

**PhD Position: Program INPhINIT Fundació La Caixa**

**“Preventing intracranial rebleeding after intracerebral hemorrhage in patients candidates to long-term oral anticoagulation. A multicenter cohort study to evaluate secondary prevention strategies and stratification of the risk by magnetic resonance markers”**

**(Dr. Joan Martí Fàbregas)**

**CENTRE: IIB SANT PAU - Fundació Institut de Recerca de l’Hospital de la Santa Creu i Sant Pau**

ADDRESS: C/ Sant Quintí 77- 79, 08041 Barcelona / [www.recercasantpau.cat](http://www.recercasantpau.cat)

**CENTRE DESCRIPTION:**

The Research Institute of the Hospital de la Santa Creu i Sant Pau (HSCSP-IR) was created on 4 June 1992 as a private scientific foundation. Its mission is to promote basic, clinical, epidemiological and healthcare research in the health science and biomedical fields, with the ultimate aim of improving the health of the population. On 10 December 2003, the Autonomous Government of Catalonia approved affiliation of the HSCSP-IR as a University Research Institute attached to the Autonomous University of Barcelona (UAB).

The HSCSP-IR has as its mission to improve the health and quality of life of the population through the production and dissemination of scientific knowledge, the training of researchers to an international standard, innovation in health and the incorporation of medical advances in clinical practice and in healthcare policies.

The HSCSP-IR is currently one of the most active research centres in Catalonia, especially in relation to translational research and the application of new discoveries to clinical practice. Since 2011 it has been part of the Catalan System of Research Centres (CERCA).

On 17 May 2009, the HSCSP-IR and nine other organizations created the Sant Pau Biomedical Research Institute (IIB Sant Pau), with the aim of strengthening collaborative translational research and bridging the gap between basic research and clinical practice so as to ultimately improve patient care.

AREA OF KNOWLEDGE: Life Sciences Panel

**GROUP LEADER: Dr. Joan Martí Fàbregas / [jmarti@santpau.cat](mailto:jmarti@santpau.cat)**



## RESEARCH PROJECT/RESEARCH GROUP

Description of research projects and members of the study group:

<http://www.recercasantpau.cat/es/destacats-home/grupo-de-investigacion-de-las-enfermedades-cerebrovasculares/>

## POSITION DESCRIPTION

-Research Project / Research Group Description:

Background. Oral anticoagulants prevent a cardioembolic stroke but increase the risk of intracranial hemorrhage. Currently we do not know which is the best antithrombotic strategy for a patient who has already suffered an intracerebral hemorrhage and who needs to start or restart treatment with OA due to a high-risk cardioembolic source. Moreover, surrogate markers of amyloid and hypertensive angiopathies detected by Magnetic Resonance might be associated with an increase risk of ICeH recurrence.

Objectives: 1) To clarify which of the following is the best antithrombotic strategy for patients who have already suffered a ICeH and who need to start or restart OA: None, antiplatelet, vitamin-K antagonists, direct OA, left atrial appendage occlusion. 2) To evaluate the value of microbleeds, leukoaraiosis, and superficial siderosis in predicting the risk of ischemic or hemorrhagic stroke recurrence.

Methodology. A prospective, observational, multicenter, multinational, cohort study of 1200 consecutive patients followed-up for 2 years. Inclusion criteria: Patients who have suffered an ICeH episode, older than 55y, with a major cardioembolic source that requires to start or resume indefinite OA and with signed consent. The specific secondary prevention strategy will be decided by the local investigator according to his/her best judgement. Primary end-point: Combination of ischemic stroke and ICrH.

In patients in whom MR is performed within 90 days after the ICeH episode, the presence, burden (MARS scale) and distribution of microbleeds, leukoaraiosis (Fazekas scale) and presence of superficial siderosis will be evaluated. Researchers will upload clinical information and images to the study website

Expected results. To define the risk of ischemic stroke/ICrH associated to each of the secondary prevention strategies, to build a score of the risk of ischemic and hemorrhagic recurrence and to stratify the risk of ICrH by detecting surrogate markers of hemorrhagic-prone angiopathies

**-Job position description:**

The investigator associated to this project will carry out his doctoral thesis on a specific aspect of the project: To investigate if the detection of microbleeds in the magnetic resonance of patients with intracerebral hemorrhage that need anticoagulant treatment allows predicting the future risk of a hemorrhagic recurrence

To this end, he will be integrated as a member of the research team of the center's Stroke Unit

A list of his/her functions: Contact with the Ethics Committee, Coordination of the study, Website design, Identification of patients admitted to the hospital with the diagnosis of Intracerebral Hemorrhage (ICH), continuous contact with all participating institutions and researchers, administrative arrangements for the authorization of each center, coordination between other researchers from the promoter site, help in solving technical and scientific problems that occur throughout the study, collaboration with the neuroradiologists who evaluate the neuroimages, monthly meeting with the Director of thesis, preparation of his/her doctoral thesis, drafting and presentation of preliminary and definitive results at international meetings

**OTHER RELEVANT WEBSITES**

institution website: <http://www.recercasantpau.cat/es/>

