

Ref. 19- 41

## Computer Engineer / Bioinformatician

### Description:

We are seeking a highly motivated **Computer Engineer and/or Bioinformatician** to join the Translational Bioinformatics Unit in Navarrabiomed. The selected candidate will participate in **the implementation and customization of translational bioinformatics tools** for the analysis of as Whole-Genome Sequencing (WGS) and Exome-Genome Sequencing (EGS) data and their usage in personalized medicine, pharmacogenetics applications and patient stratification among others. The final aim is to contribute to the development of Precision Medicine by focusing on the **use of NGS-EGS as a decision-making support tool to Genomics Medicine**

### Main functions:

- Implementation and customization of WGS/EGS data-analysis pipelines for clinical diagnostic.
- Implementation and customization of WGS/EGS data-analysis pipelines as a support tool in the treatment and monitoring of diseases
- Support the Genomic Medicine Unit in the bioinformatic needs.
- Support the Genomic Medicine Unit in the development of the NAGEN Strategy.

### Daily tasks:

- To work on the analysis of data produced in the NAGEN strategy.
- Implement and customize when necessary existing software tools for variant prioritization such as RD-Connect (<https://rd-connect.eu>) and IVA (<https://cnfl.extge.co.uk/pages/viewpage.action?pagelId=97027062>).
- Collaborate with the development those tools (e.g. IVA, OpenCB, CellBase) aligned and necessary with the NAGEN Strategy.
- Collaborate closely with Genomics Medicine Unit on implementing the appropriate solutions that meet project timelines.
- Participate in the oral presentation of all project findings and abstracts including participation in periodic project status meetings and presentation of final project deliverables
- Travel will be required occasionally for the purpose of the NAGEN strategy (dissemination and/or educational purposes)

### Condiciones laborales de la oferta:

- Full time contract
- **Starting date: July 2019**
- **Duration:** Initially 2-3 years

**Date of publication: 26/06/2019**

**Dead line: 29/07/2019**

[Online Inscription](#)

## ANEXO 1: Bioinformatician

PERSON SPECIFICATION: ESSENTIAL SKILLS AND ABILITIES	
<b>Qualifications:</b>	MSc in relevant field: Computer Engineering, MSc Bioinformatics or similar. We will consider any MSc candidate that covers the required skills.
<b>Experience:</b>	<ul style="list-style-type: none"> <li>▪ Programming experience with languages such as Java, Python, etc.</li> <li>▪ Knowledge of Unix operating system, terminal and bash.</li> </ul>
<b>Personal skills</b>	<ul style="list-style-type: none"> <li>▪ Excellent oral and written communication skills</li> <li>▪ Team person.</li> <li>▪ Fluency in written and spoken English.</li> </ul>
DESIRABLE SKILLS AND ABILITIES	
<ul style="list-style-type: none"> <li>• Experience with Python.</li> <li>• Experience in Open Source tool development.</li> <li>• Experience using relational databases, SQL and / or structured data formats.</li> <li>• Database management and tools: e.g. SOLAR, Hadoop.</li> <li>• PhD Computer Science or similar</li> <li>• Back-end frameworks, like Spring, Django or Laravel</li> <li>• Familiar with design, implementation and deployment of relational databases (MySQL, PostgreSQL or similar) and/or non-relational databases (MongoDB, ElasticSearch, Cassandra)</li> <li>• Design, implementation and documentation of data management APIs</li> <li>• Experience in Genomic Medicine; specially WGS or EGS studies.</li> </ul>	
Additional relevant skills	
<ul style="list-style-type: none"> <li>▪ Familiarity with programming techniques for analyzing data sets that do not fit in memory</li> </ul>	
<b>General skills:</b>	<ul style="list-style-type: none"> <li>• Ability to establish good personal relationships</li> <li>• Ability to communicate and explain concepts</li> <li>• Ability to work as a team</li> <li>• Initiative, autonomy and ability to plan and organize work and time</li> <li>• Enthusiasm, analytical skills, flexibility.</li> <li>• Interest in learning new techniques.</li> </ul>
<b>Other abilities:</b>	<ul style="list-style-type: none"> <li>• Learning and continuous improvement</li> <li>• Valuing the work of others</li> <li>• Responsibility and ability to make commitments</li> </ul>



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Applicants who do not meet the essential requirements will be rejected. Applicants are requested to provide with proof of qualifications and experience gained. At least one reference from previous employer will be provided should an applicant be selected for an interview.