



## The Vall d'Hebron Institute of Oncology (VHIO) Seeks a “Bioinformatician”

**Reference:** 14/2020

**Application deadline:** 16/10/2020

**Number of vacancies:** 1

### **Job description:**

We are looking for a bioinformatician to join the Cancer Genomics Lab at VHIO. The scope of the work will be mostly linked to the analysis of genomic data in the context of cancer patients. The successful applicant should be able to work independently and in several projects.

### **Requirements:**

Bioinformatician with a PhD in biomedical/ computer sciences or similar experience (i.e. 3-4 years of experience).

Knowledge/ experience in Genomics and Cancer.

Familiar with raw sequencing data (FASTQ) as well as other common formats (SAM/BAM, BED, etc.), command-line tools (bwa, samtools, bedtools, etc.) and biological databases (cBioportal, COSMIC...).

Experience using GNU/ Linux systems, preferably Ubuntu.

Fluency in R and/ or Python.

Proficiency in English.



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Vall d'Hebron Institute Oncology (VHIO) endorses the Requirements and Principles of the European Charter for Researchers, the Code of Conduct for the Recruitment of Researchers promoted by the European Commission and follows Equal Opportunities policies.

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### Additional information:

Knowledge of statistical modelling or machine learning.

Knowledge in database management systems (such as MySQL, mongoDB or noSQL).

Experience in Docker, Kubernetes.

**Application:** Candidates must submit a curriculum vitae and letter of intent via email: [selecciorrh@vhio.net](mailto:selecciorrh@vhio.net), including the reference number Ref. 14/2020.

Salary conditions will be set according to experience and profile.

### About VHIO:

VHIO's Cancer Genomics Group serves as a Core Technology laboratory. In addition, we are dedicated to translational research as well as novel genomic test development. We provide cutting-edge applications in cancer genomics through state-of-the-art technologies and the development of novel, fully validated tests that are used in the clinical research setting (Prescreening Program). Our lab is equipped with an n-Counter (Nanostring) platform, two digital PCR platforms (BEAMing Sysmex and ddPCR, BIO-RAD) and three NextGen Sequencers; MiSeq, NextSeq and HiSeq2500, Illumina. VHIO's Prescreening Program is nucleated around the activity of two VHIO groups - Cancer Genomics and Molecular Oncology, and centers on performing molecular profiling in over 1500 patients each year as potential candidates for enrollment in our Phase I clinical trials led by VHIO's Research Unit for Molecular Therapy of Cancer (UITM) – "la Caixa". Patients' suitability for inclusion in any given clinical trial is assessed based on their respective genomic or pathologic profile. Our Group has developed and routinely implemented several tests for our Prescreening Program, based on NGS and nCounter. Our research activities focus on developing novel multiplexed tests that are optimized to FFPE-derived nucleic acids. Once developed, they are validated and used in clinical and translational research. Our group has been particularly interested in liquid biopsy for the last years, we are currently developing our own custom NGS test with Unique Molecular Identifiers (UMI) chemistry and envision that this will be our first disease tracking test in the clinical setting. We are also involved in a number of translational research projects including the identification of mechanisms of resistance to targeted therapies, as well as predictive biomarkers for immunotherapeutics.

Under the leadership of Josep Tabernero, the Vall d'Hebron Institute of Oncology (VHIO), has established itself as a comprehensive cancer center of proven excellence internationally. It is also thanks to VHIO's optimal organizational structure based on a purely multidisciplinary and translational model that VHIO talents continue to anticipate and tackle the many unresolved questions in combatting this multifaceted and heterogeneous disease.

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



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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>**



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