

centre nacional d'anàlisi genòmica centro nacional de análisis genómico

# Sample Preparation Specialized Technician

## **Job Opening**

#### **CNAG - The Institute**

The Centro Nacional de Análisis Genómico (CNAG) is one of the largest Genome Analysis Centers in Europe, located in Barcelona. With state-of-the-art genomic analysis capabilities, CNAG supports national and international researchers, as well as clinicians, in their pursuit of cutting-edge research and clinical applications.

The CNAG Consortium carries out large-scale projects in DNA/RNA analysis for the improvement of quality of life in collaboration with the Spanish, European and International Research Community. CNAG researchers participate in major International Genome Initiatives such as the Human Cell Atlas (HCA), the International Cancer Genome Consortium (ICGC), the International Human Epigenome Consortium (IHEC), the International Rare Diseases Research Consortium (IRDIRC), the European Reference Genome Atlas (ERGA) and the European Infrastructure for life-science information (ELIXIR), as well as in several EU-funded projects.

CNAG occupies 1,400 square meters of laboratory and office space and operates 4 Illumina instruments (3 NovaSeq6000 and 1 MiSeq) and 2 large Oxford Nanopore Technologies sequencers (1 PromethION 24 and 1 GridION Mk1) that produce more than 7 Tbases of sequencing data per day. The sequencing operation is supported by an extensive informatics infrastructure: 10.000 computing cores and 15 petabyte of data storage. The operation is certified ISO 9001 and accredited ISO/IEC 17025 to deliver standardized, high-quality data for research and clinics.

The CNAG employs more than 120 professionals. Within its stimulating scientific environment the state-of-the-art technologies are leveraged to drive forward groundbreaking research projects in genomics, directly contributing to advancements in public health.

## **LUCIA - LUng Cancer-related risk factors and their Impact Assessment**

LUCIA is a project funded by the European commission HORIZON-MISS-2021-CANCER-02 Europe Programme (Grant agreement ID: 101096473). It contributes to the EU Mission Cancer along with other projects and researchers across Europe. It brings together a consortium of 20 partners – academia, associations, hospitals, NGOs, research and technological organisations, and industry – led by TECHNION (Israel Institute of Technology), from six EU countries and three associated countries.

Its key aim is to constitute a toolbox for discovering and understanding new risk factors that contribute to lung cancer (LC) development. The toolbox encompasses the analysis of three complementary aspects that feed into each other:

(1) personal risk factors (i.e., a person's exposure to chemical pollutants and behavioral and lifestyle factors),

(2) external risk factors (i.e., urban, built and transport environments, social aspects, and climate), and

(3) the cellular processes (i.e., changes in genetics, epigenetics, metabolism, and ageing)

### About the team/lab/Unit

The Sequencing unit provides highly specialized support in next generation genomics to national and international researchers and clinicians and conducts strategic development and implementation of the protocols.

#### The Role

The successful candidate will work closely with the head of the Sequencing Unit within the Long-read Sequencing team developing and implementing protocols for LUCIA international consortium.

#### **Responsibilities:**

- Preparation of samples for sequencing.
- Implementing new protocols.
- Keeping rigorous audit trails of the work carried out, writing and updating documentation such as Standard Operation Procedures (SOPs).
- Recognizing and reporting erroneous protocol outcomes.
- Stock and orders management.

#### Whom would we like to hire?

- At least 3 years of work experience in molecular biological procedures, in particular PCR, cloning, DNA fragmentation and DNA/RNA extraction procedures.
- Master or PhD degree in Molecular Biology, Biochemistry, Biotechnology or similar.
- Excellent laboratory techniques and able to work very reliably, pay attention to detail and work as part of a team.
- Capable of working with computers and common software packages.
- Should be very able with laboratory devices.
- The emphasis will be on excellent laboratory practices.
- Proficient in English.
- Advanced MS Office skills.
- Work safely in a laboratory, maintaining excellent housekeeping.
- Understand and follow quality procedures to meet the requirements of quality standards relevant to the workplace.
- Understand the internal and external regulatory environment.
- Prepare for laboratory tasks using the appropriate scientific techniques, procedures and methods.
- Perform laboratory tasks following specified methodologies, such as SOPs.

- Technical competence in the use of specified instrumentation and laboratory equipment, including calibration where required.
- Produce reliable, accurate data and keep accurate records of laboratory work undertaken and results.
- Demonstrate the required attitude, behaviors and interpersonal skills associated with the professional workplace.

#### Nice to have

• Experience with the 2nd and 3rd generation of DNA sequencing technology.

#### **The Offer**

- Contract duration: 12 months
- Estimated annual gross salary: Salary is commensurate with qualifications and consistent with our pay scales.
- Target start date: 15.05.2024

We provide a highly stimulating environment with state-of-the-art infrastructures, and unique professional career development opportunities.

We offer and promote a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, ethnicity, religion, sexual orientation or gender identity.

We are committed to reconcile a work and family life for our employees and are offering the opportunity to benefit from flexible working hours.

## **Application Procedure**

All applications must include:

- 1. A complete CV including contact details.
- 2. Motivation letter
- 3. Contact details of two referees.

All applications must be addressed to Mireya Fernández - mireya.fernandez@cnag.eu

**Deadline:** Please submit your application by 10/05/2024

Interview: Shortlisted candidates will be invited for interview at CNAG.

Please, see all of our job opportunities in the Career site of CNAG website: https://www.cnag.eu/jobs

#### **Consortium CNAG**

#### Centro Nacional de Análisis Genómico

National Center of Genomic Analysis