# Hongxiang Qiu

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#### Education

#### University of Washington

PhD, Biostatistics 2016-present

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

Summer 2015

Graduate Research Assistant

PRimary care Opioid Use Disorders Treatment (PROUD) Trial

Advisor: Jennifer F. Bobb, PhD

#### Shanghai Institute of Biological Sciences

Advisor: Shuhua Xu, PhD

# Teaching Experience

# University of Washington

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

Winter 2019 Teaching Assistant

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

Winter 2018 Grader

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* (accepted by *Bernoulli Journal*)
- 2. **Qiu H**, Carone M, Sadikova E, Petukhova M, Kessler R, Luedtke A (2020+). Rejoinder: Optimal individualized decision rules using instrumental variable methods. *Journal of the American Statistical Association*.
- 3. 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*, 1–18.
- 4. 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.
- 5. **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**

- 6. 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.
- 7. 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.
- 8. Zhou  $Y^{\dagger}$ , **Qiu**  $H^{\dagger}$ , Xu S (2017). Modeling continuous admixture using admixture-induced linkage disequilibrium. Scientific Reports, 7, 1–10.

# Conference and symposium 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	October 2020
2018 Donovan J. Thompson Award	October 2018
Chinese University of Hong Kong	
Dean's List, 2015–2016	July 2016
College Head's List, 2014–2015	January 2016
Department/Programme Scholarship, 2014–2015	January 2016
Undergraduate Mathematics Scheme	November 2015
Shaw College Global Exposure Award Scheme 2014–15	April 2015
Heung To Educational Fund Mathematics Scholarship	April 2015
Reaching Out Award	April 2015
1978 Mathematics Alumus Li Sze-lim Scholarships	January 2015
College Head's List, 2013–2014	January 2015
Department/Programme Scholarship, 2013–2014	January 2015
CUHK Golden Jubilee Scholarship for Outgoing Exchange Student, 2014-2015	September 2015
Yasumoto International Exchange Scholarships	July 2014
Dean's List, 2013–2014	July, 2014
Undergraduate Mathematics Scheme	June 2014
Dragon Crowd "SCHIESSER" Scheme	April 2014
College Head's List, 2012–2013	January 2014
Department/Programme Scholarship, 2012–2013	January 2014
Outstanding Essay Award, 2012–2013	November 2013
Dean's List, 2012–2013	July 2013

# Software

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

# Languages and Skills

Programming:

• proficient: R

 $\bullet\,$  familiar: Python, MATLAB

 $\bullet\,$  basic: SAS, Stan, JAGS, C++, C

Operating systems: Windows, Unix

Other computer skills: Git, LATEX, Markdown, Microsoft Office

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