

We are looking for motivated candidates to develop a PhD in biology, biomedicine, microbiology or medicine in our research group for the **"Inphinit Fellowship call (La Caixa)"**

Parc Taulí Research and Innovation Institute (I3PT):

The Parc Taulí Research and Innovation Institute belongs to the Carlos III Health Institute network of Spanish excellence research institutions. In order to ensure and stimulate high quality research studies, we want to enroll talented researchers in our top research groups.

The Translational Research in the Critical Patient: Experimental models and treatments associated with critical pathology group:

Our group investigates the **pathophysiological mechanisms and the developemnt of new innovative therapeutic strategies of sepsis and acute lung injury** through preclinical *in vitro* and *in vivo* experimental models and clinical studies in patients with acute respiratory failure. The research programmes developed are: development of *in vitro* and *in vivo* experimental models of sepsis and acute lung injury, cell therapy and nanotechnology for sepsis and acute lung injury, pulmonary nebulization of treatments, cellular and biological effect of CO₂, biomarkers for early diagnosis of sepsis and nosocomial infections, analysis of microbiome in patients with invasive mechanical ventilation.

The **pre-doctoral student will engage in the following studies** which will be developed in collaboration with other research partners:

- **Nano4Sepsis. Fundacion Ramon Areces, ESICM and I3PT.**

Aim: To develop a new cell-free therapeutic strategy based on the nebulization of PLGA nanocapsules load with the key components of Mesenchymal Stromal/Stem Cells-derived Extracellular Vesicles .

- **CO₂ in Acute Lung Injury. ESICM, SEPAR and I3PT.**

Aim: To analyze the effect of hypercapnia on the alveolar cell regeneration and inflammatory response in *in vitro* and *in vivo* experimental models of acute lung injury induced by bacterial infections.

- **Microbiome in Acute respiratory failure. Instituto de Salud Carlos III.**

Aim: To analyze the changes of microbiome and the impact on nosocomial pulmonary infection associated to mechanical ventilation.

- **Albumim. Eclif Foundation and Grifols.**

Aim: To analyze the immunological and renal protective effect of albumin in patients with septic shock.



Inphinit Fellowship call (La Caixa):

With our support, the selected candidates will apply for an Inphinit pre-doctoral fellowship, either in the **incoming** or the **retaining modality**. In both cases:

- The fellowship has a maximum **duration of four years** and includes **€35,800 per year** to cover the fellow's labour costs.
- **€3,500 per year for research costs** such as conferences, courses, research stays, consumables, equipment, charges for the use of intellectual property, etc.

The tuition fees to the official doctoral programme where the fellow will be admitted to.

Fellowship Requirements:

- **Nationality:** Young researchers of any nationality are eligible to apply.
- **Studies pursued:** Applicants must hold a **higher education degree** that makes them eligible to enroll in a doctoral programme before starting at their host institutions. **Candidates must not have been enrolled in a doctoral programme prior to the start of the fellowship.**
- **Language proficiency:** Applicants must accredit their proficiency in **English** (check call)
- **Research experience:** On the deadline for applications, applicants must still **be within the first four years** (full-time equivalent research experience) **of their research careers.**
- **Mobility:**
 - (!) **Retaining modality** . Candidates must have resided or carried out their main activity (work, studies, etc.) in the country of destination (Spain/Portugal) for more than twelve months in the three years immediately prior to the deadline for applications.
 - (!) **Incoming modality** . Candidates cannot have resided or carried out their main activity (work, studies, etc.) in the country of destination (Spain/Portugal) for more than twelve months in the three years immediately prior to the deadline for applications.

Selection criteria:

Candidates will be short-listed based on the following aspects:

- Previous research experience (verifiable)
- Participation in research projects
- Contribution to research manuscripts
- Recommendation letters

Key dates

La Caixa deadlines:

(!) [Retaining modality](#): **15 February 2024**, at 2 pm Peninsular Spain

(!) [Incoming modality](#): **24 January 2024**

I3PT deadline:

18 January 2024.

Application process

Applicants will have to register by sending an email to personali3pt@tauli.cat where they will include their **resume** in PDF format and the **signed data protection appendix**.

For any suggestions or doubts, you can contact: personali3pt@tauli.cat