

EDUCATION

University of California, Santa Cruz

PhD candidate in Statistical Science

September 2022–Current

Santa Cruz, CA

Wake Forest University

M.S. in Mathematical Statistics

August 2020–May 2022

Winston-Salem, NC

University of Nebraska-Lincoln

B.S. in Mathematics

August 2016–August 2019

Lincoln, NE

B.S. in Business Administration, Supply Chain Management, High Distinction

PUBLICATIONS

Submitted

1. Wu, Y., **Dong, Q.**, Xu, J., Li, Z. R., & Wakefield, J. (2024). sae4health: An R Shiny application for small area estimation in low- and middle-income countries.

Published and accepted

1. **Dong, Q.**, Wu, Y., Li, Z., & Wakefield, J. (2025). Toward a principled workflow for prevalence mapping using household survey data. *Journal of Survey Statistics and Methodology*.
2. **Dong, Q.**, Wu, W., Wu, B., Mo, Z., Sui, J., & Qi, X. (2025). Machine learning approaches to racial/ethnic differences in social determinants of mild cognitive impairment and its progression to dementia: an analysis of All of Us. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 80(12), gbaf179.
3. Sui, J., Wu, B., Zheng, Y., Mo, Z., **Dong, Q.**, Doan, L. N., Yi, S. S., & Qi, X. (2025). Racial and ethnic disparities in the burden of non-obese type 2 diabetes using different anthropometric measurements. *Obesity Medicine*, 53(10), 100573. <https://doi.org/10.1016/j.obmed.2024.100573>
4. **Dong, Q.**, Kline, D., & Hepler, S. A. (2023). A Bayesian spatio-temporal model to optimize allocation of buprenorphine in North Carolina. *Statistics and Public Policy*, 1–17. <https://doi.org/10.1080/2330443X.2023.2218448>
5. McKnight, E., **Dong, Q.**, Brook, D. L., Kline, D., Hepler, S. A., & Bonny, A. (2023). A descriptive study of opioid misuse prevalence and office-based buprenorphine access in Ohio: a call for a targeted and flexible approach. *Cureus*. <https://doi.org/10.7759/cureus.36903>

Software

1. **surveyPrev** (package): Mapping the Prevalence of Binary Indicators using Survey Data in Small Areas. April, 2024. (Author, Maintainer)
2. **sae4health** (package): Small Area Estimation for Key Health and Demographic Indicators from Household Surveys May, 2025. (Author)

TEACHING EXPERIENCE

University of California, Santa Cruz

September 2022–Current

Teaching Assistant:

- Courses: STAT 5: Statistics (Fall 2022), STAT 17: Statistical Methods for Business and Economics (Fall 2023, Spring 2024), STAT131: Introduction to Probability Theory (Winter 2024)

Wake Forest University

August 2020–May 2022

Mathematics and Statistics Center Tutor:

- Courses: STA 111: Elementary Probability and Statistics, STA 368/668: Time Series and Forecasting.

Teaching Assistant:

- Courses: STA 111: Elementary Probability and Statistics, STA 212: Statistical Models, STA 362/662: Multivariate Statistics, STA 310: Probability.

SCHOLARSHIPS AND AWARDS

ICHPS 2023 Student Paper Travel Award

December 2022

Health Policy Statistics Section of the American Statistical Association

Regent Fellowship and Dean's Fellowship

August 2022–June 2023

University of California, Santa Cruz

Full Tuition Scholarship

August 2020–May 2022

Wake Forest University

Benjamin F. Marshall Memorial Scholarship

August 2018–May 2019

University of Nebraska - Lincoln

R.Parker & M.S Eastwood Scholarship

August 2017–May 2018

University of Nebraska - Lincoln

Undergraduate Dean's List

January 2017–May 2019

University of Nebraska - Lincoln

Global Delegate Scholarship Tuition Scholarship

August 2016–May 2019

University of Nebraska - Lincoln

PRESENTATIONS

- Cross-fitting model evaluation for small area estimation using complex survey data. Poster and Speed talk at JSM, Portland, OR, 08/24
- A Bayesian Spatio-temporal Model to Optimize Allocation of Buprenorphine in North Carolina. Poster presented at GEOMED, Irvine, CA, 10/22
- A Bayesian Spatio-temporal Model to Optimize Allocation of Buprenorphine in North Carolina. Poster presented at OBAYES, Santa Cruz, CA, 09/22

SKILLS

- **Software:** R(advanced), Python, Matlab, Stata, JMP, Tableau
- **Language:** English (proficient), Chinese (native language)