

Job description

Job title	PhD Fellow in gut microbiome and HIV health clinical assays
Job code	GEM_PhD Fellow_01_092023
Full/part time	Full time
Field	Microbiome, Multi-omics and HIV
Direct supervisor	Dr. Roger Paredes and Dr. Alessandra Borgognone
Experience	0-2 years experience
Languages	English/Spanish/Catalan
Starting date	November 15, 2023
Education and field of expertise	<ul style="list-style-type: none"> • Bachelor degree in Biology/Biotechnology/Microbiology/Medicine/Bioinformatics • Master degree in Omics Data Analysis, Computational Biology, Biostatistics or a related field
Summary	<p>IrsiCaixa AIDS Research Institute located at the Hospital Germans Trias i Pujol has an opening for a highly motivated predoctoral position in the Microbial Genomics Group (GEM).</p> <p>The main objective of a successful candidate will be to study the role of the human microbiome in HIV immunopathogenesis and its influence on the efficacy of different state-of-the-art treatment strategies by using integrative multi-omics approaches.</p> <p>Under the direction of the principal investigator, and in close collaboration with the bioinformatics team within the Microbial Genomics team, the PhD student will carry out dry laboratory activities for the development of doctoral thesis framed in a H2020 Mistral project (GA-847943) regarding the gut microbiome in HIV infection. The work will be performed in a highly multidisciplinary research group, in the context of prospective longitudinal cohorts and randomized clinical trials ranging from phase Ib to phase IV, in collaboration with international project partners.</p> <p>The Microbial Genomics group is interested in evolving towards a better knowledge on systems biology and machine learning applications for novel microbiome-based biomarkers discovery.</p>
Job duties	<ul style="list-style-type: none"> • Analyze metagenomics data for clinical trials regarding the microbiome and immune response to HIV treatment. • Perform study follow up, data acquisition and bioinformatic data analysis. • Process large genomics data volumes and optimize next-generation sequencing data analysis procedures. • Combine data generated with multidimensional clinical, epidemiological and analytical data using integrative omics approaches. • Maintain well documented dry laboratory records. • Active update on scientific literature related to the research topic. • Collaborate with project partners for data sharing, analysis and interpretation. • Prepare scientific manuscripts/abstracts/reports detailing the project results. • Present progress work in meetings, including laboratory groups and international conferences.

<p>Candidate profile and qualifications</p>	<ul style="list-style-type: none"> • Previous experience in bioinformatics and next-generation sequencing data handling. • Expertise in statistical computing environments such as R. • Background in database management, high performance computing, and analysis of high throughput data. • Work knowledge in HIV, immunology, microbiology and multi-omics data integration (metagenomics, metabolomics, etc) will be valued. • Expertise in cloud platforms, workflow management systems, and Git will be a plus. • Good written and oral communication skills in English. • Good organizational skills and excellent attention to detail. • Ability to perform as a team member and to work in a dynamic environment with good interpersonal skills.
<p>What we offer</p>	<ul style="list-style-type: none"> • Impactful, innovative and interdisciplinary research projects • An international collaborative research environment • Mixed basic and clinical research environment in Biomedicine • Transversal and continuous training courses • State-of-the-Art facilities and well-equipped offices/relaxing areas.
<p>Application deadline</p>	<p>Open until candidate is found</p>
<p>Required documents</p>	<ul style="list-style-type: none"> • Curriculum vitae in English • Motivation letter describing previous work/research experience, current interests and career expectations • Academic certificates (Bachelor's and Master's degrees) • 2 Recommendation letters
<p>Selection process</p>	<ul style="list-style-type: none"> • Pre-selection: based on CV, academic record, and motivation letter. • Interview: short-listed applicants will be interviewed in person or online. • Offered position: the job offer will be sent to the successful candidate after the interview.
<p>Contact</p>	<p>Dr. Roger Paredes and Alessandra Borgognone E-mail: rparedes@irsicaixa.es; aborgognone@irsicaixa.es Please, insert job code in the e-mail subject: GEM_PhD Fellow_01_092023</p>
<p>Where to find us</p>	<p>IrsiCaixa AIDS Research Institute Germans Trias i Pujol Hospital 2nd floor, Maternity building. Ctra. del Canyet, s/n. 08916 Badalona, Barcelona (+34) 93 465 63 74</p>