## **International Agency for Research on Cancer**



## Postdoctoral/Visiting Scientist Opportunity On Childhood Cancer Epigenomics Epigenomics and Mechanisms Branch

A postdoctoral/visiting scientist opportunity on the epigenetic origins of childhood cancer is available in the Epigenomics and Mechanisms Branch of the International Agency for Research on Cancer (IARC). Childhood cancer may have an *in utero* origin, a period largely driven by epigenetic regulation. The DNA methylome (450K and 850K arrays) will be analysed in neonatal blood from cases and controls nested in some of the world's largest studies on childhood cancer. Significant epigenetic markers will be integrated with transcriptome and genome data derived from tumor tissues and analysed with multi-omic driver prediction algorithms in order to evaluate the functional impact and driver roles of DNA methylation alterations in carcinogenesis. This study proposes a novel approach aiming to map the DNA methylome of childhood cancer patients using unique resources and identifying early molecular origins of this cancer. The project is supported by funding from the French National Cancer Institute (INCa).

The selected candidate will interact closely with Dr Akram GHANTOUS, supervisor, with other scientists in the Epigenomics and Mechanisms Branch and at IARC, and with international research consortia. The postdoctoral/visiting scientist opportunity will involve analyses, drafting of manuscripts and reports based on data generated from the aforementioned resources, and if possible, some involvement in pertinent laboratory work. The candidate will be supported by a research team with interdisciplinary expertise encompassing fields such as bioinformatics, biostatistics, epidemiology and molecular biology.

The successful candidate would ideally have:

- A PhD in bioinformatics, biostatistics, epidemiology, molecular biology or related fields;
- Strong analytical and programming skills (eg. R);
- Experience in omics analysis (epigenomics, genomics and/or transcriptomics);
- An excellent command of spoken and written English

The opportunity is initially for a period of 1.5 years, renewable subject to availability of funding. The current IARC postdoctoral/visiting scientist stipend is € 2,820 per month. The cost of travel, and in certain circumstances for dependents, will be met. Dependent's and health insurance allowances will be paid, if applicable. Applications from women and 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 around 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.

Applicants should send a CV by email to Mrs Elizabeth PAGE (<a href="PageE@iarc.fr">PageE@iarc.fr</a>), including a cover letter, a list of publications, a description of research experience, and the names and addresses of two academic referees. Please mention in the title of your email "Postdoc – Child Cancer Epigenetics" and copy Dr Akram GHANTOUS (<a href="GhantousA@iarc.fr">GhantousA@iarc.fr</a>). Applications will be accepted until 12 February 2021.