Call for expression of interest pre-doctoral researchers PFIS contracts 2022

**The Vall d´Hebron Institute of Oncology (VHIO) Seeks a PhD student in
Machine Learning for Medical Image Analysis and Multimodal Data Integration to
Join the Radiomics Group**

Immediate Call for Applications

Position description:

The Vall d´Hebron Institute of Oncology´s (VHIO) Radiomics Group (**https://radiomicsgroup.github.io/**), headed by Raquel Perez-Lopez (MD, PhD), is currently seeking to appoint a PhD student in machine learning for medical image analysis and multimodal data integration.

This post is a great opportunity to be involved in a broad range of cutting-edge computer science research within the translational research environment of the Vall d'Hebron Institute of Oncology (VHIO), Barcelona (Spain). VHIO is a leading Comprehensive Cancer Centre dedicated to translational cancer research and one of the world-leading drug-development centers for cancer care. The Radiomics Group at VHIO aims to integrate radiology, engineering and bioinformatics expertise for the development of quantitative imaging biomarkers for precision medicine to improve outcomes for cancer patients.

The successful candidate will be involved in several research projects such as defining radiomics signatures of response to targeted-therapies in patients with cancer and evaluating differential responses to targeted therapies towards the study of tumor evolution and mechanism of resistance. The successful candidate will assist in the development, implementation and analysis of functional and quantitative medical imaging studies. This will include the optimization of scanner protocols and assisting with the analysis and interpretation of imaging data.

Moreover, the candidate will also be involved in the application of deep-learning models integrating medical imaging, pathology and clinical data towards the development of predictive and early response biomarkers in cancer.

The Radiomics Group, together with the VHIO Academy team, are committed to the continue training of their scientists and a personal training and development plan will be agreed with the candidate.

About VHIO:

Under the leadership of Josep Tabernero, the Vall d'Hebron Institute of Oncology (VHIO), created by José Baselga in 2007, has established itself as a comprehensive cancer center of proven excellence internationally. Located within the Vall d´Hebron Barcelona Hospital Campus, our researchers closely collaborate and interact with Vall d´Hebron physician-scientists. Translational science and clinical

research are therefore tightly connected which promotes superb interaction and teamwork which, in turn, accelerates the bench-bedside-bed cycle of knowledge. This privileged environment affords VHIO direct access to patients as well as the entire spectrum of oncology professionals who care for them, and a second-to-none appreciation of how cancer science can translate into more powerful, targeted treatments and better practice for the care of patients.

VHIO´s pioneering model and programs, coupled with its belief in combining strengths through cross-border collaborations, continue to spur advances in reversing cancer resistance, halting metastatic spread, and more effectively treating even the most undruggable tumor types.

VHIO´s translation toward precision oncology: **http://www.vhio.net**

We seek:

An organized and motivated, team-oriented individual with interest in medical imaging, computer science and cancer research. The ideal candidate should have previous experience in artificial intelligence and deep-learning applications.

The candidate is expected to be able to communicate in English, even if it is not his/her first language.

Requirements:

- Bachelor's degree in physics, biomedical or telecommunications engineer or related degree.
- The candidates must be admitted or enrolled in a PhD Program in a Spanish University for the 2022-2023 academic year.
- Computer problem solving and analytical skills.
- R and Python programming.
- English proficiency.

Conditions:

Contract type: PFIS
Position details: 4-year predoctoral contract
Salary: will be defined according to the candidate's experience
Funding Agency: National Institute of Health Carlos III (ISCIII)
Call: Strategic Action in Health 2022 (Acción Estratégica en Salud).
Further information:
https://www.isciii.es/QueHacemos/Financiacion/solicitudes/Paginas/default.aspx
The candidates must be admitted or enrolled in a PhD Program in a Spanish University for the 2022-2023 academic year.

Selection Process:

The process will consist of eligibility check an evaluation of merits of all CVs received (number and quality of publications, participation in research projects, mobility, and other merits). The best positioned candidates may be called for a personal interview in order to evaluate more precisely the skills of the candidate.

Review of applications will commence immediately. The deadline for applications is the 23rd of March.

How to Apply:

Applicants should send their CV to Raquel Perez-Lopez rperez@vhio.net
stating clearly in the subject of the email the reference **Predoc2022 PFIS**.