

LUIS MIGUEL MESTRE, Ph.D.

Citizenship: United States of America

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CURRENT POSITION

2023 – Present NIDA T32 Post Doctoral Fellow
Yale School of Medicine
Yale University, New Haven, CT

EDUCATION

2018 – 2023 **PhD in Epidemiology** (Minor: Data Science)
Indiana University School of Public Health – Bloomington, Bloomington, IN

2016 – 2018 **MS in Mathematical Statistics**
University of Puerto Rico at Mayagüez, Mayagüez, PR

2012 - 2016 **BS in Biomathematics, Magna Cum Laude**
Universidad Metropolitana (Currently Universidad Ana G. Méndez, Cupey Campus), San Juan, PR

RESEARCH EXPERIENCE

Yale University

2024 E-Cigarette Algorithm Pilot Study
Funding: NIDA K12 (PI: Krysten W. Bold)
Role: Data Manager
Activities: I was responsible for data collection, data cleaning, data management, and supervising research assistants

2023 – Present Digital Intervention for Smoking Cessation
Funding: American Lung Association (PI: Kathleen Garrison)
Role: Clinical Trial Coordinator
Activities: I was responsible in managing inventory, including biosensors and technological equipment related to digital intervention. I also was responsible for data management and acquisition. I also supervised the research assistants and undergraduate students that were part of the data collection effort of this study.

2023 – 2025 Digital Intervention for Smoking Cessation Pilot Study
Funding: Robert E. Leet and Clara Guthrie Patterson Trust Mentored Research Award (PI: Krysten W. Bold)
Role: Statistician
Activities: I was responsible for data analysis, data management, data query, data processing, data visualization, and support for finding dissemination in scientific presentations at conferences and manuscripts submissions.

Indiana University

2022 - 2023 Research Assistant
Parker's Lab at the Department of Epidemiology and Biostatistics
Activities: I was responsible for leading discussion at lab. I also worked on multiple projects related to cigarette smoking. I also had the role of statistics

consultant, and data analyst. I verified and supported the statistical and data analysis plan to peers coming from clinical and medical backgrounds. I also led multiple literature reviews, and peer-review manuscripts.

2018 – 2022

Research Assistant

Department of Epidemiology and Biostatistics in collaboration with The Consultation Center

Activities: The replication, reproducibility, and verification of results from statistical analysis from multiple projects. I also supported the development of IRB protocols focused on population level data from the US, UK, and Japan. I was responsible for intra-communication among institutions on multi-site projects. I led the literature review for Obesity & Energetics Offering (OEO) in the topics of health equity and Obesity. Support in developing, editing, and proofreading (in English and Spanish) grant writing for IU School of Public Health-Bloomington faculty.

PUBLICATIONS

Peer-Reviewed

1. Bold, K.W., **Mestre, L.M.**, Garrison, K.A., Gueorguieva, R., O'Malley, S.S., Fucito, L.M. (2025) Feasibility and efficacy of a real-time smoking intervention using wearable technology. *PLOS Digital Health*.
2. **Mestre L. M***, Cordoba-Grueso W. S.,*Parker M. A. (2025) "Physical Activity in Adolescence and Cannabis Use in Adulthood: Evidence from the National Longitudinal Study of Adolescent Health in the United States (1994-2018)," *Health Behavior Research*: Vol. 8: No. 4. <https://doi.org/10.4148/2572-1836.1339>: "*" = Shared first authorship
3. **Mestre L.M.**, Lee J., Parker M. A., White M. A., & Bold K. (2025) Examining multiple substance use among Lesbian, Gay, and Bisexual US adults. *Addictive Behaviors* 171, 108469.
4. **Mestre L.M.**, Zoh R.S., Perry C., Fukuyama J., Parker M.A. (2025) Determining whether weight status mediates the association between number of cigarettes smoked per day and all-cause mortality among US adults who smoke cigarettes. *PLOS ONE* 20(4): e0319560.
5. **Mestre, L. M.**, White, M. A., Levy, B. R., & Bold, K. W. (2024). Higher Prevalence of Polysubstance Use among Older Lesbian, and Gay US adults. *Drug and Alcohol Dependence Reports*, 100281
6. Yu, X., Zoh, R. S., Fluharty, D. A., **Mestre, L. M.**, Valdez, D., Tekwe, C. D., ... & Allison, D. B. (2024). Misstatements, misperceptions, and mistakes in controlling for covariates in observational research. *Elife*, 13, e82268
7. Smith Jr, D. L., Yang, Y., **Mestre, L. M.**, Henschel, B., Parker, E., Dickinson, S., ... & Nagy, T. R. (2024). Impact of sustained calorie restriction and weight cycling on body composition in high-fat diet-fed male and female C57BL/6J mice. *Obesity*, 32(5), 959-968.
8. Yamamoto, N., Ejima, K., **Mestre, L. M.**, Owora, A. H., Inoue, M., Tsugane, S., & Sawada, N. (2024). Body mass index trajectories and mortality risk in Japan using a population-based

prospective cohort study: the Japan Public Health Center-based Prospective Study. *International Journal of Epidemiology*, 53(1), dyad145

9. Zoh, R. S., Esteves, B. H., Yu, X., Fairchild, A. J., Vazquez, A. I., Chapple, A. G., **Mestre, L.M** ... & Allison, D. B. (2023). Design, analysis, and interpretation of treatment response heterogeneity in personalized nutrition and obesity treatment research. *Obesity Reviews*, 24(12), e13635.
10. Sanders, L. M., **Mestre, L. M.**, Ejima, K., Mehta, T., Keith, S. W., Maki, K. C., & Allison, D. B. (2023). Body Mass Index, Obesity, and Mortality—Part II: Weight Loss and Weight Cycling. *Nutrition Today*, 58(4), 158-164.
11. **Mestre, L. M.**, Lartey, S. T., Ejima, K., Mehta, T., Keith, S., Maki, K. C., & Allison, D. B. (2023). Body Mass Index, Obesity, and Mortality—Part I: Associations and Limitations. *Nutrition Today*, 58(3), 92-99
12. Pavela, G., Yi, N., **Mestre, L.**, Xun, P., & Allison, D. B. (2023). Birth weight moderates the association between obesity and mortality rate. *Annals of epidemiology*, 82, 26-32.
13. Ejima, K., Liu, N., **Mestre, L. M.**, de Los Campos, G., & Allison, D. B. (2023). Conditioning on parental mating types can reduce necessary assumptions for Mendelian randomization. *Frontiers in Genetics*, 14, 1014014
14. Vorland, C. J., Chen, X., Chusyd, D. E., **Mestre, L. M.**, Dickinson, S. L., Allison, D. B., & Brown, A. W. (2022). Re-Analysis and Additional Information Needed to Inform Conclusions. Comment on Halenova et al. Deuterium-Depleted Water as Adjuvant Therapeutic Agent for Treatment of Diet-Induced Obesity in Rats. *Molecules* 2020, 25, 23. *Molecules*, 27(16), 5186
15. Pavela, G., Yi, N., **Mestre, L. M.**, Lartey, S., Xun, P., & Allison, D. B. (2022). The associations between relative and absolute body mass index with mortality rate based on predictions from stigma theory. *SSM-Population Health*, 19, 101200.
16. Owora, A. H., Dawson, J., Gadbury, G., **Mestre, L. M.**, Pavela, G., Mehta, T., ... & Allison, D. B. (2022). Randomisation can do many things—but it cannot “fail”. *Significance*, 19(1), 20-23.
17. Vorland, C. J., **Mestre, L. M.**, Mendis, S. S., & Brown, A. W. (2020). *Within-group comparisons led to unsubstantiated conclusions in “Low-phytate wholegrain bread instead of high-phytate wholegrain bread in a total diet context did not improve iron status of healthy Swedish females: a 12-week, randomized, parallel-design intervention Study”*. *European Journal of Nutrition*, 59(6), 2813-2814.
18. **Mestre, L. M.**, Dickinson, S. L., Golzarri-Arroyo, L., Brown, A. W., & Allison, D. B. (2020). Data anomalies and apparent reporting errors in ‘Randomized controlled trial testing weight loss and abdominal obesity outcomes of moxibustion’. *BioMedical Engineering OnLine*, 19, 1-3.
19. Vorland, C. J., Matthey-Mora, P. P., **Mestre, L. M.**, Chen, X., Dickinson, S. L., Brown, A. W., & Allison, D. B. (2020). Errors or irreproducibility in effect size calculations and incomplete reporting of results in “Systematic Review of the Effects of Blueberry on Cognitive Performance as We Age”. *The Journals of Gerontology: Series A*, 75(8), e24-e26.
20. Golzarri-Arroyo, L., **Mestre, L. M.**, & Allison, D. B. (2019). What’s new in understanding the risk associated with body size and shape?: Pears, apples, and olives on toothpicks. *JAMA Network Open*, 2(7), e197336-e197336.

Submitted Manuscripts

1. **Mestre, L. M.**, Parker M. A., Lee, J., White M. A., Bold K. W. *Disproportionate use of heavy alcohol drinking, cannabis, cigarettes, and vape nicotine among sexual minority female US adults.*
2. **Mestre, L. M.**, Azzizoddin, D., Byrd, M. C., Odera, J., Ramos, K., & Osazuwa-Peters, N. *Prevalence of use of medical cannabis and concurrent opioid misuse among cancer survivors.*
3. Kyriakos, C., **Mestre, L. M.**, Bold, K. W. *Differences at the age of starting to smoke cigarettes everyday regularly by menthol use and different sociodemographic groups in the US.*
4. **Mestre, L. M.**, Zoh, R. S., Perry, C.A., Fukuyama, J., Jacobs, W., Parker, M. A., *Determining the Role of Health Disparities for the Associations between Cigarette Smoking, Weight Status, and All-Cause Mortality.*
5. Field, L., **Mestre, L. M.** *Determining whether weight change is associated with substance use among US young adults.*

In Preparation

1. **Mestre L. M.**, Bold K. W., Parker, M. A., Byrd, M. C., Osazuwa-Peters N. *Nicotine E-Cigarettes among Cancer Survivors by Age Groups and Cancer Types in the US from 2019-2024.*
2. **Mestre L. M.**, Boakye E, A., Peters-Osazuwa N., Wang, M., Tutlam N., Li, X., Tobo B., Buchanan, P., Loux T., Vaughn, M., & Schootman M. *Marijuana and Concurrent Illicit Drug Use Among in an Era of Post-Legalization and Decriminalization the United States.*
3. **Mestre, L. M.**, Kusiez D., Ramkumar S. P., Barnes J. M., Boakye E. A., Rohde R. L., Babatunde, O A. B., Deshields T. L., Knettel B. A., Striley C. W., & Osazuwa-Peters N. *Depression and antidepressant use among individuals with a history of cancer.*
4. Hood, C., Henningfield, J., Moreland, A., Garcia-Romeu, A., Davis, D., Heads, A., Hudzik T., Martinez S. J. Wilkerson, M., **Mestre, L. M.**, Tarfa, A., Zakiniaez, Y., & Fields S. *The 2022 CPDD Membership Survey: A New Approach to Assessing Diversity and Inclusion in Scientific Organizations.*

PRESENTATIONS

Invited

1. **Mestre, L. M.** (2025, September). *Substance Use Prevention and Treatment as a Strategy to Address Cancers in the US – An interdisciplinary approach.* Special Seminar Series. Sidney Kimmel Comprehensive Cancer Center. Thomas Jefferson University, Philadelphia, PA.
2. **Mestre, L. M.** (2025, January). *Polysubstance Use Differences Among Sexual Minority Groups in the US. A Population Health Approach.* Department of Epidemiology, College of Public Health, Florida International University, Miami, FL.
3. **Mestre, L. M.** (2022, November). *How to be More Productive in Graduate School.* Math Alliance Field of Dreams Conference, Minneapolis, MN
4. **Mestre, L. M.** (2022, August). *How to thrive as a Doctoral Student in Epidemiology or Biostatistics.* Graduate Students Panel Orientation Week, Bloomington, IN

5. **Mestre, L. M.** (2022, July). *My experiences as a Math major, a Member of the Math Alliance, and as a Master and Doctoral student being a Member of an Underrepresented Minority*, Math Alliance Panel Graduate School Seminar, Virtual Retreat.
6. **Mestre, L. M. & Matthey-Mora, P. P.** (2022, April). *How to Contribute to Communities of Scholars while being a Doctoral Student*, Graduate Student Meeting – Bloomington, IN.
7. Paneto, A., **Mestre, L. M.** & Guardini L. (2020, September). *Impostor Syndrome as a Latine student in higherED*, Indiana University - La CASA Virtual Retreat.

Oral

8. Kyriakos, C., **Mestre L. M.**, Bold, K. W. (2025, June). *Smoking initiation by sociodemographic factors and menthol use status: Implications for minimum legal sales age policies*. 8th Annual Yale Cancer Center Trainee Colloquium
9. **Mestre L. M.**, Parker M., Lee J., White, M.A, & Bold, K. (2025, June). *Increasing Trends of Polysubstance Use among Lesbian and Bisexual US Female Adults*. Yale Postdoctoral Association, 8th Symposium, Yale University, New Haven, CT.
10. **Mestre, L.M.**, White M., Levy, B., & Bold, K., (2024, June). *Higher Prevalence of Polysubstance Use among Lesbian, Gay and Bisexual US older adults*. Yale Postdoctoral Association, Pint of Postdocs, Yale University, New Haven, CT.
11. **Mestre, L.M.**, White M., Levy, B., & Bold, K., (2024, June). *Higher Prevalence of Polysubstance Use among Lesbian, Gay and Bisexual US older adults*. Yale Postdoctoral Association Symposium, Yale University, New Haven, CT.
12. **Mestre, L. M.** (2019, July). *Is the Association of Obesity and Longevity Affected by Social Network Among Latinos?* A symposium for Underrepresented Minority Scholar, Bloomington, IN
13. **Mestre, L. M.** (2014, August). *Accuracy in Image Processing Methods to Calculate the Rotation Angle of an Output Image*, NSF Undergraduate Scholars in Puerto Rico at Universidad Metropolitana, San Juan, P.R
14. **Mestre, L. M.**, & Sandel M. (2013, July). *Evolution of Mitochondrial tRNA in Spinny Ray-Finned Fishes* SSG Day, University of Alabama at Birmingham, Birmingham, AL
15. **Mestre, L. M.**, & de la Torre-Quintana, L.F. (2012, August). *Comparative Analysis of Pairwise Alignment Method*, MBTI Puerto Rico Meeting, San Juan, PR.

Poster

16. **Mestre, L.M.**, Parker, M., Lee, J. White M. & Bold, K. (2025, June). *Disproportionate use of polysubstance combinations varies by sexual identity among US adults*. Yale Postdoctoral Association, 8th Symposium, Yale University, New Haven, CT.
17. **Mestre, L.M.**, Parker, M., Lee, J. White M. & Bold, K. (2025, May). *Disproportionate use of polysubstance combinations varies by sexual identity among US adults*. LGBTQ+ Health Workforce Conference 2025, Cornell Medicine, New York, New York, USA.

18. **Mestre, L.M**, Parker, M., Lee, J, White, M. & Bold, K. (2024, June). *Increasing Trends of Polysubstance Use Combinations among US Gay, Lesbian and Bisexual Adults*, College on Problems of Drug and Dependence (CPDD) Annual Meeting, Montreal, QE, CAN.
19. Cordoba-Grueso, W., **Mestre, L.M**, Galaviz K. & Parker, M. (2024, June). *Exercise in Adolescence and Cannabis Use in Adulthood: Findings from the National Longitudinal Study of Adolescent Health in the United States*, College on Problems of Drug and Dependence (CPDD) Annual Meeting, Montreal, QE, CAN
20. **Mestre, L.M**, Zoh, R., Perry, C. Fukuyama J., & Parker, M. (2023, June). *Determining Whether Weight Status is a Mediator for the Association between Cigarette Smoking and All-Cause Mortality among US Adults*, College on Problems of Drug Dependence (CPDD) Annual Meeting, Denver, CO, USA.
21. **Mestre, L.M**, Zoh, R., Perry, C. Fukuyama J., & Parker, M. (2023, March). *Determining Whether Weight Status is a Mediator for the Association between Cigarette Smoking and All-Cause Mortality among US Adults*, Society for Research in Nicotine and Tobacco (SRNT) 2023, Texas US
22. **Mestre, L.**, Pavela, G., Allison, D., Liu N., & Ejima, K. (2022, June). *Determining an Appropriate Statistical Model when Assessing the Association between Obesity and Mortality*. Current Developments in Nutrition, 6, 38.
23. **Mestre, L.**, Pavela, G., Allison, D., Liu, N., & Ejima, K. (2022, May). *Determining an Appropriate Statistical Model when Assessing the Association between Obesity and Mortality*. 137th Indiana Academy of Science Annual Meeting
24. **Mestre, L.**, Pavela, G., Allison, D., Liu, N., & Ejima, K. (2022, February). *Consequences of Unmet Proportionality of Hazard Assumption When Using the Cox PH Model in the Obesity and Longevity Relationship*, American Statistical Association, Conference Statistical Practice (CSP).
25. Pavela, G., Yi, N., **Mestre, L.**, Lartey, S., & Xun, P. FTOS, D. A. P. (2021, December). *The Association between Obesity and Mortality is Conditional on Birthweight*. *Obesity*, 29, 172-172.
26. **Mestre, L.**, Pavela, G., Yi, N., Lartey, S., Xun, P., & Allison D. (2021, June). *The Association between Relative Body Mass Index and Mortality in the US*. American Society for Nutrition Annual Meeting.
27. Pavela, G., Allison, D., Xun, P., **Mestre, L.**, & Yi, N. (2020, October). *The Association Between Body Mass Index and Mortality Across Generations*. In *APHA's 2020 VIRTUAL Annual Meeting and Expo (Oct. 24-28)*. APHA.
28. **Mestre, L.M.**, Cisneros., J., Masten, E., Sturman L., Roberts, N., Hartley, C., Tenhumberg B., & Rebarber R., (2015, October). *Analysis of Metapopulation with an Allee Effect*, Advancing Chicanos/Hispanics and Native Americans in Science (SACNAS) Conference at Washington D.C.
29. **Mestre, L.M.**, Cisneros., J., Masten, E., Sturman L., Roberts, N., Hartley, C., Tenhumberg B., & Rebarber R. (2015, September). *Analysis of Metapopulation with an Allee Effect* , Ana G. Mendez University System (AGMUS) National Symposium 2015, San Juan, P.R

30. **Mestre, L.M.**, Cisneros., J., Masten, E., Sturman L., Roberts, N., Hartley, C., Tenhumberg B., & Rebarber R. (2015, August). *Analysis of Metapopulation with an Allee Effect*, Mathematical Biological Institute (MBI) Conference, The Ohio State University, Columbus, OH.
31. **Mestre, L.M.** (2014, August). *Accuracy in Image Processing Methods to Calculate the Rotation Angle of an Output Image*, AGMUS National Symposium Fall 2014, San Juan, P.R
32. **Mestre, L.M.**, & Sandel M. (2013, August). *Evolution of Mitochondrial tRNA in Spinny Ray-Finned Fishes*, AGMUS National Symposium Fall 2013, San Juan, PR
33. **Mestre, L.M.**, & Sandel M. (2013, July). *Evolution of Mitochondrial tRNA in Spinny Ray-Finned Fishes* Summer Expo, University of Alabama at Birmingham, Birmingham, AL
34. **Mestre, L.M** & de la Torre-Quintana, L.F. (2013, March). *Comparative Analysis of Pairwise Alignment Method*, MGE @MGA WAESO Conference in Arizona State University, Tempe, AZ.
35. **Mestre, L.M** & de la Torre-Quintana, L.F. (2012, August) *Comparative Analysis of Pairwise Alignment Method*, AGMUS National Symposium. San Juan, PR

AWARDS & ACHIEVEMENTS

National

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| 2022 | Selected as the top 10 graduate students in the US
Diverse: Issues in Higher Education.
URL: A Scholar for Our Time The EDU Ledger
Fairfax, VA, US |
| 2016 | SAMMS Program TA Certification (certification about intensive training in statistical combinatorics)
The Ohio State University, Columbus, OH, US |
| 2015 | Travel Scholarship to SACNAS Annual Meeting
Amount: \$1,000
Washington DC, US |
| 2012 | Travel Award to the Joint Mathematical Meeting 2013
Amount: \$250
San Antonio, TX, US |

Regional (Awards selected among students in the Southern region of the US)

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| 2013 | Honorific Mention in the MGA@MGE Waeso Conference
Arizona State University, Tempe, AZ, US |
| 2013 | Travel Award to the MGA@MGE Waeso Conference
Amount: \$1,000
Arizona State University, Tempe, AZ, US |

University

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| 2025 | Best Talk at Yale Postdoctoral Association Symposium
Title: <i>Examining multiple substance use among Lesbian, Gay, and Bisexual US adults</i>
Yale University |
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2024	Best Oral Presentation at Yale Postdoctoral Association Symposium Title: <i>Higher Prevalence of Polysubstance Use among Lesbian, Gay and Bisexual US older adults</i> Yale University
2024	Outstanding leadership award at Yale Postdoctoral Association Yale University
2023	Leadership skills program certification Yale University
2023	Dean's Office Travel Award Amount: \$1,000 Indiana University School of Public Health Bloomington
2018 – 2019	Graduate School Dean of Students Fellowship Amount \$30,000 Indiana University
2016 – 2018	Teaching Assistantship Amount: \$25,000 University of Puerto Rico at Mayaguez
2016	Federico Mathew Award (Award for outstanding scholastic and leadership performance in STEM) Universidad Metropolitana
2015 - 2016	Science & Honors Scholarship Amount: \$7,500 Universidad Metropolitana
2012 – 2016	Honor student Universidad Metropolitana

TEACHING AND MENTORING EXPERIENCE

University of New Haven

2024	Adjunct Professor Department of Psychology <u>Course:</u> Research Methods, graduate level (PSYCH-6609) <u>Activities:</u> I developed, designed, and planned coursework and syllabus. The teaching activities included reading scientific and clinical manuscripts. Discussions about the ethical use of AI in Behavioral Research. Identifying which methods to use based on a scientific problem. Implementation of quasi experimental designs. Discussions of quantitative and qualitative methods. <u>Teaching strategies:</u> Flipped Classroom, research-based projects, leading discussions about implementation of research methods, study designs, and ethical considerations when doing behavioral research.
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Indiana University

2022 – 2023

Teaching Assistant

Luddy School of Informatics, Computing and Engineering

Course: Information Visualization (ENGR-E583/E483)

Activities: I did the grading of assessment and quizzes. I supported the development of competencies assessment to professor, and students in their learning process. The activities to students included explaining how to use R Studio, Python, Tableau, Power BI, or Excel to develop visualizations that can support stakeholders' needs. I also support the professor to develop research-based projects with real world evidence using data from stakeholders.

Teaching Strategies: Flipped Classroom. Active learning

2021

Math and Statistics Tutor

Indiana University Athletics

Courses: College Math, Finite Math, Pre-Calculus, Calculus, Introductory Statistics courses, Epidemiology and Biostatistics graduate courses

Activities: The tutoring consisted in reviewing section and assisting in the teaching process of athlete students at Indiana University.

Teaching Strategy: Active learning

University of Puerto Rico

2017 – 2018

Lecturer

Department of Mathematical Sciences

Course: Pre-Calculus

Activities: I led the teaching of Pre-Calculus courses for over 200 students, proctoring, and coordinating exams. I also did grading, development of assessments and evaluations of competencies and knowledge such as exams, quizzes, and hands-on projects. The projects included problem solving exercises where students needed to apply the discussed concepts and methods in the classroom.

Teaching strategies: Flipped Classroom. Teaching for the test. Problem Solving. Peer-Reviewed discussions. Active Learning

2016 – 2017

Tutoring

Support Center, Department of Mathematical Sciences

Courses: Pre-Calculus I & II, Calculus I, & II, Introduction to Statistics, Inferential Statistics, and mathematical probability

Activities: I led tutoring or consulting among undergraduate students about statistics and mathematics concepts to support their learning process.

Teaching Strategy: Teaching for the test and active learning

2016 – 2017

Teaching Assistant

Department of Mathematical Sciences

Courses: Pre-Calculus I & II

Activities: I led the recitation section and review sections. I also led the teaching and peer discussions. Activities included using real-life applications of concepts discussed in class.

Teaching Strategies: Teaching for the Test. Problem Solving. Active Learning

The Ohio State University

2017 Teacher Assistant (TA) at the Sampling Advanced Mathematics for Minorities Students (SAMMS) Program.
Activities: I supported and assisted the course's professor in the learning process of statistical combinatorics to international from different math backgrounds.
Teaching Strategies: Peer-Reviewed discussions

Universidad Metropolitana

2014 – 2016 Math Tutor
School of Science and Technology
Courses: Calculus I & II. Pre-Calculus I & II.
Activities: I led tutoring to undergraduate students about mathematics related concepts to support their learning process.
Teaching Strategies: Active learning

2014 – 2016 Undergraduate Teaching Assistant
School of Science and Technology
Courses: Pre-Calculus I & II, and Calculus I
Activities: I supported the professors in material and teaching dissemination. Responsible in promoting active learning among students and supervising their performance during class. Promoting peer-reviewed discussions; recitation sections; reviewing sections and grading.
Teaching Strategies: Active learning and teaching for the test

2013 - 2014 Assistant Mentor of Biostatistics in the Saturday Academy
Activities: I prepared lectures and mini seminars for pre-college students in Biostatistics and Epidemiology, quantitative methods, and scientific dissemination. We successfully helped over 35 students to present their research at regional scientific conferences; seven students did summer internship in prestige universities such as University of Washington, University of Vermont, University of Puerto Rico, and MIT.

SERVICE AND LEADERSHIP EXPERIENCE

Institutional Service and Leadership

2024 – 2025 Deans' Advisory Council on LGBTQIA+ Affairs Trainee
Yale School of Medicine
Yale University

2024 – 2025 Coordinator of Belonging Committee
Yale Postdoctoral Association
Yale University

2024 – 2025 Board member of the Education and Training subcommittee
The Consultation Center
Yale University

<i>2024 – 2025</i>	Mentor for incoming Postdocs Yale Postdoctoral Association Mentoring Committee Yale University
<i>2024 – 2025</i>	Co-Organizer of Pint of Postdocs event Yale Postdoctoral Association Professional Development committee Yale University
<i>2024 – 2025</i>	Social Equity and Inclusion Committee The Consultation Center Yale University
<i>2023 – 2025</i>	LGBTQ+ Liaison Yale Postdoctoral Association Belonging Committee Yale University
<i>2023 – 2025</i>	Member of Social Equity and Inclusion The Consultation Center Yale University
<i>2023 – 2025</i>	Member of the Yale Postdoctoral Association Buddy Program Yale University.
<i>2023</i>	Elected Representative of the School of Public Health-Bloomington of the Graduate School Strategic Planning Committee Indiana University
<i>2023</i>	Member of the Committee Fee Review Membership Student Government and Graduate and Professional Student Government Indiana University
<i>2022</i>	Math Alliance Field of Dreams Conference Student Recruitment Efforts Department of Epidemiology and Biostatistics Indiana University School of Public Health – Bloomington Minneapolis, MN
<i>2022</i>	SACNAS Annual Meeting Student Recruitment Efforts Epidemiology or Biostatistics Department of Epidemiology and Biostatistics School of Public Health-Bloomington San Juan, PR
<i>2021</i>	Searching and Review Committee for Dean of Research, Indiana University School of Public Health-Bloomington
<i>2021</i>	Searching and Review Committee for Post Doctoral positions Indiana University School of Public Health-Bloomington

2018 – 2020	Representative of the Department of Epidemiology and Biostatistics School of Public Health – Bloomington Student Government Indiana University
2018 – 2020	Student Government’s Liaison School of Public Health – Bloomington Student Government Indiana University

External Service and Leadership

2024 – Present	Member of the Early Career Development Committee College Program of Drug Dependence
2024– 2025	Member of the LGBTQIA+ Subcommittee College Program of Drug Dependence
2024 – Present	Founder Member of Math Alliance Alumni Association Math Alliance
2024 – Present	Member of Steering Committee Math Alliance Alumni Advisory Committee Math Alliance
2022 – 2023	Program Chair-Elected Section of Statistical Programming and Analysts American Statistical Association
2022 – 2023	Secretary Aging and Chronic Disease Section American Society for Nutrition
2019 – 2022	Graduate Student Representative Aging and Chronic Disease Section American Society for Nutrition

GRANTS

2023 – Present	<i>Research Training Program in Substance Abuse Prevention</i> Agency: National Institute of Drug Abuse (NIDA) Award# 5T32DA019426-19 (PI: Tami Sullivan) Role: Postdoctoral Research Fellow Yale School of Medicine
2022 – 2023	<i>Minding A Mid-America Gap: NIDA/NIAAA Epidemiology Research Training for Clinical Researchers and Clinicians in Currently Under-Served Areas</i> ; Agency: NIDA/NIAAA Award# R25DA051249 (PI: David B. Allison and Maria A. Parker) Role: Pre doctoral trainee Amount: \$12,500 Indiana University School of Public Health - Bloomington
2020 –2022	<i>Obesity and Longevity Across Generations (Supplement)</i> Agency: National Institute of Aging (NIA) Award# 3R01AG057703-02S1 (PI sponsored: David B. Allison)

Role: Pre doctoral trainee
Amount: \$121,825
Indiana University School of Public Health – Bloomington

2012 –2015 *AGMUS Institute of Mathematics Scholarship*
Agency: National Science Foundation (NSF) - Competitive based
Award# 0822404 (PI: Juan Arratia)
Role: Undergraduate Scholar
Amount: \$30,000
Universidad Metropolitana at Cupey (Currently Universidad Ana G. Mendez
Cupey Campus)

MEDIA PRESS RELEASES

1. *Older gay & Lesbian Adults at Greater Risk of Polysubstance Use: Study* (URL: [Older Gay & Lesbian Adults at Greater Risk of Polysubstance Use: Study](#))
2. *Older Gay & Lesbian Adults at Greater Risk of Polysubstance Use: Study* (URL: [Older Gay & Lesbian Adults at Greater Risk of Poly | Newswise](#))
3. *Student Named Program Chair-Elect of Section of American Statistical Association.* (URL: [Student Named Program Chair-Elect of Section of American Statistical Association: : News: News & Events: School of Public Health: Indiana University Bloomington](#)).
4. *A scholar for our Time.* Diverse Issues in Higher Education (URL: [A Scholar for Our Time | Diverse: Issues In Higher Education \(diverseeducation.com\)](#))
5. *Indiana University Public Health Bloomington Student Named to Prestigious Group of Rising Scholars* (URL: [Student Named to Prestigious Group of Rising Scholars: : News: News & Events: School of Public Health: Indiana University Bloomington](#))
6. *Tortuous and torturous: Why publishing a critical letter to the editor is so difficult* (URL: [Tortuous and torturous: Why publishing a critical letter to the editor is so difficult – Retraction Watch](#))

AD-HOC JOURNAL REVIEWER

Substance Use and Addiction

Journal of American College Health; Journal of Child & Adolescent Substance Abuse; Addictive Behavior; Substance Use and Misuse; Current Drug Safety Journal; Journal of Health Psychology; Drug and Alcohol Dependence; Drug and Alcohol Dependence Reports; The American Journal on Addictions; Drug and Alcohol Review

Population Health

Journal of Nutrition; eLife; JAMA Open Network; Nature; PLoS Medicine; Journal of American Heart Association MS; Journal of Immunology and Immunotherapy; Journal of Integrative Medicine; Annal of Internal Medicine; Circulation; American Journal of Clinical Nutrition; Obesity Journal; PLoS One; Frontiers in Public Health; JMIR Aging; JAMA Otolaryngology; BMC Public Health; Discover Social Science and Health

SKILLS AND PROFICIENCIES

Languages

Spanish – Native level; English - Native level

Expertise on US National Datasets

National Health Assessment and Nutrition Examination Survey (NHANES); National Survey on Drug Use and Health (NSDUH); National Longitudinal Study of Adolescent to Adult Health (Add Health); Population Assessment of Tobacco and Health (PATH) Study; Behavioral Risk Factor Surveillance System (BRFSS); National Health Interview Survey (NHIS)

Software

R Software; STATA; SAS; Python; MATLAB; SPSS; Minitab; SQL; Qualtrics Survey Tool Software; R Markdown; GitHub

ACTIVE MEMBERSHIP IN PROFESSIONAL SOCIETIES

College on Problems of Drug Dependence; Math Alliance