

## Scientist (Epigenetics) - (1800377)

**Grade:** P2

**Contractual Arrangement:** Fixed-Term Appointment

**Contract duration:** Two years - Extra-budgetary position established for a limited duration of two years. Any extension subject to availability of extra-budgetary funding.

**Posting Date** Feb 6, 2018, 4:07:11 PM

**Closing Date** Mar 5, 2018, 11:59:00 PM

**Primary Location** France-Lyons

**Organization** Epigenetics

**Schedule** Full-time

### **PURPOSE OF THE POSITION**

Under the direct supervision of the Head of the Epigenetics Group (EGE) at IARC, the incumbent conducts studies aimed at investigating epigenetic mechanisms and cellular pathways involved in cancer development and progression, and their relationship with known or suspected etiological factors.

Specifically, the incumbent will carry out existing and develop new studies aimed at testing mechanistic hypothesis on the role of early molecular events and deregulated pathways involved in tumour initiation and progression, which should advance our knowledge of mechanisms of carcinogenesis. This will involve, but not limited to, the discovery and characterization of functionally important epigenetic "driver" genes ("epidrivers") and molecular pathways altered by specific carcinogenic agents as well as the development and application of in vitro models (human and mouse immortalization models) and state-of-the-art approaches, (epi)genome editing (such as CRISPR/Cas9 technology), genome-wide shRNA library knockdown screens, cell phenotyping and functional (epi)genomics. He/she will also participate in collaborative projects across IARC aimed at better understanding the mechanisms of carcinogenesis and of the causal pathways underlying specific malignancies.

### **OBJECTIVES OF THE PROGRAMME**

Within the Section of Mechanisms of Carcinogenesis (MCA), the EGE Group conducts both mechanistic studies and epigenetic profiling, aimed at enhancing our understanding of mechanisms of carcinogenesis and cancer etiology and discovering and validating new epigenetic biomarkers, exploiting new concepts in cancer epigenetics and recent technological advances in epigenomics. The research is carried out in close collaboration with IARC laboratory scientists, epidemiologists and biostatisticians as well as external groups. Particular emphasis is placed on the studies aiming to provide critical insights into mechanisms of carcinogenesis through the identification of epigenetic alterations and molecular pathways deregulated by specific carcinogenic agents.

More information about the EGE Group at IARC can be found at the following link:

<http://www.iarc.fr/en/research-groups/EGE/index.php>

### **DESCRIPTION OF DUTIES**

Within the framework of the EGE Group and under the guidance of the EGE Group Head, the key duties of the incumbent are as follows:

- 1/ Contribute to the development, design, and conduct of research projects aiming to better understand the role of epigenetic mechanisms in cancer development and progression and to discover/validate epigenetic biomarkers of exposure and cancer.
- 2/ Assist in the development of epigenetic assays that may facilitate evaluation of new potential carcinogens and incorporation of epigenetic data into carcinogen evaluation by the IARC Monographs Programme.
- 3/ Coordinate laboratory experiments related to ongoing molecular/cell biology studies and liaise with relevant internal and external groups and networks. Seek and develop collaborations with other researchers at IARC where epigenetic approaches may add value to research projects.
- 4/ Prepare and write scientific manuscripts, reviews, and reports based on on-going and future mechanistic and profiling studies.
- 5/ Contribute to writing grant applications in the relevant research areas with a view to attracting research funding from competitive sources.
- 6/ Provide technical advice and daily supervision to post-doctoral fellows, students, visitors and trainees hosted by the EGE Group.
- 7/ Assist in the organization of various scientific and/or technical activities related to on-going and future studies in epigenomics.
- 8/ Perform any other related duties as may be assigned by the Supervisor.

### **REQUIRED QUALIFICATIONS**

#### **Education**

PhD (doctoral degree) or Doctor of Medicine (MD) degree in molecular biology, genetics, genomics, cancer biology, or related field.

#### **Experience**

##### *Essential:*

At least two years' post-doctoral experience within the field of cancer research related to epigenetics/epigenomics, molecular biology and functional (epi)genomics. Experience of working on mechanistic/functional studies using in vitro (cell culture) models. Solid publication record in the relevant research areas.

##### *Desirable:*

Experience with bioinformatics and related skill set, experimental setup for genome-editing and multiparametric phenotyping as well as other state-of-the-art tools of molecular and cell biology (such as shRNA library knockdown screens) would be an asset.

#### **Skills**

##### **Functional skills:**

The functional skills listed below are all essential.

- 1/ Applied knowledge in modern molecular/cell biology and (epi)genomics in particular with respect to cancer research.

2/ Familiar with preparation of grant applications.

3/ Good organization and communication skills.

**Required WHO competencies:**

Ability to:

1/ Produce and deliver quality results

2/ Foster integration and teamwork

3/ Move forward in a changing and moving environment

**Languages**

*Essential:* Expert knowledge of English.

*Desirable:* Intermediate or higher knowledge of French.

**REMUNERATION**

Remuneration for WHO/IARC staff in the Professional and higher category is quoted in US dollars.

The fixed remuneration for the above position comprises an annual net salary plus a post adjustment which reflects the cost of living in a particular duty station.

Total fixed remuneration for this position currently amounts to USD 70926 per annum which is the sum of: 1) annual net salary of USD 46026 at Level P2/Step I of the UN professional salary scale, plus 2) post adjustment for Lyon, France currently amounting to an annualized figure of USD 24900.

The fixed remuneration is expressed net of income tax but before deduction of the employee share contributions for mandatory participation in the United Nations Joint Staff Pension Fund and in the Organization's private insurance plans covering health, accident, illness and disability.

Other benefits include 30 days of annual leave and allowances for dependent family members.

Subject to certain conditions, internationally-recruited staff may also be entitled to relocation travel & shipment, settling-in grant upon appointment, home leave and/or education grant for dependent children.

More information about the remuneration and benefit package applicable at WHO/IARC can be found at the following link: <http://www.who.int/careers/what-we-offer/en/>

**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.
- Application profiles should include the details of all of the candidate's work experiences to date (full career details).
- All candidates are strongly encouraged to add a cover letter (in English) to their online application.
- Candidates called for interview will be expected to give a seminar (in English).
- 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.