Scientist (Bioinformatics) - REQ-1703672

Grade: P2

Contractual Arrangement: Fixed-term appointment

Contract duration: Two years - Extra-budgetary position established for an initial duration of two

years. Any extension subject to availability of extra-budgetary.

Job Posting: 6 November 2017 Closing Date: 5 December 2017 Primary Location: Lyon, France

Organization: IARC

Section of Nutrition and Metabolism (NME)/Biomarkers Group (BMA)

PURPOSE OF THE POSITION

A major focus of the Biomarkers (BMA) Group is the collection of complex metabolomic data by mass spectrometry within the context of intervention and epidemiological studies on cancer aetiology. To date, no standardized approaches exist to analyse metabolomic data and new bioinformatic tools are needed to fulfil specific needs of the Group to interpret this data. The purpose of this position is to provide support to the BMA Group for developing innovative bioinformatic approaches for the analysis of metabolomic data obtained from blood, urine and other biospecimens and to facilitate interactions with biostatisticians and epidemiologists engaged in metabolomic studies.

OBJECTIVES OF THE PROGRAMME

The main research objectives of the BMA Group are to identify, validate and implement biomarkers in order to better understand the role of environmental and lifestyle factors in cancer aetiology. This includes the study of the role of diet, physical activity, obesity, environmental factors, the microbiome and endogenous metabolism on cancer risk. These objectives are achieved through the application of mass spectrometry-based metabolomic approaches to large-scale prospective cohorts, cross-sectional and intervention studies.

The work includes the development and implementation of new bioinformatic tools to aid in the chemical identification of biomarkers of interest and in the biological interpretation of the results obtained in metabolomic studies.

DESCRIPTION OF DUTIES

Within the research framework of the BMA Group, the incumbent is expected to:

- contribute to the planning, design and conduct of metabolomic studies to study the relationship between lifestyle, diet, environmental factors and cancer;
- develop innovative bioinformatic tools for the analysis of metabolomic data;
- contribute to the statistical and bioinformatic analysis of metabolomic data;
- contribute to the preparation and writing of scientific manuscripts and/or reports;
- present results of his/her research findings at conferences;
- participate in the training of PhD students and postdoctoral fellows;
- contribute to the writing of grant applications with a view to attracting funding from competitive sources in relevant research areas;

- conduct any other related duties as may be assigned by the Supervisor.

REQUIRED QUALIFICATIONS

Education

Essential: PhD in bioinformatics, cheminformatics or a related subject.

Desirable: Postgraduate training in bioinformatics applied to clinical or epidemiological studies.

Experience

Essential: At least two years of relevant experience at the international level in the field of bioinformatics and metabolomics.

Desirable: Experience in cancer clinical or epidemiological research. Experience in grant writing as well as supervision of technical personnel. Good publication record in the relevant research area.

<u>Skills</u>

- Very good knowledge of cheminformatics and bioinformatics applied to metabolomic data.
- Demonstrable ability to write computer codes and organise data.
- Good working knowledge of mass spectrometry analysis of small molecules.
- Good working knowledge in biostatistics.
- Working knowledge or interest in pathway and network analysis.
- Knowledge or demonstrated interest in human nutrition, metabolism or medicine.
- Ability to draft reports and familiarity with preparation of grant applications.
- Demonstrated organizational and communication skills.
- High level of accuracy and attention to detail.
- Ability to collaborate effectively in order to deliver on-time high quality results in a larger team.
- Affinity for working in an interdisciplinary and highly international environment.
- Demonstrated experience in using information technology and statistical tools to understand large complex data sets, and particularly metabolomic data.

Required WHO competencies:

Ability to:

- Produce results
- Move forward in a changing environment
- Foster integration and teamwork
- Respect and promote individual and cultural differencies
- communicate in a credible and effective way
- know and manage yourself

Languages:

Expert knowledge of English. Intermediate knowledge of French is an asset.

REMUNERATION

WHO/IARC salaries for staff in the Professional category are calculated in US dollars. The remuneration for the above position comprises an annual base salary starting at USD 46026 (subject to mandatory deductions for pension contributions and health insurance, as applicable), a variable

post adjustment, which reflects the cost of living in a particular duty station, and currently amounts to USD 1864 per month for the duty station indicated above. Other benefits include 30 days of annual leave, allowances for dependent family members, home leave, and an education grant for dependent children.

ADDITIONAL INFORMATION:

- It is mandatory to attach a full list of publications. To add this list, please go to your profile under the dedicated "publication" tab.
- All candidates are strongly encouraged to add a cover letter to their online application.
- Candidates called for interview will be expected to give a seminar.
- This vacancy notice may be used to fill other similar positions at the same grade level.
- Only candidates under serious consideration will be contacted.
- Any appointment/extension of appointment is subject to WHO Staff Regulations, Staff Rules and Manual.
- For information on WHO's operations please visit: http://www.who.int.
- WHO/IARC is committed to workforce diversity. Applications from women are particularly encouraged.
- WHO/IARC has a smoke-free environment and does not recruit smokers or users of any form of tobacco.

To apply to this job (from 6th of November, 2017): http://www.iarc.fr/en/vacancies/index.php