RNAS IN PATHOLOGICAL LUNG TISSUES
- CRISPR interference screens & single-cell RNA-seq
- Bioinformatic analysis

Aix Marseille université
Socialement engagée

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SCREENACTION CRISPR

For further information please contact:
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CRISPR Screen Action Access Form

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