

MATTHEW AYITAH

575-777-2904 | Houston, TX | matthewayitah@gmail.com | <https://www.linkedin.com/in/matthew-ayitah-4b1642158/>

EDUCATION

Master of Science, Biology, Eastern New Mexico University, Portales, NM GPA: 3.88/4.0 Dec 2024
Bachelor of Science, Biochemistry, University for Development Studies, Ghana GPA: 3.88/5.0 July 2018

EXPERIENCE

Microbiologist II | Eagle Analytical Science | Houston, TX Jan 2025 – Present

- Demonstrated GDP Documentation
- Perform USP <85> Bacterial Endotoxin Testing

Graduate Assistant | Eastern New Mexico University | Portales, NM Jan 2023 – Dec 2024

- Instructed full-time laboratory courses for Organic Chemistry I (CHEM 341LP) and Organic Chemistry II (CHEM 342LP), focusing on experimental techniques, safety protocols, and analytical skills to support undergraduate chemistry education
- Held office hours to support students, clarify lab assignments, and enhance understanding of course material
- Evaluated assignments and delivered constructive feedback to support student learning and improve academic outcomes

Graduate Tutor | Eastern New Mexico University | Portales, NM Jan 2023 – Dec 2024

- Provided tutoring for Organic Chemistry I (CHEM 341), Organic Chemistry II (CHEM 342), and additional chemistry courses, offering personalized instruction to improve comprehension and academic performance
- Supported students in understanding complex topics through clear explanations and tailored guidance
- Provided guidance and support to students in completing assignments, ensuring clarity and adherence to academic standards

Microbiologist | Atlantic Lifesciences Limited | Ghana Feb 2021 – Dec 2022

- Performed environmental monitoring in the production area and aseptic areas to assess the microbial conditions of the facility
- Performed Microbial Limit Tests (MLT) and pathogen testing on water and raw materials, ensuring quality compliance
- Conducted sterility tests and process validation on finished products to ensure compliance with quality and regulatory standards

Assistant Manager | Onyame Ne Bofo Enterprise | Ghana Aug 2019 – Feb 2021

- Assisted in the recruitment, training, and onboarding of new employees, ensuring a smooth integration into the team
- Served as the primary point of contact for staff, addressing & resolving workplace issues to maintain a productive work environment
- Assisted with daily operations, including opening/closing, inventory management, and supply procurement

National Service | Komfo Anokye Teaching Hospital | Ghana Sept 2018 – Aug 2019

- Collected and analyzed data on infections from surgical incisions to support pathological research and clinical assessments
- Conducted audits of surgical cases on a weekly, monthly & quarterly basis to ensure accuracy, compliance, and quality standards

Internship | Seventh Day Adventist (S.D.A), Koforidua | Ghana July 2016 – Aug 2017

- Registered clients in information management systems, ensuring accurate and up-to-date records
- Collected biological samples, including blood, stool, and urine, following established protocols for analysis and testing
- Performed numerous clinical tests such as widal tests, full blood count, urinalysis, Hepatitis B and C testing, prostate-specific antigen (P.S.A.), liver function test

TECHNICAL SKILLS

Microbiological Analysis and Testing: Microbial Testing, Sterility Testing and Validation, Environmental Monitoring, Sample Collection and Analysis (Blood, Urine, Stool), Media Preparation and Autoclaving, Aseptic Techniques

Quality Control and Regulatory Compliance: Quality Control and Assurance, Process Validation, Regulatory Compliance (FDA, GMP, GLP), Risk Assessment and Mitigation, Root Cause Analysis and Problem Solving

Laboratory Operations and Instrumentation: Laboratory Equipment Operation and Maintenance, Analytical Chemistry, Instrumental Analysis (HPLC, GC, Spectroscopy), Data Collection and Reporting, Documentation and Record Keeping

Pharmaceutical Chemistry and Formulation: Pharmaceutical Formulation, Instrumental Analysis

Team Management and Collaboration: Team Training and Onboarding, Inventory Management and Supply Procurement

PUBLICATIONS

- Kumar, S., Lekshmi, M., Stephen, J., Ortiz-Alegria, A., Ayitah, M., and Varela, M. F. (2024). Dynamics of efflux pumps in antimicrobial resistance, persistence, and community living of Vibrionaceae. Archives of Microbiology, 206(1), 7. [\(Link\)](#)
- Aborah, E., Ayitah, M., Bofo, K. F., Ortiz-Alegria, A., Lekshmi, M., Dhanush, C. K., Kumar, S., Varela, M. F. (2025). Multidrug resistance and major facilitator superfamily antimicrobial efflux pumps of the ESKAPEE pathogen *Staphylococcus aureus*. Exploration of Drug Science, 3:100897. [\(Link\)](#)

WORKSHOPS/POSITIONS/AWARDS

- Judge, New Mexico State National History Day Contest Apr. 2024
- Winner, SRCC Best Oral Presenter Award, Graduate Biology Category Apr. 2024
- Judge, New Mexico National History Day Central Regional Contest Mar. 2024
- Judge, New Mexico National History Day Southern Regional Contest Feb. 2024
- Eastern New Mexico University Wesley Foundation Scholarship Award Apr. 2024

MANUSCRIPTS IN REVIEW

- Abagale, A. S., and Ayitah, M. (2018). Phytochemical and Antimicrobial Investigation of Nymphaea lotus Seed Extracts Against Escherichia coli and Salmonella typhi (In preparation)

- Kumar, S., Ayitah, M., Ortiz, A. A., Bofo. K. F., Aboah, E., and Varela M.F. (2024). Multidrug efflux pumps of the Major Facilitator Superfamily from the foodborne pathogen *Staphylococcus aureus* (Manuscript under review)