

# GEMELLI SCIENCE AND TECHNOLOGY PARK

Omics guided radiotherapy prescription. Clinical tools for external beam: the colon-rectal experience. Clinical tools for interventional radiotherapy: ENT, Gyn and Skin experience

Camilla Nero





## **Background**

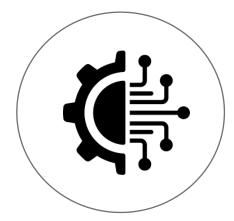
Unmet needs



**FRAGMENTATION** 



ACCESS TO INTEGRATED MULTI OMICS DATABASES



ACCESS TO CUTTING EDGE TECHNOLOGY



ACCESS TO DEDICATED EXPERTISE

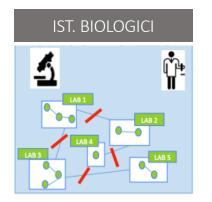




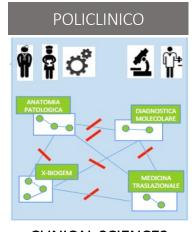


## **Rationale**

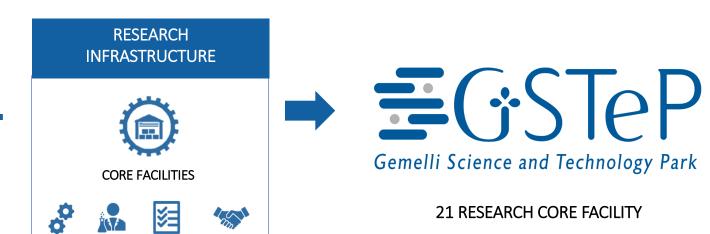
### A Science and Technology Park



**BASIC SCIENCES** 



**CLINICAL SCIENCES** 







## The project

### Milestones and timing



N. CONTRACTS: 18



**MAJOR RENOVATIONS: 2** 



**APP IMPLEMENTATION** 



N. CUTTING-EDGE TECHNOLOGIES: 6



Genomics core facility





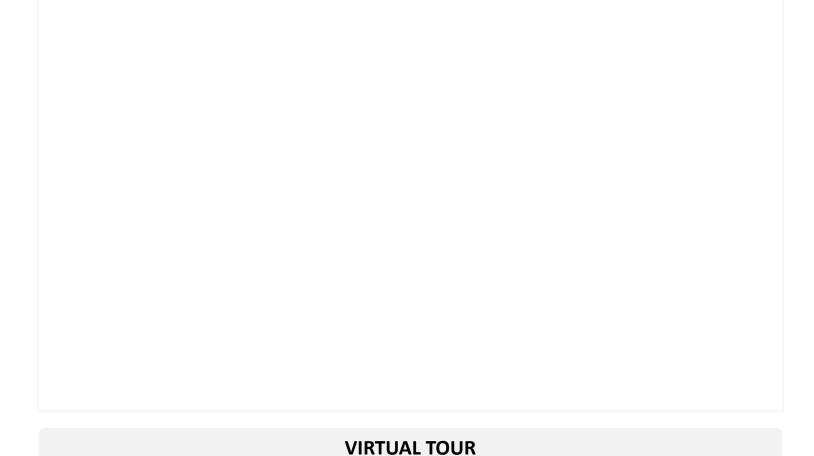






#### **G-STeP**

#### Facilities and infrastructure





#### **OMICs**

**GENOMICS** 

LIQUIDBIOPSY

MICROBIOTA ANALYSIS & MICROBIAL WGS

PROTEOMICS & METABOLOMICS

RADIOMICS

SINGLE CELL ANALYSIS

# GemelliGenerator Clinical research beyond tomorrow DATA

**BIOINFORMATICS** 

DATA COLLECTION

EPIDEMIOLOGY & BIOSTATISTICS

REAL-WORLD DATA

#### BASIC SERVICES

3D BIOPRINTING

**BIOBANK FOR** 

PERSONALIZED MEDICINE

ELECTROPHYSIOLOGY

EXPERIMENTAL MODELS

FLOW CYTOMETRY

IMMUNOLOGY

**IMMUNOHISTOCHEMISTRY** 

MICROSCOPY

ORGANOIDS

PREANALYTICAL AND CELL BIOLOGY





## **G-STeP**

Easy access, tracking, metrics

https://gstep.policlinicogemelli.it/#/



