

# Single-Cell Human Genomics

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**POSITION TITLE:** RESEARCH ASSISTANT

**RESEARCH PROJECT TITLE:** SINGLE-CELL HUMAN GENOMICS

**FACULTY NAME & TITLE:** YOUSSEF IDAGHDOUR, ASSISTANT PROFESSOR OF BIOLOGY

## RESEARCH PROJECT DESCRIPTION

An emerging and promising trend in the field of human genetics is to perform biological experiments at single cell resolution. Applications such as single-cell whole-genome sequencing, RNA sequencing and epigenetic profiling open the door to understanding biology at the level of individual cell. Recently, our laboratory has established a single-cell genomics facility to study cellular responses to various environmental stimuli with a focus on cancer, cardio-metabolic traits and infection. The successful applicant will use single-cell genomic methodologies coupled with next-generation sequencing approaches and focus on primary human cells. The successful applicant will be trained in genomic techniques and is expected to take a lead role in setting up and conducting the project and work as team in our well-equipped facilities. There is scope for the successful candidate to eventually pursue his/her own research interests within the area of human genetics.

## RESPONSIBILITIES OF THE POSITION

- Take a lead role in the experimental part of the project
- Collect and process samples for genomic work
- Laboratory preparation and processing of samples for single-cell profiling
- Quality control and processing of the data with other members of the lab
- Take part of the experimental and analytical training sessions in the lab
- Work in team environment and write internal reports
- Weekly meetings with the PI and Laboratory Manager

## ESSENTIAL QUALIFICATIONS:

BSc in Biology with experience in basic molecular techniques

## PREFERRED EXPERIENCE / SKILLS:

MSc in Genetic or Molecular Biology. Experience in PCR and cell culture.

**APPLICANTS TO PROVIDE:**

1. Statement of interest in the position
2. Transcript of degree(s)
3. CV
4. Two letters of recommendation