

# CIBERONC

## Ampliando fronteras dentro de CIBER

### Jornada Científica CIBERESP

13 de junio - Madrid

Joaquín Arribas  
Scientific Director of CIBERONC

# Scientific Structure

CIBERONC mission: Promote stable collaborative translational cancer research in Spain, focusing on translational precision medicine as a strategy to meet the European priorities.



Gastro-Intestinal Tumors



Breast Cancer



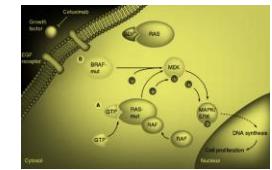
Respiratory Tract Tumors



Hematological Tumors



Low Prevalence Tumors



Mechanisms of Tumor Progression



Liquid biopsy & Biomarkers



Cancer Bioinformatics & Omics



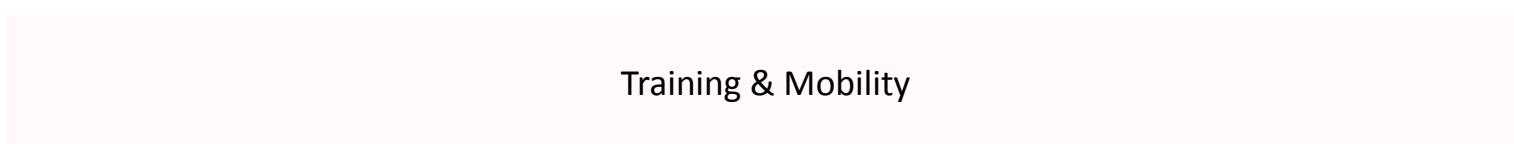
Drug Resistance & New Therapies



Immuno-Oncology



Experimental Models



2017

## Launching and Network Consolidation

- Internal Organization
- Programs Consolidations
- National Visibility

2020

## Internationalization & Translation

- Promote CIBERONC collaborative scientific activity
  - Intra & Inter-Program
  - InterCIBERS
  - With External Entities
- Results translation (tech transfer, clinical assays, spin-off)
- International Visibility

# CIBER collaborations

## Scientific Activity

Co-funded seed projects:

- 2018: CIBER-BBN
- 2019: CIBERES

## I Foro de proyectos colaborativos CIBERONC – CIBER-BBN



CIBER-BBN / CIBERONC | miércoles, 18 de abril de 2018

## Other activities:

Jornadas de Formación CIBERES

Encuentro para la excelencia CIBERESP

**ciberonc** *isci*<sup>iii</sup> Centro de Investigación Biomédica en Red Cáncer

Buscar

QUIÉNES SOMOS ▾ GRUPOS ▾ PROGRAMAS DE INVESTIGACIÓN ▾ PROGRAMAS TRANSVERSALES ▾ SALA DE PRENSA ▾

Convocatoria de ayudas para asistir al "Encuentro para la Excelencia de la Investigación en Salud Pública"

Convocatoria de Ayudas para asistir al "Encuentro para la Excelencia de la Investigación en Salud Pública", Escuela de Verano de Salud Pública Lazareto de Maó, Menorca, (19, 20 y 21 de septiembre de 2018).

El Programa de Formación del CIBER en el área temática de Epidemiología y Salud Pública, en colaboración con las áreas de Obesidad y Fisiopatología de la Nutrición, Enfermedades Cardiovasculares y Cáncer, quiere propiciar el intercambio de ideas, en un ambiente informal, entre científicos acreditados y jóvenes científicos en formación, debatiendo sobre sus proyectos de Tesis Doctoral. Este intercambio no sólo pretende mejorar los proyectos, se trata también de facilitar la innovación en la investigación de salud pública y su incidencia en los retos de la salud del siglo XXI.

Entidad Financiadora: CIBERESP  
Plazo de Presentación: 14/06/2018  
Estado: Abierta  
Documentación:

Convocatoria FFCyD Menorca CIBERESP 2018.pdf

# CIBERONC

## Research Programs



Gastro-Intestinal  
Tumors



Breast Cancer



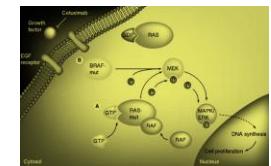
Respiratory Tract  
Tumors



Hematological  
Tumors



Low Prevalence  
Tumors



Mechanisms of  
Tumor Progression

# Gastro-Intestinal Tumors



**Gabriel Capellá**  
**IDIBELL (Barcelona)**

**Josep M. Tabernero.** VHHIO

Eduardo Díaz-Rubio. HCSC

Manel Esteller. IDIBELL

Eduard Batlle. IRB

Enrique Aranda. IMIBIC

Jaime Feliu. H La Paz

Alfredo Carrato. HU RyC

Núria Malats. CNIO

Francisco X. Real. CNIO

Andrés Cervantes. INCLIVA

## Colorectal Cancer & Pancreatic Cancer

- 1** Molecular epidemiology of cancer (GWAS, moderate risk alleles or high-risk alleles) & correlation of main exposures.
- 2** Tumor cell genomic and transcriptomic classification.
- 3** Personalized in vitro / in vivo models for sequential treatments response.
- 4** Real time- dynamic liquid biopsy

# Breast Cancer



**Atanasio Pandiella**  
**CIC (Salamanca)**

**Joan Albanell. IMIM**

Ana Lluch. INCLIVA

Amparo Cano. IIB

José Palacios. HUVR

Joaquín Arribas. VHHIO

Miguel Martín. HGM

- 1** Incorporation of translational studies to investigator initiated clinical trials (CDK inhibitors and T-DM1)
- 2** Development of the liquid biopsy (CTCs, tfDNA)
- 3** Dynamic evolution of breast cancer  
Evaluation of pairs of primary tumors and metastases
  - Primary tumors Vs metastases
  - Comparison between gene expression and the mutational profile of residual tumor after neoadjuvant chemotherapy and the first metastatic relapse
  - Genetic or/and epigenetic alterations of heterogeneity of TNBC.
- 4** Immune therapies. Generation of preclinical models
- 5** Novel therapies, drug resistance and mechanisms involved in the pathophysiology of breast cancer.

# Respiratory Tract Tumors



**Luis Montuenga**  
**CIMA (Pamplona)**

**Luiz Paz-Ares. H12O**

Amancio Carnero. IBiS

Carlos Camps. HCV

Juan P. Rodrigo Tapia. FICYT

- 1** Identification and characterization of genomic aberrations (genomics, epigenomics and in silico analysis).
- 2** Preclinical evaluation of novel targeted therapy strategies against SCC: translational analysis of the survival relevance of specific genetic alterations.
- 3** Evaluation, validation of emerging immunotherapy approaches for SCC and prediction of efficacy and resistance based on tumor genomic profile and immune and microenvironmental landscape
- 4** In vitro and in vivo analysis of therapeutic combinations of immunotherapy based treatments
- 5** Biomarker analysis in liquid biopsies (screening, early diagnostics, and prediction or monitorization of therapeutic responses)

# Hematological Tumors



**Dolor Colomer**  
**IDIBAPS (Barcelona)**

**Marcos Gonzalez. HUS**

Elias Campo. IDIBAPS

Miguel A. Sanz. HU La Fe

Miguel A. Piris. HUMV

Jesús F. San Miguel. CIMA

José A. Orfao de Matos. HUS

José A. Pérez Simón. HUVR

Felipe Prósper. CIMA

- 1** Pathologic/immunophenotypic/molecular characterization. Accurate diagnosis and evaluation of potential biomarkers for prognostic and monitorization (Minimal Residual Disease (MRD))
- 2** Development of diagnostic tools applicable to clinical practice.
- 3** Development of pre-clinical models.
- 4** To promote clinical trials and controlled clinical assays.
- 5** Transversal aims: Development of clinical and biological databases to help/facilitate subsequent studies (epidemiological, clinical data, biomarkers...)

# Low Prevalence Tumors



Enrique de Álava  
IBiS (Sevilla)

Ignacio Melero. CIMA

Xavier Matías-Guiu. IRB

Rafael López López. ONCOMET

Santiago Ramón y Cajal. VHIR

Francesc X. Bosch. ICO

Rosa Noguera. INCLIVA

- 1** Prognostic and predictive biomarkers in sarcomas, carcinomas, melanomas and tumors of the nervous system.
- 2** Clinical relevance of exosomes, CTCs and ctDNA as reservoirs of metastatic markers and chemoresistance in sarcomas. Quantification and genomic characterization of the Tumor population circulating PD-L1 + and PD-L1-.
- 3** Tumor heterogeneity in endometrial cancer, sarcomas, melanomas and tumors of the nervous system using primary tissue, metastases and CTCs.
- 4** Search for predictive or monitoring biomarkers for the effectiveness of immunotherapy treatments
- 5** Multiplex tissue immunohistochemistry and immunofluorescence assays and automated multiparametric analysis for the study of immune, inflammatory and vascular cell infiltration in tumors

# Mechanism of Tumor Progression



**Xosé Bustelo**  
**CIC (Salamanca)**

**Anna Bigas. IMIM**

Jesús M. Paramio. CIEMAT

Carlos López Otín. UO

Alberto Muñoz Terol. IIB

María Pilar Santisteban. IIB

Eugenio Santos. CIC

Francisco J. Oliver. CSIC

Piero Crespo. IBBTEC

Arkaitz Carracedo. CIC BioGune

Joan Seoane. VHIO

**1** Identification of early oncogenic drivers and signaling modifiers linked to tumor origin, progression, and therapeutic responsiveness (discovery phase)

**2** Biological corroboration of candidate genes/programs as causal contributors to disease (validation phase)

**3** Exploitation of candidate genes and pathways for precision medicine approaches (implementation phase)

# CIBERONC

# Transversal Programs



## Liquid Biopsy & Biomarkers

Rodrigo Toledo

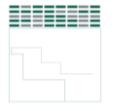
Vall d'Hebron Instituto de Oncología



## Cancer Bioinformatics & Omics

Víctor Quesada

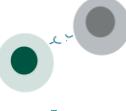
Universidad de Oviedo



## Drug Resistance & New Therapies

Alberto Ocaña

Universidad de Castilla La Mancha



## Immuno-Oncology

Pedro Berraondo

Centro de Investigación de Medicina Aplicada



## Modelos Experimentales

Patricia Pérez-Galán

Instituto de Investigaciones Biomédicas August Pi i Sunyer

# Training & Mobility



Amparo Cano  
UAM (Madrid)

**1**

## Mobility Program

- Intramural
- National
- International

**2**

## Training Program

- Course organization
- Course attendance

**3**

## Initiation to Oncology Research Program

- 10 Launching Fellowship (6 month)

**4**

## Promotion to Young Researcher

- CIBERONC Young Researchers Meeting (14 – Nov)