

Postdoctoral Research Assistant for the Human Genotyping-CEGEN Unit at the Spanish National Cancer Research Centre (CNIO)

About the team

The Human Genotyping Unit at the Spanish National Cancer Research Centre (CNIO) is part of the National Genotyping Centre (www.cegen.org) a multidisciplinary team focuses on identifying and characterizing germline determinants of cancer susceptibility and cancer treatment response, with a particular focus on breast cancer. The objective is the prediction of cancer risk and drug response using genetic and other -omics data together with clinical data. The Unit participates in several large international consortia, and have strong expertise in high-throughput data generation and analysis. The group is very international and dynamic. We provide a highly stimulating environment with state-of-the-art infrastructures. If you like such environment, apply to this position.

Job description

This position includes the analysis of NGS analysis (WGS and WES) and genome-wide association studies (GWAS) to solve challenge genomics problems in one or more of the bioinformatics areas, such as structure variation detection, metagenomics, and target sequencing/clinical bioinformatics.

We are looking for a bioinformatician with a background in computational biology and strong statistical skills. The ideal candidate will have strong background in NGS data analysis using techniques such as quality control methods, variant interpretation, CNV detection algorithms and rare variants analysis. In addition to strong programming skills, the candidate must have a keen interest in biology and working with real-world data. Strong interpersonal skills, a desire to understand genomics researcher needs and the ability to communicate results clearly are a must. This position will interact closely with colleagues in molecular biology.

The candidate will also have the opportunity of interact with other national and international groups in common collaborative projects of our group, participating both in research and clinical meetings.

Desired Skills:

- Statistical design and analysis of genome-wide association studies from NGS and array-based studies.
- Proficiency in statistical and scripting programming skills (e.g. R, Python, Perl, Shell scripting)
- Hands on experience with NGS data analysis tools (e.g. GATK, bcftools, bwa, samtools, etc.) and data analysis pipelines.
- Experience developing bioinformatics algorithms in NGS genomic data analysis
- Strong experience developing tools for numerical data analysis and simulation
- Knowledge of developing polygenic risk scores (e.g. PRSice, Ldpred)
- Experience building and releasing commercial or open-source software
- Management and analysis of metagenomics and methylation data would be desirable.

Professional experience:

Studies: Bioinformatics, Biostatistics or similar (preferably with doctor degree).

Experience: Experience at least of 2 years working in some of the above-mentioned techniques, shown from scientific publications.

Knowledge: English advanced (spoken and written).

Salary: according with post-doc position in ISCIII

Time table: Full time

Target start date: May 2021 or earlier.

Applications:

Applicants should send their applications by e-mail to personal@cnio.es, clearly quoting the Reference: **AIPOSCEGEN2** in the subject line of the e-mail. Applications and resumes without a reference will not be considered.

<https://www.cnio.es/empleo/postdoctoral-research-assistant-for-the-human-genotyping-cegen-unit-aiposcegen2/>