

**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: <a href="https://projekty.ncn.gov.pl/index.php?projekt\_id=498486">https://projekty.ncn.gov.pl/index.php?projekt\_id=498486</a>

#### 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 October 2025, for a period up to 12 months (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 September 23, 2025. 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 September 30, 2025.

