

Expression of Interest



Contact Person/Scientist in Charge

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University CEU Cardenal Herrera

Department / Institute / Centre

- **Name:** Universidad CEU Cardenal Herrera (CEU UCH)
- **Address:** Avd. Seminario S/N 46113 Montcada
- **Province:** Valencia

Research Area

- Life Sciences (LIF)

Brief description of the institution:

CEU Cardenal Herrera University belongs to the CEU San Pablo University Foundation which is a non-profit charitable educational institution with over 75 years' worth of experience in the field of education. In the context of the European framework in which we find ourselves, the internationalisation of the Research in our University is one of our main objectives.

Brief description of the Centre/Research Group (including URL if applicable):

CEU Cardenal Herrera University belongs to the CEU San Pablo University Foundation which is a non-profit charitable educational institution with over 75 years' worth of experience in the field of education. In the context of the European framework in which we find ourselves, the internationalisation of the Research in our University is one of our main objectives.

Our University belongs to the San Pablo-CEU Foundation, the most important private education organization in Spain, having more than 26,000 students and 24 centers in all educative levels, among those three Universities in Madrid, Barcelona and Valencia.

CEU-UCH is among the top four Spanish private universities in research rankings (Shanghai Ranking Expanded, IUNE, international ranking SCIMAGO), being the best positioned in Valencia.

The university has a clear commitment to research (+3 million euros of investment and more than 40 projects) as a basis to develop academic excellence that benefits our students and society.

Project description:

We are interested in developing a transdermal pharmaceutical form for acute migraine treatment and to evaluate its effectiveness.

The first drug from the group of triptans used for the treatment of migraine attacks was sumatriptan. However, so-called second generation triptans, were subsequently developed to improve some of the characteristics of sumatriptan, especially to achieve greater efficiency and speed, a lower rate of recurrence (recurrence of pain before 24-48 hours) and a lower incidence of adverse effects. Among second-generation triptans, almotriptan is a drug with a well-known safety profile and proven tolerance when compared to other drugs. Since migraine attacks are characterized by the appearance of nausea and vomiting which hinder proper pharmacotherapeutic compliance, transdermal drug delivery is a remarkable alternative to the oral administration in the treatment of this disease. Because almotriptan is marketed as oral triptan, the objective of the current project is to develop an alternative to the existing dosage form, that allows an alternative use of administration.

Transdermal pharmaceutical forms of almotriptan will be developed, such as transdermal patches of Polyvinylpyrrolidone and/or polyvinyl alcohol or a pluronic lecithin organogel (PLO). To achieve plasma concentrations of the drug while reducing the latency period of the drug iontophoresis will be used as an enhancing strategy. At the same time, a characterization of the pharmaceutical forms will be carried out. Furthermore, in vivo transdermal absorption of almotriptan of selected pharmaceutical forms in Wistar rat will be studied.

<https://www.uchceu.es/investigacion/grupos-lineas-investigacion/desarrollo-de-formas-farmaceuticas-de-aplic>

Applications

Please send CV and motivation letter.