Leslie Myint

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Education

PhD in Biostatistics May 2018
Johns Hopkins Bloomberg School of Public Health
Dissertation: Evidence-Based Methods in Studies of Biology and Data Analysis
Advisor: Kasper Daniel Hansen

BS in Biomedical Engineering May 2013
Johns Hopkins University
Secondary major: Applied Mathematics and Statistics
Minor: Computer Science

Work Experience

Assistant Professor August 2018 - present
Department of Mathematics, Statistics, and Computer Science
Macalester College, Saint Paul, MN

Johns Hopkins Biostatistics Center July 2016 - August 2017
Student statistical consultant
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
Advisor: Carol Thompson, MS

Siemens Competition 2016 - 2017
Stage I, II, and finalist judge
Categories: Computer Science, Mathematics, Bioinformatics, Cell/Cancer Biology, and Genetics

Publications

Published

5. **Myint L**, Avramopoulos DG, Goff LA, Hansen KD. 2019. Linear models enable powerful differential activity analysis in massively parallel reporter assays. BMC Genomics 20:209. DOI: 10.1186/s12864-019-5556-x.
4. **Myint L.**, Leek JT., Jager LR. 2018. Explanation of observational data engenders a causal belief about smoking and cancer. PeerJ 6:e5597. DOI: 10.7717/peerj.5597.
    - **Press:**
      Preprint was featured in the February 2018 issue of Significance Magazine.
3. Monroe, Anne K., **Leslie Myint**, Richard Rutstein, Judith Aberg, Stephen Boswell, Allison Agwu, Kelly Gebo, Richard Moore, and HIV Research Network. 2018. "Factors Associated with Gaps in Medicaid Enrollment among People with HIV and the Effect of Gaps on Viral Suppression." Journal of Acquired Immune Deficiency Syndromes, April. https://doi.org/10.1097/QAI.0000000000001702.

2. Kang, Joon Y., Amin H. Rabiei, **Leslie Myint**, and Maromi Nei. 2017. "Equivocal Significance of Post-Ictal Generalized EEG Suppression as a Marker of SUDEP Risk." Seizure: The Journal of the British Epilepsy Association 48 (May): 28–32. https://doi.org/10.1016/j.seizure.2017.03.017.
1. **Myint, Leslie**, Andre Kleensang, Liang Zhao, Thomas Hartung, and Kasper D. Hansen. 2017. "Joint Bounding of Peaks Across Samples Improves Differential Analysis in Mass Spectrometry-Based Metabolomics." Analytical Chemistry 89 (6): 3517–23. https://doi.org/10.1021/acs.analchem.6b04719.

Submitted

1. **Leslie Myint**, Aboozar Hadavand, Leah Jager, Jeffrey Leek. "Comparison of plotting system outputs in beginner analysts." Under review at the Journal of Statistics Education.

In Preparation

1. **Leslie Myint**, Ruihua Wang, Leandros Boukas, Kasper D. Hansen, Loyal A. Goff, Dimitrios Avramopoulos. "Testing the Regulatory Consequences of 1,049 Schizophrenia Associated Variants With a Massively Parallel Reporter Assay." (bioRxiv doi: 10.1101/447557).

Presentations

Statistical methods for querying the regulatory role of DNA
Invited Talk: Creighton University Math Colloquium (slides)
March 2019

Magical Web Scraping with rvest
Invited Talk: Baltimore R Ladies Group (slides)
May 2018

Joint Preprocessing of Samples Improves Power in Differential Analysis for Mass Spectrometry-Based Metabolomics
Invited Talk: JHU Biophysics
December 2017

Shiny Applications for Teaching and Dungeons and Dragons
Invited Talk: Baltimore UseR Group (slides)
September 2017

A Method for Joint Processing of Mass Spectrometry-Based Metabolomics Data for Improved Differential Analysis
Poster: ENAR, Washington D.C.
March 2017

Software

yamss: Tools for the analysis of high-throughput metabolomics data. An R package released through the Bioconductor project.

https://www.bioconductor.org/packages/yamss

mpra: Tools for the analysis of data from massively parallel reporter assays. An R package released through the Bioconductor project.
https://www.bioconductor.org/packages/mpra

Teaching

Macalester College
Instructor
- STAT 155: Introduction to Statistical Modeling (F18)
- STAT 253: Machine Learning (S19)

Chromebook Data Science Specialization
Content developer
A massive open online course on the Leanpub platform for providing a highly accessible data science education. Content developer for the following courses:

- Organizing Data Science Projects
- Version Control
- Introduction to R
- Data Tidying

Johns Hopkins Bloomberg School of Public Health
Instructor
- Statistical Thinking for Informed Decision Making (2 semesters)
  I developed this course as part of the Gordis Teaching Fellowship, a school-wide award that provides funds to design and teach an undergraduate class. A news article-motivated introduction to major biostatistical areas, including causal inference, survey sampling, and survival analysis.

Teaching Assistant
- Public Health Biostatistics (3 semesters)
- Introduction to R for Public Health Researchers (1 course)
- Statistical Methods in Public Health (3 quarters)
- Data Analysis Workshop (2 courses)
- Statistics for Genomics (1 quarter)
- Statistics for Laboratory Scientists (2 quarters)
- Summer Institute: Statistical Reasoning in Public Health (2 courses)

Tutor
- Statistical Methods in Public Health (2 quarters)
- Mentor for Center for Talented Youth Cogito Research Award Recipient (3 months)

Johns Hopkins University
Teaching Assistant
- Introduction to Java (1 semester)

Awards

Helen Abbey Award May 2017
Johns Hopkins Bloomberg School of Public Health
Excellence in teaching (website)

Service

- 2019: Referee - Nature Human Behaviour
- 2019: Referee - Technology Innovations in Statistics Education
- 2019: Referee - Journal of Statistics Education
- 2018: Referee - BiOverlay
- 2018: Referee - American Journal of Epidemiology
- 2017: Referee - Observational Studies