# **ONCOLOGY MASTER**

# THE MASTER'S OFFERS

- A Master 1 first year allowing students to acquire in-depth knowledge of the biological mechanisms of cancer, in partnership with the Lyon Veterinary School.
- An introduction to clinical and translational research in line with the socio-economic and ethical aspects of patients care.
- Pluridisciplinarity

## MASTER'S COURSES

#### **Cancer Biology**

Focus on the latest fundamental discoveries in the biological mechanisms of cancer - Lectures given by internationally recognised researchers.

### Therapeutic Innovations in Oncology

Focus on drug design, therapeutic innovations and clinical trials in oncology in collaboration with teachers from the Lyon Veterinary School (cancers in pets).

### **Precision Medicine in Oncology**

Analysis and use of digital data in oncology and the socio-economic, ethical and societal aspects of this «massive data», divided into two specialities : bioinformatics analysis of «omics» data or Health Humanities Sciences (HHS) dimension.

#### **Cancer Bio-engineering**

Focus on the transdisciplinary teaching of physico-chemical properties of cancers, innovative technologies (biomechanics in 3D models, microfluidics and new devices) to better approach the physiology of the tumour *in vitro*.

# HOST LABORATORIES IN FRANCE

**In France** - Institut G.Roussy, Institut Curie, Institut Paoli-Calmette

#### In Rhône-Alpes region

- Cancer Research Centre of Lyon
- The DEV2CAN LabEX, Lyon and Convergence PLAsCAN Institute, Lyon
- LYOS, INSERM UMR 1033, Lyon
- IAB (Institute of Advanced Biology), Grenoble
- IMoST, UMR 1240, INSERM) Clermont-Ferrand

#### M1 courses

Socio-economics, ethics and HHS

Tumor B

microenvironnmenent Cellular & animal experimentents

Clinical & translational research

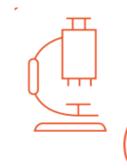
< 30 %

of the M2 class do internships abroad

#### **Universities Cooperations**

The master is partner of foreign laboratories :

Harvard, MIT, Oxford, Heidelberg, Tromso, Oslo, Lausanne and Geneva and has developed several international collaborations with universities in Canada, Japan, China, Australia and New Zealand.



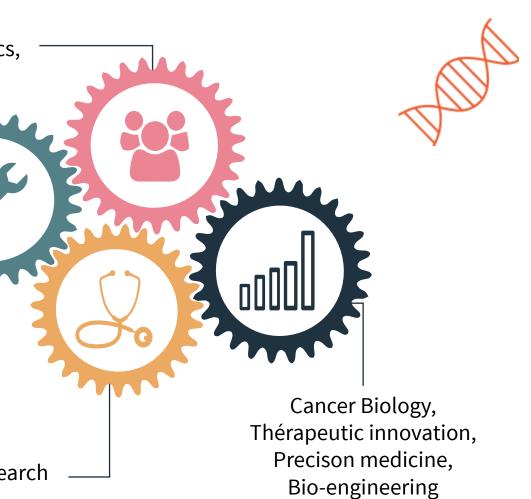




First and unique oncology complete program in France



#### M2 courses



### **UNIVERSITY LYON 1 ENVIRONMENT**

University at the cutting edge of innovation, Lyon 1 delivers highquality education and research excellence within an attractive environment. Its international reach extends through the fields of science, technology, health and sport. Lyon 1 is also a university that is committed to support, creation and sharing with respect to everyone within its community.



## **INTERNATIONAL DIMENSION AND PARTNERSHIPS**

# 25 %

of the M2 class do internships abroad

#### **European summer school**

The Oncology master participated in the creation of an international summer "Precison Oncoschool logy" labelled ESI (European School International) at the regional level with the UGA, the IARC and the CERN.

A region at the crossroads of Europe, Lyon is a city with a historic centre listed as a UNESCO heritage site, cultural life hinged around a full calendar of international events: the University enjoys the benefits of a truly exceptional environment and guarantees through access to a raft of cultural and sports activities, social action and aids available to students and staff, the civic responsibility initiatives of more than 80 student associations.

The training participates in the **ARQUS** exchange program which includes 8 European countries.

A M1 program in cancer has been created at the Shanghai Jiao-Tong University Medical School

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