Lyon Hepatology Institute - IHU EVEREST
intEgratiVE RESearch in hepatology

Scientific Director: Fabien Zoulim
Deputy Director: Massimo Levrero
Executive Director: Catherine Oudin
Why a Research Institute (IHU) for Liver Diseases?

Chronic Liver Diseases (CLDs) Challenges

- New biomarkers for prognosis & stratification
- New targets for curative treatments
- New technologies for organ preservation

- Global prevalence: 1.5 billion
- > 2 million deaths/year (cirrhosis & liver cancer)
- Alcohol and Metabolic (NAFLD) epidemics
- Overall health costs x4

Disease and patient heterogeneity
Few curative treatments

VIRAL LIVER DISEASES
LIVER METABOLISM NAFLD
ALCOHOL DRUG ADDICTIONS

HEPATOCELLULAR CARCINOMA
END STAGE LIVER DISEASES
LIVER TRANSPLANTATION

Healthy Cirrhosis Cancer
EVEREST - New Frontiers and Ambition

- Reduce premature morbidity and mortality
- Decrease the impact on working life lost
- Decrease public health and social costs

New paradigms for CLD management
- Early diagnosis and interventions
- New disease classifiers for treatment personalization
- Discovery of new curative treatments

Reduce the impact of CLDs
- Reduce premature morbidity and mortality
- Decrease the impact on working life lost
- Decrease public health and social costs

EVEREST: The French Comprehensive Liver Center
A unique model of liver institute

Basic & clinical research with social sciences and public health
Integrate
All liver diseases across etiologies and stages
**Why in Lyon?**

**Exciting Multidisciplinary research**

- 18 Research teams
- 114 Tenured scientists

**Excellence in clinical management & research**

- 13 Clinical units
- 99 Clinicians (H/HU)
- 162 Clinical studies (2017-2021)
  - Clinical trials: 1335 patients
  - Cohorts: 4590 patients

**International recognition Collaborations and networks**

- 21 Countries: academic collaborations
- 10 Countries: industrial network

**A dynamic environment**

**A strong institutional commitment**

**An IHU to leverage and shape unique synergies around liver diseases**
EVEREST - Scientific Strategy

VIRAL LIVER DISEASES
Molecular virology

LIVER METABOLISM NAFLD
Epigenetics

ALCOHOL ADDICTIONS
Molecular oncology

HEPATOCELLULAR CARCINOMA
Immunology

END STAGE LIVER DISEASES
Metabolism

LIVER TRANSPLANTATION
Imaging

Multi-omics
Clinical Research
cohorts clinical Trials
Human & Social Sciences
special populations

Actionable blueprint of Chronic Liver Diseases
Economics Public Health

Beat liver diseases
Promote healthy liver

Decrease morbidity and mortality due to chronic liver diseases

Data collection & management, data sciences
EVEREST workpackages

**Basic and translational science**

- **WP1 Curing HBV and HDV:** from virus persistence to innovative targets
- **WP2 Liver integrative biology:** interplay between energetic metabolism, inflammation and epigenetics
- **WP3 Hepatic critical care:** targeting perioperative liver injury

**Translational science for clinical research**

- **WP4 Multiomics profiling:** towards an actionable blueprint of liver diseases
- **WP5 Clinical cohorts and trials**
- **WP6 Improving care:** impact of innovation on clinical care pathways and health system

**WP7 Data Science, data integration and modelling**

- Precision medicine, public health & economic assessment

**WP8 Innovative Training and Education Programs**

**WP9 Exploitation and industrial transfer**
EVEREST – Strong and Durable Support from Founders

Hospices Civils de Lyon - North Hospital

EVEREST Building - 4500 m²
Research labs
Translational platforms
Flex lab / start-ups
Liver patient home
Dedicated Clinical Trial Unit

✓ Dedicated EVEREST positions
✓ Dedicated staff for fast track support of clinical investigations and grant applications
✓ Core grant for the new liver research unit PaThLiv
EVEREST - Transforming Effect in Time and Space

Unite scientists, health professionals & patients
Innovation for cure of liver diseases

Innovation, Discovery and Transfer
Excellence and Attractiveness
Promote healthy liver
Train the new leaders in liver sciences

Transform knowledge and healthcare in liver diseases

“International influence & leadership

“This venture could serve as a model for future similar comprehensive [hepatology] centres of excellence in other European countries.”

EASL letter of support – 14 October 2022