

# Travis Michael Loux

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[Link to SLU faculty site \(slu.edu\)](#) | [Link to personal site \(tloux.com\)](#)

## RESEARCH INTERESTS

Causal inference and observational studies; non-random samples; missing data; statistics education.

## ACADEMIC POSITIONS

Saint Louis University

- 2018-present: Associate Professor, Department of Epidemiology and Biostatistics.
  - 2020 - 2024: Program Director, PhD Public Health Studies.
- 2017-2018: Assistant Professor, Department of Epidemiology and Biostatistics.
- 2013-2017: Assistant Professor, Department of Biostatistics.

Previous Institutions

- 2011-2013: Visiting Assistant Professor, Department of Applied Probability and Statistics, University of California - Santa Barbara.
- 2010-2011: Adjunct Faculty, Department of Mathematics and Statistics, Sacramento City College.
- 2008-2011: Associate Instructor, Department of Statistics, University of California - Davis.

## EDUCATION

- Doctor of Philosophy, Statistics, University of California - Davis. December 2011.  
Dissertation: Causal Inference and Estimation of the Odds Ratio. Advisor: Dr. Christiana Drake.
- Master of Science, Statistics, University of California - Davis. June 2008.
- Bachelor of Science, Mathematics, University of Washington. June 2006.  
Minors in statistics and law, societies, and justice.

## PUBLICATIONS

Student co-authors indicated by \*. Click on DOI to go to article webpage.

- Bafageeh, F.\*, Loux, T. (2024) "Depression Symptoms Linked to Oral Health Outcomes in US Adults" *Journal of Dental Research Clinical and Translational Research*. doi: [10.1177/23800844241246225](https://doi.org/10.1177/23800844241246225)
- Ragsdale, A.S., Al-Hammadi, N., Loux, T., Bass, S., Keller, J.M., Chavan, N.R. (2024) "Perinatal Substance Use Disorder: Examining the Impact on Adverse Pregnancy Outcomes" *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 22. 100308. doi: [10.1016/j.eurox.2024.100308](https://doi.org/10.1016/j.eurox.2024.100308)
- Huang, Y.\*, Loux, T., Huang, X., Feng, X. (2023) "The relationship between chronic diseases and mental health: a cross-sectional study" *Mental Health & Prevention*. 32. 200307. doi: [10.1016/j.mhp.2023.200307](https://doi.org/10.1016/j.mhp.2023.200307)

- Hockenberry, J.M., Wen, H., Druss, B.G., Loux, T., Johnston, K.J. (2023) "No Difference in Mental Health Treatment or Patient-Reported Out9

- Chiu, Y., Neel, A., Loux, T. (2021) "Exploring the acoustic perceptual relationship of speech in Parkinson's disease." *Journal of Speech, Language, and Hearing Research*. 64(5), 1560-1570. doi:

- Loux, T., Nelson, E., Arnold, L.D., Shacham, E., Schootman, M. (2019) "Using multilevel regression with poststratification to obtain regional health

- Linhorst, D., Loux, T.M., Riley, S.E.\*, Dirks-Linhorst, P.A. (2018) "Characteristics and Outcomes

- Smith-Gagen, J., Loux, T.M., Drake, C., Perez-Stable, E. (2016) "How Does Managed Care Improve the Quality of Breast Cancer Care Among Medicare-Insured Minority Women?" *Journal of Racial and Ethnic Health Disparities*, 3(3), 496-507. doi: [10.1007/s40615-015-0167-y](https://doi.org/10.1007/s40615-015-0167-y)
- Loux, T.M., Varner, S.E.\*, VanNatta, M.\* (2016) "Flipping an introductory biostatistics course: A case study of student attitudes and confidence." *Journal of Statistics Education*, 24(1), 1-7. doi: [10.1080/10691898.2016.1158017](https://doi.org/10.1080/10691898.2016.1158017)
- Rebmann, T., Wilson, K.D., Loux, T., Iqbal, A.Z., Peters, E.B., Peavler, O.\* (2016) "Outcomes, approaches, and challenges to developing and passing a countywide mandatory vaccination policy: St. Louis County's experience with hepatitis A vaccine for food service personnel." *AIMS Public Health*, 3(1), 116-130. doi: [10.3934/publichealth.2016.1.116](https://doi.org/10.3934/publichealth.2016.1.116)
- Rebmann, T., Loux, T.M., Zink, T.K., Swick, Z.\*, Wakefield, M.\* (2015). "Infection prevention and mass vaccination training for U.S. point of dispensing (POD) staff and volunteers: A national study." *American Journal of Infection Control*, 43(3), 222-227. doi: [10.1016/j.ajic.2014.11.012](https://doi.org/10.1016/j.ajic.2014.11.012)
- Rebmann, T., Loux, T.M., Swick, Z.\*, Dolgin, H., Reddick, D., Wakefield, M.\* (2015) "Are US Jurisdictions Prepared to dispense medical countermeasures through

## RESEARCH GRANTS & OTHER FUNDING

### Current

- 1R01MH125820: The role of neurological connectivity in the relationship between environmental safety and adolescent depression and anxiety  
9/7/2021 - 6/30/2025  
Role: Principal Investigator  
Funding: National Institute of Mental Health  
The goals of this project are to evaluate the impact of Medicare payment program on patient access to evidence-based treatment for depression and anxiety disorders in the primary care setting and to assess quality of care for Medicare beneficiaries with these conditions.

### Under Review

- Can the Medicare Quality Payment Program Incentivize Evidence-Based Treatment of Depression and Anxiety Disorders by Primary Care Providers?  
4/1/2025 - 3/31/2027  
Role: Co-Investigator (PI: Dr. Kenton Johnston) Open 4/7/2025 (Spec 250a) T1\_11 T1\_4 1 Tf.11

(EMS)



## PRESENTATIONS

### Invited Presentations

- Dental Insurance and Out-of-Pocket Dental Expenses. Saint Louis University Advanced Health Data (AHEAD) Institute, St. Louis, MO, October 10, 2023.
- Adjusting Published Estimates for Exploratory Biases Using the Truncated Normal Distribution. University of Massachusetts Amherst, Amherst, MA,

- Propensity-Biased Treatment Allocation in Trials with Staggered Entry. IMS 14th Meeting of New Researchers in Statistics and Probability, UC San Diego, San Diego CA, July 26, 2012.
- Estimation of the Marginal Odds Ratio in Observational Studies. WNAR/ IMS Annual Meeting, San Luis Obispo CA, June 20, 2011.
- Marginal, Crude and Conditional Odds Ratios: Definitions and Estimation. Sacramento Statistical Association Institute on Research and Statistics, Sacramento, CA, April 1, 2010.

## TEACHING EXPERIENCE

### Saint Louis University (2013 - present)

- BST 3100: Applied Biostatistics I
- BST 4100/5020: Theory of Biostatistics I
- BST 5000: Principles of Biostatistics
- BST 5100: Introduction to General Linear Modeling
- BST 6100: Introduction to Causal Inference
- PHS 6010: Design and Analysis in Public Health
- PHS 6900: Professional Development
- PUBH 5040: Generating Evidence from Public Health Data
- CPP 2: Quantitative Reasoning (SLU Prison Education Program)

### UC Santa Barbara (2011 - 2013)

- PSTAT 5E: Statistics with Economics and Business Applications
- PSTAT 120A: Probability and Statistics
- PSTAT 123: Sampling Techniques

### Sacramento City College (2010 - 2011)

- MATH 170: Intermediate Algebra Review
- STAT 300: Introductory Statistics

### UC Davis (2008 - 2011)

- STA 10: Statistical Thinking
- STA 13: Elementary Statistics
- STA 32: Basic Statistical Analysis through Computers
- STA 103: Applied Statistics for Business and Economics
- STA 120: Probability and Random Variables for Engineers

## STUDENT MENTORING

### Master's Students

- Noel Raybon, GRA mentor (Health Management and Policy, 2023-present)
- Morgan Matusik, GRA mentor (Biostatistics, 2020-2022)
- Cara Wiskow, GRA mentor (Biostatistics, 2018-2020)
- Orlando Davy, GRA mentor (Biostatistics, 2015-2017)
- Daphne Lew, GRA mentor (Biostatistics, 2014-2016)

### Doctoral Students

PHS: Public Health Studies with named concentration.

- Ethan Wankum, doctoral committee chair (PHS Biostatistics, current)
- Yi Huang, doctoral committee chair (PHS Biostatistics, current)
- Firas Bafageeh, doctoral committee chair (PHS Biostatistics, current)
- Orlando Davy, doctoral committee chair (PHS Biostatistics, current)
- Saad Siddiqui, doctoral committee co-chair (PHS Epidemiology, current)
- Meghan Taylor, doctoral committee member (PHS Behavioral Science and Health Education, current)
- Kelly Ayres, doctoral committee member (PHS Biostatistics, current)
- Georey Kangogo, doctoral committee member (PHS Epidemiology, 2024)
- Dajun Tian, doctoral committee chair (PHS Biostatistics, 2023)
- Mintesnot Teni, doctoral committee member (PHS Behavioral Science and Health Education, 2023)
- Noor Al-Hammadi, doctoral committee co-chair (Health Outcomes, 2022)
- Yan Xie, doctoral committee member (PHS Biostatistics, 2022)
- Steven Scroggins, doctoral committee member (PHS Behavioral Science and Health Education, 2022)
- Florida Uzoaru, doctoral committee chair (PHS Behavioral Science and Health Education, 2021)
- Tyler Glassford, doctoral committee member (Social Work, 2020)
- Meera Muthukrishnan, doctoral committee member (PHS Epidemiology, 2020)
- Daphne Lew, doctoral committee member (PHS Biostatistics, 2020)
- Katie Holzer, doctoral committee member (Social Work, 2020)
- Eleanor Peters Bergquist, doctoral committee member (PHS Behavioral Science and Health Education, 2019)
- Austin Turner, doctoral committee member (PHS Biosecurity and Disaster Preparedness, 2019)
- Jason Carbone, doctoral committee member (Social Work, 2019)
- Sarah Underwood, doctoral committee member (Social Work, 2018)
- Nosayaba Osazuwa-Peters, doctoral committee member (PHS Epidemiology, 2018)
- Kristen Kremer, doctoral committee member (Social Work, 2018)
- Shahida Rice, doctoral committee member (PHS Health Management and Policy - Policy Track, 2015)

## DEPARTMENTAL & UNIVERSITY SERVICE

- SLU Faculty Senate Professional Relations Committee. 2023 - present.
- SLU Academic Program Review Council. 2022 - present.
- EPI/BST Department Advising Committee. 2020 - present.
- SLU Institutional Review Board Alternate Reviewer. 2019 - present.
- CPHSJ Building Committee. 2022 - 2023.
- SLU Academic Strategic Planning Committee. 2022 - 2023.
- CPHSJ Faculty Assembly President. 2022 - 2024.
- CPHSJ Research Advisory Council. 2017 - 2019, 2020 - 2021.
- CPHSJ Doctoral Steering Committee. 2018 - 2020.
- EPI/BST Department Admissions Committee. 2017 - 2020.
- SLU IT Advisory Board. 2018 - 2019.
- CPHSJ MPH Steering Committee. 2017 - 2019.
- CPHSJ MPH Curriculum Reinvention Task Force. 2017 - 2018.
- CPHSJ Faculty Council Secretary, 2016 - 2017.
- Biostatistics Department MPH Admissions Coordinator. 2015 - 2017.
- CPHSJ Pedagogy Committee. 2014 - 2016.
- Organizer, Doctoral R Programming Seminar. 2014 - 2016.
- CPHSJ Committee on Faculty Workload Policy. 2014 - 2016.

## PROFESSIONAL SERVICE

- St. Louis Chapter of the American Statistical Association, 2023.
  - Treasurer, 2023
  - President, 2022
  - Vice President, 2021 - 2021
- Resource Review Editor, American Statistical Association Section for Teaching Statistics in the Health Sciences, 2020-2021. Reviews: [1](#) [2](#) [3](#)
- Consulting statistical editor, Journal of Cardiac Failure, 2015 - 2020 (>200 manuscripts).
- Reviewer: Statistical Methods in Medical Research (9 manuscripts); Journal of Statistics and Data Science Education (5); AIMS Public Health (1); American Journal of Public Health (1); The American Statistician (1); BMC Medical Research Methodology (1); BMJ Open (1); Journal of Nonparametric Statistics (1); Studies in Higher Education (1); Teaching Statistics (1); Trials (1); Youth & Society (1).

## CONSULTING EXPERIENCE

- Catholic Health Initiatives, Omaha, NE (with Dr. Kimberly Enard). 2022-2023.
- U.S. Center for Sports Medicine, St. Louis, MO. 2021.
- SEMO Rx Pharmacy (with Dr. Ellen Barnidge). 2020.
- Mid-American Transplant, St. Louis, MO. 2017.
- Regional Justice Information Service (REJIS) Commission, St Louis, MO. 2015-2016.
- Sierra Research Laboratories, Modesto, CA. 2012 - 2016.

## PROFESSIONAL DEVELOPMENT

- Introduction to Online Teaching Seminar. Reinert Center for Transformative Teaching and Learning. Saint Louis University, April 20 - May 15, 2020.
- "Mentoring for Mission in Teaching." Saint Louis University, January 2019 - November 2019.
- "Writing/Designing Winning NIH Proposals." Grant Training Center. Washington University of St. Louis, June 13, 2017.
- "TIER Faculty Development Workshop." Project TIER. Haverford College, November 18-19, 2016.
- "Evaluation of Mental Health Service Systems." Presenter: Christine Walrath. Johns Hopkins School of Public Health Summer Institute in Mental Health Research, June 13, 2014.
- Online Teaching and Learning Institute. Reinert Center for Transformative Teaching and Learning. Saint Louis University, June 2-5, 2014.
- IMS 14th Meeting of New Researchers in Statistics and Probability. UC San Diego, July 26-28, 2012.
- "Student Engagement: Mission Possible." Center for Excellence in Teaching and Learning TA Consultant Workshop Series. UC Davis, Winter 2011.
- "Become a Catalyst for Change in Statistics Education." Presenters: Bob delMas, Joan Garfield, John Holcomb, Andy Zie er. Preceding JMM 2010 in San Francisco CA.

## PROFESSIONAL AFFILIATIONS

- American Statistical Association
  - Chapters: St. Louis
  - Sections: Biometrics, Mental Health, Statistics in Epidemiology, Teaching Statistics in the Health Sciences

## AWARDS AND HONORS

- Dr. Terry Leet Teaching Award. Saint Louis University College for Public Health and Social Justice. 2018-2019 academic year.
- Runner-Up, Student Paper Competition Best Oral Presentation. WNAR/ IMS Annual Meeting, San Luis Obispo CA, June 19-22, 2011. Cash award.
- TA Appreciation Award. UC Davis Statistics Club. 2011.