International Agency for Research on Cancer



Postdoctoral Opportunity BIOSTATISTICS AND DATA INTEGRATION TEAM NUTRITION AND METABOLISM BRANCH

Within the Nutrition and Metabolism Branch (NME), the Biostatistics and Data Integration Team (BDI) aims to develop and apply modern statistical tools to study the role of anthropometry, lifestyle and metabolic dysfunction on cancer risk, and to understand the biological mechanisms that underlie these processes. These objectives are achieved through access to world-leading epidemiological resources, such as the EPIC study and the UK Biobank, and collaborations with international genetics consortia.

A postdoctoral opportunity is immediately available within the BDI team to contribute to the MeDiCa project (Metabolic signature of Dietary exposures and their association with gastrointestinal cancers) – funded by the World Cancer Research Fund for 4 years. The successful candidate will develop and apply supervised learning methods for the construction of metabolic signatures of specific dietary exposures. Their association with risk of gastro-intestinal cancer will be assessed using observational data and Mendelian randomization analyses. Bioinformatics tools will be used to leverage relevant information available in the literature and chemical databases, and to investigate the biological role of the metabolites comprising the signatures.

The successful candidate will be supervised by Dr. Vivian Viallon (leader of the BDI team). Essential or desired selection criteria include:

- A PhD with appropriate training in statistics, biostatistics, machine learning, bioinformatics, molecular epidemiology or related fields;
- Strong background in R and/or Python;
- Proficiency in English (oral and written);
- Strong communication skills;
- Scientific writing skills;
- Experience with cancer epidemiology and the analysis of metabolomics or other omics data.

The postdoctoral scientists will undertake activities in an innovative and scientifically stimulating environment and will have opportunities to interact and collaborate with colleagues from IARC and its worldwide networks. The postdoctoral opportunity is initially for one year with possibility of renewal for additional years subject to performance. The IARC postdoctoral stipend is currently €2950 per month (net). The cost of travel for the postdoctoral scientist, and in certain circumstances for dependents, will be met. Dependence and health insurance allowances will be paid, if applicable. Applications from nationals from low- and middle-income countries are particularly encouraged. Postdoctoral scientists at IARC have access to a wide spectrum of scientific disciplines and to a unique network of collaborators across the world. IARC welcomes approximately 40 postdoctoral scientists, at any one time, distributed across its research branches. For more information about postdoctoral stays at IARC, please read the Postdoctoral charter here.

Interested candidates are invited to contact Dr. Vivian Viallon (viallonv@iarc.who.int) for informal enquiries. Applicants should send a CV, including list of publications and a description of previous

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research experience, a motivation letter and the names and addresses of two academic referees, to viallonv@iarc.who.int

Closing date: Applications will be accepted until 31 January 2024 at the latest, but we recommend applying immediately as the opportunity is likely to be filled before that date.