

Hongxiang Qiu

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<https://QIU-Hongxiang-David.github.io/>

Education

University of Washington

PhD, Biostatistics

2016–2021

Dissertation advisor: Marco Carone, PhD and Alex Luedtke, PhD

The Chinese University of Hong Kong

B.Sc., Mathematics; Minor in Statistics

2012–2016

Capstone project advisor: Raymond Honfu CHAN, PhD

Research Experience

Kaiser Permanente Washington Health Research Institute

2016–present

Graduate Research Assistant

PRimary care Opioid Use Disorders Treatment (PROUD) Trial

Advisor: Jennifer F. Bobb, PhD

Shanghai Institute of Biological Sciences

Summer 2015

Advisor: Shuhua Xu, PhD

Teaching Experience

University of Washington

Tutor

Spring 2019

STAT 583: Advanced Theory of Statistical Inference

Topics including: empirical processes, semiparametric efficiency

Instructors: Alex Luedtke, PhD and Marco Carone, PhD

University of Washington

Teaching Assistant

Winter 2019

BIOST 557: Applied Statistics and Experimental Design

Topics including: one/two-sample t-test, linear models, GLMs, causation versus correlation

Instructor: Brian Lerous, PhD

University of Washington

Grader

Winter 2018

STAT 582: Advanced Theory of Statistical Inference
Topics including: Bayes methods, decision theory, UMPU test
Instructor: Jon A. Wellner, PhD

Peer reviewed publications

(† stands for equal contribution.)

Methodology

1. **Qiu H**, Luedtke A, Carone M (2020+). Universal sieve-based strategies for efficient estimation using machine learning tools. *arXiv preprint: arXiv:2003.01856* (accepted by *Bernoulli Journal*)
2. **Qiu H**, Carone M, Sadikova E, Petukhova M, Kessler R, Luedtke A (2020). Optimal individualized decision rules using instrumental variable methods. *Journal of the American Statistical Association* (with discussion), 1–18.
3. Bobb J, **Qiu H**, Matthews, A, McCormack J, Bradley K (2020). Addressing identification bias in the design and analysis of cluster-randomized pragmatic trials: a case study. *Trials* 21(1), 289.
4. **Qiu H**, Luedtke A, van der Laan M (2019). Contribution to discussion of “Entropy Learning for Dynamic Treatment Regimes” by Jiang B, Song R, Li J, Zeng D. *Statistica Sinica*, 29(4): 1666–1678.

Application

5. Fitts W, Tassiou NR, Cisse FA, Vogel A, Atakla HG, Sakadi F, **Qiu H**, Conde ML, Balde AT, Bah AK, Hamani ABD, Anand P, Patenaude B, Mateen F (2019). School Status and its Associations among Children with Epilepsy in the Republic of Guinea. *Epilepsy & Behavior*, 97, 275–281.
6. Jang M, Sakadi F, Tassiou NR, Abass CF, Grundy SJ, Woga A, Kenda BA, Lamine CM, Talibé BA, **Qiu H**, Cohen JM, Carone M, Mateen FJ (2018). Impact of Poorly Controlled Epilepsy in the Republic of Guinea. *Seizure*, 61, 71–77.
7. Zhou Y†, **Qiu H**†, Xu S (2017). Modeling continuous admixture using admixture-induced linkage disequilibrium. *Scientific Reports*, 7, 1–10.

Under review

8. Qiu H, Luedtke A (2021+). Leveraging vague prior information in general models via iteratively constructed Gamma-minimax estimators. *arXiv preprint: arXiv:2003.05465*

Presentations

1. “Optimal individualized decision rules using instrumental variable methods.” **Qiu H**, Carone M, Sadikova E, Petukhova M, Kessler R, Luedtke A.
 - 2020 ENAR Spring Meeting
 - Biostatistics student seminar

- Causal working group
- 2. “TMLE based on Pseudo-gradients and examples from my project.” **Qiu H.** Semiparametric Efficiency Reading Group.
- 3. “Constructing asymptotically normal plug-in estimators with highly adaptive Lasso and data adaptive series.” **Qiu H.**, Luedtke A & Carone M.
 - 2019 WNAR/IMS/JR (Japanese Region) meeting
 - Biostatistics student seminar

Reviewer for International Journals

- *Journal of the American Statistical Association*
- *International Journal of Biostatistics*
- *Statistical Methods in Medical Research*

Awards and Fellowships

University of Washington

Scholarship for 6th Seattle Symposium in Biostatistics
2018 Donovan J. Thompson Award

October 2020
October 2018

Chinese University of Hong Kong

Dean's List, 2015–2016
College Head's List, 2014–2015
Department/Programme Scholarship, 2014–2015
Undergraduate Mathematics Scheme
Shaw College Global Exposure Award Scheme 2014–15
Heung To Educational Fund Mathematics Scholarship
Reaching Out Award
1978 Mathematics Alumnus Li Sze-lim Scholarships
College Head's List, 2013–2014
Department/Programme Scholarship, 2013–2014
CUHK Golden Jubilee Scholarship for Outgoing Exchange Student, 2014-2015
Yasumoto International Exchange Scholarships
Dean's List, 2013–2014
Undergraduate Mathematics Scheme
Dragon Crowd "SCHIESSER" Scheme
College Head's List, 2012–2013
Department/Programme Scholarship, 2012–2013
Outstanding Essay Award, 2012–2013
Dean's List, 2012–2013

July 2016
January 2016
January 2016
November 2015
April 2015
April 2015
April 2015
January 2015
January 2015
January 2015
September 2015
July 2014
July, 2014
June 2014
April 2014
January 2014
January 2014
November 2013
July 2013

Software

CAMer R package for Continuous Admixture Modeling based on the result of iMAAPs.

Languages and Skills

Programming:

- proficient: R
- familiar: Python, MATLAB
- basic: SAS, Stan, JAGS, C++, C

Operating systems: Windows, Unix

Other computer skills: Git, L^AT_EX, Markdown, Microsoft Office

Languages: English (fluent), Chinese Mandarin (native), Chinese Cantonese (basic)