Emmanuel Kubuafor

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PROFESSIONAL SUMMARY

Emerging biostatistician with 3+ years of experience in data analysis and interdisciplinary research. Skilled in statistical computing with master's level training across advanced modeling, inference, and survival analysis. Recognized for strong problem-solving skills, cross-cultural communication, and mentoring students through research and academic support initiatives. Driven to pursue advanced research in biostatistics and contribute to the development of statistical methods that address public health challenges.

EDUCATION

- **University of Washington** — **Seattle, WA**
  Ph.D in Biostatisitcs — ***September 2026 - May 2031***

- **University of New Mexico (UNM)** — **Albuquerque, NM**
  MS in Statistics; GPA: 4.0/4.0 — ***January 2024 - July 2026***
  - Research: Latent Spatial Heterogeneity in U.S. Cancer Mortality: A Multi-Site Clustering and Spatial Autocorrelation Analysis
  - Golden Key Honors: Top 15% of graduating class

- **University of Ghana** — **Accra, Ghana**
  B.sc Actuarial Science; GPA: 3.76/4.00 — ***August 2018 - September 2022***
  - Research: Evaluating Financial Health of Commercial Banks in Ghana: An Application of Altman's Z-Score Model
  - First Class Honors
  - Dean's Honor of Academic Excellence

PROFESSIONAL EXPERIENCE

- **The Office of Assessment & Academic Program Review (UNM)** — **Albuquerque, NM**
  Project Assistant — ***June–July 2026 and June–July 2025***
  - Independently scored 120+ STEM student artifacts using New Mexico state rubrics, achieving 98% scoring consistency and informing improvements in Quantitative Reasoning outcomes.
  - Collaborated with faculty teams during a month-long institutional review to calibrate rubric interpretation, achieving significant inter-rater reliability and strengthening consistency in student assessment practices.
  - Validated and entered 100+ ratings into the university's assessment database, ensuring data accuracy that supported accreditation reporting and improved longitudinal tracking of student performance.

- **African American Student Services, University of New Mexico** — **Albuquerque, NM**
  Project Assistant — ***January 2025 – May 2025***
  - Assisted with the development and evaluation of an ongoing quantitative skills pilot in math and statistics for 30+ students, with preliminary results showing a 20% gain in assessment scores.
  - Analyzed academic performance and engagement data across 5 student programs to refine success metrics, improving outcome tracking accuracy by 35% to date.
  - Analyzed and reported program outcomes for grant proposals, demonstrating over 85% fulfillment of targeted metrics to secure continued funding.

- **Center for Teaching and Learning, University of New Mexico** — **Albuquerque, NM**
  Graduate Teaching Scholar — ***August 2024 – May 2025***
  - Led a systematic review on attendance factors in undergraduate statistics courses, screening 60+ sources and synthesizing 20 studies to highlight key drivers of student engagement.
  - Identified key barriers in course structure, instructional design, and student support, leading to targeted recommendations with projected increase in class participation and retention rates by approximately 12%.
  - Presented findings to three faculty committees, leading to policy and instructional revisions projected to enhance attendance compliance and teaching effectiveness significantly across departments.

- **Department of Actuarial Science and Statistics, University of Ghana** — **Accra, Ghana**
  Research Assistant — ***October 2022 – December 2023***
  - Conducted data analysis for a stochastic immigration study in Ghana, supporting model building and leading to a publication that advanced the literature.
  - Guided three undergraduate students through their thesis projects, strengthening their statistical analysis and writing skills, which led to a 100% thesis completion and defense success rate.
  - Collected and organized data from 20+ companies for a national study on innovation adoption, improving dataset completeness by 25% and supporting cross-sector comparative analysis.

RESEARCH EXPERIENCE

My Google Scholar Profile: Google Scholar

Manuscripts Under Review

- **Kubuafor, E.**, Baidoo, D., Duah, A., Amevor, R., Okeke, O. J., Quaye, D., & Appiah, P. O. (2026). Latent Spatial Heterogeneity in U.S. Cancer Mortality: A Multi-Site Clustering and Spatial Autocorrelation Analysis. Link
- Amevor, R., **Kubuafor, E.**, & Baidoo, D. (2026). Adaptive Weighting for Time-to-Event Continual Reassessment Method: Improving Safety in Phase I Dose-Finding Through Data-Driven Delay Distribution Estimation. Link
- Amevor, R., Baidoo, D., & **Kubuafor, E.** (2026). Time-Varying Hazard Patterns and Co-Mutation Profiles of KRAS G12C and G12D in Real-World NSCLC. 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
- **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

- 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

Academic Projects

- Modeling Global Student-Teacher Ratios Across Education Levels: A Mixed-Effects Framework.
- 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.
- Meteorological and Seasonal Drivers of Ozone Concentrations in Bernalillo, New Mexico: A Multiple Regression Analysis.

Presentations

- *Time-Varying Hazard Patterns and Co-Mutation Profiles of KRAS G12C and G12D in Real-World NSCLC.* Poster Presentation, Statistics in Pharmaceuticals (SIP) Conference, University of Connecticut, Storrs, Connecticut. August 2026.
- *Causal Effect of Breast-Conserving Surgery plus Radiotherapy vs. Mastectomy on 10-Year Breast Cancer–Specific Survival: A Target Trial Emulation.* Poster Presentation, Joint Statistical Meetings (JSM), Boston, Massachusetts. August 2026.
- *Causal Effect of Breast-Conserving Surgery plus Radiotherapy vs. Mastectomy on 10-Year Breast Cancer–Specific Survival: A Target Trial Emulation.* Poster Presentation, American Statistical Association (ASA) Albuquerque Chapter Annual Meeting. April 2026.
- *Latent Spatial Heterogeneity in U.S. Cancer Mortality: A Multi-Site Clustering and Spatial Autocorrelation Analysis.* Poster Presentation, Eastern North American Region (ENAR) Spring Meeting, Indianapolis, Indiana. March 2026.
- *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.

Talks

- *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

- **Department of Mathematics & Statistics, University of New Mexico** — **Albuquerque, NM**
  Course Instructor — ***January 2024 – July 2026***
  - Instructed College Algebra (MATH 1220) and Introductory Statistics (MATH 1350), applying active learning methods that improved student exam scores by 10–15%.
  - Boosted office-hour attendance by 40% after introducing structured review sessions before exams.
  - Introduced collaborative learning groups, which led to a 25% increase in homework completion rates.

- **African American Student Services, University of New Mexico** — **Albuquerque, NM**
  Math Tutor & Academic Support Specialist — ***January 2024 – May 2025***
  - Delivered 1:1 and group tutoring in statistics, calculus, and linear algebra to 10+ students per semester, supporting a 20% higher pass rate among participants.
  - Co-led biweekly "Math Anxiety" workshops for 20+ students; 70% report increased confidence in quantitative coursework.
  - Helped incoming STEM majors improve math placement scores, enabling over 10 students to qualify for higher-level courses and advance their academic progression by the first semester.

- **Department of Actuarial Science and Statistics, University of Ghana** — **Accra, Ghana**
  Teaching Assistant — ***October 2022 – December 2023***
  - Facilitated tutorials and exam prep sessions for 300+ students across core statistics courses, supporting a 15% improvement in pass rates.
  - Implemented active learning strategies in classroom instruction, resulting in a 20% improvement in student engagement and course evaluations.
  - Taught lab sessions for Intro to Statistical Computing, training 10+ students in data manipulation and visualization, resulting in an 84% lab completion and proficiency rate.

- **University Practice Senior High School** — **Cape Coast, Ghana**
  Science & Math Quiz Team Instructor — ***January 2019 - July 2019***
  - Taught calculus and combinatorics to 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 significantly.
  - Facilitated performance review sessions for contestants and prepared detailed progress reports, improving individual development tracking accuracy and enhancing overall performance outcomes.

AWARDS AND HONORS

- 2026 – Outstanding Graduate Student in Teaching, University of New Mexico
- 2026 – Teaching Statistical Thinking with GAISE Workshop Travel Award, NSF-Funded EAPOST Program
- 2026 – NISS Writing Workshop for Junior Researchers Travel Award, National Institute of Statistical Sciences
- 2026 – Statistics in Pharmaceuticals (SIP) Travel Scholarship, University of Connecticut.
- 2026 – Pharmaceutical Industry SAS® Users Group (PharmaSUG) Student Scholarship

- 2026 & 2025 – Student Research Grant, University of New Mexico
- 2026 & 2025 – Section for Statistical Programmers and Analysts Conference Grant, American Statistical Association
- 2026 & 2025 – Joint Statistical Meetings Early Career Travel Award, American Statistical Association
- 2026 & 2026 – African American Conference Assistance, University of New Mexico
- 2025 – Lester R. Curtin Award, American Statistical Association
- 2025 – Symposium on Data Science and Statistics Travel Award, American Statistical Association
- 2025 - Diversity Mentorship Program Award, American Statistical Association
- 2025 – Professional Development Grant, University of New Mexico
- 2025 – Graduate Community Mentoring Scholarship, University of New Mexico
- 2025 – South Central Topology IV Travel Award, Texas A&M University
- 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

ACADEMIC SERVICE, LEADERSHIP, & VOLUNTEERISM

- 2026 – Session Coordinator: Data Visualization & Interactive Analysis, Pharmaceutical Industry SAS® Users Group (PharmaSUG) Conference .
- 2026 – Website Development and Management: District 6, American Statistical Association.
- 2026 – Session Chair: New Statistical Approaches to Address Competing Risks, ENAR Spring Meeting, Indianapolis, Indiana
- 2025 – Evaluator, Fourth Annual Undergraduate Research Inspiration/Inspiración Undergraduate Research Conference (Florida International University, University of New Mexico, University of Arizona, Universidad Nacional de Cuyo)
- 2025 –Reviewer, Biosats4You Program , 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
- 2025|2024 – Research Evaluator, McNair Scholars Research Competition Conference
- 2024 – Math Camp Counselor, The CAMP for Algorithmic and Mathematical Play (“Campersand”)
- 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
- 2021 – President, Academic Committee, University of Ghana Actuarial and Statistics Society

NON-DEGREE EDUCATION & CERTIFICATIONS

- RStudio & Positron: Advancements in AI for Statistical Programming – PharmaSUG
- Graduate Statistician Accreditation (GStat) – American Statistical Association
- Bayesian Time Series Analysis and Forecasting – Joint Statistical Meeting
- Essentials of Clinical Research – Alison
- Data or Specimens Only Research – CITI (Collaborative Institutional Training Initiative) Program
- 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

HIGHLIGHTED SKILLS

- **Soft Skills**: Collaboration, Leadership, Analytical Thinking, and Effective Communication
- **Technical Skills**: Statistical Modeling (R, SAS, Python, OpenBUGS), LaTeX, Microsoft 365, and Adobe Creative Suite

PROFESSIONAL MEMBER ASSOCIATION

- Sigma Xi - The Scientific Research Honor Society.
- American Statistical Association
- American Mathematical Society
- Institute of Mathematical Statistics
- Eastern North American Region of the International Biometric Society