

Job description

Job title	Postdoctoral Position to study the role of the human microbiome in infectious diseases
Job code	GEM_Posdoc_02_092023
Full/part time	Full time
Field	Microbiome, Bioinformatics, and Human Health
Direct supervisor	Dr. Roger Paredes
Experience	0-2 years experience
Languages	ENGLISH: Advanced
Starting date	November 15, 2023
Education and field of expertise	PhD in a biomedical / biotechnological area, with strong experience in bioinformatics research
Summary	<p>The Microbial Genomics Group (GEM) at the IrsiCaixa AIDS Research Institute is seeking a postdoctoral fellow to work in the analysis of large-scale microbiome multi-omics data in consortium projects focused on HIV and human health.</p> <p>The team apply computational approaches to study the role of the human microbiome in the immunopathogenesis and treatment of infectious diseases, with a special focus on the development of personalized microbial-based diagnostics and biomarkers. The group also work in collaborative projects investigating the impact of the intestinal microbiome in different human diseases, including SARS-CoV-2 and cancer.</p> <p>The successful candidate will improve and implement existing analysis workflows, participate in and lead projects, and collaborate with other researchers in data interpretation. Additionally, he/she will have the opportunity to initiate new cutting-edge research projects, in a highly collaborative network of international project partners. The work will be performed in the framework of a H2020 project Mistral (GA-847943) and other national and international research projects.</p>
Job duties	<ul style="list-style-type: none"> • Guide and collaborate in research projects through experimental design, data generation and analysis. • Develop efficient and scalable workflows for analyzing next-generation sequencing data (metagenomics, metaproteomics, metabolomics, etc). • Create novel analytical tools as required by research goals. • Participate in development, testing, and maintenance of modular software pipelines for metagenomic analysis. • Implement procedures for data processing and sharing. • Maintain detailed documentation of data analyses strategies and protocols ensuring the traceability of generated data. • Interface with collaborators to design experiments, analyze and interpret the data. • Prepare scientific presentations and articles. • Present data within and outside of the laboratory groups in meetings and symposia. • Maintain close communications with the PI regarding progress

<p>Candidate profile and qualifications</p>	<ul style="list-style-type: none"> • Strong programming skills in R and/or Python, experience in analyzing large volumes of next-generation sequencing data. and with bioinformatics workflow environments. • Excellent data analysis skills including exploratory analysis and statistical testing. • Background in human disease biology, immunology and/or microbiology. • Experience in handling multi-omics data, in particular metagenomic datasets. • Expertise in cloud computing technologies and workflow management systems will be valued. • Capacity to coordinate projects. • Outstanding scientific and English communication skills (written and oral presentations). • Excellent team work skills. • Motivation to explore new research avenues.
<p>What we offer</p>	<ul style="list-style-type: none"> • Dynamic and highly collaborative project with translational potential • An international and interdisciplinary research environment consisting of wet lab scientists and data analysts • Mixed basic and clinical research environment in Biomedicine • Transversal and general training (such as gender equality, research seminars, scientific writing) • State-of-the-art infrastructures 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 • Motivational letter describing previous work/research experience, current interests and career expectations • Academic certificates (BSc, MSc and PhD degrees) • 2 Recommendation letters
<p>Selection process</p>	<ul style="list-style-type: none"> • Pre-selection: evaluation of track 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, MD, PhD E-mail: rparedes@irsicaixa.es Please, insert job code in the e-mail subject: GEM_Posdoc_02_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>