Nathaniel Osher

CV

Nathaniel Osher
Department of Biostatistics
1415 Washington Heights
Ann Arbor, MI 48109

oshern@umich.edu
Updated: March 2023

Education

2021-Present PhD, Biostatistics
University of Michigan, Ann Arbor, MI

Research Interests:
Bayesian modeling of complex structured data, spatial pathological imaging analysis, tumor microenvironment analysis, multiplex imaging data analysis

2019-2021 MS, Biostatistics
University of Michigan, Ann Arbor, MI

2013-2017 BA, Mathematics
Carleton College, Northfield, MN

Awards

2024 Distinguished student paper award – American Statistical Association (Section on Statistical Genomics and Genetics)

Publications

Published

[1] **Osher N**, Kang J, Krishnan S, Rao A, Baladandayuthapani V. *SPARTIN: A Bayesian Method for the Quantification and Characterization of Immune Cell Infiltration in Spatial Pathology Data*

[2] Masotti M, **Osher N**, Eliason J, Rao A, Baladandayuthapani V. *DIMPLE: An R package to quantify, visualize, and model spatial cellular interactions from multiplex imaging with distance matrices*

In Progress/Forthcoming

[3] **Osher N,** Kang J, Baladandayuthapani V. *Dual Random Effect and Main Effect Spatial Selection for Pathology Imaging and Genomics Data*

Presentations

Oral Presentations

[1] **Osher N**, Kang J, Krishnan S, Rao A, Baladandayuthapani V. SPARTIN: A Bayesian Method for the Quantification and Characterization of Immune Cell Infiltration in Spatial Pathology Data. ENAR Spring Meeting. March 2023.

Poster Presentations

[1] **Osher N**, Kang J, Krishnan S, Rao A, Baladandayuthapani V. SPARTIN: A Bayesian Method for the Quantification and Characterization of Immune Cell Infiltration in Spatial Pathology Data. Virtual due to COVID-19. Statistical Methods in Imaging Conference. May 2022.

Research Experience

September 2019-Present

Research Assistant

University of Michigan, Ann Arbor, MI
Biostatistics Department

- Advised by Veerabhadran Baladandayuthapani and Jian Kang
- Developed methods to analyze spatial tumor imaging data and multiplex Imaging data
- Developed methods to analyze complex structured areal data
- Experience with point process models, areal data models, Bayesian computation

Reviewing

August 2022 Journal of Data Science

Professional Memberships

March 2020-Present American Statistical Association