

# Matvii Mykhailichenko

E-mail: 341450@uwr.edu.pl

Location: Wroclaw, Poland

GitHub: [matthewthefool](#)

ResearchGate: [Matvii Mykhailichenko](#)

Oct 2022 – Present

**University of Wroclaw, Biotechnology department**

Sep 2020 – Aug 2022

**National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (KPI),  
biotechnology department**

## PROFESSIONAL AFFILIATIONS

Aug 2023 – Present

**Bioinformatics for Ukraine initiative**

[Educator](#) and coordinator for an initiative that empowers Ukraine's bioinformatics community through education and collaboration. Led the "Essential Biostatistics for Biomedical Research" course and seminar on bioinformatics series through the Moodle platform, facilitating the learning experience for students. Throughout this workshop, instructed more than 10 hands-on sessions to over 50 undergraduate and graduate students from a diverse array of Ukrainian universities, providing them with valuable practical skills in bioinformatics and biostatistics. Communicated with students to provide guidance, support, and clarification on course materials and assignments. Collaborated with a team to develop course materials, ensuring they met educational objectives and standards. In addition to leading educational efforts, I strengthened the initiative's visibility by partnering with Ukrainian science societies. Notably, I established a key partnership with the "[Ukrainian Science Diaspora](#)", enhancing collaboration and engagement within the bioinformatics community.

Aug 2023 – Present

**Mangul Lab, University of Southern California (USC)**

[Remote research fellow](#), actively contributed to various projects within the research institute and developed articles.

Sep 2023 – Present

**NGSociety**

Member of society of computational biologists that organise training events, disseminate valuable resources like video-recordings and tutorials.

## PUBLICATIONS

## PUBLISHED

- Nadiia Kasianchuk, Yevhenii Kukuruza, Vladyslav Ostash, Anastasiia Boshtova, Dmytro Tsvyk and **Matvii Mykhailichenko** [Scrutinised and Compared: HVG Identification Methods in Terms of Common Metrics](#)//Proceedings of International Conference on Applied Innovation in IT. Volume 11, Issue 2, pp. 59-65. (DOI:10.25673/112994). First and last author contributed equally.
- **Matvii Mykhailichenko**, Nadiia Kasianchuk. [Review of cuproptosis-related lncRNA's potential as cancer biomarkers](#). Abstract book of the 9th International Student Congress, Graz, Austria.

## IN PROGRESS

- **M.Mykhailichenko**, R.Dzykirba, V.Ostash, N.Kasianchuk. Designing a ceRNA Network and Discovering Hub Genes in Breast Cancer: A Comprehensive Approach.
- S.Mangul, N.Kasianchuk, **M.Mykhailichenko**, T. Oleksyk. Developing Bioinformatics Capacities in Eastern Europe

## AWARDS

- Most innovative approach for «Benchmarking of 5 methods for HVG identification» project, EEBG 2023;
- Recipient of the Prestigious Rector's Scholarship for Science Achievements from University of Wroclaw;
- Recipient of the Prestigious Scholarship for Study Achievements from NTUU "KPI".

## PRESENTATIONS

- Poster presentation: „Review of cuproptosis-related lncRNA's potential as cancer biomarkers”, International Student Conference (ISC 2023, Graz, Austria);
- Oral presentation: „Benchmarking of 5 methods for HVGs identification”, East European Bioinformatics and Computational Genomics School 2023 (EEBG 2023, Chisinau, Moldova);
- Oral presentation: „Scrutinised and Compared: HVG Identification Methods in Terms of Common Metrics”, NGSchool 2023 (Otwock, Poland).
- Oral presentation: „Developing segmentation-free methods for spatial transcriptomic data”, NGSchool 2023 (Otwock, Poland).

## WORKSHOPS and CONFERENCES

### **EEBG 2023 (Chisinau, Moldova)**

- UNIX commands and Jupyter; WGS; RNA-seq; Metagenome analysis;
- Project leader;
- “The Most Innovative Approach” award.
- Received support grant (full fee waiver, accommodation and travel grant).

### **NGSchool 2023 (Otwock, Poland)**

- Single-cell data analysis; Whole genome sequencing; Epigenetics and epigenomics; Multi-modal data integration; Cancer evolution;
- Received support grant (full fee waiver, accommodation and travel grant).

### **CSAMA 2023 (Brixen/Bressanone, Italy)**

- R and Bioconductor Basics; Single-cell transcriptomics; Proteomics/metabolomics; Working with image data; Tidy genomic analysis workflows; Annotation of untargeted metabolomics data;
- Received support grant (full fee waiver and accommodation).

### **ISBRA 2023 (Wroclaw, Poland)**

- Received support grant (full fee waiver).

### **ISC 2023**

- Poster presentation: „Review of cuproptosis-related lncRNA's potential as cancer biomarkers”.

### **Microbial Genomics Workshop (on-line, led by MicroGenomeUA)**

- Post-sequencing data manipulation; Genome assembly; Genome Annotation; Pangenome analysis: basic concepts and tools; Comparative genomics. SNP tree for bacterial genome comparison.

### **Microbial Genomics Workshop 2 (on-line, led by MicroGenomeUA)**

- Handling and service of FASTQ files; Taxonomic Classification Techniques; Identification of Similar Genomes; Comprehensive Analysis of Genomic Data; Construction of Phylogenetic Trees; Comparative Studies in Protein Families and Pathways; Proteome Comparison and Analysis; Region and Genome Alignment.

### **Basics of biological data analysis (on-line, led by Bioinformatics for Ukraine)**

- Python basics; The basics of data cleaning, data manipulation, and data wrangling; Code-based visualization of real-world biomedical data; Basic concepts of statistical analysis.

## **COMMUNITY SERVICE**

Feb 2021 – Sep 2021

### **KPI Student Council**

- Organized and volunteered at various student activities;

- Student Council Information Department Participant.

Feb 2020 – Feb 2021

**EU-funded sustainability schools**

- Cooperated with Young European Ambassadors in Ukraine.
- SMM & Public Outreach Coordinator in Ukraine.