# Persister Cells: from Bacteria to Cancer Programme

Lyon, France

18 - 20 March 2025



# Scientific Programme

### Tuesday 18th March 2025

### Listed times are in Central European Time (CET)

### 11:30 REGISTRATION

Light refreshments will be served at 12:00

#### 13:00 CONFERENCE WELCOME

### 13:10 PERSISTERS: WHERE ARE WE NOW., AND WHERE ARE WE GOING?

Is it really possible to give a definition of persister cells? Our Scientific Programme Committee come together to discuss the aims of the meeting and the key questions in the field.

SESSION 1: NOVEL METHODOLOGIES FOR STUDYING PERSISTER CELLS

### **Chair: Yaara Oren**

### 13:55 Jan Michiels

VIB-KU Leuven Center for Microbiology, Belgium

'Mechanistic Insights and Evolutionary Dynamics of Antibiotic Persistence in Escherichia coli'

Q&A: 14:15 - 14:25

# 14:25 Shensi Shen

West China Hospital, P.R. China

Proffered Paper 1: 'Cross-cancer Insights into Persister Cells Reveal an RNA methyltransferase Driving Immune Evasion'

Q&A: 14:35 - 14:40

# 14:40 EXHIBITOR INTRODUCTIONS

### 14:50 COFFEE BREAK, EXHIBITION & SOLO TRAVELLER MEET-UP

### 15:20 Yaara Oren

Tel Aviv University, Israel

'The day after the drug- investigating persister cells memory'

Q&A: 15:40 - 15:50

### 15:50 Direna Alonso-Curbelo

IRB Barcelona, Spain

'Uncovering tissue-level interactions dictating tumor and senescent cell state persistence'

Q&A: 16:10 - 16:20

#### 16:20 INDUSTRY SYMPOSIUM - PROMOCELL

#### **Janina Moros**

PromoCell

'How to kill your fibroblasts and save the cancer stem cells in your culture'

Q&A: 16:40-16:50

### 16:50 Cedric Blanpain

Université Libre de Bruxelles, Belgium

'Tumor States mediating Resistance to Chemotherapy'

Q&A: 17:10-17:20

17:20 POSTER SPOTLIGHTS 1

17:30 WELCOME RECEPTION

18:15 POSTER DISCUSSION SESSION 1

Led by members of the Scientific Programme Committee

# Wednesday 19th March 2025

### Listed times are in Central European Time (CET)

#### 08:30 EARLY POSTER VIEWING

SESSION 2: DECIPHERING THE PERSISTER CODE: MOLECULAR MECHANISMS

#### Chair: Lenka Munoz

The University of Sydney, Australia

### 09:00 Susan Rosenberg

Baylor College of Medicine, USA

'Drugging Bacterial and Cancer Evolution'

Q&A: 09:20 - 09:30

#### 09:30 Lenka Munoz

University of Sydney, Australia

Proffered Paper 2: 'Histone methyltransferase PRDM9 promotes survival of drug-tolerant persister cells in glioblastoma'

Q&A: 09:40 - 09:45

### 09:45 **Céline Vallot**

Institut Curie, France

'Investigating mechanisms of cell plasticity in breast cancers with single-cell epigenomics'

Q&A: 10:05 - 10:15

#### 10:15 THE EMBO KEYNOTE LECTURE

#### **Chris Marine**

VIB - KU Leuven Center for Cancer Biology, Belgium

'A cell geometry-based approach to monitor and contend with cancer cell plasticity and therapy resistance in melanoma and beyond'

Q&A: 10:35 - 10:45

### 10:45 COFFEE BREAK & EXHIBITION

### 11:15 Aaron Hata

Massachusetts General Hospital, USA

'Mechanisms driving evolution of drug resistance in lung cancer'

Q&A: 11:35 - 11:45

### 11:45 **Jukka Westermarck**

University of Turku and Åbo Akademi University, Finland

Proffered Paper 3: 'Transcriptional profiling of awakening of drug tolerant persisters (DTEPs) reveals DUSP6 as key driver of HER2i tolerance'

Q&A: 11:55 - 12:00

12:00 POSTER SPOTLIGHTS 2

12:10 LUNCH

Light refreshments will be served.

13:00 POSTER DISCUSSION SESSION 2

Led by members of the Scientific Programme Committee

SESSION 3: EMERGING VULNERABILITIES: TARGETING PERSISTER CELLS

Chair: Ultan McDermott

### 14:30 Ultan McDermott

AstraZeneca, UK

'Genome-wide CRISPR screens identify the YAP/TEAD axis as a driver of persister cells in EGFR mutant lung cancer'

Q&A: 14:50 - 15:00

### 15:00 Olivier Calvayrac

Centre de Recherches en Cancérologie de Toulouse, France

Proffered Paper 4: 'Farnesyltransferase inhibition overcomes oncogeneaddicted non-small cell lung cancer adaptive resistance to targeted therapies'

Q&A: 15:10 - 15:15

#### 15:15 Eduard Batlle

IRB Barcelona, Spain

'Plasticity, therapy resistance and immune evasion in metastatic colorectal cancer'

Q&A: 15:35 - 15:45

### 15:45 COFFEE BREAK & EXHIBITION

# 16:15 **Johannes Zuber**

IMP - Institute of Molecular Pathology, Austria

'Unveiling persister cell vulnerabilities through in-vivo CRISPR screens'

Q&A: 16:35 - 16:45

### 16:45 René Bernards

Netherlands Cancer Institute, Netherlands

'Finding vulnerabilities of drug-tolerant persisters identified through functional genetics'

Q&A: 17:05 - 17:15

### 17:15 EARLY CAREER ADVICE: MANAGING THE WORK LIFE BALANCE

Scheduled to end at 18:00 CET

### 19:30 CONFERENCE DINNER

### Thursday 20th March 2025

# Listed times are in Central European Time (CET)

08:30 EARLY POSTER VIEWING

### SESSION 4: PERSISTER CELLS IN THE CLINIC

### **Chair: Caroline Robert**

### 09:00 Wendy Mok

UConn Health, USA

'Targeting bacterial metabolism and defenses to eradicate antibiotic persisters'

Q&A: 09:20 - 09:30

### 09:30 Shruti Bhatt

National University of Singapore, Singapore

'The Great Escape: From Persisters to Resistance Through Apoptotic Priming Loss in Leukemia Models'

Q&A: 09:50 - 10:00

#### 10:00 Isabel Puig

Vall d'Hebron Institute of Oncology (VHIO), Spain

Proffered Paper 5: 'Proteomic and interactomic profiling to understand the complexities of colorectal cancer persistence'

Q&A: 10:10 - 10:15

### 10:15 COFFEE BREAK & EXHIBITION

### 10:45 Alessia Mira

University of Turin, Italy

Proffered Paper 6: 'Targeting oxidative metabolic vulnerabilities in sotorasib-tolerant lung cancer cells'

Q&A: 10:55 - 11:00

#### 11:00 Caroline Robert

Gustave Roussy, France

'Interactions of the Persister Cells with the tumor microenvironment'

Q&A: 11:20 - 11:30

### 11:30 Trever Bivona

UCSF, USA

'Mechanisms of persister cell biology in lung cancer'

Q&A: 11:50 - 12:00

#### 12:00 SUMMARY & CLOSE

#### 12:15 DEPART