



The Vall d'Hebron Research Institute (VHIR) is a public sector institution that promotes and develops the research, innovation and biosanitary teaching of the Vall d'Hebron University Hospital. Through the excellence of our research, we identify and apply new solutions to the health problems of society and we contribute to spread them around the world.



In April 2015, the **Vall d'Hebron Research Institute (VHIR)** obtained the recognition of the European Commission **HR Excellence**.

This recognition proves that VHIR endorses the general principles of the **European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers (Charter & Code)**.

Thus, there are no restrictions of gender, national origin, race, religion, sexual orientation or age and **candidates with disabilities are strongly encouraged to apply.**



Predocctoral Research Scientist UNINN (Bitmap)

VHIR offers vacancy/vacant position for a predoctoral student within the Unitat de Recerca en Neurotraumatologia i Neurocirurgia. More information about our group can be found [here](#)

[http://www.vhir.org/portal1/grup-equip.asp?t=unitat-de-recerca-en-neurotraumatologia-i-neurocirurgia-uninn\)&s=recerca&contentid=186904](http://www.vhir.org/portal1/grup-equip.asp?t=unitat-de-recerca-en-neurotraumatologia-i-neurocirurgia-uninn)&s=recerca&contentid=186904)

JOB DESCRIPTION

The Vall d'Hebron Research Institute (VHIR) seeks candidates for a PhD fellowship in the field of neuroscience. The main focus of Bitmap is the application of diffuse optical tomography in neurology and neuroscience. Within this project, the candidate will be part of a collaboration with local and international biomedical and clinical teams. The clinical part of the project is devoted to providing innovative and reliable non-invasive tools to monitor and assess brain blood flow and oxygenation in patients with traumatic brain injury.

The successful PhD candidate will join the Neuro traumatology and Neurosurgery Research Unit (UNINN) that is led by Dr. J. Sahuquillo, and will participate in the project Brain Injury and Trauma Monitoring using Advanced Photonics (BITMAP). The work will focus on the clinical implementation, validation, and study of a multi-modal optical platform in a neurointensive care developed by the Institute of Photonic Sciences (<http://www.icfo.eu>). This position is part of an EU Marie Curie Initial Training Network (ITN) that will start in early 2018.

Within this project, the candidate will be part of an international team from European countries working collectively on all the major state-of-the-art optical imaging methods that apply to these problems. As part of the ITN network, the successful candidate will be exposed to other disciplines and sectors represented in the network, through visits, secondments, or other training events. Although the main work will be conducted at the Neurotraumatology Intensive Care Unit of the Vall d'Hebron University Hospital, the candidate will spend time at and will interact with academic centers such as the ICFO; (<http://www.icfo.eu>) and the School of Computer Science at the University of Birmingham (<http://www.cs.bham.ac.uk/~dehghanh>). Secondments will also be conducted in a high-tech ICFO spin-off company, Hemo Photonics (<http://hemophotonics.com>), which is dedicated to developing diagnostic tools for many cerebrovascular diseases through non-invasive monitoring of blood flow in the brain.

Eligible Candidates:

Candidates must be Early-Stage Researchers (with less than four years of research experience after obtaining their MSc degree) who have not been awarded a doctoral degree. Eligible candidates can be of any nationality, as long as they have not resided more than 12 of the last 36 months in Spain, and are required to undertake transnational mobility when taking

up their appointment. Candidates must hold an internationally-recognized Masters degree (or evidence of its completion in the nearest future) in bioengineering, biomedicine, biostatistics, bio photonics, biology, or a related field. Candidates need to be comfortable with contacting patients in a neurocritical care unit and working together with nurses, doctors and other research fellows.

Title of the position:

- Predoctoral Research Scientist

Required skills:

- Good communication skills and fluency in spoken and written English.
- Strong sense of responsibility, initiative, self-motivation and social skills as key personal abilities.

Labour conditions:

- Full time position (40 hours/week)
- Gross annual salary: 35.230,00 Euros (12 payments, plus Family allowance if applicable)
- Contract length: 12 months, renewable

HOW TO APPLY

- To apply, eligible candidates should email the following documentation (in English) with ITN, “**Marie-Curie-Actions/2017**” reference to the following email addresses: (secretaria@neurotrauma.net) and (seleccio@vhir.org):
- A presentation letter with declaration of research interests
- A Curriculum Vitae, including contact details, - Scanned copies of your complete (Bachelor and Masters equivalent) university academic transcripts in English or Spanish
- Scanned copies of any degree certificates, if available, at the time of application. Three letters of recommendation, for which the candidates should contact their referees to ask them to submit their recommendation letter directly to Prof. Sahuquillo (sahuquillo@neurotrauma.net).
- If available, a scanned copy of standardized test results (GRE, TOEFL, etc.). Note that submission of test results is optional, but they can be particularly helpful for evaluating candidates with degrees obtained outside the European Higher Education Area.