Foster Kyei

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RESEARCH

Interests: Molecular Medicine · Molecular Biology · Molecular Embryology · Molecular Genetics · Biotechnology

Areas: Immunology · Molecular Biology · Oncology · Infectious Diseases · Surgery · Genetics

RESEARCH SUMMARY

42	411	12	13	1.44	13%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 42 publications listed below, 2005–2026. Field-weighted impact is the mean over the 31 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 31 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer 2013–present
Molecular Biology and Biotechnology, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 38

1. **Foster Kyei**, Clement Napo, Collins Nabawo, Emmanuel Opoku Asante, Benjamin Nyarko, Isaac Kofi Adu, Cara Obenewaa Aidoo, Victoria Essien, Prince Amoah Barnie, Emmanuel Owusu Ansah, Kwadwo Fosu (2026). Advancing assisted reproductive technology in Africa: a narrative review on the promising role of molecular biology and molecular techniques. *Reproductive Health*. https://doi.org/10.1186/s12978-026-02410-0
2. Prince Amoah Barnie, Karen Pomeyie, Benjamin Amoani, **Foster Kyei**, Abdala Ussif Mumuni, Justice Afrifa, Samuel Essien-Baidoo, Daniel Boison (2026). CD4+T cell metabolic reprogramming as therapeutic targets in neurodegenerative diseases. *Molecular Brain*. https://doi.org/10.1186/s13041-026-01282-6
3. Emmanuel Owusu Ansah, Emmanuel Boateng Agyenim, Andrews Danquah, Stephen Kumi Addo, Daniel Sakyi Agyirifo, Kwadwo Fosu, **Foster Kyei** (2026). Genetic Insights Into Hypertension and Breast Cancer Risk in African Women: A Mendelian Randomization and Colocalization Analyses. *Annals of Human Genetics*. https://doi.org/10.1111/ahg.70038
4. Daniel Awuah, Alphonse Hounkpe, Jesse Anane-Asamoah, William Kanmwaa Dakubo, Isaac Kofi Adu, Prince Amoah Barnie, Emmanuel Owusu Ansah, Kwadwo Fosu, Cara Obenewaa Aidoo, Victoria Essien, Yakubu Adam, Ernest Ninson, Richard Quansah, **Foster Kyei** (2026). The use of artificial intelligence in advancing molecular biology in Africa: a narrative review. *Molecular Genetics and Genomics*. https://doi.org/10.1007/s00438-026-02492-2
5. Kwadwo Fosu, Bridget Agbesi, Richard Gyan, Ebenezer Eduam Afful, Fussein Hussein, Daniel Takyi, Eric Frimpong, Ann Deborah Darko, Cosmos Nuer, Joshua Nsiah, Divine Yao Sapey, **Foster Kyei** (2025). A survey of the cytotoxicity of some medicinal plant extracts in Ghana against breast and prostate cancer cells. *Clinical Phytoscience*. https://doi.org/10.1186/s40816-025-00400-6
6. Emmanuel Owusu Ansah, **Foster Kyei**, Caleb Frimpong Opoku, Andrews Danquah, Kwadwo Fosu,

Emmanuel Boateng Agyenim, Daniel Sakyi Agyirifo (2025). Associations Between Lipid Traits and Breast Cancer Risk: A Mendelian Randomization Study in African Women. *Cancer Medicine*. https://doi.org/10.1002/cam4.70928

7. **Foster Kyei** (2025). Bispecific T-cell engagers and related immunotherapies: Advances and challenges. *Advances in Medical, Pharmaceutical and Dental Research*. https://www.ajol.info/index.php/ampdr/article/view/305584

8. Emmanuel Owusu Ansah, Benard Ansong, **Foster Kyei** (2025). Current advances in bispecific T cell–engaging therapies. *Advances in Medical Pharmaceutical and Dental Research*. https://doi.org/10.21622/ampdr.2025.05.1.1222

9. **Foster Kyei** (2025). Detection and characterization of nontuberculous mycobacteria from selected water sources in the Central Region of Ghana. *International Journal for Research Trends and Innovation*.

10. Eric Gyamerah Ofori, **Foster KYEI**, Cynthia Ayefoumi Adinortey, Ansumana Sandy Bockarie, Daniel Boison, Michael Buenor Adinortey (2025). Helicobacter pylori: Detection of dupA, iceA and cagE genes in Ghanaian patients with dyspepsia. *International Journal of Biological and Chemical Sciences*. https://www.ajol.info/index.php/ijbcs/article/view/304061

11. Karen Pomeyie, Francis Abrokwah, Daniel Boison, Benjamin Amoani, **Foster Kyei**, Cynthia A. Adinortey, Prince Amoah Barnie (2025). Macrophage immunometabolism dysregulation and inflammatory disorders. *Biomedicine & Pharmacotherapy*. https://doi.org/10.1016/j.biopha.2025.118142

12. Eric Gyamerah Ofori, **Foster Kyei**, Emmanuel Ayitey Tagoe, Ansumana Sandy Bockarie, Samuel Mawuli Adadey, Osbourne Quaye, Michael Buenor Adinortey, Gordon Akanzuwine Awandare, Cynthia Ayefoumi Adinortey (2025). Mutational analysis of antibiotic resistance genes in Helicobacter pylori from Ghanaian dyspepsia patients: Implications for treatment strategies. *Aspects of Molecular Medicine*. https://doi.org/10.1016/j.amolm.2025.100078

13. Oti Gyamfi, Isaac Galyuon, **Foster Kyei**, Emmanuel Otwe, Daniel Asante, Kwasi Addo, Kofi Bedzra, Samuel Kudzawu, Sjoukje Kuijper, Arend J. H. Kolk - (2025). Prevalence of tuberculosis in selected prisons in Ghana: a baseline study using the CapiliaTM TB-Neo assay. *International Journal For Multidisciplinary Research*. https://doi.org/10.36948/ijfmr.2025.v07i04.51557

14. Rita Okwampah, Kofi Dzorgbenyuie Bedzra, Oti Kwasi Gyamfi, James Ataki, **Foster Kyei**, Martin Adarkwah-Yiadom, Edem Sosu, Emmanuel Boateng (2025). Quantitative determination of iron (III) in polymaltose haematinic formulations on the Ghanaian market. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0325846

15. Prince Amoah Barnie, Festus Agbatey, Godwin Amponsah Asiamah, William Gyamesi, Cynthia A. Adinortey, **Foster Kyei** (2025). The relevance of biomarkers for diagnosis, monitoring treatment response and immunity during tuberculosis infections. *Mycobacteria*. https://doi.org/10.1186/s44350-025-00006-5

16. Samuel Badu Nyarko, Joel Adu Twum, Aikins Sarpong Obeng, Helena Dede Djangba, Oksana Ryabinina, **Foster Kyei**, George Boateng Kyei, Nicholas Ekow Thomford (2025). Viral kinetics among persons living with HIV (PLWH) on Dolutegravir-based antiretroviral Regimen: A retrospective and prospective analysis from selected HIV clinics in Ghana. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0324360

17. Benjamin O. Emikpe, **Foster Kyei**, A Danquah, M Teye (2022). Assessment of pig farmers' knowledge on influenza A virus, and adoption of biosecurity measures in areas with previous outbreak of avian influenza in the Greater Accra Region …. *PAMJ - One Health*. https://www.one-health.panafrican-med-journal.com/content/article/7/1/full/

18. **Foster Kyei** (2022). Initial assessment of Id protein antagonist (aHLH) shows anti-proliferative activity on HEK293T, LS174T and HCT116 cells. *Scientific African*. https://doi.org/10.1016/j.sciaf.2022.e01099

19. Emmanuel Enoch Dzakah, Jiacong Zhao, Liuyan Wang, Farooq Rashid, Ru Xu, Ligang Yang, Zhengwei Wan, Liping Huang, Haiying Wang, Shuyi Chen, Wujian Ke, **Foster Kyei**, Kai Deng, Shixing Tang (2021). Chlamydia trachomatis Stimulation Enhances HIV-1 Susceptibility through the Modulation of a Member of the Macrophage Inflammatory Proteins. *Journal of Investigative Dermatology*. https://doi.org/10.1016/j.jid.2021.09.020

20. Salisu Shaban, **Foster Kyei**, Joseph Awuni, Andrews Danquah, Theophilus Odoom, Daniel Natasha Yaw Tawiah Yingar, Patrick Tetteh Ababio, Benjamin Obukowho Emikpe (2021). Dynamics of influenza A (avian influenza) virus in poultry in the Greater Accra region of Ghana amongst the production levels. *Journal of Immunoassay and Immunochemistry*. https://doi.org/10.1080/15321819.2021.1952426

21. Emmanuel Enoch Dzakah, Liping Huang, Yaohua Xue, Shuai Wei, Xiaolin Wang, Hongliang Chen, Jingwei Shui, **Foster Kyei**, Farooq Rashid, Heping Zheng, Bing Yang, Shixing Tang (2021). Host cell response and distinct gene expression profiles at different stages of Chlamydia trachomatis infection reveals stage-specific biomarkers of infection. *BMC Microbiology*. https://doi.org/10.1186/s12866-020-02061-6

22. S. A. Ofori, J. K. Hagan, **F. Kyei** (2021). Morphometric characterization and differentiation of West African Dwarf goat populations in Ghana. *Tropical Animal Health and Production*. https://doi.org/10.1007/s11250-020-02498-x

23. S.A. Ofori, J.K. Hagan, **F. Kyei**, N.N. Etim (2021). Phenotypic and genetic characterization of qualitative traits in the West African Dwarf goat of Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00857

24. **F Kyei**, A Danquah, M Teye (2021). Research Article Is There Cross-Species Transmission to Pigs of Avian Influenza Virus Within Poultry Farms with Previous Outbreak of Avian Influenza? *African Journal of Biomedical Research*. https://www.researchgate.net/profile/Benjamin-Emikpe/publication/356475196_Is_There_Cross-Species_Transmission_to_Pigs_of_Avian_Influenza_Virus_Within_Poultry_Farms_with_Previous_Outbreak_of_Avian_Influenza/links/619d735207be5f31b7b2e78c/Is-There-Cross-Species-Transmission-to-Pigs-of-Avian-Influenza-Virus-Within-Poultry-Farms-with-Previous-Outbreak-of-Avian-Influenza.pdf

25. Precious Barnes, F. A. Yeboah, Jinling Zhu, Roland Osei Saahene, Christian Obirikorang, Michael Buenor Adinortey, Benjamin Amoani, **Foster Kyei**, Patrick Akakpo, Yaw Asante Awuku (2020). Prognostic Worth of Epidermal Growth Factor Receptor (EGFR) in Patients with Head and Neck Tumors. *Journal of Cancer Epidemiology*. https://doi.org/10.1155/2020/5615303

26. JY Asiamah, **F Kyei**, Samuel Obeng Apori, A Danquah (2020). The Potential of Biodiversity Utilization and Sustainable Development in Ghana. *Journal of Sustainable Development in Africa*. https://openurl.ebsco.com/contentitem/gcd:144796137?sid=ebsco:plink:crawler-gcd&id=ebsco:gcd:144796137&crl=c&jrnl=15205509

27. Du-Bois Asante, Isaac Tabiri Henneh, Desmond Omane Acheampong, **Foster Kyei**, Christian Kweku Adokoh, Eric Gyamerah Ofori, Nelson Kwabla Domey, Emmanuel Adakudugu, Lokeswari Prathyusha Tangella, Elvis Ofori Ameyaw (2019). Anti-inflammatory, anti-nociceptive and antipyretic activity of young and old leaves of Vernonia amygdalina. *Biomedicine & Pharmacotherapy*. https://doi.org/10.1016/j.biopha.2018.12.147

28. Eric Gyamerah Ofori, Cynthia Ayefoumi Adinortey, Ansumana Sandy Bockarie, **Foster Kyei**, Emmanuel Ayitey Tagoe, Michael Buenor Adinortey (2019). Helicobacter pyloriInfection, Virulence Genes' Distribution and Accompanying Clinical Outcomes: The West Africa Situation. *BioMed Research International*. https://doi.org/10.1155/2019/7312908

29. Du-Bois Asante, Richard Harry Asmah, Andrew Anthony Adjei, **Foster Kyei**, David Larbi Simpong, Charles Addoquaye Brown, Richard Kwasi Gyasi (2017). Detection of Human Papillomavirus Genotypes and Epstein-Barr Virus in Nasopharyngeal Carcinomas at the Korle-Bu Teaching Hospital, Ghana. *The Scientific World JOURNAL*. https://doi.org/10.1155/2017/2721367

30. Desmond O. Acheampong, Christian K. Adokoh, Du-Bois Asante, Ernest A. Asiamah, Prince A. Barnie, Dan O.M. Bonsu, **Foster Kyei** (2017). Immunotherapy for acute myeloid leukemia (AML): a potent alternative therapy. *Biomedicine & Pharmacotherapy*. https://doi.org/10.1016/j.biopha.2017.10.100

31. **Foster Kyei**, Du-Bois Asante, Esther Sarpong, Juliet Ama Mawusi Edekor, Daniels Konja, Edem Gavor (2017). Over-expression of Id2 and Id3 Proteins Regulates Growth and Survival of Human Colon Carcinoma (HCT116) Cells. *Journal of Applied Biology & Biotechnology*. https://doi.org/10.7324/jabb.2017.50102

32. **F Kyei**, R Puobi, S Gadu, E Dokurugu, T Djimadjor, E Laryea (2017). The Science, Acceptance and Support of Modern Biotechnology in Africa. *Journal of Advances in Biology & Biotechnology*. https://doi.org/

10.9734/jabb/2017/32160

33. T Djimadjor, **F Kyei** (2016). Are Children Who Grow Up on Traditional Farms Protected From Asthma, Allergic Rhinitis and Allergic Sensitization? *Asian Journal of Medicine and Health*. https://doi.org/10.9734/ajmah/2016/30038

34. **Foster Kyei**, Du-Bois Asante, Juliet Ama Mawusi Edekor, Esther Sarpong, Edem Gavor, Daniels Konja (2016). Down-regulation of Id1 and Id3 genes affects growth and survival of Human Umbilical Vein Endothelial Cells (HUVECs). *Journal of Applied Biology & Biotechnology*. https://doi.org/10.7324/jabb.2016.40204

35. Samuel Antwi-Baffour, David Kwasie Annor, Jonathan Kofi Adjei, Ransford Kyeremeh, George Kpentey, **Foster Kyei** (2015). Anemia in prospective blood donors deferred by the copper sulphate technique of hemoglobin estimation. *BMC Hematology*. https://doi.org/10.1186/s12878-015-0035-3

36. **Foster Kyei** (2015). Knock-Down of Id1 and Id3 Proteins Induces Apoptosis in Human Colon Carcinoma (HCT116) Cells. *Journal of Biology and Life Science*. https://doi.org/10.5296/jbls.v6i1.6712

37. Samuel Antwi-Baffour, Jonathan Adjei, Claudia Aryeh, Ransford Kyeremeh, **Foster Kyei**, Mahmood A. Seidu (2015). Understanding the biosynthesis of platelets-derived extracellular vesicles. *Immunity Inflammation and Disease*. https://doi.org/10.1002/iid3.66

38. **Foster Ofori Kyei** (2014). Evaluation of consumers' perception and willingness to pay for bacteriophage treated fresh produce. *Bacteriophage*. https://doi.org/10.4161/21597081.2014.979662

Reports 3

1. **Foster Kyei** (2016). Introduction to Molecular Genetics. *University Printing Press*.

2. **Foster Kyei** (2016). Population Genetics and Evolution. *University Printing Press*.

3. **Foster Kyei** (2012). Id proteins in the regulation of mammalian cell cycle, growth and survival. *University of Essex*. https://scholar.google.com/scholar?cluster=15606452346573591670&hl=en&oi=scholarr

Other publications 1

1. **Foster Kyei** (2005). Associations Between Lipid Traits and Breast Cancer Risk: A Mendelian Randomization Study in African Women. *Cancer Medicine*.