

Genomics R&D Specialist

The Genomics R&D Specialist will apply scientific domain-specific knowledge in second and third-generation sequencing technologies and specialized data processing techniques to design, develop and implement new sequencing strategies in Environmental Genomics. The role will work in partnership with scientists and lab technicians to support the generation of innovative solutions, within defined project scopes and aligned to established frameworks, which support decision-making in research, development and sequencing activities.

In particular, we are seeking a Genomics researcher with strong desire to be a key contributor for establishing/developing/testing innovative sequencing strategies, while exploring new tools and methods to enable the analysis of DNA/RNA sequence and epigenetic data in support of our R&D projects. You will join us at the Sequencing Laboratory (SeqLab) at Genoscope (French National Sequencing Centre). The latter has a long-standing tradition in the broad field of genomics and was one of the key players in the Human Genome Project. The candidate will benefit from a highly dynamic and interdisciplinary environment, including biologists, microbiologists, computer scientists, and bioinformaticians. You will partner with SeqLab scientists, interact across the Production and Development units, and use wet-lab and computational approaches to leverage cutting-edge genomics assays (e.g.: Oxford Nanopore 'Read-Until', meta-omics with long-reads, detection of non-traditional epigenetic marks). The position is a rare opportunity to work in a variety of wet-lab and computational approaches relating to genomics/epigenomics and interact with key stakeholders, while publishing and contributing directly to the development of the field. The contract is valid for 2 years, with the possibility of permanent recruiting.

Responsibilities

- Drive hypothesis generation by applying wet-lab, sequencing approaches, data integration, and biological knowledge.
- Build and/or implement new sequencing strategies to translate biological data into insights.
- Identify and proactively help build strategic directions in long-read sequencing.
- Process troubleshooting throughout the entire sequencing workflow (nucleic acid isolation, library preparation, sequencing and analysis).

Essential Requirements

- A PhD degree in Biology or related field (e.g., Biological sciences, Microbiology, Genetics), preferably with post-doctoral or equivalent experience in Genomics/Epigenomics.
- Demonstrated experience in multiple areas in at least three of the following: long-read sequencing technologies (Pacbio/Nanopore), gene expression analysis, epigenomics, Hi-C data analysis.
- Demonstrated expertise in R, Python, or Perl. Experience in working on high performance computing/cluster platforms.
- Demonstrated experience in the use of many bioinformatics tools relating to genomic (DNA/RNA) sequence analysis.

- A keen demonstrated interest in translating genomic knowledge into applications that leverage the field.

Interested?

Please contact Pedro Oliveira (pcoutool@genoscope.cns.fr) with a CV, motivation letter, and 3 contacts for recommendation letters.