



# DEVweCAN

UNIVERSITE DE LYON

- Université de Lyon
- Univ Lyon 1
- Centre Léon Bérard
- CNRS
- INSERM

## Cancer Development and Targeted Therapies

### DEVweCAN

Worldwide cancer cases are expected to go up 75% until 2030, reaching 93% in poor countries and representing 13,2 million people versus 7,6 million today. Borderline between cancer research and development, Labex ambition is to improve our knowledge of reactivated embryonic mechanisms during tumor progression, to discover and validate new tumor progression markers and next to identify and develop new therapeutic targets against cancer. Societal and economical impacts of the DEVweCAN health program will help UdL to become a worldwide hub in oncology in the next 10 years.



DEVweCAN

### Research Teams

#### ○ CRCL - Lyon Cancerology Research Center (UMR CNRS 5286 – INSERM 1052)

##### Tumor escape department

- ➔ Dependence Receptor, Cancer and Development team
- ➔ Escape to fail-safe programs and cellular plasticity team

#### ○ CRCL - Lyon Cancerology Research Center (UMR CNRS 5286 – INSERM 1052)

##### Immunity, Microenvironment, Virus Department

- ➔ Therapeutic targeting of the tumor and of its immune environment team
- ➔ TGFbeta and immune evasion team
- ➔ Pathogenesis of Hepatitis B and C infections and new anti-viral strategies team

#### ○ SBRI - Stem-cells and Brain Institute (INSERM U 846)

- ➔ Embryonic stem (ES) cells team: Self-renewal and Early Commitment
- ➔ Stem cells, Cortical Development and Repair team

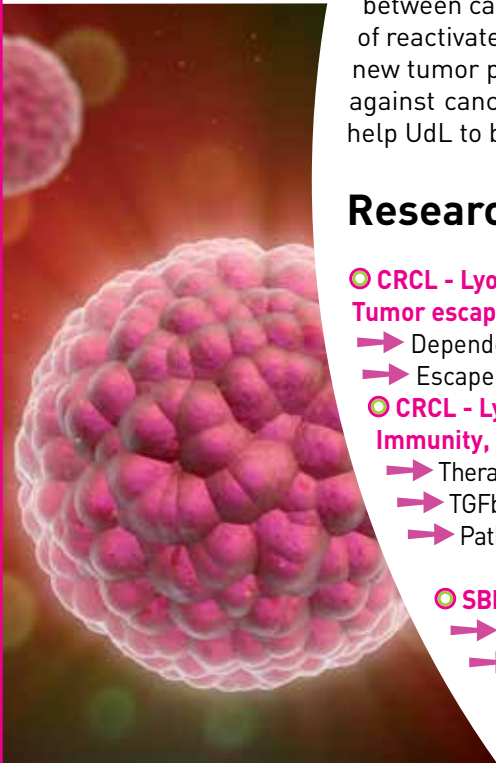
#### ○ CGphiMC - Genetics and Cellular and Molecular Physiology Center (UMR CNRS 5534)

- ➔ Viral Silencing and Centromeric Instability team
- ➔ Neural-development and Guidance Signals team

#### ○ LabTAU - Therapeutic Application of Ultrasound (INSERM U 1032)

#### ○ Pathophysiology, Diagnosis and Treatments of Bone Diseases (INSERM U 1033)

- ➔ Functional Genomics and Experimental Treatments of Bone Metastasis in Breast and Prostate Cancers team



# Cancer

Dependence receptor

# Development

Metastasis

# Migration

Stem-cell

# Twist

Senescence

# Apoptosis

# EMT

## Key figures

- 75 clinicians Researchers and teachers-researchers
- 55 engineer assistants and technicians
- 35 PostphD
- 20 masters student
- 60 PhD students
- Research budget : 12 M€ over 10 years

## Thematics

Themes addressed in the DEVweCAN program constitute a continuum between fundamental and clinical research, in particular with the Centre Léon Bérard and the Hospices Civils de Lyon. The program deals with several aspects of tumor growth: ageing and cell death, stem cells, cell migration and metastasis. The scientific project is divided in 5 main coordinated axis:

- Self-renewal and proliferation of normal and cancer cells
- Senescence and apoptosis
- Cell migration and metastasis
- Tumor escape and immune surveillance
- New targeted therapies against cancer

## Collaborations

➔ **Links with competitiveness clusters** : Lyon Biopôle, Cancéropôle CLARA, Fondation Lyon Synergie Cancer

➔ **Links with other economics players** : Netrispharma, Mérieux alliance, Edap, Theraclion, EyeTechCare, Carthera, Epitaget, Esben, Innate-Pharma, Transgene, Tibotec, ImmunID, Novartis, Roche, Sanofi, GSK ...

## Cancer

Dependence receptor

Development

Metastasis

Migration

Stem-cell

Twist

Senescence

Apoptosis

EMT

## Contacts :

[emilie.dufour@lyoningenierie.fr](mailto:emilie.dufour@lyoningenierie.fr)