Prof. Vivian Etsiapa Boamah

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PROFILE

Prof. Vivian Etsiapa Boamah is an Associate Professor at the Department of Pharmaceutics (Pharmaceutical Microbiology Section) of the Kwame Nkrumah University of Science and Technology (KNUST). She is a registered Pharmacist and holds a Master of Education (Higher Education Pedagogy), and Master of Philosophy (MPhil) and PhD in Pharmaceutical Microbiology.

She has close to 2 decades experience in teaching and collaborative research. Her research interests include antimicrobial resistance (AMR) surveillance, and stewardship, mechanisms of resistance and resistance transfer, the One Health concept, secondary microbial infections, vector-borne infections, antimicrobial and wound healing agents from natural sources and infection prevention control (IPC). She has several publications in peer-reviewed journals and conference proceedings to her credit.

She is a recipient of the L'Oreal For Women in Science – Sub-Saharan Africa Fellowship (2012) and the Organisation for Women in Science for the Developing world (OWSD) Early Career Fellowship in 2022. Other fellowships have been the DANIDA-BSU and University of Michigan UMAPS programmes.

Prof. Boamah is an advocate for women and girls in STEM and member of several women-in-STEM organisations including the the Women in Science, Technology, Engineering and Mathematics (WiSTEM Ghana), the working to Advance Science and Technology for African Women (WAAW) Foundation and the KNUST co-ordinator for the Africa Research Acadamies of Women (ARAW). She serves as a mentor for several STEM mentorship programmes, including the WiSTEM/Mastercard Mentorship programme, the MiDA/WiSTEM mentorship programme and the Empowering Female Mind in STEM (EFeMS) Mentoring programme, and the WISTEM/LAFMAAL mentorship program among others.

RESEARCH

Interests	Antimicrobial resistance · Molecular biology · Microbial quality assurance · Antimicrobial Resistance| Antimicrobial Stewardship | One Health Concept · Resistant gene transfer | Environmental Microbiology | IPC · GMP | Microbial QC & QA | Natural Products Research · NTDs | Secondary microbial infections | Wound research · Plasmids |Resistant gene transfer | Microbiomics | Biofilm
Areas	Plant Science · Food Science · Molecular Biology · Molecular Medicine · Pollution · Applied Microbiology and Biotechnology

RESEARCH SUMMARY

51	1,000	17	25	3.26	26%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 51 publications listed below, 2011–2026. Field-weighted impact is the mean over the 38 works scored for it; 1.00 is the world average for works of the same field, type and year. 10 of the 38 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 2010–present
Pharmaceutical Microbiology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

MEd (Higher Education Pedagogy)
KNUST, Kumasi, Ghana

Pharmacist
KNUST, Kumasi, Ghana

PhD Pharmaceutical Microbiology
Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

CREST ONLINE TRAINING COURSE FOR SUPERVISORS OF DOCTORAL CANDIDATES AT AFRICAN UNIVERSITIES 2024
Centre for Research on Evaluation, Science and Technology (CREST), Stellenbosch University, Stellenbosch, South Africa

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Full Member 2018–present
Women in Science, Technology, Engineering and Mathematics (WiSTEMGH), Kumasi, Ghana

Member, National Chair (Ghana Chapter 2018 to date) 2018–present
Organization for Women in Science for the Developing World, Trieste, Italy

full 2015–present
European Society of Clinical Microbiology and Infectious Diseases, Basel, Switzerland

Member, Co-ordinator and Mentor for KNUST 2015–present
African Research Academies for Women (ARA-W), NY, United States

Pharmaceutical Society of Ghana 2006–present
Accra, Ghana

Academia, Social and Research Pharmacists' Association 2006–present
Kumasi, Ghana

PUBLICATIONS

Journal articles 47

1. Stephanie Adu-amoako, Ahmed Wahab Obeng, Theresa Agana, Clement Osei-akoto, **Vivian Etsiapa Boamah**, Yaw Duah Boakye (2026). Anti-salmonella activity of aqueous and methanol extracts of Xylopia aethiopica and xylopic acid. *International Journal of Secondary Metabolite*. https://doi.org/10.21448/ijsm.1717383
2. Millicent Serwaa Marfo Ogyiri, Stephen Yao Gbedema, Yaw Duah Boakye, Hayford Odoi, Theresa Appiah Agana, **Vivian Etsiapa Boamah**, Christian Agyare (2026). Bacteria from lead and arsenic contaminated herbal preparations exhibit varied resistance to essential antibiotics: A cross-sectional study on herbal medicines in Kumasi, Ghana. *South African Journal of Botany*. https://doi.org/10.1016/j.sajb.2026.06.043
3. Ahmed Wahab Obeng, Theresa Appiah Agana, **Vivian Etsiapa Boamah**, Yaw Duah Boakye, Erdi Can Aytar, Francis Adu, Christian Agyare (2026). Cryptolepis sanguinolenta and cryptolepine as dual-action therapeutics: enhancing antimicrobial activity and promoting wound repair. *Oriental Pharmacy and Experimental Medicine*. https://doi.org/10.1007/s13596-025-00880-4
4. Hayford Odoi, Yaw Duah Boakye, Thereas Appiah Agana, Dennis Obeng Mensah, Alfred Ofori Agyemang,

Kingsley Badu, **Vivian Etsiapa Boamah**, Christian Agyare (2026). Cutaneous leishmaniasis disease and vector related knowledge in endemic communities in Ghana: A 2023 cross-sectional study in the Nkwanta South District. *Journal of Public Health Research*. https://doi.org/10.1177/22799036261485477

5. Paul Appiah Sekyere, David Azanu, Osei Akoto, **Vivian Etsiapa Boamah**, Lyndon N. A. Sackey, Charles K. Sekyere, Jonathan N. Hogarh, R. C. Abaidoo (2026). Quantification of Veterinary Antibiotics and Antibiotics Resistant Bacteria in Poultry Droppings. *Journal of Chemistry*. https://doi.org/10.1155/joch/5407152
6. D. Obeng-Mensah, **V. E. Boamah**, Y. D. Boakye, C. Agyare (2025). Antimicrobial resistance patterns of enteric bacteria in HIV sero-positive patients: A regional hospital-based cross- sectional survey in Kumasi metropolis, Ghana. *African Journal of Clinical and Experimental Microbiology*. https://doi.org/10.4314/ajcem.v26i4.7
7. Mercy Badu, Philip T. Thompson, **Vivian E. Boamah** (2025). In vivo anti-inflammatory activity, acute toxicity profiling, and sub-acute toxicity profiling of extracts from the fruit pulp and seeds of african baobab (Adansonia digitata L.). *Scientific African*. https://doi.org/10.1016/j.sciaf.2025.e02615
8. Elizabeth Akua Baidoo, **Vivian Etsiapa Boamah**, Hayford Odoi, Yaw Duah Boakye, Christian Agyare (2025). Low prevalence but high resistance of Extended Spectrum Beta-lactamase producing Klebsiella pneumoniae isolated from Hospitals in the Ashanti Region of Ghana. *African Health Sciences*. https://doi.org/10.4314/ahs.v25i2.4
9. Nembot Fogang Brice Armel, Yaw Duah Boakye, Theresa Appiah Agana, **Vivian Etsiapa Boamah**, Clement Osei Akoto, Michael Owusu, Francis Adu, Christian Agyare (2024). Aspilia africana (Pers.) C.D. Adams and Manihot esculenta Crantz Exhibit Antibacterial Activity against Resistant Salmonella typhi Strains. *Scientifica*. https://doi.org/10.1155/2024/6637904
10. Philip T. Thompson, **Vivian E. Boamah**, Mercy Badu (2024). In-vitro antioxidant, antimicrobial and phytochemical properties of extracts from the pulp and seeds of the African baobab fruit (Adansonia digitata L.). *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e29660
11. Makafui Seshie, Billal Musah Obeng, **Vivian Etsiapa Boamah**, Marcel Bayor, Evelyn Yayra Bonney, Stephen Yao Gbedema, Kwamena William Coleman Sagoe (2024). Resistance to protease inhibitors among persons living with HIV in Ghana: a case for viral load and drug resistance monitoring. *Virology Journal*. https://doi.org/10.1186/s12985-024-02354-6
12. Abena Kyeraa Sarpong, Hayford Odoi, Yaw Duah Boakye, **Vivian Etsiapa Boamah**, Christian Agyare (2024). Resistant C. albicans implicated in recurrent vulvovaginal candidiasis (RVVC) among women in a tertiary healthcare facility in Kumasi, Ghana. *BMC Women s Health*. https://doi.org/10.1186/s12905-024-03217-6
13. Comfort Yeboaa, Hayford Odoi, Rhoda Owusu Ntim, Yaw Duah Boakye, Godwin Kwakye-Nuako, Christian Agyare, **Vivian Etsiapa Boamah**, Kingsley Badu (2023). Diversity and antibiograms of bacteria isolated from cutaneous leishmaniasis wounds in the Nkwanta South District of Ghana. *Archives of Microbiology*. https://doi.org/10.1007/s00203-023-03411-4
14. YD Boakye, TA Agana, **VE Boamah**, C Agyare (2023). Evidence-based review of medicinal plants for the management of onchocerciasis. *Natural Products in Vector-Borne Disease Management*. https://www.sciencedirect.com/science/chapter/edited-volume/pii/B9780323919425000045
15. Sumaiya Bandile Amidu, **Vivian Etsiapa Boamah**, Edmund Ekuadzi, Priscilla Kolibea Mante (2023). Gut-Brain-axis: effect of basil oil on the gut microbiota and its contribution to the anticonvulsant properties. *BMC Complementary Medicine and Therapies*. https://doi.org/10.1186/s12906-023-04211-5
16. Francis Kwaku Dzideh Amankwah, Stephen Yao Gbedema, Yaw Duah Boakye, Marcel Tunkumgmen Bayor, **Vivian Etsiapah Boamah** (2022). Antimicrobial Potential of Extract from a Pseudomonas aeruginosa Isolate. *Scientifica*. https://doi.org/10.1155/2022/4230397
17. Martin Boadi, Stephen Y. Gbedema, Marcel T. Bayor, **Vivian E. Boamah**, Hayford Odoi (2022). Antimicrobial Property of Microorganisms Isolated from Soil and Water – Body Samples in Ghana. *Journal of Advances in Microbiology*. https://doi.org/10.9734/jamb/2022/v22i530462
18. Andrew M. Limantol, Blessed Agbemade, **Vivian E. Boamah**, Mercy Badu, Kingsley I. Amponsah, Firdaws

C.N. Adam, Rahmatu B. Mohammed (2022). Antioxidant and anti-inflammatory properties of “Limolanii” grass and perceptions of locals on its survival in the era of changing climate. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e12018

19. Ahmed Wahab Obeng, Yaw Duah Boakye, Theresa Appiah Agana, **Vivian Etsiapa Boamah**, James Oppong-Kyekyeku, Abena Amponsaa Brobbey, Francis Adu, Stephen Yao Gbedema, Christian Agyare (2022). Antitrypanosomal and Anthelminthic Properties of Ethanol Extracts of Carica papaya Linn. and Ceiba pentandra (L) Gaertn. *Journal of Chemistry*. https://doi.org/10.1155/2022/5251930
20. Akosua Dufie Ankomah, Yaw Duah Boakye, Theresah Appiah Agana, **Vivian Etsiapa Boamah**, Paul Poku Sampene Ossei, Francis Adu, Christian Agyare (2022). Evaluation of Dermal Toxicity and Wound Healing Activity of Cnestis ferruginea Vahl ex DC. *Advances in Pharmacological and Pharmaceutical Sciences*. https://doi.org/10.1155/2022/5268613
21. **Vivian Etsiapa Boamah**, Eric Okyere, Samuel Iddi, Joseph H.K. Bonney, Joshua Kiddy K. Asamoah, Jonathan A.D. Wattis, Rachel L. Gomes (2022). Mathematical modelling of earlier stages of COVID-19 transmission dynamics in Ghana. *Results in Physics*. https://doi.org/10.1016/j.rinp.2022.105193
22. Bill Clinton Aglomasa, Cynthia Kyerewaa Adu-Asiamah, Samuel Opoku Asiedu, Priscilla Kini, Emmanuel Kobla Atsu Amewu, Kennedy Gyau Boahen, Solomon Wireko, Isaac Kingsley Amponsah, Yaw Duah Boakye, **Vivian Etsiapa Boamah**, Alexander Kwarteng (2022). Multi-drug resistant bacteria isolates from lymphatic filariasis patients in the Ahanta West District, Ghana. *BMC Microbiology*. https://doi.org/10.1186/s12866-022-02624-9
23. **VE Boamah**, YD Boakye, C Agyare (2022). Sensitivity Patterns, Plasmid Profiles and Clonal Relatedness of Multi-Drug Resistant Isolated From the Ashanti Region, Ghana. *Environmental Health Insights*. https://scholar.google.com/scholar?cluster=15051375601850502767&hl=en&oi=scholarr
24. Hayford Odoi, **Vivian Etsiapa Boamah**, Yaw Duah Boakye, Cornelius Cecil Dodoo, Christian Agyare (2022). Sensitivity Patterns, Plasmid Profiles and Clonal Relatedness of Multi-Drug Resistant Pseudomonas aeruginosa Isolated From the Ashanti Region, Ghana. *Environmental Health Insights*. https://doi.org/10.1177/11786302221078117
25. Frank B. Osei, **Vivian E. Boamah**, Yaw D. Boakye, Christian Agyare, Robert C. Abaidoo (2021). Antibiotic Resistance of Bacteria Isolated from Water Supplies Used in Poultry Production in Ashanti Region of Ghana. *The Open Microbiology Journal*. https://doi.org/10.2174/1874285802115010007
26. Miriam Tagoe, Yaw Duah Boakye, Theresah Appiah Agana, **Vivian Etsiapa Boamah**, Christian Agyare (2021). In Vitro Anthelmintic Activity of Ethanol Stem Bark Extract of Albizia ferruginea (Guill. & Perr.) Benth. *Journal of Parasitology Research*. https://doi.org/10.1155/2021/6690869
27. Theophilus Fadjare Frempong, Mercy Badu, **Vivian Etsiapa Boamah**, Isaac Kingsley Amponsah, Blessed Agbemade, Ransford Appianin Boateng, Nathaniel Owusu Boadi (2021). Phenolic Content, Antioxidant Properties and Antimicrobial Activities of the Extracts from Funtumia africana and Funtumia elastica. *Chemistry Africa*. https://doi.org/10.1007/s42250-021-00249-5
28. Hayford Odoi, **Vivian Etsiapa Boamah**, Yaw Duah Boakye, Christian Agyare (2021). Prevalence and Phenotypic and Genotypic Resistance Mechanisms of Multidrug-Resistant Pseudomonas aeruginosa Strains Isolated from Clinical, Environmental, and Poultry Litter Samples from the Ashanti Region of Ghana. *Journal of Environmental and Public Health*. https://doi.org/10.1155/2021/9976064
29. **VE Boamah**, YD Boakye, C Agyare (2021). Prevalence and Phenotypic and Genotypic Resistance Mechanisms of Multidrug-Resistant Strains Isolated from Clinical, Environmental, and Poultry Litter Samples from the Ashanti …. *Journal of Environmental & Public Health*. https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=16879805&AN=150924654&h=%2BFNoaZC62%2FLDxENT9SL9TmazV%2BxvqjGlMHmXf4KwvQgm0RcojVq2WlVDwlYAjej1tjLjY9dd20ySBGFN1P9uYA%3D%3D&crl=c
30. Adam-Yakub Abdul-Nasir-Deen, Yaw Duah Boakye, Newman Osafo, Christian Agyare, Daniel Boamah, **Vivian Etsiapa Boamah**, Eugene Kusi Agyei (2020). Anti-inflammatory and wound healing properties of methanol leaf extract of Physalis angulata L. *South African Journal of Botany*. https://doi.org/10.1016/j.sajb.2020.06.030

31. Theresa Appiah Agana, C Agyare, **VE Boamah**, YD Boakye (2020). Antimicrobial and resistance modifying activities of cerevisterol isolated from Trametes species. *Current Bioactive Compounds*.

32. Linda A. Fondjo, **Vivian E. Boamah**, Adelaide Fierti, Dorcas Gyesi, Eddie-Williams Owiredu (2019). Knowledge of preeclampsia and its associated factors among pregnant women: a possible link to reduce related adverse outcomes. *BMC Pregnancy and Childbirth*. https://doi.org/10.1186/s12884-019-2623-x

33. Lawrence Sheringham Borquaye, Edmund Ekuadzi, Godfred Darko, Hubert Senanu Ahor, Sarah Twumwah Nsiah, Jemima Asi Lartey, Abdul-Hakim Mutala, **Vivian Etsiapa Boamah**, Eric Woode (2019). Occurrence of Antibiotics and Antibiotic-Resistant Bacteria in Landfill Sites in Kumasi, Ghana. *Journal of Chemistry*. https://doi.org/10.1155/2019/6934507

34. Frank B. Osei, **Vivian E. Boamah**, Christian Agyare, Robert C. Abaidoo (2019). Physicochemical Properties and Microbial Quality of Water Used in Selected Poultry Farms in the Ashanti Region of Ghana. *The Open Microbiology Journal*. https://doi.org/10.2174/1874285801913010121

35. Suad Ahmed Salihs, John Boulard FORKUOR, **Vivian Etsiapa Boamah** (2019). Post Birth Challenges among Working Mothers in a Higher Educational Institute in Ghana: Implications for Occupational Competitiveness of Working Mothers. *International Journal of Social Science Studies*. https://doi.org/10.11114/ijsss.v7i6.4516

36. C Agyare, YD Boakye, **VE Boamah** (2018). Anthelmintic resistance modifying properties of extracts of Cyperus difformis L.(Cyperiaceae). *Investigational Medicinal Chemistry and Pharmacology*. https://www.researchgate.net/profile/Christian-Agyare/publication/325335687_Anthelmintic_resistance_modifying_properties_of_extracts_of_Cyperus_difformis_L_Cyperiaceae/links/5b0d106d4585157f871cf8d3/Anthelmintic-resistance-modifying-properties-of-extracts-of-Cyperus-difformis-L-Cyperiaceae.pdf

37. Theresa Appiah, Christian Agyare, Yinggang Luo, **Vivian E. Boamah**, Yaw D. Boakye (2018). Antimicrobial and Resistance Modifying Activities of Cerevisterol Isolated from Trametes Species. *Current Bioactive Compounds*. https://doi.org/10.2174/1573407214666180813101146

38. Esther Eyram Agoba, Francis Adu, Christian Agyare, **Vivian Etsiapa Boamah** (2017). Antibiotic Use And Practices In Selected Fish Farms In The Ashanti Region Of Ghana. *Journal of Infectious Diseases and Treatment*. https://doi.org/10.21767/2472-1093.100036

39. **Vivian Etsiapa Boamah**, Christian Agyare, Hayford Odoi, Francis Adu, Stephen Gbedema, Anders Dalsgaard (2017). Prevalence and antibiotic resistance of coagulase-negative Staphylococci isolated from poultry farms in three regions of Ghana. *Infection and Drug Resistance*. https://doi.org/10.2147/idr.s136349

40. Yaw Duah Boakye, C Agyare, **VE Boamah** (2015). In vitro activity and evaluation of quality of some selected penicillins on the Ghanaian market using developed HPLC methods. *Med chem*. https://www.academia.edu/download/41841456/In_vitro_activity_and_evaluation_of_qual20160201-6510-18q65a6.pdf

41. C Agyare, SY Gbedema, **VE Boamah** (2013). Antibiotic resistance patterns of strains of Staphylococcus aureus isolated from patients in three hospitals in Kumasi, Ghana. *Journal of Bacteriology Research*. https://www.academia.edu/download/83664488/Antibiotic_resistance_patterns_of_strain20220410-22926-14sf7sm.pdf

42. Duredoh Freeman George, Stephen Yao Gbedema, Christian Agyare, Francis Adu, **Vivian Etsiapa Boamah**, Adelaide Ama Tawiah, Sixtus Bieranye Bayaa Martin Saana (2012). Antibiotic Resistance Patterns of Escherichia coli Isolates from Hospitals in Kumasi, Ghana. *ISRN Microbiology*. https://doi.org/10.5402/2012/658470

43. Adelaide A Tawiah, Stephen Y Gbedema, Francis Adu, **Vivian E Boamah**, Kofi Annan (2012). Antibiotic producing microorganisms from River Wiwi, Lake Bosomtwe and the Gulf of Guinea at Doakor Sea Beach, Ghana. *BMC Microbiology*. https://doi.org/10.1186/1471-2180-12-234

44. SY Gbedema, **VE Boamah** (2011). Antibacterial and free radical scavenging activity of duranta plumieri, linn. *International Journal of Pharmaceutical Science Research*. https://www.academia.edu/download/49793610/Duranta.pdf

45. Yaa Asantewaa Osei, K Ofori-Kwakye, SL Kipo, **VE Boamah**, R Johnson (2011). Investigation of the

emulsifying and suspending potential of cashew tree gum in pharmaceutical formulations. *International journal of Pharmacy and Pharmaceutical sciences*. https://www.academia.edu/download/53018283/Investigation_of_the_emulsifying_and_sus20170506-5074-1h2e823.pdf

46. **VE Boamah**, SY Gbedema, K Ofori-Kwakye (2011). Microbial quality of household water sources and incidence of diarrhoea in three peri-urban communities in Kumasi, Ghana. *Journal of pharmaceutical Sciences and Research*. https://scholar.google.com/scholar?cluster=2437417115831165708&hl=en&oi=scholarr

47. SY Gbedema, **VE Boamah** (2011). The effects of Acanthospermum hispidum extract on the antibacterial activity of amoxicillin and ciprofloxacin. *Hygeia Journal for Drugs and Medicines*. http://hygeiajournal.com/downloads/127090568110.adu%20f%20manuscript.pdf

Book chapters 2

1. Yaw Duah Boakye, Doreen Kwankyewaa Adjei, Kofi Oduro Yeboah, Daniel Obeng Mensah, Newman Osafo, Theresah Appiah Agana, **Vivian Etsiapa Boamah**, Christian Agyare (2023). Natural Products as Therapeutic Option for Echinococcossis. *Infectious diseases*. https://doi.org/10.5772/intechopen.109614

2. Christian Agyare, **Vivian Etsiapa Boamah**, Crystal Ngofi Zumbi, Frank Boateng Osei (2019). Antibiotic Use in Poultry Production and Its Effects on Bacterial Resistance. *IntechOpen eBooks*. https://doi.org/10.5772/intechopen.79371

Conference papers 1

1. SY Gbedema, YD Boakye, TA Agana, **VE Boamah** (2025). DIVERSE MICROBES HABITING MEDICINAL HERBAL PREPARATIONS EXHIBIT VARIED RESISTANCE TO ESSENTIAL ANTIBIOTICS. *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE*. https://scholar.google.com/scholar?cluster=5307477945146455575&hl=en&oi=scholarr

Reports 1

1. **Vivian Etsiapa Boamah** (2023). Echinococcosis: New Perspectives. *BoD–Books on Demand*. https://books.google.com/books?hl=en&lr=&id=YiQDEgAAQBAJ&oi=fnd&pg=PP14&dq=info:AcvnPehoq0EJ:scholar.google.com&ots=UuB1eTz4w0&sig=CvTZ9tlftusupb9VAGyp0u8JXrY