

Emmanuel Kubuafor

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Professional Summary

Accredited Graduate Statistician with 3+ years of experience in data analysis and public health research. Skilled in statistical computing with graduate-level training in spatial modeling, survival analysis, and systematic reviews. Recognized for strong problem-solving skills, cross-cultural communication, and mentoring students through research and academic support initiatives. Motivated to pursue advanced research in biostatistics and contribute to the development of statistical methods that address public health challenges.

Education

- University of New Mexico

MS in Statistics; CGPA: 4.15

Albuquerque, NM
January 2024 - May 2026

 - Research: Latent Spatial Heterogeneity in U.S. Cancer Mortality: A Multi-Site Clustering and Spatial Autocorrelation Analysis
 - Golden Key Honors: Top 15% of class
- University of Ghana

Bsc in Mathematical Science; Magna cum laude

Accra, Ghana
August 2018 - September 2022

 - Research: Evaluating Financial Health of Commercial Banks in Ghana: An Application of Altman's Z-Score Model

Professional Experience

- The Office of Assessment and Academic Program Review (UNM)

Project Assistant

Albuquerque, NM
June 2025 – July 2025

 - Independently scored 100+ STEM student artifacts using New Mexico state rubrics, evaluating skills such as Quantitative Reasoning across Math, Statistics, and Science General Education courses.
 - Collaborated with faculty teams to calibrate rubric interpretation and maintain inter-rater reliability during a month-long institutional review process.
 - Validated and entered 100+ ratings into the university's assessment database, contributing to accreditation reports and longitudinal performance tracking.
- University of New Mexico African American Student Services

Project Assistant

Albuquerque, NM
January 2025 – Present

 - Assisting the development and evaluation of an ongoing quantitative skills pilot in math and statistics for 30+ underrepresented students, with preliminary results showing a 20% gain in assessment scores.
 - Analyzing academic performance and engagement data across 5 student programs to refine success metrics, improving outcome tracking accuracy by an estimated 35% to date.
 - Analyze and report program outcomes for grant proposals, demonstrating over 85% fulfillment of targeted metrics to secure continued funding.
- University of New Mexico Center for Teaching and Learning

Graduate Teaching Scholar


Albuquerque, NM
August 2024 – May 2025

 - Led a systematic review on factors affecting attendance in undergraduate statistics courses, screening over 60 sources and synthesizing 20 peer-reviewed studies and institutional reports.
 - Identified key barriers related to course structure, instructional design, and student support, informing targeted recommendations for curriculum improvement.
 - Presented findings to 3 faculty committees, contributing to revisions in attendance policy and instructional practices across multiple departments.

- Assisted in data analysis for a stochastic immigration study in Ghana, supporting manuscript development and validation.
- Guided 3 undergraduate students through their final thesis projects, providing guidance on statistical methodology, analysis, and academic writing.
- Collected and organized data from 20+ companies as part of a national study on innovation adoption in both the commercial and private sectors.

Research Experience

Submitted Manuscripts

My Google Scholar profile:  [Google Scholar](#)

- **Kubuafor, E.**, Baidoo, D., Duah, A., Amevor, R., Okeke, O. J., Quaye, D., & Appiah, P. O. (2025). Latent Spatial Heterogeneity in US Cancer Mortality: A Multi-Site Clustering and Spatial Autocorrelation Analysis. [Link](#)
- **Kubuafor, E.**, Baidoo, D., Okeke, O. J., Amevor, R., Arhin, G., & Korley, J. T. (2025). Evaluation of Time Series Forecasting Models for Predicting Lung Cancer Mortality Rates in the United States: A Comparison with Altuhaifa (2023) Study. [Link](#)
- Amevor, R., **Kubuafor, E.**, Baidoo, D., Salifu, J., Gonnage, K. M., & Okeke, O. J. (2025). Integrative Prognostic Modeling of Breast Cancer Survival with Gene Expression and Clinical Data. [Link](#)
- Baidoo, D., **Kubuafor, E.**, Osarfo, S. F., Agyei-Owusu, F. A., Frimpong, J. A., Amevor, R., ... & Aboagye, F. (2025). Bayesian Hierarchical Methods for Surveillance of Cervical Dystonia Treatments. [Link](#)
- Baidoo, D., **Kubuafor, E.**, Joshua, O. O., Osarfo, S. F., Agyei-Owusu, F. A., Akuoko-Frimpong, J., ... & Benyi, B. (2025). Comparing Malaria Trends in the Comoros Islands: ARIMA Modeling and Retrospective Analysis. [Link](#)
- Okeke, O. J., Nwaogu, C., Oladoyin, O. O., **Kubuafor, E.**, Baidoo, D., Akinyemi, T., ... & Fabunmi, I. A. (2025). Assessing the Influence of Locational Suitability on the Spatial Distribution of Household Wealth in Bernalillo County, NM. [Link](#)
- Okeke, O. J., **Kubuafor, E.** (2025). Optimizing Cattle Ranching Locations in Chaves County, New Mexico: A GIS-Based Assessment of Ecological Resources and Spatial Relationships to Oil and Gas Wells. [Link](#)

Academic Projects

- Dose-Response Effects of Dietary Sulfamerazine on Red Blood Cell Counts in Brown Trout: A Hierarchical Mixed-Effects Analysis.
- Serum Prostate-Specific Antigen (PSA) Determinants in Prostate Cancer: A Regression-Based Clinical Assessment.
- A Bayesian Investigation into the Effects of Beta-Carotene Supplementation on Serum Levels of Beta-Carotene and Vitamin E.
- Modeling Global Student-Teacher Ratios Across Education Levels: A Mixed-Effects Framework.
- Meteorological and Seasonal Drivers of Ozone Concentrations in Bernalillo, New Mexico: A Multiple Regression Analysis.

Presentations

- Systematic Review: Investigation of factors influencing low attendance in Undergraduate Statistics Classes at the University of New Mexico. Center for Teaching and Learning Seminar, University of New Mexico, May 2025.
- Evaluation of Time Series Forecasting Models for Predicting Lung Cancer Mortality Rates in the United States: A Comparison with Altuhaifa (2023) Study. Department of Mathematics and Statistics Course Meeting, University of New Mexico. April 2024.
- Comparative Statistical Analysis of Social Security and Pension Systems: A Case Study of Ghana and Sudan. Department of Actuarial Science and Statistics Seminar, University of Ghana, May 2022.
- Insurance Product Valuation & Anti-Money Laundering Measures. Department of Actuarial Science and Statistics Seminar, University of Ghana, May 2021.

Teaching Experience

- University of New Mexico** **Albuquerque, NM**
Instructor & Mathematics Tutor **January 2024 – Present**
 - Instruct College Algebra (MATH 1220) and Introductory Statistics (MATH 1350), applying active learning methods that improved student exam scores by 10–15%.
 - Tutor 10+ underrepresented students weekly through African American Student Services, supporting a 20% higher pass rate among participants.
 - Co-lead biweekly “Math Anxiety” workshops for 20+ students; 70% report increased confidence in quantitative coursework.
- Department of Actuarial Science and Statistics, University of Ghana** **Accra, Ghana**
Teaching Assistant **October 2022 – December 2023**
 - Facilitated tutorials and exam prep sessions for 60+ students across core statistics courses, supporting a 15% improvement in pass rates.
 - Assisted professors in modernizing curriculum with R/Python modules, now required for 4 core courses.
 - Taught lab sessions for Intro to Statistical Computing, training 80+ students in R for data manipulation, visualization, and simulation-based inference.
- University Practice Senior High School** **Cape Coast, Ghana**
Science & Math Quiz Team Instructor **January 2019 - July 2019**
 - Taught 5 students for national competitions; team placed 11th nationally (top 15% of 100+ schools)
 - Designed and implemented gamified learning techniques that improved the team’s speed and accuracy by 25%.
 - Facilitated contestant performance review sessions and prepared detailed progress reports to track development and outcomes.

Awards and Honors

- 2025 – Lester R. Curtin Award, American Statistical Association
- 2025 – Section for Statistical Programmers and Analysts Conference Grant, American Statistical Association
- 2025 – Joint Statistical Meetings Early Career Travel Award, American Statistical Association
- 2025 - Diversity Mentorship Program Award, American Statistical Association
- 2025 – Symposium on Data Science and Statistics Travel Award, American Statistical Association
- 2025 – Graduate Community Mentoring Scholarship, University of New Mexico
- 2025 – African American Conference Assistance, University of New Mexico
- 2025 – South Central Topology IV Travel Award, Texas A&M University
- 2025 – Professional Development Grant, University of New Mexico
- 2025 – Student Research Grant, University of New Mexico
- 2024 – Graduate Scholarship of Teaching and Learning, University of New Mexico
- 2024 – Project for New Mexico Graduates of Color Scholarship, University of New Mexico
- 2023 – Best Teaching Assistant Award, Department of Statistics and Actuarial Science, University of Ghana
- 2022 – Honor of Excellence and Dedication, University of Ghana Actuarial and Statistics Society
- 2022 – Most Hard Working Committee Executive, University of Ghana Actuarial and Statistics Society
- 2020 – Dean’s Honor for Academic Excellence, College of Basic and Applied Sciences, University of Ghana

Academic Service, Leadership, & Volunteerism

- 2025 – Resource Reviewer, Biosats4You, University of Minnesota
- 2025 – Reviewer, Undergraduate Statistics Project Competition, The Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) and the American Statistical Association
- 2025 – Peer Mentor, African American Student Services, University of New Mexico
- 2025 – Peer Mentor, Global Education Office, University of New Mexico
- 2024 – Math Camp Counselor, The CAMP for Algorithmic and Mathematical Play (“Campersand”)
- 2024 – Research Evaluator, McNair Scholars Research Competition Conference
- 2024 – Peer Mentor, Project of New Mexico Graduate of Color, University of New Mexico
- 2023 – Statistics Aide, Department of Marine and Fisheries Sciences, University of Ghana
- 2022 – Board Member, Quiz Committee, University of Ghana Actuarial and Statistics Society
- 2021 – President, Academic Committee, University of Ghana Actuarial and Statistics Society

Non-Degree Education & Certifications

- Graduate Statistician Accreditation – American Statistical Association
- Bayesian Time Series Analysis and Forecasting (Marco A. R. Ferreira) – American Statistical Association
- Essentials of Clinical Research – Alison
- SAS® Programming 1: Essentials – SAS
- Advanced Epidemiological Study Design, Implementation, and Analysis – Chisquares Inc
- Scientific Writing and Publishing – Chisquares Inc
- Conducting and Visualizing Systematic Reviews – Chisquares Inc
- Survival Analysis and Cox Regression – Chisquares Inc
- Inequality Analysis Using R: Disaggregated Data from Surveys – World Health Organization

Professional Member Association

- American Statistical Association.
- American Mathematical Society.
- Eastern North American Region of the International Biometric Society.

Skills Summary

- **Programming:** R, SAS, SPSS, OpenBUGS
- **Systematic Review:** PRISMA, Covidence