

Faculty of Mathematics, Informatics and Mechanics

M.Sc. student research scholarship in the NCN SONATA grant "Integrative analysis of single-cell genomics data"

Two Master's degree student scholarships in the project "Integrative analysis of single-cell genomics data" funded by the National Science Centre, Poland (2020/39/D/NZ2/03461). Successful candidates will work on the development of computational methods for analysis of experimental data from single-cell sequencing.

Project description

The objective of the project is to better understand the process of regulation of gene expression by integrating genomics data from experimental methods at the single-cell level (single-cell sequencing) and at the population level (bulk sequencing). The tasks include development of computational methods for the following problems:

- using single-cell sequencing data to determine in which cell types interactions between enhancers and promoters occur,
- identification of transcription factors responsible for transcription activation or repression in particular cell types.

More information: https://projekty.ncn.gov.pl/index.php?projekt_id=498486

Requirements

The successful candidate is expected to:

- be a Master's student in bioinformatics, computer science, mathematics or a related field,
- show interest in solving biological problems using computational methods,
- be proficient in programming in R or Python,
- · have good knowledge of English.

Additionally, knowledge of topics related to the subject of the project, in particular the analysis of DNA and RNA sequencing data, will be appreciated.

Conditions

- scholarship 1,500 PLN per month from November 2024, for a period of 9 months or shorter (to be determined),
- possibility of preparing a Master's thesis covering the obtained results,
- possibility of presenting the obtained results at scientific conferences.

Entries for the competition

Applications containing CV, transcript of grades and a short cover letter should be sent to <u>aleksander.jankowski@uw.edu.pl</u> by October 22, 2024. Any additional information can be

obtained from the project principal investigator, Aleksander Jankowski (aleksander.jankowski@uw.edu.pl).

Competition results

The competition results will be announced by October 31, 2024.

