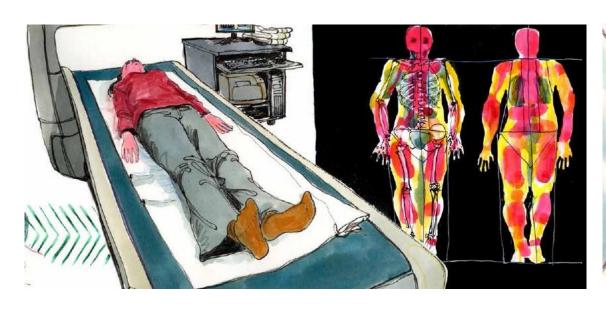


# Unlocking Health Research & Innovation through Co-Creation – the IDIBAPS Perspective

Morning Health Talks 2025

Michela Bertero, PhD, Strategy Director













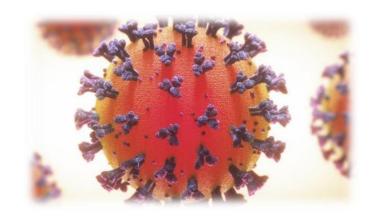


- Why is co-creation relevant in health Research & Innovation?
- The Campus Clínic Barcelona as an example of health ecosystem
- Examples of co-creation and collaborative initiatives
- Future projects





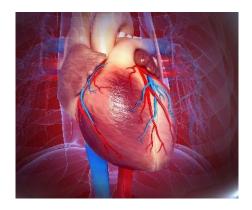








Crash test dummies



Hearth diseases in diverse populations



Facial recognition



GMOs social perception



Cognitive-behavioural therapy



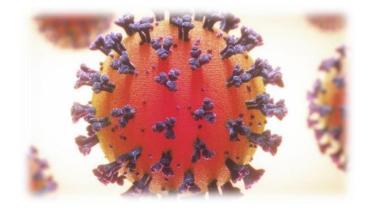
Unmet clinical needs



A need to transform the relationship between Science and Society



"Responsible Research and Innovation"



"Open Science"

"Co-creation"

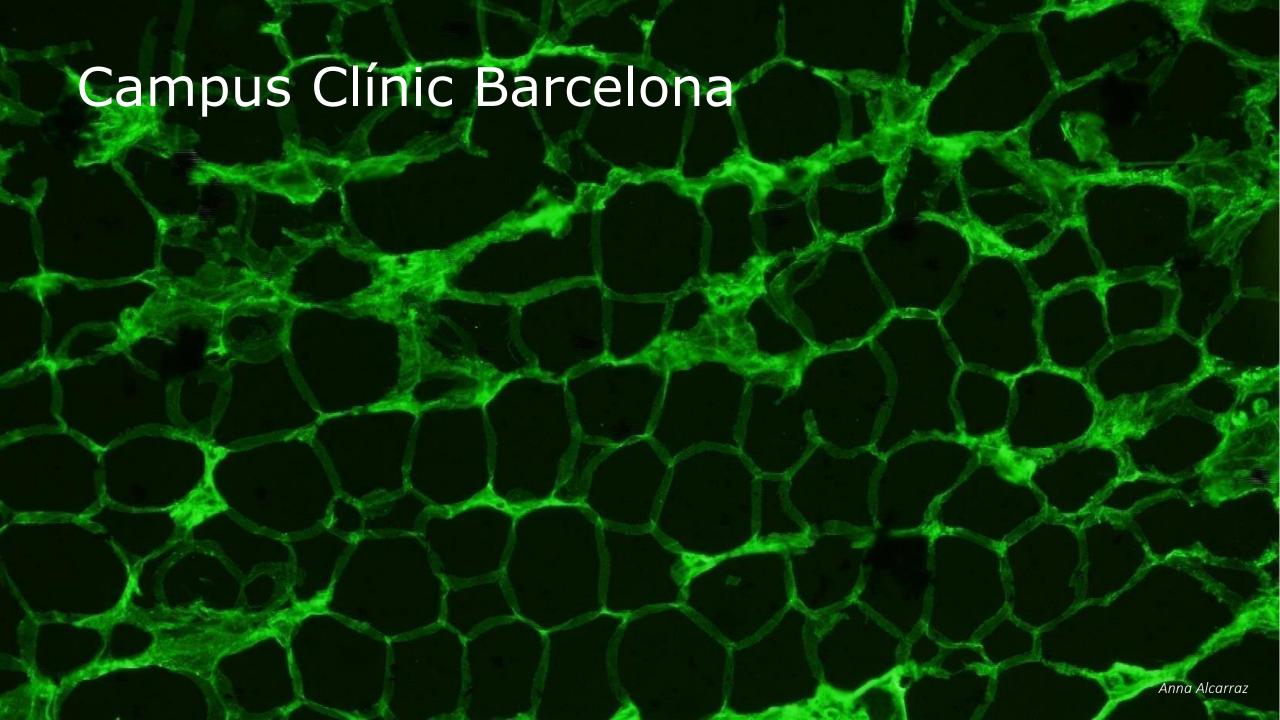








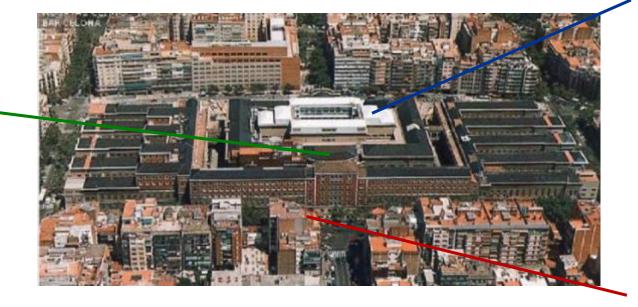
- Collaborative innovation ecosystems
- Cross-sectoral collaboration
- Inclusive policy design
- Stakeholder engagement
- Co-creation





### **Hospital Clínic**

- Community hospital for ~450K people (adults)
- Specialized hospital of high technology and complexity
- 850 beds; 51.000
   adminissions; 785.000
   outpatient visits; 160.000
   emergencies; 26.000
   surgeries
- 8.000 Health professionals
- €800M budget



# University of Barcelona (UB)

- Funded in 1450, the oldest in Catalonia and Spain
- Among 50 top universities in Europe
- 16 faculties, Doctoral School
- >60.000 students
- Faculty of Medicine

#### **IDIBAPS**

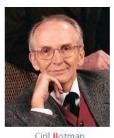
- Founded in 1996
- >2.000 professionals
- ~100 Research groups
- 7 Core Facilities
- >2.000 publications
- ~1.000 active projects
- >1.500 clinical trials
- 20 active start-ups
- ~80M budget



Lluis Revert



Juan Rodés





**2023** – **Integration of FCRB and IDIBAPS** to strengthen research and innovation strategy and operations

**70s** – Strong Clinical Research, Leader in Spain

 Volunteer donations by Hospital Clínic medical doctors of 1.5% of salary to promote research **1996** – Creation of **IDIBAPS**, a research institute to promote **translational research** 

**1986** – First **foundation** in Spain to develop research and innovation at Hospital Clínic

- University of Barcelona
- Hospital Clinic of Barcelona









Juan Rodés

David Ser

Josep M Bricall







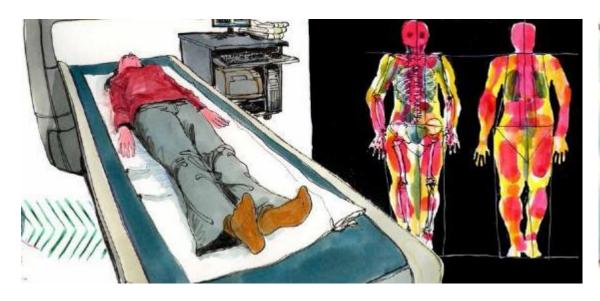




## Mission: From knowledge to cure

**Vision**: To contribute significantly to improve the health and quality of life of people through high impact research

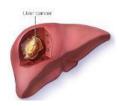
Values: Integrity, Accountability and Care



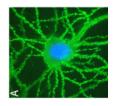


### Research with impact in medicine





- Pathogenesis and clinical management of chronic liver disease.
- New protocols for liver cancer diagnosis and treatment.



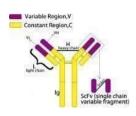
- Discovery of new **neuroautoimmune diseases**, pathogenesis and management of patients.
- Diagnosis and new treatments of neurodegenerative, vascular and movement disorders.



- **Genome and epigenome** sequencing of lymphoid neoplasms.
- Identification of new lymphoid entities and pathogenic mechanisms.



- Population-based strategy to prevent colorectal cancer.
- Pathogenesis and management of chronic inflammatory bowel disease.



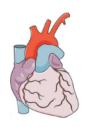
• **Immunotherapy:** first academic CAR-Ts in Europe based on research from 1990.



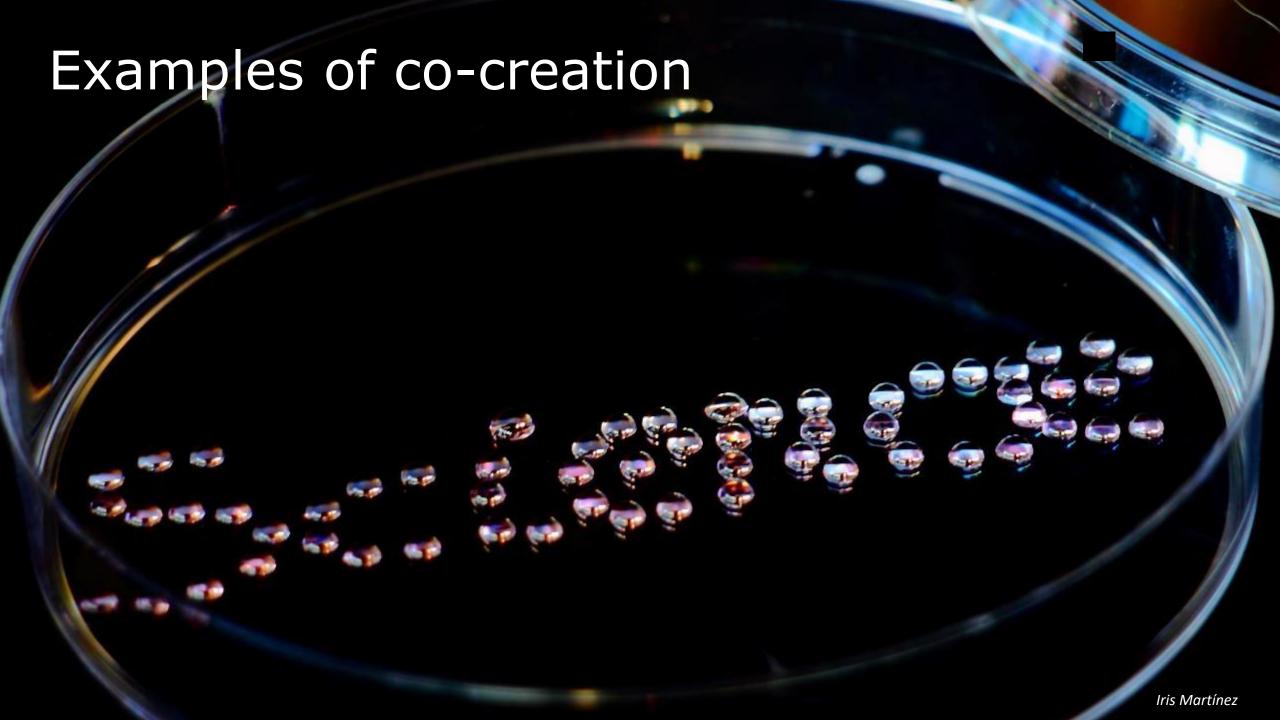
 First stages and new approaches of schizophrenia, bipolar and neurodevelopmental disorders.



- Neurological control of obesity and diabetes.
- Impact of the **Mediterranean diet** on prevention of **cardiovascular diseases**.

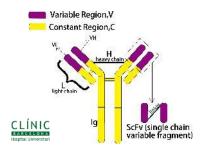


- Image characterization of **cardiac arrythmias** and novel therapeutic strategies.
- Minimal invasive intervention of valvular cardiac disorders.



## One story of impact: advanced therapies at Campus Clínic





Clone: A3-B1 (IgG2a) 1990 S Immunologia-CDB-HCP

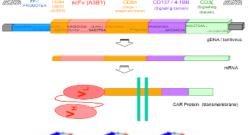


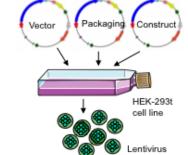
University of Pennsylvania Manel Juan Visiting professor



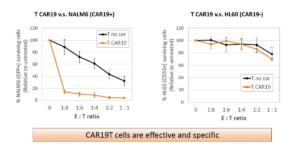
Research projects

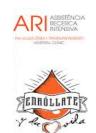
#### CAR design & production





*In vitro* CAR19-mediated T cell cytotoxic activity

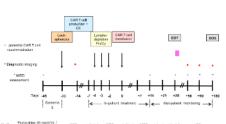




### **ARI Project**

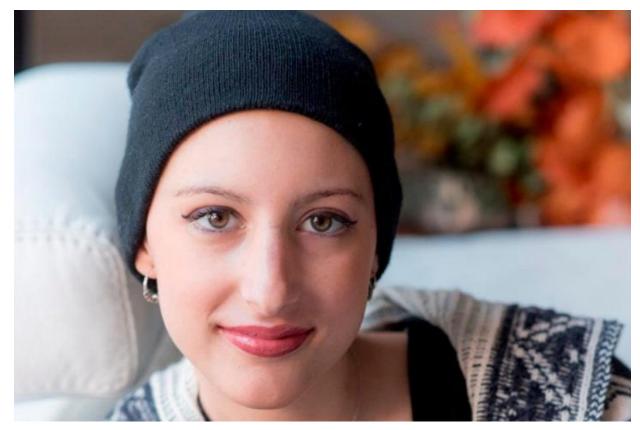








**CLINICAL TRIAL** 





- > 30 years of Research and Innovation
- > 200 professionals, interdisciplinary team
- 500 treated patients
- Developments of new academic ARIs 2 approved by AEMPS, 1 by EMA as "PRIME"
- "ARI, a story of love and life" documentary



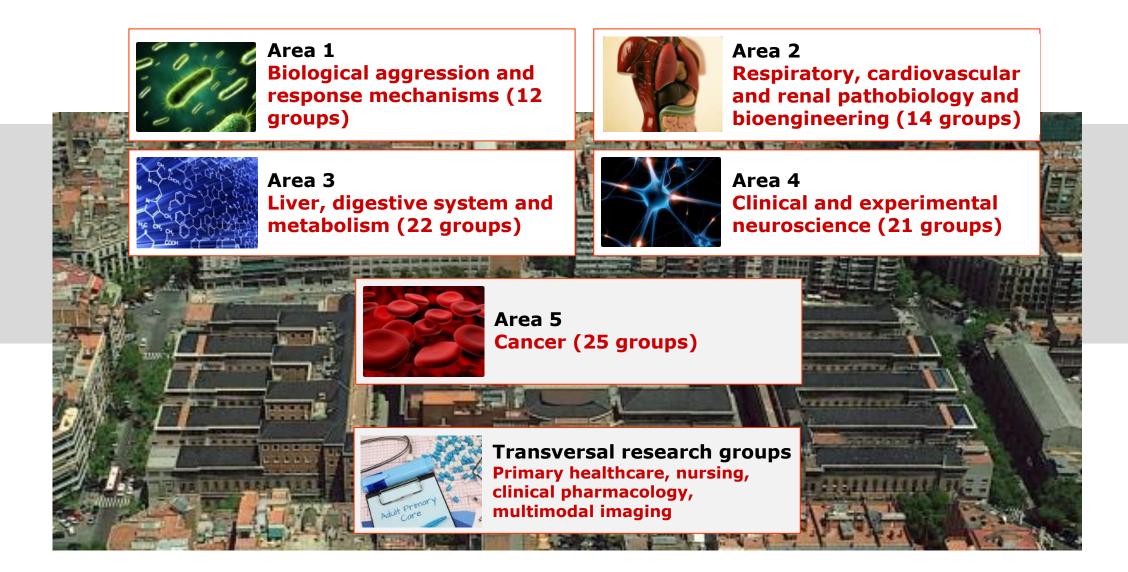
Facilitating collaborations



Talent development



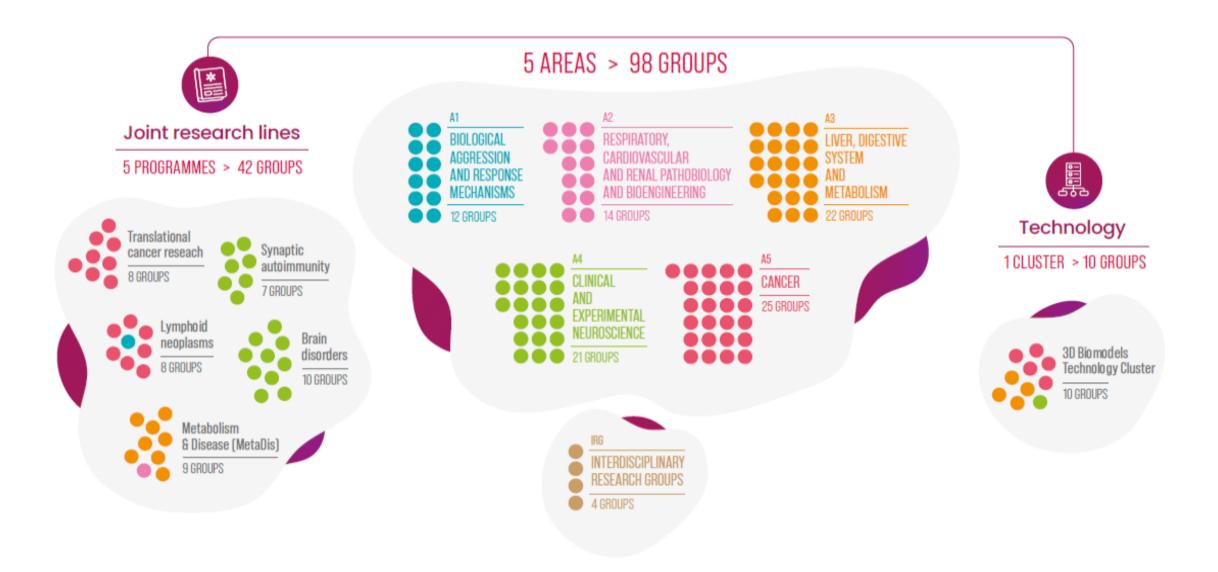
Stakeholder engagement



## 1. Facilitating multidisciplinary research: programmes and clusters



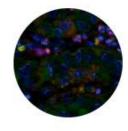
New scientific organization to promote interdisciplinary collaborations



## 1. Facilitating multidisciplinary research: programmes and clusters



New scientific organization to promote interdisciplinary collaborations



Translational cancer research programme



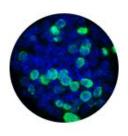
Synaptic autoimmunity in neurology, psychiatry and cognitive neuroscience programme



Lymphoid neoplasms programme



Translational research programme for brain disorders



Metabolism and disease programme (MetaDis): a multidisciplinary approach to understanding metabolic diseases



## Career development for researchers and clinician-scientists



HR EXCELLENCE IN RESEARCH

# Everything you need to know about your experience at IDIBAPS



#### Research career

Discover how our research career is structured.



HRS4R

We have the HR Excellence in Research seal,



Gender Equality Plan

Access to our Gender Equality Plan



#### Seminars

See our institutional program of research seminars.



#### Stepping-stone

Discover the opportunities provided by this training program for predoctoral and postdoctoral researchers.



#### Toolbox

Toolbox IDIBAPS Talks Series is a cycle of talks that focuses on different topics of general interest for all IDIBAPS FCRB research community.



#### BITRECS

Discover the Biomedicine International training research programme for excellent clinician-scientists, jointly funded by the European Commission and the "La Caixa" Foundation.



#### Institutional policies

Access our registry of institutional policies



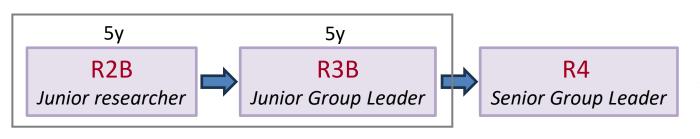


## 2. Promoting talent



### IDIBAPS Research Career: defined tenure-track system





March 31 2023

IDIBAPS researcher Sílvia Affó receives an ERC Starting Grant

Over the next five years, the project DynamHet will study the origin, evolution and function of heterogeneity presented by cancer-associated fibroblasts, as well as their ro in tumour development and progression.



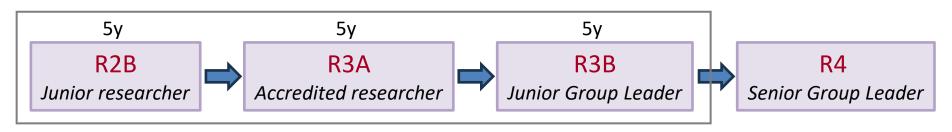
September 13 202

IDIBAPS researcher Marianna Spatola is awarded an ERC Starting Grant for research into autoimmune encephalitis



Her 5-year immuBRAIN project is funded with 1.5 million euros and aims to gain a greate understanding of the immunological mechanisms of autoimmune encephalitis, and in particular encephalitis associated with antibodies against the NMDA receptors.



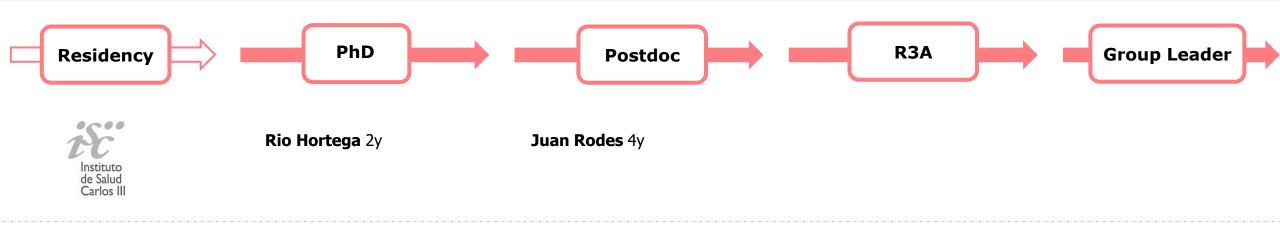


+ dedicated support team, mentoring, financial support

## 2. Promoting talent



Dedicated career-track for clinician scientists...





**Emerald** 3y ½, COFUND programme, **Europe**.

**BITRECS** programme, 100% research, 2 to 3 years, diverse sources of funding.

**Estella Matutes Extraordinary Scholarship** 2y, physician specialist in Hematology or Hematopathology.

**50/50** 5y, renewable, periodic peer-review evaluation, for MDs who want to lead independent research (**IDIBAPS**).

**80/20** 3+2y, renewable, periodic peer-review evaluation, for MDs (**IDIBAPS**).

**80/20** 5y, for MD in hepatology (**EF-CLIF**)



Joan Rodés-Josep Baselga Advanced Research Contracts 3y, on IDIBAPS research areas, supported by BBVA foundation.

**Intensification** contracts, 2y, to carry out research (**Hospital Clínic**).

Sabbaticals.





Dedicated career-track for clinician scientists...

# Structured programs to train the next generation of clinician scientists



**Fig. 1**| **The many traits of the clinician scientist.** Clinician scientists have multiple roles that need to be addressed by specific measures within structured programs. Some measures apply to multiple roles.

Structured programs for training clinician scientists have been implemented in several European countries, but these must include adequate resourcing and mentoring and foster career opportunities.

#### **ELEMENTS OF SUCCESS**

- Institutional commitment, rewards and incentives – <u>institutional career pipeline</u>
- Protected research time
- Mentoring
- National and international networking
- Patient engagement

#### nature medicine



**Science generation** for school children: workshops, escape room



**Talks at civic centres** for the general public



**Laboratories visits** for Patients and Patient Associations



**IDIBAPS Scientific Photography** contest exhibition



**Science summer camp** for children



**Open day** to IDIBAPS families and friends, citizens



**Art & Science** collaborating with Suñol and Gloria Soler Foundations



**International Day of Women and Girls and Science**: scientist speak out

# COLLABORATION WITH PATIENT EXPERIENCE OBSERVATORY

- Knowledge, methodologies and good practices
- Training for researchers
- Joint projects
- Patient experience week



## A PATIENT EXPERIENCE FORUM

The Patient Experience Forum of the Hospital Clinic of Barcelona is an initiative that promotes a new, effective and innovative work method with the creation of a collaborative open space where all the stakeholders involved in the health sector can exchange their perspectives. A special emphasis is given to the voice of the patients and their caregivers.

The Forum is also a physical space within the hospital, a place to reflect, rethink and co-create solutions to improve healthcare services and increase their value from the patient's perspective.



#### HOW DO WE WORK?

Incorporating the patient's perspective from the beginning of the projects and guaranteeing that this is useful.

Ask to take action.

Evaluating the transversality of the involvement and collaboration of all actors.

Patients, relatives, professionals, suppliers, researchers, etc.

Offering a wide range of methodologies in order to identify unmet needs.

Co-creation techniques, interviews, focus groups, surveys and observation sessions, etc.

#### SERVICE PORTFOLIO

Evaluation of the patient's experience in a clinical setting

- Focus groups, in-depth interviews and surveys
  Support in the design, implementation and
- Support in the design, implementation and evaluation of those activities

#### Innovation in services

- · Design thinking
- Solutions prototyping

#### Research

- · Competitive and collaborative projects
- · Identification of unmet needs

#### Training

- Short training courses for professionals
- Design and evaluation of training programmes for patients
- Support to the Methodology of Therapeutical Education Course

#### Knowledge exchange

- Patient's Coffee (open events for patients)
- Elevator Pitch techniques
- XPA Congress Barcelona

#### Communication

- Corporate social networks
- Newsletter











## Clínic Comprehensive Cancer Center (4C)











**2024 - onwards** 

2023

A joint journey towards an international reference in oncology, integrating healthcare, research, innovation and education



## Future Clínic Health Campus

 International hub for knowledge, research, and health, with a social and economic impact and integrated into the urban fabric

## Scale & Scope

- 300,000 m2

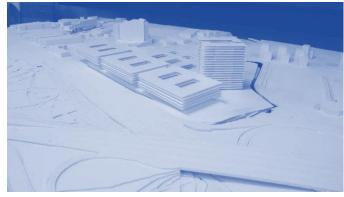
### Co-creation in action

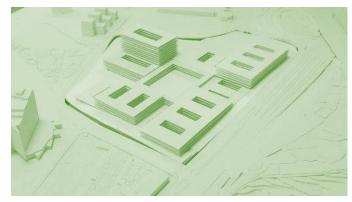
- Dedicated Master's degree in Architecture to draft the specifications for the international design competition
- Multistakeholder working groups include researchers, clinicians, and infrastructure leaders
- Inspired by international visits
- Society engagement by living lab approach

## Design principles

Innovation, sustainability, flexibility, efficiency, interconnections, high-tech, well-being









## Many thanks and open to explore new collaborations in Greece!

