Serge Aleshin-Guendel **Updated: January 26, 2021**

Contact

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Research Interests

Bayesian Statistics, Multiple-Systems Estimation, Record Linkage, Spatio-Temporal Statistics, Human Rights, Child Mortality Estimation

Education

University of Washington, Seattle, WA **Fall 2017 - Spring 2022 (Expected)**
Ph.D. in Biostatistics
Advisors: Mauricio Sadinle, Ph.D. and Jon Wakefield, Ph.D.

Boston College, Chestnut Hill, MA **Fall 2013 - Spring 2017**
B.S. in Mathematics, Departmental Honors
B.A. in Computer Science, Departmental Honors
Summa Cum Laude

Research Experience

Research Assistant
University of Washington, Department of Biostatistics
Supervisor: Mauricio Sadinle, Ph.D. **Fall 2019 - Present**
Supervisor: Susanne May, Ph.D. **Winter 2020 - Summer 2020**
Supervisor: Jon Wakefield, Ph.D. **Summer 2019**

Fred Hutchinson Cancer Research Center
Supervisor: Ruth Etzioni, Ph.D. **Fall 2017 - Summer 2018**

Computational Biology and Biostatistics Summer Research Program
University of Wisconsin-Madison, Department of Biostatistics & Medical Informatics
Supervisors: Mark Craven, Ph.D. and Yuriy Sverchkov, Ph.D. **Summer 2016**

Columbia Summer Institute for Training in Biostatistics
Columbia University, Department of Biostatistics
Supervisor: Christine Mauro, Ph.D. **Summer 2015**

Teaching Experience

Teaching Assistant
University of Washington

BIOST537 - Survival Data Analysis In Epidemiology **Winter 2021**
BIOST570 - Advanced Regression Methods for Independent Data **Fall 2020**
BIOST509 - Introduction to R for Data Analysis in the Health Sciences **Fall 2018, Fall 2019**
BIOST310 - Biostatistics for the Health Sciences **Spring 2019**
STAT554 - Statistical Methods for Spatial Data **Winter 2019**

Boston College

CSCI2244 - Randomness & Computation **Spring 2016, Spring 2017**
CSCI3345 - Machine Learning **Fall 2016**
CSCI2243 - Logic & Computation **Fall 2015**
CSCI1101 - Computer Science I **Fall 2014 - Spring 2015**

Grader
Boston College

MATH4427 - Mathematical Statistics **Fall 2015, Spring 2017**
MATH3320 - Introduction to Analysis **Fall 2016**
MATH1180 - Principles of Statistics for the Health Sciences **Spring 2016**

MATH1004 - Finite Probability & Applications **Fall 2014 - Spring 2015**

Submitted/In Preparation

1. **Aleshin-Guendel S**. "Latent Class Modeling in Space and Time." In preparation.
2. **Aleshin-Guendel S**, Sadinle M, and Wakefield J. "Revisiting Identifying Assumptions for Population Size Estimation." *arXiv preprint arXiv:2101.09304*. Submitted
   - ▷ The material presented in Appendix A previously appeared in the following preprint: **Aleshin-Guendel S**. "On the Identifiability of Latent Class Models for Multiple-Systems Estimation." *arXiv preprint arXiv:2008.09865*.
3. **Aleshin-Guendel S** and Sadinle M. "Multifile Partitioning for Record Linkage and Duplicate Detection." Under Revision.
   - ▷ 2020 ASA Social Statistics, Government Statistics, and Survey Research Methods Sections Student Paper Competition First Place

Publications

1. **Aleshin-Guendel S**, Lange J, Goodman P, Weiss N, and Etzioni R. "A Latent Disease Model to Reduce Detection Bias in Cancer Risk Prediction Studies." Accepted, *Evaluation & the Health Professions*. Special Issue: Latent Transition/Latent Markov Modeling in Health and Evaluation Studies
2. **Aleshin-Guendel S**, Sadinle M, and Wakefield J. Discussion of "Multiple-systems analysis for the quantification of modern slavery: classical and Bayesian approaches" by Bernard Silverman. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*. 2020; 183 (3), 724.
3. Ivancic M, Megna B, **Aleshin-Guendel S**, Sverchkov Y, Craven M, Reichelderfer M, Pickhardt P, Sussman M, and Kennedy G. "Noninvasive detection of colorectal carcinomas using serum protein biomarkers." *Journal of Surgical Research*. 2020; 246, 160–169.
4. Lim D, Gulati R, **Aleshin-Guendel S**, Gawne A, Wingate J, Cheng H, Etzioni R, Yu E. "Undetectable prostate-specific antigen after short- course androgen deprivation therapy for biochemically recurrent patients correlates with metastasis-free survival and prostate cancer-specific survival." *The Prostate*. 2018; 78 (14), 1077–1083.

Invited Presentations

1. "Multifile Record Linkage and Duplicate Detection Via a Structured Prior for Partitions"
   SDSS, Virtual **2020**
2. "Interval-Censored Survival Analysis to Reduce Detection Bias in a Study of Family History, Race, and Cancer Risk"
   WNAR, Portland, OR **2019**

Contributed Presentations

1. "Multifile Record Linkage and Duplicate Detection Via a Structured Prior for Partitions"
   JSM, Virtual **2020**
2. "Revisiting Log-Linear Models for Multiple-Systems Estimation"
   WNAR, Virtual **2020**
3. "Multifile Record Linkage and Duplicate Detection Via a Structured Prior for Partitions"
   JSM, Denver, CO **2019**

Activities

University of Washington

Biostatistics Activities and Events Squad (BAES) **Fall 2018 - Present**
Space-Time Reading Group **Fall 2017 - Spring 2019**

Honors and Awards

American Statistical Association (ASA)

Social Statistics, Government Statistics, and Survey Research Methods Sections, Student Paper Competition First Place **2020**

Boston College

Phi Beta Kappa Honor Society **2017**
Pi Mu Epsilon Mathematics Honor Society **2016**
McGillycuddy-Logue Travel Grant **2014**

Service

Manuscript Reviewer

Journal of Survey Statistics and Methodology **2021**
Annals of Applied Statistics **2019, 2020**

University of Washington

Department of Biostatistics Student-Faculty Relations Committee **Fall 2018 - Summer 2020**

Skills

Languages: R, C++, Stan, Python, Java
Other: LaTeX