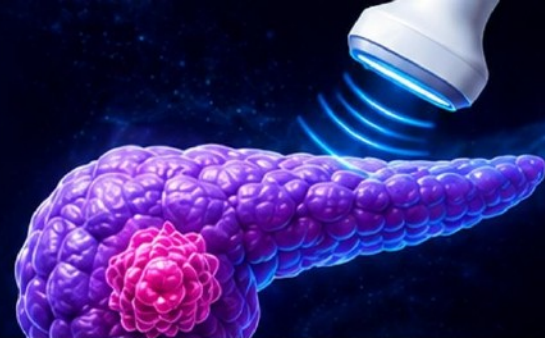


# PhD POSITION AVAILABLE

# PancTher

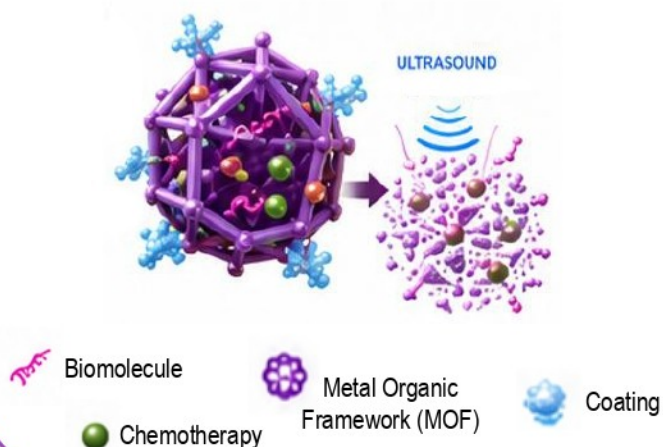


Ultrasound degradable nanomaterials for pancreatic cancer treatment

FUNDING: La Caixa Foundation – Junior Leader Incoming Program

SMART NANOPLATFORM. PRECISE THERAPY. BETTER OUTCOMES.

The Crystal engineering Lab (CEL) at the Institute of Molecular Science (ICMol), University of Valencia, invites applications for a PhD position under the supervision of **Dr. Beatriz Lozano Torres** and **Prof. Mónica Giménez-Marqués**



## MAIN TASKS



### SYNTHESIS & CHARACTERIZATION

- Synthesis and characterization of organic linkers
- Synthesis and characterization of MOFs
- Optimise metal-ligand coordination and degradation profiles
- Encapsulate biomolecules and chemotherapeutics
- Evaluate loading efficiency and release kinetics
- Functionalise MOF surface
- Advanced characterization: TEM, SEM, XRD, DLS, TGA, HPLC, fluorescence & spectroscopy



### VALIDATION IN 2D & 3D PDAC MODELS

- Assess cytotoxicity and cellular uptake (confocal microscopy, FACS)
- Quantify proteins and genes (qPCR, western blot)
- Evaluate therapeutic efficacy and cell proliferation (Incucyte)
- Study penetration and treatment in 3D models
- Investigate ultrasound-triggered release and therapeutic response



### WE OFFER

- Full time PhD contract
- Maximum duration: 3 years
- International & multidisciplinary environment
- Access to cutting-edge facilities and collaborations
- Opportunities for conferences, dissemination and high-impact publications



### HOW TO APPLY

Send an email to: [pancther.candidature@gmail.com](mailto:pancther.candidature@gmail.com)

- Including:
- CV
  - Motivation letter
  - Contact details of at least one reference (two recommended)



### INCORPORATION

Starting date:

**1 September 2026**

(flexible according candidate availability)



### CALL DATES

Applications should be submitted before

**12 July 2026**

Shortlisted candidates will be invited for online interviews. All applications will be treated confidentially.

**CEL** CRYSTAL ENGINEERING LAB

The Crystal Engineering Lab (CEL) is a part of the ICMol at the University of Valencia. We design, synthesise and characterise hybrid organic-inorganic materials from a crystal engineering approach focusing on nanomaterials to address biomedical and environmental applications

**ICMOL**

ICMol is a research center located at the Scientific Park of the University of Valencia. The ICMol has been awarded for third time the recognition from the Spanish Ministry of Science and Innovation the seal of Unit of Excellence "Maria de Maeztu".

VISIT CEL GROUP



VISIT ICMOL

