

GIFT OSEI AGYEMANG

Senior Laboratory Technician, Department of Medical Laboratory Science

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EDUCATION

BSc Medical Laboratory Science

2018 - 2022

University of Energy and Natural Resources, Sunyani, Ghana

POSITIONS

Senior Laboratory Technician

2026 - present

Department of Medical Laboratory Science, UENR

- Runs practical sessions for Medical Laboratory Science students, including ABO/Rh blood grouping, G6PD screening, sickling tests and haemoglobin electrophoresis
- Prepares teaching and assessment materials for Haematology and Immunohaematology courses across several programme levels

Research Director, Hematology Research Group (HeMaRes)

2024– present

UENR, Sunyani

- Leads the group's research agenda, which in 2026 covers AI microscopy for red cell indices, G6PD and sickle cell variants among blood donors, ABO antibody levels in sepsis, and platelet activation in pre-eclampsia
- Supervises undergraduate thesis projects through to the final-year thesis symposium

Biomedical Data Consultant (part-time)

Aug 2023 – present

Emperor Software, Kumasi

- Supports data work for Maame Dromo, a Grand Challenges Canada-funded AI maternal health platform deployed in 16 Ghana Health Service districts
- Coordinated the company's application to the HORIZON-JU EDCTP3 call (HORIZON-JU-GH-EDCTP3-2026-03-DIGIT-02), including outreach to European consortium partners

TEACHING AND STUDENT SUPPORT

- Undergraduate thesis supervision in haematology through HeMaRes
- Hematology practical course delivery for undergraduate medical laboratory science students

PUBLICATIONS

Published

1. Abulibdeh, R., Agyemang, G. O., Celi, L. A., Gorijavolu, R., Kalema, N. L., Kleinlein, R., ... & Youssef, A. (2026). Who's really in the loop? Rethinking oversight in AI-assisted health care. *The Lancet*, 407(10545), 2340-2344. DOI: 10.1016/S0140-6736(26)00204-7
2. Rangel Teixeira, A., Kleinlein, R., Kalema, N. L., Agyemang, G. O., Senteio, C., Celi, L. A., ... & Kebede, M. A. (2025). Reimagining open science for global health: epistemic power and the pursuit of health equity. *PLOS Global Public Health*, 5(11), e0005300. [doi:10.1371/journal.pgph.0005300](https://doi.org/10.1371/journal.pgph.0005300)
3. Ashorm, G., Ofosu, D. N., Asamoah, A., Tuekpe, R. M., Appiah, S., Asare, W. S., Agyemang, G. O., Amoah, A., Abdul, G., & Obirikorang, C. (2024). Malaria's association with ABO blood groups in a tertiary institution in Ghana. *Journal of Energy and Natural Resources*, 10(1).
4. Ofosu, D. N., Asamoah, A., Tuekpe, R. M., Acheampong, J. A., Brown, S., Amoako, J. N., Amoah, A., Agyemang, G. O., Abdul, G., & Obirikorang, C. (2024). Effect of prolonged freezing of plasma samples on prothrombin time and activated partial thromboplastin time tests at -20°C in a low sample inflow region in Ghana. *Journal of Energy and Natural Resources*, 9(2).

Pre-prints

- Ofosu, D. N., Agyemang, G. O., Asamoah, A., & Tuekpe, R. M. (preprint). Menstrual Abnormalities, Hematological Profiles, and Educational Impact Among Ghanaian Adolescents: A School-Based Study. Research Square.

Manuscripts Under Review / Submitted

- Agyemang, G. O., Chi, H., Goodson, T., Marshall, V., Nelson, A., & Senteio, C. (submitted). Blockchain to Quantify Racialized Stress: Collecting and Using Psychological Data to Advance Racial Health Equity in Maternal Care. *Frontiers in Digital Health*.
- Agyemang, G. O., Chi, H., Riley, K., & Senteio, C. (submitted). Data Justice for Weathering: Ethical Implications of Stress-Biomarker Data to Reduce Black Maternal Health Inequities. *Bioethics Journal*.
- Agyemang, G. O., Chi, H., Riley, K., & Senteio, C. (submitted). Addressing Youth Mental Health in Africa Through AI Chatbots: A Narrative Review on Stigma, Innovation, and Community Engagement. 76th International Communication Association Conference.
- Abulibdeh, R., Agyemang, G. O., Celi, L. A., Gorjavolu, R., Kalema, N. L., Madapati, K., & Salarikia, R. S. (under review). Who is Really in the Loop? Rethinking Oversight in AI Assisted Healthcare. *The Lancet Machine Learning*.
- Abulibdeh, R., Agyemang, G. O., Ameen, S., Cadillac, C., Celi, L. A., Maciejewski, M., Samsel, K., & Vig, P. (under review). Moving beyond 'Can We?' to 'Should We?'. *New England Journal of Medicine AI*.

CONFERENCE PRESENTATIONS

Year	Presentation	Event
2026	Cigarette smoking induces systemic inflammation but not platelet activation in adults from Ghana's Bono Region: a population-specific paradox (Poster PB2496)	ISTH 2026 Congress, Paris, France, July 2026
2026	AI mental health chatbot for youth in Ghana and Kenya (Top Innovative Paper Award)	ICA 76th Annual Conference, Cape Town, South Africa, June 2026
2025	Menstrual Abnormalities, Hematological Profiles, and Educational Impact Among Ghanaian Adolescents: A School-Based Study.	STHISD 2025, Sunyani, Ghana.

RESEARCH PROJECTS

- Maame Dromo** (Emperor Software, Grand Challenges Canada): AI decision support for maternal health in 16 Ghana Health Service districts. Role: biomedical data consultant.
- Culturally adapted AI mental health chatbot for youth in Ghana and Kenya** (led by Prof. Charles Senteio, Rutgers University; Rutgers Global funding). Role: focus group facilitation support and qualitative data preparation.
- AI microscopy for red cell analysis** (HeMaRes, UENR): automated red cell shape classification and indices for low-resource laboratories.
- Platelet Activation markers in pregnancy complication** (HeMaRes, UENR): analysis of early detection and alternative methods for platelet markers linked with pre-eclampsia

AWARDS

- Top Innovative Paper Award, International Communication Association 76th Annual Conference, Cape Town, 2026

TRAINING AND PROFESSIONAL DEVELOPMENT

- AI Skills Immersion Programme (AISIP), Africa AI Hub, Cohort 1, Pathway 4: AI Engineering and Development (2026, ongoing). Capstone: an AI performance audit toolkit for maternal health tools in Ghanaian district health systems.
- MIT Critical Data Africa Regional Dialogue

COLLABORATIONS

- Reimagining Global Health writing group, convened by Leo Anthony Celi (MIT Critical Data): contributes to manuscripts on health AI governance and open access, drawing on Maame Dromo fieldwork
- Prof. Charles Senteio, Rutgers University: joint work on AI mental health tools and information science

REFEREES

Available on request.