





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	PhD in a biomedical / biotechnological area, with strong experience in	
expertise	bioinformatics research	
Summary	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. 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. 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.	
Job duties	 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 	







Candidate profile and qualifications	 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.
What we offer	 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.
Application deadline	October 15, 2023
Required documents	 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
Selection process	 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.
Contact	Dr. Roger Paredes, MD, PhD E-mail: rparedes@irsicaixa.es Please, insert job code in the e-mail subject: GEM_Posdoc_02_092023
Where to find us	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