Mykhaylo M Malakhov

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EDUCATION

UNIVERSITY OF MINNESOTA
PhD in Biostatistics
Expected 2025 | Minneapolis, MN
Advised by Wei Pan
Funded by an NIH T32 grant

ANDREWS UNIVERSITY
BS in Mathematics
May 2020 | Berrien Springs, MI
Minor in Computing
J. N. Andrews Honors Scholar

BUDAPEST SEMESTERS IN MATHEMATICS
Study Abroad
Fall 2019 | Budapest, Hungary

LINKS

Twitter: **twitter.com/MykMal**
LinkedIn: **linkedin.com/in/mykmal**
GitHub: **github.com/MykMal**
ORCID: **0000-0002-6856-3913**
Google Scholar: **e5Q7sMQAAAAJ&hl**

GRADUATE COURSES

THEORY
○ Honors Real Analysis I & II
○ Theory of Statistics I & II
○ Biostatistics: Regression
○ Advanced Regression and Design
○ Linear Models
○ Probability Models for Biostatistics
○ Advanced Statistical Inference
○ Bayesian Decision Theory and Data Analysis
○ Survival Analysis

ELECTIVES
○ Statistics for Human Genetics and Molecular Biology
○ Advanced Statistical Genetics and Genomics
○ GIS and Spatial Analysis for Public Health
○ Statistical Learning and Data Mining
○ Seminar: Transethnic Association Studies
○ Seminar: Imaging Genetics
○ Seminar: Bioinformatics Methods

OTHER
○ Research Skills in Biostatistics
○ Foundations of Public Health
○ Biomedical Ethics

CURRENT POSITIONS

DENALI THERAPEUTICS | Human Genetics Intern
Summer 2023 | South San Francisco, CA
- Leveraging public GWAS data to better understand the molecular mechanisms of genetic variants associated with neurodegenerative disease
- Developing computational infrastructure to internalize, store, and readily access public GWAS data

UNIVERSITY OF MINNESOTA | Predoctoral Trainee
2020 - present | Minneapolis, MN
- Proposed and implemented DRAB (Differential Regulation Analysis by Bootstrapping), a statistical framework for identifying genes with context-specific patterns of local genetic regulation
- Currently working on ensemble learning methods for more accurate transcriptome imputation
- Currently working on boosting GWAS power by integrating proteomics data

PUBLICATIONS

1. **M. M. Malakhov**, B. Dai, X. T. Shen, W. Pan, A bootstrap model comparison test for identifying genes with context-specific patterns of genetic regulation. *bioRxiv*, (`https://doi.org/10.1101/2023.03.06.531446`) (Mar. 2023).

2. Z. Lin, H. Xue, **M. M. Malakhov**, K. A. Knutson, W. Pan, Accounting for nonlinear effects of gene expression identifies additional associated genes in transcriptome-wide association studies. *Human Molecular Genetics* 31, 2462–2470, (`https://doi.org/10.1093/hmg/ddac015`) (Jan. 2022).

3. J. C. Blackwood, **M. M. Malakhov**, J. Duan, J. J. Pellett, I. S. Phadke, S. Lenhart, C. Sims, K. Shea, Governance structure affects transboundary disease management under alternative objectives. *BMC Public Health* 21, (`https://doi.org/10.1186/s12889-021-11797-3`) (Oct. 2021).

4. J. Duan, **M. M. Malakhov**, J. J. Pellett, I. S. Phadke, J. Barber, J. C. Blackwood, Management efficacy in a metapopulation model of white-nose syndrome. *Natural Resource Modeling* 34, e12304, (`https://doi.org/10.1111/nrm.12304`) (Apr. 2021).

SELECTED AWARDS

National
| 2018 | Barry M. Goldwater Scholarship |

University of Minnesota
2022	1st place, People's Choice Award at the SPH Research Day conference
2022	2nd place, Best Poster Award at the SPH Research Day conference
2022	3rd place in the Interdisciplinary Health Data Competition
2020	Dean's PhD Scholars Award
2020	Jean Roberts Biostatistics Fellowship

Andrews University
2018	Harold T. Jones Scholarship for highest mathematical excellence
2018	Louis Ulloth Scholarship for most significant leadership
2016	Full tuition ACT/SAT Scholarship