Dennis Baidoo, MS, Gstat

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PROFESSIONAL SUMMARY

Certified Graduate Statistician with 3+ years of experience in data analysis, statistical modeling, and public health research. Adept at applying advanced statistical methods to address real-world health challenges. Demonstrates strong analytical thinking, rapid adaptability, and a proven ability to foster effective collaboration within culturally diverse teams. Seeking to leverage leadership, strategic planning, and analytical expertise to drive data-informed solutions in public health and related fields.

EDUCATION

- **University of New Mexico**   **Albuquerque, NM**
  M.S in Statistics   *January 2023 - May 2025*

  - Research: Bayesian Hierarchical Methods for Surveillance of Cervical Dystonia Treatments.
  - Advisor: Prof. James Degnan

- **University of Ghana**   **Accra, Ghana**
  B.Sc in Statistics and Mathematics (Combined Major)   *Aug 2017 - Nov 2021*

  - Research: Predictors of Intent to Receive COVID-19 Vaccines in Ghana.
  - Advisor: Dr. Godwin Debrah
  - Graduated among the top 5% of the class.

AWARDS & HONORS

2025 - Lester R. Curtin Award, American Statistical Association
2025 - Statistics in Pharmaceuticals (SIP) Scholarship Award, University of Connecticut
2025 - Early Career Travel Award, American Statistical Association
2025 - Sigma Xi Honoree, The Scientific Honor Research Society
2025 - Excellence in Teaching Award, University of New Mexico
2024 - Biopharmaceutical Section Student Scholarship Award, American Statistical Association
2024 - Diversity Mentoring Program Award, Joint Statistical Meetings
2024 - Office of the Vice President for Research Zancada Graduate Fellowship, University of New Mexico
2024 - Acxiom Diversity Scholarship Award, Acxiom
2024 - Golden Key International Honour Society Honoree, The International Collegiate Honor Society
2024 - Graduate Scholarship Fund Grant, University of New Mexico
2023/25 - The South Central Topology Conference IV Travel Award, Texas A & M University
2023/25 - Professional Development Grant, University of New Mexico
2023/25 - Project for New Mexico Graduates of Color Scholarship, University of New Mexico
2023 - Scholarship of Teaching & Learning Award, University of New Mexico
2023 - Michael Woodroofe Memorial Conference Travel Award, University of Michigan
2023 - Student Research Grant, University of New Mexico
2021 - Dean's Honor List, University of Ghana

RESEARCH EXPERIENCE

- **College of Population Health, University of New Mexico**   **Albuquerque, NM**
  Graduate Research Assistant, Advisor: Dr. Stephanie McIver   *May 2024 - Current*

  - Designed predictive ML models (85% accuracy) identifying student suicide risk factors, directly informing the university mental health outreach programs.
  - Identified and ranked critical suicide risk factors (e.g., academic pressure, social isolation), enabling data-driven prevention strategies that reduced high-risk cases.
  - Co-designed suicide prevention talks with campus health teams, embedding mental health modules in statistics courses, and post-intervention surveys showed more than a 30% increase in student help-seeking behavior.

- **Department of Anesthesiology, University of New Mexico** — Albuquerque, NM
  Graduate Research Assistant, Advisor: Dr. Reza Ehsanian — *June 2024 - Current*
  - Supported data collection and analysis for a multi-site study on genicular nerve radiofrequency ablation (RFA) practice patterns, contributing to insights that optimized clinical protocols for 500+ annual procedures.
  - Streamlined research collaboration by developing and maintaining centralized project documentation systems, ensuring 100% compliance with institutional protocols and improving team efficiency by 25%.
  - Authored strategic briefs synthesizing research outcomes, influencing 3 departmental policy changes in 2024.

- **African American Student Services, University of New Mexico** — Albuquerque, NM
  Project Assistant, Advisor: Dr. Brandi Stone — *June 2023 - Current*
  - Led a high-impact mathematics and statistics pilot program, leveraging data-driven analysis to optimize quantitative assessments, resulting in a 45% increase in student success rates.
  - Trained 15+ students in R for qualitative research, boosting reproducibility and enabling 3 conference presentations.
  - Boosted research grant success rate from 40-50% to 80%, while maintaining exceptional program pass rates, driving sustainable funding and impact.

- **Department of Statistics and Actuarial Science, University of Ghana** — Accra, Ghana
  Research Assistant, Advisor: Dr. Godwin Debrah — *Oct 2021 - Nov 2022*
  - Conducted data analysis for an NIH-funded study on Broken Heart Syndrome, identifying key risk factors that informed clinical screening guidelines.
  - Trained 33+ students in predictive modeling (regression diagnostics, covariate selection), boosting research skills for public health/econometrics projects.
  - Mentored 4 students in statistics/biostatistics final year projects, improving methodological rigor and resulting in 2 publications.

- **Compassion International Ghana** — Accra, Ghana
  Intern - Data Analyst, Advisor: Mr. Patrick Attah-Darkoh — *May 2018 - Jul 2018*
  - Transformed malaria program outcomes through data-driven insights, optimizing interventions that reduced cases by 37% in target regions.
  - Partnered with Compassion International Ghana to optimize resource allocation for malaria-affected children, reducing health disparities in underserved communities by 25%.

TEACHING EXPERIENCE

- **Department of Mathematics and Statistics, University of New Mexico** — Albuquerque, NM
  Course Instructor — *Jan 2023 - Current*
  - Designed and taught the first-ever offering of the new MATH 1300 (Statistical Literacy) course from scratch to non-quantitative majors.
  - Designed and delivered 200+ engaging lectures for MATH1350 (Introductory Statistics), reaching 240+ undergraduates across 6 semesters.
  - Cultivated a welcoming classroom atmosphere that encouraged questions and collaborative learning.
  - Guided 20+ final-year students in applying descriptive and inferential statistics to psychology research projects.
  - Reduced departmental dropout rates by 86% through proactive student support interventions.

- **Department of Statistics and Actuarial Science, University of Ghana** — Accra, Ghana
  Teaching Assistant, Instructor: Dr. Godwin Debrah — *Oct 2021 - Nov 2022*
  - Led rigorous yet accessible instruction in STAT 445 (Regression Analysis - linear, logistic, nonlinear) and time series analysis for mixed audiences of quantitative and non-quantitative majors.
  - Provided 10+ hours weekly of one-on-one statistical guidance, helping 90% of students successfully implement regression analysis in their capstone projects.
  - Maintained a high passing rate with more than 90% getting an A with no students failing the course.

- **Mozano Senior High School**   **Gomoa Eshiem, Ghana**
  Course Instructor   *Jul 2019 - Aug 2019*
  - Tutored core and elective mathematics at my alma mater, supporting students in mastering fundamental and advanced concepts.
  - Mentored underrepresented student groups on advancing their studies in mathematical sciences at the university.
  - Mentored 50+ minority students in statistical methods, with 20% pursuing bachelor's degrees in statistics/economics at top universities.

RESEARCH PUBLICATIONS (UNDERGOING PEER-REVIEW)

- **Baidoo, D.**, Aboagye, F., Okeke, O. J., et al (2024, in review). Comparing malaria trends in the Comoros Islands: ARIMA modeling and retrospective analysis.

- **Baidoo, D.**, Okeke, O. J., Amevor, R., et al (2024, in review). Elucidating Community-Level Determinants of Adolescent Obesity in New Mexico: An Artificial Intelligence Approach Using Bayesian Belief Networks.

- Okeke, O. J., **Baidoo, D.**, Okeke, H. U., et al (2024, in review). Modelling the Spatial Distribution of West Nile Virus in New Mexico: A Five-Year Study Employing Poisson, Geometric, Quartile Normalization and Mean Squared Error Evaluation.

- Okeke, O. J., Enyinnaya, R. N., Nwaogu, C., **Baidoo, D.**, et al (2023, in review). Irrigation Agriculture Potential Areas Extraction in Hadejia Jama'are River Basin Using Multivariate Clustering Geostatistical Analysis.

- Okeke, O. J., Nwaogu, C., Oluwadamilare, O. O., **Baidoo, D.**, et al (2023, in review). Modelling the Groundwater Potential and Suitability for Irrigation in New Mexico State Using Geospatial, MLA and Geostatistical Approaches.

RESEARCH CONFERENCE PRESENTATIONS

- **Baidoo, D.** (2025, August). *Bayesian Hierarchical Methods for Surveillance of Cervical Dystonia Treatments*. Paper accepted for presentation at the Statistics in Pharmaceuticals (SIP), University of Connecticut.

- **Baidoo, D.**, & Okeke, O. J. (2024, February). *Leveraging Bayesian Belief Networks to Uncover Place-Based Influences on Adolescent Obesity in New Mexico*. Paper accepted for presentation at the American Statistical Association Conference on Statistical Practice, New Orleans, Louisiana.

- **Baidoo, D.**, & Okeke, O. J. (2023, September). *Leveraging Bayesian Belief Networks to Uncover Place-Based Influences on Adolescent Obesity in New Mexico*. The paper was accepted for presentation at the Prof. Michael Woodroofe Memorial Conference, Ann Arbor, Department of Statistics, University of Michigan.

- **Baidoo, D.**, & Okeke, O. J . (2023, November). *Modelling The Groundwater Potential and Suitability For Irrigation In New Mexico State Using Geospatial MLA and Geostatistical Approaches*. The paper was accepted for presentation at the GIS Day, Albuquerque, University of New Mexico.

ACADEMIC SERVICE, LEADERSHIP, & ACTIVITIES

2025 - Reviewer, Biostats4You: University of Minnesota
2024 - Abstract Reviewer, Ronald E. McNair Scholars Research Competition Conference
2023/2024 - Research Proposal Reviewer, Graduate and Professional Student Association: University of New Mexico
2023 - Registration Assistant, Biopharmaceutical Section RIS Workshop: American Statistical Association (ASA)
2023 - Alumni President, Compassion International Ghana
2023 - Mentor, African American Student Services: University of New Mexico
2023 - Student Advisor, Global Education Office: University of New Mexico
2023 - Organizer, Pentecostal Students and Associates: University of New Mexico
2023 - Math Competition Coordinator, Statewide Math Contest: University of New Mexico
2020 - Pandemic Educator, Department of Psychology: University of Ghana

NON-DEGREE EDUCATION & CERTIFICATION

2024 - American Statistical Association: Graduate Statistician accreditation (Gstat)
2024 - Johns Hopkins University (Coursera): Clinical Trials Analysis, Monitoring, and Presentation
2024 - Johns Hopkins University (Coursera): Infectious Disease Modeling in Practice
2024 - Johns Hopkins University (Coursera): Practical Machine Learning

PROFESSIONAL MEMBER ASSOCIATION

American Mathematical Society	2025-Present
Sigma Xi	2025-Present
Golden Key International Honour Society	2024-Present
Eastern North American Region of the International Biometric Society	2024-Present
American Statistical Association	2023-Present

HIGHLIGHTED SKILLS

Soft Skills: Strategic Communication, Adaptive Flexibility, Precision-Oriented, and Analytical Thinking.

Technical Skills: R, SAS, Python, LATEX, OpenBUGS, Prompt Engineering (LLM), Jamovi, Covidence