



# Carla Cruz University of Beira Interior carlacruz@fcsaude.ubi.pt





## **Description of the Organization**

The Health Sciences Research Center (CICS-UBI) is a research unit of University of Beira Interior (UBI) and has crossroads of Biomedicine and Biotechnology, and the research activity is focused on the characterization of the molecular mechanisms underlying the onset and progression of neurological and neurovascular diseases, endocrine-related disorders, and cancer, for the identification of new disease biomarkers and therapeutic targets. CICS-UBI research also pursues the development of novel drugs, biopharmaceuticals, and biomaterials with potential diagnostic and therapeutic applications, as well as, new delivery methods, to solve unmet clinical problems and improve quality of life.









### Description of your research interest

 My group is working on G-quadruplex (G4) field, namely, on drug design and development, G4 aptamers and their biological implications in cancer, biomarkers, drug delivery systems based on G4s, ligands as stabilizers of G4s structures; novel targets such as miRNAs and proteins.





## **Project Idea**

#### Please indicate your Call Topic of Interest

Lung Cancer treatment

#### Please indicate relevant project ideas

The project proposes preparing graphene-based materials (GBM) and their drug conjugates to be used as platforms for cancer PTT/PDT and immunotherapy. Hydrogels containing GBM and the selected drugs will also be produced.

#### Please add TITLE of the PROJECT IDEA ....

- Objectives:
  - to produce aptamers by SELEX for the targeting of PD-L1;
  - to produce drug-aptamer conjugates with GBM
  - to evaluate the therapeutic relevance of the nanomaterials in cells and in vivo model
- Expected results
  - nanomaterial for cancer PTT/PDT and immunotherapy







## Consortium - profile of known partners (if any)

No	Partner Name	Туре	Country	Role in the Project
01				
02				
03				
04				
05				
06				







## **Consortium - required partners**

lo Ex	xpertise Type	Country	Role in the project
01	RTD		
2	SME		
)3	INFR	A	
)4			
05			
)6			







## Carla Cruz

## University of Beira Interior Health Sciences Research Center Portugal

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https://gquadruplex.wixsite.com/ccruz





