# Bioinformatics position – Transcriptomics Unit

## Background

IGATech has been the largest sequencing provider in Italy since 2009. Currently, it serves hundreds of clients worldwide, primarily in Europe and South America. With an annual turnaround of over 30,000 samples per year, IGATech has established itself as a leading player in the industry. IGATech's mission is to provide the scientific community with robust and dependable support in adopting the latest sequencing technologies and bioinformatics approaches. For this reason, we leverage internally developed sequencing and computational infrastructure and rely on continuous implementation and upgrades through commercial activities. Our laboratories utilize a variety of sequencing and automation platforms, such as Illumina, Element Biosciences, Oxford Nanopore, Tecan, Beckman, and 10X Genomics. Thanks to its sequencing capability, IGATech has successfully participated in several EU-funded projects, playing a key role in various genomics research work packages. IGATech's major clients include universities, research institutes, IRCSS, and several private companies, such as biopharma, biotech, and seed companies.

## The Position

We are seeking a Senior Bioinformatician for the Transcriptomics Unit who can provide top-notch experimental designs and analyses across various applications, such as RNA-Seq, small-RNA, single-cell transcriptomics, spatial transcriptomics, full-length cDNA sequencing, direct RNA sequencing, and ribosome profiling. The candidate will have the opportunity to work with a variety of experiments in the field of transcriptomics, with the potential to develop integration of analytical methods and emerging sequencing technologies. A strong interaction with the laboratory operators is also required to optimize protocols and promote continuous feedback on the experimental outcomes. The successful candidate will be responsible for developing new analytical pipelines, with a strong focus on single-cell sequencing and spatial transcriptomics. This will involve using commercial platforms such as 10X Genomics, Parse Biosciences, and Curio, as well as internally developed solutions.

The company's core business is delivering quality-centric services, and one of our key values is the ability to operate in an industry-grade setting. Therefore, our bioinformatics solutions must be highly reproducible, well-documented, and computationally optimized. The candidate will therefore spend time on both R&D activities, such as exploring new bioinformatics solutions and designing more customized services, as well as consolidating push-button pipelines for

standardized processes. Interaction with clients will also be a part of the role, with the goal of understanding clients' needs and proposing the most suitable analytical solution.

## Key Tasks and Responsibilities

- Develop expertise and experience in emerging sequencing applications such as single-cell sequencing, spatial transcriptomics, ribosome profiling, and long-read sequencing.
- Strong collaboration with the laboratory to enhance protocol optimization.
- Deliver customized analysis services for customers.
- Develop and maintain data analysis pipelines in coordination with the bioinformatics team.
- Provide support to end-users for the utilization of standardized pipelines.
- Provide consultancy during experimental designs in collaboration with the business development team.
- Scouting for cutting-edge and market-relevant analytical solutions

## Requirements

- PhD in Bioinformatics-related subjects (biology, bioinformatics, genetics, biotechnology, etc.).
- Experience with NGS data analysis in the field of transcriptomics (single-cell and spatial preferably)
- Strong programming skills in Python and R.
- Good understanding of basic principles of NGS library preparation methodologies is preferable.
- Proficiency with the Unix/Linux operating system.
- Proficient in English.
- Experience with workflow orchestrators (e.g. Snakemake) and the use of Docker/Singularity is a plus.

## Required Personal Skills

- Good time management and prioritization skills.
- Ability to manage competing priorities in a fast-paced environment and work independently.
- Strong interpersonal skills, demonstrated by the ability to lead and gain the assistance and cooperation of others in a team.

- Ability to interact effectively with other team members and collaborate synergistically to drive projects forward.
- Motivation to train and mentor colleagues in the adoption of new pipelines and technologies
- Strong communication skills to effectively interface with teams and clients.
- Excellent problem-solving and innovation skills.
- Strong results-oriented approach.
- Attention to detail.
- Ability to multitask, work independently, and be self-motivated.
- A strong work ethic and a commitment to delivering results on time.

**To apply for the position please contact us at [info@igatechnology.com](mailto:info@igatechnology.com) and include:**

- Your CV
- A short letter of motivation
- Name and contact of 2 potential referees.