# Yanda Lang

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1301 Cecil B. Moore Ave. Ritter Annex Room 927, Philadelphia, PA

## EDUCATION

**Doctor of Philosophy, Statistics**                                       June 2021
Western Michigan University
  Dissertation title: "Rank-Based Meta Analysis"
  Dissertation advisor: Dr. Joseph McKean

**Graduate Certificate in Biostatistics**                                  June 2021
Western Michigan University

**Master of Science, Statistics**                                          May 2017
University of Alaska Fairbanks
  Thesis title: "Edge Detection using Bayesian Process Convolutions"
  Thesis advisor: Dr. Margaret Short

**Bachelor of Science, Statistics**                                        June 2014
Nanjing University of Finance and Economics

## PROFESSIONAL EXPERIENCE

**Assistant Professor of Instruction, Biostatistics**          August 2021 - Present
Department of Epidemiology and Biostatistics, Temple University, Philadelphia, PA

**Graduate Student Instructor, Statistics**              August 2017 - May 2021
Department of Statistics, Western Michigan University, Kalamazoo, MI

**Data Scientist Intern**                                May 2019 - August 2019
Soothsayer Analytics, Livonia, MI

**Teaching Assistant, Statistics**                       August 2015 - May 2017
University of Alaska Fairbanks, Fairbanks, AK

## TEACHING EXPERIENCE

**Assistant Professor of Instruction, Biostatistics**          August 2021 - Present
Department of Epidemiology and Biostatistics, Temple University
Instructor
EPBI 8012: Multivariable Biostatistics
EPBI 5006: Biostatistics and Applied Analysis of Health
EPBI 5005: Biostatistics
EPBI 5002: Applied Analysis of Health
EPBI 3205: Intro to Statistical Computing
EPBI 2219: Biostatistics and Public Health

**Graduate Student Instructor, Statistics**              August 2017 - May 2021
Department of Statistics, Western Michigan University
Instructor
STAT 3660: Data Analysis for the Biosciences
STAT 2160: Business Statistics

Teaching Assistant
STAT 6630: Linear Models
STAT 5670: Design of Experiment
STAT 5660: Nonparametric Statistical Methods
STAT 5610: Applied Multivariate Statistical Methods
STAT 4640: Intro Statistical Computing
STAT 2600: Data Analysis Using R

**Teaching Assistant, Statistics**                                     August 2015 – May 2017
Department of Mathematics and Statistics, University of Alaska Fairbanks
Teaching Assistant
STAT 401 Regression and ANOVA
MATH 302 Differential Equations
MATH 253X Calculus III
MATH 251X Calculus I


## SERVICE & AWARDS

**Department of Epidemiology and Biostatistics, Temple University**
Committee Chair, Epi-Bio Department Awards and Recognition Committee            January 2023 - Present
Committee Member, CPH Epi-Bio MPH-MS Admissions Committee                   August 2021 - Present
Committee Member, Epi-Bio Department Curriculum Committee                    August 2022 - Present
Faculty Advisor for MPH students

**Journal Reviewer**
Statistics in Medicine
BMJ Open

ESG Workshop, "Introduction to Statistical Software: R and SAS"                        March 2023
Biostatistics Core Workshop, "Introduction to Bayesian Statistical Analysis"             April 2022

2022-2023 Student-Selected Graduate Faculty Teaching Award, Temple University               2023
2021-2022 Student-Selected Undergraduate Faculty Teaching Award, Temple University           2022


## PUBLICATIONS & RESEARCH OUTPUT

**Lang, Y.**, McKean, J., & Ozturk, O. (2023), "Robust Rank-Based Meta-Analyses for Two-Sample Designs with Application to Platelet Counts of Malaria Infection Data," *Statistics in Medicine*, 42(17):2887-2913

Alcantara , I., Naranjo, J., & **Lang, Y.** (2022), "Model Selection Using PRESS Statistic," *Computational Statistics*, 1:14.

**Lang, Y.**, & Zhang, J. (2015), "Influence of piezoelectric atomizer pores on ultrasonic atomization effect," *In Proceedings of the 2014 Symposium on Piezoelectricity, Acoustic Waves, and Device Applications*, 287-290, IEEE.

**Lang, Y.**, & Wu, Y. (2014), "An Investigation of Influencing Factors on Household Portfolio in China -- Based on Micro Econometric Analysis of Tobit Model," *In 2014 International Conference on Management, Education and Social Science (ICMESS 2014)*, Atlantis Press.

(Under review) Kobulsky, J. M., Schroeder, K., Schuler, B., Patrick, E.L., **Lang, Y**. & Wu, J (2023) "Developmental timing of child maltreatment in relation to obesity and substance use disorder in late adolescence," *Psychology of Violence*

R package:
**Lang, Y.**, McKean, J. & Ozturk, O. (2023), "RankBasedMeta," available on Github, In preparation for CRAN.

In progress:

Alcantara , I., **Lang, Y.**, & Williams, F "Immigration, Parenting and Child Depression ."

**Lang, Y.**, McKean, J., & Ozturk, O., "Hogg-Type Adaptive Rank-Based Meta-Analyses for Two-Sample Designs"

Alcantara , I., **Lang, Y.**, & Leiper, J "Bayesian Model Averaging and Model Selection."

Alcantara , I., Naranjo, J., & **Lang, Y.**, "Statistical Properties of PRESS Statistic."

## PROFESSIONAL DEVELOPMENT WORKSHOPS FOR TEACHING

| | |
|---|---|
| 21st Annual Faculty Conference on Teaching Excellence | January 11, 2023 - January 12, 2023 |
| CAT Workshop, "Effective Teaching Strategies in Synchronous Online Courses" | April 26, 2022 |
| 20th Annual Faculty Conference on Teaching Excellence | January 6, 2022 - January 7, 2022 |
| Safe Zone Training II: Allocating for LGBTQIA+ Inclusion | December 6, 2021 |
| Safe Zone Training I: Fundamentals of Gender and Sexuality | August 18, 2021 |
| CAT Workshop, "First Generation Students and Faculty" | November 8, 2021 |
| CAT Workshop, "Choosing Questions for Student Feedback Forms" | October 28, 2021 |
| Seminar, "Virtual Course Redesign: Flip and More" | May 28, 2020 |
| Training, "International Graduate Assistant Training Program" | August 28, 2017 - September 1, 2017 |
| Teaching Seminar, "Practice Teaching" | November 18, 2015 |
| Teaching Seminar, "Writing Homework, Quizzes, and Exams" | October 25, 2015 |
| Teaching Seminar, "Creating a Lesson Plan" | October 11, 2015 |
| Teaching Seminar, "Course Planning and Schedule" | October 6, 2015 |
| Teaching Seminar, "Development of Course Syllabus" | September  22, 2015 |

## MENTORING & ADVISING

**Department of Epidemiology and Biostatistics, Temple University**

Faculty Advisor

Anamarys Arroyo-Lloret - MPH, Applied Biostatistics

Kirsten Campbell - MPH, Applied Biostatistics

Jordan Fredette - MPH, Applied Biostatistics

Roukiatou Sore - MPH, Applied Biostatistics

## INDUSTRY EXPERIENCE

**Data Scientist Intern**                                                     May 2019 – August 2019

Soothsayer Analytics                                                                    Livonia, MI

- AMAG Pharmaceuticals: Provided statistical support concerning conflict results from phase III and phase IV study of Makena drug for preventing preterm birth.

- Safelite AutoGlass (Automotive): Assisted data pre-processing, data visualization, missing value analysis, imputation, and modeling.

- Kids Read Now (Education, Non-Profit Organization): Evaluated the effects on students' reading achievement of a reading program designed for elementary school students.

- R&D: Developed an alternative hyper-parameter tuning algorithm based on Bayesian Optimization in XGBoost model.

- R&D: Developed Python functions for missing value detection and imputation strategy suggestion based on data structure and missing data mechanism, which can be used as a routine diagnostic tool for data with any missing rates.

## PROGRAMMING SOFTWARE & TEACHING TOOLS

Teaching Tools: Canvas, E-Learning, Blackboard, Zoom, WebEx, Socrative

Statistical Programming: R, SAS (Certified SAS 9.4 Programmer), Python, SQL, RStan

Other Software: WinBUGS, R shiny, Tableau, LaTex, Github, Minitab, SPSS, Microsoft Office