# Leslie Myint

e: lmyint@macalester.edu w: lmyint.github.io

# 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**

- 6. **Myint L**, Wang R, Boukas L, Hansen KD, Goff LA, Avramopoulos D. 2019. A screen of 1,049 schizophrenia and 30 Alzheimer's-associated variants for regulatory potential. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics 77:e43. DOI: 10.1002/ajmg.b.32761.
- 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. <u>Myint L.</u>, 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., <u>Leslie Myint</u>, 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.000000000001702.
- 2. Kang, Joon Y., Amin H. Rabiei, <u>Leslie Myint</u>, 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. <u>Leslie Myint</u>, Aboozar Hadavand, Leah Jager, Jeffrey Leek. "Comparison of beginning R students' perceptions of peer-made plots created in two plotting systems: a randomized experiment." Under review at the Journal of Statistics Education.

## Presentations

## **Graphs Galore! Representing Knowledge in the Sciences and Humanities**

Invited Talk: Carleton College (slides)

October 2019

Talk: Macalester College (slides)

November 2019

# 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 125: Epidemiology (F19)
- 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)

# Professional Service

### **Conferences**

• 2020: Organizer and Chair for the Education Track's invited session at the Symposium on Data Science and Statistics

#### Referee

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