

David J. Schlueter, Ph.D.

CONTACT INFORMATION	1265 Military Trail Toronto, ON, Canada, M1C 1A4	david.schlueter@utoronto.ca
RESEARCH INTERESTS	Precision medicine, genomics, Bayesian statistics, multivariate survival analysis, machine learning	
EDUCATION	Vanderbilt University (VU) Nashville, TN Ph.D., Biostatistics, December 15, 2018 <ul style="list-style-type: none">Dissertation: <i>Bayesian Transformation Models for Multivariate Survival Analysis with Applications in Large Data</i>Advisor: Qingxia (Cindy) Chen, Ph.DCommittee Members: Daniel Fabbri, Ph.D, Christopher Fommesbeck, Ph.D, Robert E. Johnson, Ph.D	
	Grand Valley State University (GVSU) Allendale, MI B.A., Mathematics and Statistics (Double Major), May 2012 <ul style="list-style-type: none"><i>Magna Cum Laude</i>	
ACADEMIC APPOINTMENTS	University of Toronto Scarborough <i>Department of Health and Society</i> Toronto, ON Assistant Professor July 2023 to present <ul style="list-style-type: none">Department of Health and Society	
	Vanderbilt University Medical Center (VUMC) <i>Center for Precision Medicine</i> Nashville, TN Postdoctoral Research Fellow December 2018 to June 2020 <ul style="list-style-type: none">Main Projects: <i>All of Us</i> Research Program, Neurofibromatosis Type 1 EHR researchResearch Supervisors: Joshua C. Denny, M.D., M.S., Andrea Ramirez, M.D., M.S.	
OTHER EMPLOYMENT	National Institutes of Health (NIH) <i>National Human Genome Research Institute (NHGRI)</i> Bethesda, MD Research Fellow June 2020 to July 2023 <ul style="list-style-type: none">Center for Precision Health ResearchFounding Member of Precision Health Informatics SectionResearch Supervisor: Joshua C. Denny, M.D., M.S.	
	Vanderbilt University School of Medicine <i>Department of Biostatistics</i> Nashville, TN Graduate Research Assistant December 2012 to December 2018 <ul style="list-style-type: none">Provided analytics and statistics for Vanderbilt University Center of Excellence for Children in State CustodyResearch Supervisor: Rameela Chandrasekhar Raman, Ph.D	
	Chapin Hall at the University of Chicago Chicago, IL	

Associate Researcher

May 2016 to June 2017

- Main Projects: *Voices of Youth Count (VoYC)*, Illinois Department of Child Services
- Supervisors: Richard Epstein, Ph.D and Matthew Morton, Ph.D

TEACHING
EXPERIENCE

Undergraduate Courses, University of Toronto

Fall 2023

HLTB30 Current Issues in Health

HLTC27 Community Health and Epidemiology

Winter 2024

HLTC16 Introduction to Health Information Systems

HLTC27 Community Health and Epidemiology

Teaching Assistant, Vanderbilt University

Bios 6342: Contemporary Statistical Inference Spring 2018
Instructor: Jeffrey D. Blume, Ph.D

Bios 8366: *Advanced Statistical Computing* Fall 2016, Fall 2017
Instructor: Chris Fonnesebeck, Ph.D

Bios 7362: *Advanced Statistical Inference and Statistical Learning* Spring 2016
Instructor: Matt Shotwell, Ph.D

Bios 6341: Fundamentals of Probability Fall 2015
Instructor: Brian Shepherd, Ph.D

Bios 7346: Advanced Regression Analysis II Spring 2015
Instructor: Jonathan Schildcrout, Ph.D

Bios 7361: Advanced Probability and Real Analysis Fall 2014
Instructor: Robert E. Johnson, Ph.D

AWARDS

- Office of the Director Honor Award
National Institutes of Health July 2021
- "In recognition of exceptional efforts to study *All of Us* Research Program participant blood samples to track the spread of COVID-19 in the United States"
- WS Gosset Award for Exceptional Research
VU Dept. of Biostatistics Jan. 2018
- "For exemplary dissertation/thesis work or exceptional contributions to a research project/collaboration"
- Distinguished Teaching Assistant
VU Dept. of Biostatistics Jan. 2017
- "For excellence in teaching and a dedication to peer education"

- Outstanding Senior in Statistics
GVSU Department of Statistics May 2012
- Mathematics Senior Award
GVSU Department of Mathematics May 2012
- Student Summer Scholars Grant for Mathematics July 2011
- National Science and Mathematics Access to Retain Talent Grant 2011
- STEM Award, GVSU Competitive Grant 2010-2012

PUBLICATIONS

1. Zeng, C., **Schlueter, D.**, et. al. (2023) “Comparison of disease prevalence and associations in the All of Us Research Program against the US general population and the UK Biobank” *Under Review*
2. Zeng, C., Cassini, T., Ferrara, T., **Schlueter, D.**, Tran, T., Denny, J. (2023) “Assessing Prediabetes and Diabetes Screening Eligibility and Detection in Adults by ADA and USPSTF Guidelines in the NIH’s All of Us Research Program” *Diabetes* 2023;72(Supplement 1):1254-P
3. **Schlueter, D.**, et. al. “Systematic replication of smoking disease associations in the All of Us Research Program” *Journal of the American Medical Informatics Association (In Press)*
4. Miller, C., Althoff, K., **Schlueter, D.**, et. al. (2022) “Concordance of SARS-CoV-2 antibody results during a period of low prevalence, *Mosphere* Vol. 7, Issue 5, pgs e00257-22”
5. Ramirez A.H., Suliman L., **Schlueter D.**, et. al. (2022) “The All of Us Research Program: data quality, utility, and diversity. *Patterns* Vol. 3 Issue 8.
6. Althoff, K., **Schlueter, D.**, et. al. (2021) “Antibodies to SARS-CoV-2 in All of Us Research Program Participants, January 2-March 18, 2020.” *Clinical Infectious Diseases*
7. **Schlueter D.** (2021) “On the Usage of Combined Data Structures to Study COVID-19 in Understudied Populations” *JAMA Network Open* 4.6 (2021): e2112874-e2112874
8. Zhao, J., Zhang, Y., **Schlueter, D.**, Wu, P., Eric Kerchberger, V., Trent Rosenbloom, S., Wells, QS., Feng, Q. Denny, JC., Wei, WQ. (2019) “Detecting time-evolving phenotypic topics via tensor factorization on electronic health records: Cardiovascular disease case study” *Journal of Biomedical Informatics*. 98.
9. Morton, M., Dworsky, A., Matjasko, J. L., Curry, S., **Schlueter, D.**, Chavez, R., Farrell, A. “Prevalence and correlates of youth homelessness in the United States” (2018) *Journal of Adolescent Health*. 62(1), 14-21.
10. Curry, S. R., Morton, M., Matjasko, J. L., Dworsky, A., Samuels, G. M., **Schlueter, D.** (2017). “Youth Homelessness and Vulnerability: How Does Couch Surfing Fit?” *American Journal of Community Psychology*. 60(1), 17-24.
11. Epstein, R. A., **Schlueter, D.**, Gracey, K. A., Chandrasekhar, R., Cull, M. J. (2015). “Examining placement disruption in child welfare.” *Residential Treatment for Children and Youth*, 32(3), 224-232.

PRESENTATIONS

(PRIMARY PRESENTER)

1. **Schlueter, D.** “Phenomic and Genomic Analysis of Endometriosis in the *All of Us* Research Program” NICHD REI Clinical Fellows Meeting. (May 2022)
2. **Schlueter, D.**, et. al. “Systematic replication of smoking disease associations in the All of Us Research Program” Accepted Podium Abstract AMIA 2021 Annual Symposium. (October 2021)
3. **Schlueter, D.**, Bastarache, L., Smith, J., Denny, J. “Temporal Phenotypic Progression in Neurofibromatosis Type 1” Accepted Podium Abstract AMIA 2021 Virtual Informatics Summit. (March 2021)
4. **Schlueter, D.**, Bastarache, L., Schuler, B. Denny, J. “Exploration of phenomic and genomic profiles in NF1” (October 27-30) American Society of Human Genetics 2020 Virtual Meeting. Poster.
5. **Schlueter, D.**, Denny, J. “Phenomic and Genomic Exploration of NF1 in an EHR-linked Biobank” (September 24, 2020) Precision Health Research Seminar. National Human Genome Research Institute. Bethesda, MD.
6. **Schlueter, D.**, Jarrett, R. “Dynamic and Interactive Administrative Reporting” (October 3-5, 2018) Presentation at Transformational Collaborative Outcomes Management (TCOM) Conference, Chicago, IL.
7. **Schlueter, D.** “A broad introduction to Machine Learning” (September 28, 2017) Presentation and invited panel membership for Machine Learning Roundtable, Pizza and Programming Seminar Series, Advanced Computing Center for Research and Education (ACCRE), Nashville, TN.
8. **Schlueter, D.**, Chen, C., Fonnesbeck, F., Wu, P. “Bayesian Large Scale Inference for Time to First Event of Multivariate Ordinal Survival Outcomes with Application to TennCare Cohort Study” (May 25, 2017). Poster presentation at the 2017 Conference on Lifetime Data Science (LIDA). Storrs, CT.
9. **Schlueter, D.** “Two Groups and a Time to Event Outcome” (April 25, 2017), Part 3 of 2017 HSR Biostatistics Seminar Series *Basic Bayesian Analyses: How and Why You Want to Do Them: An Easy Introduction to Bayesian Analyses*.
10. **Schlueter, D.** “Introduction to Variational Bayesian Methods” (March 24, 2017) Statistical Computing Series, Vanderbilt University.
11. **Schlueter, D.** “Bayesian Non-Parametric Analysis (September 2016). Guest Lecture for Bios 8366, Advanced Statistical Computing. VU Department of Biostatistics
12. **Schlueter, D.** “On Firefly Markov Chain Monte Carlo (June 15, 2016). Discussion and Presentation for VU Biostatistics Journal Club.
13. **Schlueter, D.** “Flexible and Scalable Bayesian Survival Analysis (January 2016). Vanderbilt Biostatistics Student Research Forum, Seminar in VUMC Department of Biostatistics
14. **Schlueter, D.** “A Primer on Gaussian Processes (January 2016). Department Lecture in VUMC Department of Biostatistics.
15. **Schlueter, D.** “Gaussian Processes for Spatial Epidemiology (March 2015). Guest Lecture for Longitudinal Data course in VUMC Department of Biostatistics.
16. **Schlueter, D.** and Malloure, M: “Comparing Z and T intervals for Binary Logistic Regression (November 2011). Seminar presentation to GVSU Department of Statistics.

17. **Schlueter, D.** and Frazier, J.: Determining Indicators of MCAT Scores and Medical School Admission Rates (April 13, 2011). Poster at GVSU Student Scholars Day.

PROFESSIONAL
ACTIVITIES

- Member, Center of Excellence for Children in State Custody at Vanderbilt (2012 - 2018)

SERVICE

Conferences

Session Chair for *A Recent Development on Competing and Semi-competing Risks*, 2017 Conference on Lifetime Data Analysis, Storrs, CT. (May 2017)

Session Chair for *Emerging Issues in Clinical Trials with Time-to-Event Data in the Presence of Competing Risks*, Eastern North American Region, Austin, TX. [Substituted for Julie Cong] (March 2016)

Ad-Hoc Reviewer

Statistics and Its Interface (2017: 2), (2020: 1)
 JAMA Network Open (2021: 1)
 AMIA Virtual Summit 2021
 AMIA Annual Symposium 2020, 2021

MENTORSHIP

- Alexander Kalams
 High School Senior Researcher
 Montgomery Bell Academy 2019-2020
 Current Position: Engineering Major at University of Michigan, Ann Arbor

ADDITIONAL
PROFESSIONAL
SKILLS

Computation:

- Python, R, SQL, SAS, Stata, Cluster Computing, Linux

Languages:

- English (Native/Bilingual Proficiency)
- Hindi (Elementary Proficiency)
- Spanish (Professional Working Proficiency)

RECENT
VOLUNTEER
WORK

- Advisor (Lebanon High School), *Model United Nations Conference B*, Tennessee YMCA Center for Civic Engagement (November 17-19, 2017), Murfreesboro, TN.

REFERENCES

(LISTED IN ALPHABETICAL ORDER)

- Keri N. Althoff, Ph.D., M.P.H.
Associate Professor Department of Epidemiology,
Johns Hopkins Bloomberg School of Public Health
Joint Appointment in the Oncology Center,
Johns Hopkins University School of Medicine
Provost Fellow for Research Communication,
Johns Hopkins University
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- Qingxia (Cindy) Chen, Ph.D.
Associate Professor
Department of Biostatistics
Vanderbilt University Medical Center
E-mail: cindy.chen@vanderbilt.edu
- Joshua C. Denny, M.D., M.S.
Chief Executive Officer
All of Us Research Program, NIH
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- Kelly Gebo, M.D., M.P.H.
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