Prince Mensah Ansah

Department of Chemistry and Biochemistry
Auburn University
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RESEARCH INTERESTS

Functional Genomics, Enzymology, Bioinformatics, Computational Genomics, Transcriptomics

EDUCATION

Ph.D., Biochemistry August 2028
Auburn University, Auburn, United States
Project: *Elucidation of dinoflagellate luciferin biosynthesis*
Supervisor: Dr. Steven O. Mansoorabadi

GCRT, Computational Biology May 2026
Auburn University, Auburn, United States

MPhil, Biodata Analytics and Computational Genomics March 2026
Kwame Nkrumah University of Science and Technology (KNUST), Ghana
Thesis: *Pan-cancer transcriptomic analysis of 10 cancer types to decipher conserved and context-specific dysregulated genes*
Supervisor: Prof. Samson Salifu Pandam

B.Sc. (Hons) Biochemistry June 2019
Kwame Nkrumah University of Science and Technology (KNUST), Ghana
Thesis: *Assessing fluoride concentrations and risk of dental fluorosis of different sources of drinking water in the Oforikrom metropolitan area*
Supervisor: Prof. Alexander Kwarteng

RESEARCH EXPERIENCE

Graduate Teaching Assistant August 2024 – Present
Auburn University, Auburn, Alabama

- Instruct and supervise undergraduate Chemistry and Biochemistry laboratory sessions.
- Guide students in experimental design, data interpretation, and laboratory safety.

Research Assistant November 2020 – July 2024
Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Kumasi, Ghana

- Investigated COVID-like illnesses and frequent respiratory pathogens.
- Conducted prospective differential diagnosis studies of COVID-19.
- Contributed to a prospective cohort study on post-acute condition outcomes.

Research Assistant September 2019 – October 2020
Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Kumasi, Ghana

- Studied immunological responses of neonates to malaria in pregnancy.
- Contributed to a 5-year malaria birth cohort study evaluating growth outcomes.

Intern (Laboratory Assistant) June 2018 – August 2019
Clinical Analysis Laboratory (CAnLab), Kumasi, Ghana
- Assisted in collecting, analyzing, and reporting clinical laboratory results.

Intern (Laboratory Assistant) June 2016 – August 2017
St. Mark Hospital, Dunkwa-On-Offin, Ghana
- Assisted in collecting, analyzing, and reporting clinical laboratory results.

TEACHING EXPERIENCE

Math Tutor 2019 – Present
Online Tutoring Services
- Teach algebra, geometry, and precalculus to high school and college students.
- Provide personalized academic support, review sessions, and homework guidance.

Science Tutor June 2014 – April 2015
St. Augustine's School Complex, Wasa Akropong, Ghana
- Prepared junior high school students for the Basic Education Certificate Examination.
- Organized science practical sessions.
- Provided IT support services.

TECHNICAL SKILLS

Molecular Biology Techniques: Protein expression and purification, Next-Generation DNA Sequencing (Illumina MiniSeq), DNA/RNA extraction, Gel electrophoresis, Singleplex and Multiplex PCR
Computational Skills: Python, R programming, bioinformatics, data science, machine learning

SELECTED CONFERENCES AND PRESENTATIONS

- Poster Presentation: *Deciphering dinoflagellate luciferin biosynthesis using untargeted metabolomics: identification of putative substrates and intermediates* (April 2026).
- Poster Presentation: *Optimal storage condition for sputum samples for the PCR diagnosis of lower respiratory tract infections* (September 2023).
- Oral Presentation: *Accuracy of diagnosis among clinical malaria patients: comparing microscopy, RDT, and highly sensitive quantitative PCR* (May 2023).
- Oral Presentation: *The role of malaria epidemiologists towards the zero-malaria agenda in Africa* – World Malaria Day Celebration (April 2023).
- Conference: *Conducting Clinical Research in Resource-Limited Settings* (August 2022).
- Conference: *Responding to the threat of malaria parasites evading HRP2-RDTs* – MESA Forum (June 2022).
- Conference: *Building a Career in STEM* – A-Zone Network KNUST (September 2020).
- Oral and Poster Presentation: *Assessing fluoride concentrations of drinking water sources and risk of dental fluorosis* – KNUST (May 2019).

PROFESSIONAL AFFILIATIONS

- National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) 2025–Present
- American Chemical Society (ACS) 2025–Present
- American Chemical Society Young Chemists Committee (ACS YCC) 2025–Present
- American Society for Biochemistry and Molecular Biology (ASBMB) 2025–Present

LEADERSHIP AND VOLUNTEER EXPERIENCE

- Executive Member, ACS-Auburn Chapter, United States (2026—present).
- Vice-President, NOBCChE-Auburn Chapter, United States (2026 – present).
- Cabinet Member, Graduate Student Organization (GS), Auburn, United States (2025—2026).
- Volunteer reviewer, Journal of Emerging Investigators (JEI), United States (2024—2026).
- Director, Recruitment and Administration, A-Zone Network, Ghana (2020 – 2026).
- Member, KCCR Journal Club Committee (2019 – 2020).
- Mentor & President, A-Zone Network, KNUST (2019 – 2020).
- Mentor & Programs Coordinator, A-Zone Network (2017 – 2019).
- Chairperson, Academic Board, Biochemistry Students' Association, KNUST (2017 – 2018).
- Chairperson, Trade and Technology Fair (TRATECH), KNUST (2017 – 2018).

REFERENCES

Available upon request.