# Research Group Leaders for the Human Technopole Centre of Genomics - Functional Genomics Programme

We are seeking talented, preferably early career, researchers to establish their independent laboratory at the **HT Centre for Functional Genomics**. Exceptionally, we will also consider mid-career leading scientist that are considering to move to HT. The **Research Group Leaders** will be responsible for developing an independent scientific programme within the Centre, as well as contributing to the collegial development of the HT research programme. They will be active researchers carrying out high-quality, internationally competitive research and contributors to the international scientific community.

The mission of **Functional Genomics** in the Centre will be to elucidate key questions including "how the genome is regulated in each cell, tissue and organ in health and disease", "what are the molecules and networks that drive biological activity in cells, tissues, organs", and "how to modify genome regulation and genome output in health and diseases". In particular, we will identify and characterize functional and regulatory non-coding genomic element networks in different cells and tissues of the human body, with the goal to identify the grammar of the genome, which will ultimately provide deeper understanding of genome function and enable genomics medicine.

In order to address these challenges, the Centre will develop original technologies to identify and functionally characterize regulatory elements, non-coding RNA (with focus on IncRNAs), the genome conformation and interactomes of biological molecules in living cells. These approaches will be broadly used to map the function and regulation of human genome in health and disease across human diversity.

# In the context above outlined, successful candidate(s) will engage in the following areas:

(1) Development and application of original technologies to comprehensively analyze function and regulation of the genome and the transcriptome also considering its dynamic 3D structure.

(2) Development and application of single cell technologies including multiomics from single cells to analyze expression, interactomes and gene regulation from single cell to tissue and organ level.

(3) Development and application of broad bioinformatics approaches towards biological interpretation of original genomics data, with particular focus on the areas of the Center of Genomics and other HT centers.

(4) Development of databases and tools to broadly analyze, display, distribute, reuse the data produced by the Center and in collaboration with other centers inside and outside HT.

## Key tasks and responsibilities

## The Group Leader will:

• Develop and supervise the establishment of a world-class research programme in genomics;

• lead their own research group;

• foster a diverse and nurturing research environment through leading and mentoring members of their teams;

• build effective links and collaborations within other HT research investigators;

• develop and foster links between HT and other national and international research organizations;

• contribute to the preparation of Centre reports to be reviewed by an external expert board;

• actively participate in initiatives that pursue improvement of all aspects of HT;

• actively participate in the co-organization and implementation of activities that will promote the image of HT in the international genomics community, such as symposia and workshops;

• contribute to the establishment of a collaborative and open scientific environment by actively participating in meetings and seminar series internal to HT. This will foster synergies between the groups and propagation of knowledge;

• raise third-party funding;

• participate and helping to designing HT Core Facilities.

#### **Key requirements**

The selected candidates will have an outstanding record in various areas of Genomics, preferably with a strong track in technology development; computational biology and related areas; and interest in the analysis of human systems and diseases. The Centre for Genomics will be implementing strategic internal collaboration schemes and will work closely with other HT Research Centres to achieve synergies and reach joint goals. The selected candidates will possess scientific vision, leadership skills and be competitive in acquiring extramural grants and collaborative attitude. Basic requirements for the position include a PhD in a relevant science subject, and a proven record of scientific research output in the field of genomics and related area. Excellent organisational skills and a fluent command of English are essential.

#### **Application Instructions**

Please apply online sending a CV, a motivation letter, a project description and providing contacts for 3 to 4 potential referees.

The project description should be a maximum of 8 pages long and include both a short description of current and future research in the group in the context of HT.

Questions concerning the role and any queries regarding the terms and conditions should be sent to the Head of the HT Centre of Genomics, at piero.carninci@fht.org.

Please apply only through the dedicated area below. (APPLY NOW)

(Please use Google Chrome or Firefox (not Safari) to send in your application. Once your application has been received, you will receive a confirmation email. If you do not receive the confirmation email please contact us at helpdeskHR@fht.org )

#### **Additional Information**

Group leaders in Genomics Centre will be based in Milan, recently named the city with the best quality of life in Italy. (<u>https://lab24.ilsole24ore.com/qualita-della-vita/</u>)

HT offers a highly collaborative, international and diverse work environment. The working language is English. HT will foster top quality, interdisciplinary research by promoting a vibrant environment consisting of independent research groups attracting outstanding graduate students and postdoctoral fellows with access to cutting-edge Core Facilities.

HT is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to a leading, internationally competitive research organization. Researchers coming to Italy for the first time, or returning after residing abroad, benefit from very attractive income tax benefits. HT seeks to promote a collegial and family-friendly atmosphere. The remuneration package comprises a competitive salary, a comprehensive pension scheme, medical and other social benefits, as well as financial support for relocation and installation.

The contract is to be intended as Fixed-Term.