

## Position IM009438 - Job Description

**Bioinformatician.** The post holder will evaluate and improve tools for accurately identifying RNA modifications for which there are no ready-to-use bioIT pipelines. The developing part mainly relates to the interpretation of Oxford Nanopore Technologies (ONT) direct RNA/seq raw data to identify post-transcriptional modifications. This will involve working closely with lab scientists to ensure the sequence data is of sufficient quality to perform the required analyses.

The post holder will need to communicate their findings to internal stakeholders and to present the group's work at meetings and webinars. The goal is to design, or identify and improve tools for analysing endogenous and exogenous RNA modifications after direct RNA sequencing.

### Duties include, but are not limited:

- To develop direct RNA-seq data analysis pipelines for the ONT's sensing platform;
- To work with laboratory-based scientists in the group to help them plan and refine experiments, to interpret the data generated and to report the results clearly;
- To interact with other data analysts and bioinformaticians in the company and to utilize and adapt their tools for analysis;
- To keep up-to-date with the latest developments of ONT, provide feedback and incorporate them into analyses where appropriate;
- To have a track record of analysing and interpreting ONT and RNA sequence data, and be familiar with broad range of bioinformatics tools for this analysis;
- To have the ability to adapt or modify bioinformatic tools to achieve specific outcomes;
- To work as part of a multi-disciplinary team on the whole;
- To keep contact with ONT collaborators.

### Essential

### Education/Qualifications

- MSc (or Equivalent experience) involving a substantial amount of analysis and visualisation of DNA and RNA sequence data.
- Undergraduate degree in Biological Science (or related discipline)

### Experience

- Track record of successfully performing bioinformatics sequence analyses on ONT data
- Experience with nanopore software and ONT raw data (electric signal)
- Demonstrable history of involvement in the whole experimental process, from the initial experimental concept to execution, analysis and presentation of results, addressing important biological questions.
- Practical experience of handling and analysing large data sets and working closely with lab scientists to continually refine the experimental and analytical approaches

### Knowledge /Skills/ Abilities

- Expertise in bioinformatics and statistics. In-depth knowledge of the range and limitations of existing bioinformatics tools
- Experience with scripting languages e.g. Perl/Python, R etc.
- Some experience with machine learning
- Up-to-date with latest literature about NGS and analysis
- Good communication and interpersonal skills for discussing and presenting data within the team and with other colleagues
- Excellent problem-solving skills
- Versatility and the ability to work on multiple projects simultaneously

### **Attitude/Other requirements**

- Creative, ambitious, self-reliant, positive, problem solver
- Enthusiastic about technology
- Team builder

### **Desirable Experience**

- Experience with NGS – preferably long reads
- Experience in RNA analysis
- Hands on wet lab experience
- Good biological knowledge
- Commercially aware
- Experience and/or understanding of simple sample and library preparation methods
- PhD

### **Salary**

30000 - 35000 Euro/year – 1 year contract. Renewable.

### **About Us**

IMMAGINA Biotechnology has been operating since 2016 as a research-driven SME business operating in the sector of Genomics, Proteomics, and Enabling Technology.

As *The ribosome company* we develop sophisticated tools to capture ribosomes in an active state and characterize their components. Our unique technologies are first-in-class systems allowing for simultaneous measurement of newly synthesized proteins and the RNA template from which they are produced, and delivering the highest level of correlation between gene expression and the proteome. The present platform includes IP covering our technologies and dedicated to research-use-only (RUO) products with the potential to accelerate the path toward the discovery of novel therapeutic strategies in cancer, other human diseases, and congenital disorders. IMMAGINA is currently expanding its diagnostic branch. IMMAGINA is expected to fully underpin the immense diagnostic potential of a recently developed product portfolio for better decisions in precision medicine and better health.