Samuel Essien-Baidoo

Associate Professor · Medical Laboratory Science
University of Cape Coast

ORCID 0000-0002-8618-6648 · Google Scholar scholar.google.com/citations?user=AviSdwEAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/d2d91327-42c8-44e0-be12-fbe82db20149

RESEARCH

Interests	Laboratory Medicine · Immunology · Infectious Diseases · Health Law and Ethics
Areas	Infectious Diseases · Parasitology · Public Health, Environmental and Occupational Health · Oncology · Ecology · Epidemiology

RESEARCH SUMMARY

50	1,220	16	22	0.93	11%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 50 publications listed below, 2009–2026. 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. 4 of the 38 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 2009–present
Medical Laboratory Science, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2010–2013
Laboratory Medicine, Jiangsu University, Zhenjiang, China

PUBLICATIONS

Journal articles 49

1. Allwell A. Ayirebi, Stephen Twumasi, Linda K. Olaga, Benedict Sackey, Daniel N. M. Antonio, Richard O. Ansah, Eugene A. Ansah, John A. Sah, Enoch O. Anto, Yvonne Anang-Quartey, Antoinette Koomson, Angela Opoku, Godfred A. Donkor, Paulina Duah, Ama G. Boadu, **Samuel Essien-Baidoo**, Wina I. O. Boadu, Lilian A. Boateng (2026). Acute and Chronic Leukemia in Sub-Saharan Africa: A Systematic Review. *Cancer Reports*. https://doi.org/10.1002/cnr2.70635
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. Alkhair Adam Khalil Mohamed, **Samuel Essien-Baidoo**, Alex Boye (2026). Natural product-inspired mitotic poisons in cancer pharmacotherapy. *Academia Drug Development and Pharmacotherapy*. https://doi.org/10.20935/acaddrug8351
4. Allwell Adofo Ayirebi, Wina Ivy Ofori Boadu, Stephen Twumasi, Samuel Kwarteng, Benedict Sackey, Lilian Antwi Boateng, Joseph Boachie, **Samuel Essien-Baidoo**, Daniel Nii Martey Antonio, John Agyemang Sah, Afua Marfowaa, Mayfair Adwapa Mpiani, Joachim Baba Domosie, Abiba Khalifah, Emmanuel Ekow Korsah, Ebenezer Senu, Eugene Arele Ansah, Joseph Yorke, Enoch Odame Anto (2026). Neutrophil Gelatinase-Associated Lipocalin and Neutrophil-to-Lymphocyte Ratio as Indicators of Nephropathy in Type 2 Diabetic Mellitus Patients in Ghana: A Case-Control Study. *Health Science Reports*. https://doi.org/10.1002/hsr2.71939

5. Justice Afrifa, Eric Gyamerah Ofori, Evans Duah, Ibrahim W. Naveh-fio, Gabriel Pezahso Kotam, Yeboah Kwaku Opoku, Addae Boateng Adu-Gyamfi, Helena Acquah, Enoch Essiam, **Samuel Essien-Baidoo**, Kwame Kumi Asare, Richard K. D. Ephraim (2026). Oxidative Stress in Heat Stress Nephropathy: Crosstalk. *Oxidative Medicine and Cellular Longevity*. https://doi.org/10.1155/omcl/1708417

6. Justice Afrifa, Godfred Appiah Kubi, Richard Armah, Eric Ofori Gyamerah, Sandra Ofori, Ibrahim Neveh-Fio, Gabriel Pezahso Kotam, Enoch Essiam, Helena Acquah, Ibrahim Anyass Goumboundi, **Samuel Essien-Baidoo**, Richard Kobina Dadzie Ephraim (2026). Reduced Pseudocholinesterase Levels Are Associated With Alterations in Lipid Biomarkers and Liver Enzymes Among Ghanaian Male Cocoa Farmers Using Organophosphate Pesticides. *The Scientific World JOURNAL*. https://doi.org/10.1155/tswj/5926091

7. Kwesi Akumenyi Quagraine, Babatunde J. Abiodun, **Samuel Essien-Baidoo** (2025). Africa must lead the governance of solar radiation management. *Nature Climate Change*. https://doi.org/10.1038/s41558-025-02420-z

8. Stephen Twumasi, Richard Owusu Ansah, **Samuel Essien-Baidoo**, Laud Anthony W. Basing, Alexander Yaw Debrah, Enoch Odame Anto, Allwell Adofo Ayirebi, Rebecca Asiamah-Broni, Waldemer Attivor, Eric Twum Ameyaw and 12 others (2025). Haemato-Urological Profile and Asymptomatic Urinary Tract Infection in Ghanaian Steady-State Sickle Cell Disease Patients: A Case-Control Study. *Health Science Reports*. https://doi.org/10.1002/hsr2.70643

9. Ellen Mensa-Bonsu, Henry Kyei, Lauren Korley, Sandra Banini, Seth Agyenkwa, Cosmos Yarfi, Adu Appiah-Kubi, Evans Ashigbi, Dennis Assibey, Alex Abudzie, Godsgift Nicholas, **Samuel Essien-Baidoo** (2025). LEVEL OF PHYSICAL ACTIVITY AND QUALITY OF LIFE OF GYNECOLOGICAL CANCER PATIENTS IN A TERTIARY HOSPITAL IN GHANA. *International Journal of Gynecological Cancer*. https://doi.org/10.1016/j.ijgc.2025.102365

10. Alex Boye, **Samuel Essien-Baidoo**, Ernest Amponsah Asiamah (2024). Citrus reticulata fruit peel extract ameliorates testesterone-induced benign prostatic hyperplasia-like phenotypes in rats. *International Journal of Plant Based Pharmaceuticals*. https://doi.org/10.62313/ijpbp.2024.208

11. Yayra Kluboito, Joseph Kwame Mintah, **Samuel Essien-Baidoo**, Neeyi Akesseh Arthur (2024). Effect of acute supplementation of hibiscus-ginger drink on university athletes' aerobic power and blood lactate. *The North African Journal of Food and Nutrition Research*. https://doi.org/10.51745/najfnr.8.18.89-95

12. Loretta Betty Blay Mensah, Sebastian Ken-Amoah, Mainprice Akuoko Essuman, Betty Anane-Fenin, Evans Kofi Agbeno, Sebastian Eliason, **Samuel Essien-Baidoo** (2023). Cervical Microbiota Influences Cytokine Diversity in Cervical Intraepithelial Neoplasia among Rural Women in the Akyemansa District of Ghana. *BioMed Research International*. https://doi.org/10.1155/2023/5129709

13. Michael Afari Baidoo, Edward Wilson Ansah, **Samuel Essien-Baidoo** (2023). Employee turnover intention: The predictive role of work-related burnout and psychosocial climate among university workers. *Journal of Psychology in Africa*. https://doi.org/10.1080/14330237.2023.2233210

14. Michael Afari Baidoo, Edward Wilson Ansah, **Samuel Essien-Baidoo** (2023). Psychosocial work environment and burnout among employees of a Ghanaian public university. *International Journal of Health Promotion and Education*. https://doi.org/10.1080/14635240.2023.2282129

15. Mainprice Akuoko Essuman, Nii Armah Addy, **Samuel Essien-Baidoo**, Irene Esi Donkoh, Felix A. Botchway, Justice Afrifa, Prince Agyeman, Leticia Awontayami Amaama, Samuel Amoah, Felix B. K. Sorvor, Richard K. D. Ephraim (2023). Self-reported continuing professional development needs of medical laboratory professionals in Ghana. *Human Resources for Health*. https://doi.org/10.1186/s12960-023-00859-9

16. **Samuel Essien-Baidoo**, Mainprice Akuoko Essuman, Joseph Tee, Richard K. D. Ephraim, Loretta Betty Blay Mensah, Seth Boakye Amponsah, Justice Afrifa (2023). Toward schistosomiasis control: Assessment of infection-associated voiding symptoms, quality of life and the impact of exercise coupled with water intake on egg recovery in an endemic community in Ghana. *PLOS Global Public Health*. https://doi.org/10.1371/journal.pgph.0002514

17. **Samuel Essien-Baidoo**, Mainprice Akuoko Essuman, Bernard Adarkwa-Yiadom, Dominic Adarkwa, Anita Akua Owusu, Seth Boakye Amponsah (2023). Urinogenital schistosomiasis knowledge, attitude, practices, and its clinical correlates among communities along water bodies in the Kwahu Afram Plains North District, Ghana. *PLoS neglected tropical diseases*. https://doi.org/10.1371/journal.pntd.0011513

18. Bright K Ocansey, Edmund A Dadzie, Stephen K Eduful, Martin Agyei, Mary-Magdalene Osei, Peter Puplampu, Isabella Asamoah, Rita O Oladele, Iriagbonse I Osaigbovo, Jane S Afriyie-Mensah, Japheth A Opintan, **Samuel Essien-Baidoo**, Arunaloke Chakrabarti, Martin Hoenigl, David W Denning, Malcolm D Richardson (2022). Improving awareness, diagnosis and management of invasive fungal infections in Ghana: establishment of the Ghana Medical Mycology Society. *Medical Mycology*. https://doi.org/10.1093/mmy/myac069

19. Maxim Armstrong, Andrew R. Harris, Michael V. D'Ambrosio, Jean T. Coulibaly, **Samuel Essien-Baidoo**, Richard K. D. Ephraim, Jason R. Andrews, Isaac I. Bogoch, Daniel A. Fletcher (2022). Point-of-Care Sample Preparation and Automated Quantitative Detection of Schistosoma haematobium Using Mobile Phone Microscopy. *American Journal of Tropical Medicine and Hygiene*. https://doi.org/10.4269/ajtmh.21-1071

20. Sebastian Ken-Amoah, Loretta Betty Blay Mensah, Sebastian Eliason, Betty Anane-Fenin, Evans Kofi Agbeno, Mainprice Akuoko Essuman, **Samuel Essien-Baidoo** (2022). Poor knowledge and awareness of human papillomavirus and cervical cancer among adult females in rural Ghana. *Frontiers in Tropical Diseases*. https://doi.org/10.3389/fitd.2022.971266

21. Francis Tanam Djankpa, Gideon Akuamoah Wiafe, Bernard Ntim Boateng, Korantema Mawuena Tsegah, **Samuel Essien-Baidoo**, Mark Bilinyi Ulanja, Kwame Ofori Affram, Abdala Mumuni Ussif, Desmond Owusu Agyeman, Gabriel Asante (2021). Assessment of corn starch as substitute for agarose in DNA gel electrophoresis. *BMC Research Notes*. https://doi.org/10.1186/s13104-021-05483-1

22. Richard Kobina Dadzie Ephraim, Evans Duah, Charles Nkansah, Samuel Amoah, Emmanuel Fosu, Justice Afrifa, Felix Botchway, Perditer Okyere, **Samuel Essien-Baidoo**, Kofi Mensah, Dorcas Serwaa, Samuel Asamoah Sakyi, Prince Adoba, Linda Ahenkorah Fondjo, Jerry Paul Ninnoni, Yaa Boahemaa Gyasi Aderoju (2021). Psychological impact of COVID-19 on diabetes mellitus patients in Cape Coast, Ghana: a cross-sectional study. *PubMed*. https://doi.org/10.11604/pamj.2021.40.76.26834

23. Abubakari Sisu, James Abugri, Richard K.D. Ephraim, Isaac Dadzie, **Samuel Essien-Baidoo**, Joseph Kyei-Mensah, Rebecca P. Storph, Emmanuel Toboh (2020). Intestinal parasite infections in diabetes mellitus patients; A cross-sectional study of the Bolgatanga municipality, Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00680

24. Oluwamuyiwa A. Ayanshina, Adeleye O. Adeshakin, Lukman O. Afolabi, Funmilayo O. Adeshakin, Ganiyu O. Alli-Balogun, Dehong Yan, **Samuel Essien-Baidoo**, Xiaochun Wan (2020). Seasonal variations in Nigeria: understanding COVID-19 transmission dynamics and immune responses. *Journal of Global Health Reports*. https://doi.org/10.29392/001c.14600

25. **Samuel Essien-Baidoo**, Dorcas Obiri-Yeboah, Yeboah Kwaku Opoku, Elvis Ayamga, Kevin Hodi Zie, Daniel Attoh, Evans Obboh, Anna Hayfron Benjamin, Justice Afrifa (2019). ART Regimen and Other Sociodemographics Do Not Affect Cytokine Expression in HIV Patients in Ghana. *Canadian Journal of Infectious Diseases and Medical Microbiology*. https://doi.org/10.1155/2019/2730370

26. Justice Afrifa, Felix A. Botchway, Yeboah Kwaku Opoku, Joyce Badohu, Henrietta Ekua Ocran, Kwame Kumi Asare, **Samuel Essien-Baidoo** (2019). Assessment of cardiovascular risk in post-menopausal women in Ghana. *F1000Research*. https://doi.org/10.12688/f1000research.19447.1

27. Bernard Owusu Asimeng, Elvis Kwason Tiburu, Elsie Effah Kaufmann, Lily Paemka, Claude Fiifi Hayford, **Samuel Essien-Baidoo**, Obed Korshie Dzikunu, Prince Atsu Anani (2019). Electrochemical evaluation of ion substituted-hydroxyapatite on HeLa cells plasma membrane potential. *Cogent Engineering*. https://doi.org/10.1080/23311916.2019.1614756

28. Dorcas Obiri-Yeboah, Faustina Pappoe, Ibrahim Baidoo, Francis Arthur, Anna Hayfron-Benjamin, **Samuel Essien-Baidoo**, Godwin Kwakye-Nuako, Stephen Ayisi Addo (2018). Immunologic and virological response to ART among HIV infected individuals at a tertiary hospital in Ghana. *BMC Infectious Diseases*. https://doi.org/10.1186/s12879-018-3142-5

29. **Essien-Baidoo Samuel**, Ansah Agyei Benjamin, Hayfron Benjamin Anna, Betty Blay Mensah Loretta, Afrifa Justice (2018). Nosocomial infections are still a major concern in peri-urban polyclinics in Ghana. *African Journal of Microbiology Research*. https://doi.org/10.5897/ajmr2017.8773

30. Justice Afrifa, **Samuel Essien-Baidoo**, Albert Baffour Gyau, Richard Kobina Dadzie Ephraim (2017). Evaluation of Renal Function in Pregnant Women with Malaria: A Case-Control Study in a Mesoendemic

Area. *Obstetrics and Gynecology International*. https://doi.org/10.1155/2017/6030943

31. Justice Afrifa, Desmond Gyedu, Eric Ofori Gyamerah, **Samuel Essien-Baidoo**, Isaac Mensah-Essilfie (2017). Haematological Profile and Intensity of Urogenital Schistosomiasis in Ghanaian Children. *Journal of Environmental and Public Health*. https://doi.org/10.1155/2017/4248325
32. Justice Afrifa, **Samuel Essien-Baidoo**, Richard K.D. Ephraim, Daniel Nkrumah, Daniel Osei Dankyira (2017). Reduced egfr, elevated urine protein and low level of personal protective equipment compliance among artisanal small scale gold miners at Bibiani-Ghana: a cross-sectional study. *BMC Public Health*. https://doi.org/10.1186/s12889-017-4517-z
33. Justice Afrifa, **Samuel Essien-Baidoo**, Eric Ofori, Albert Abaka-Yawson (2017). Trace Elements Levels and Blood Pressure in Ghanaian Women Using Depot Medroxyprogesterone Acetate Contraceptive. *Journal of Advances in Medicine and Medical Research*. https://doi.org/10.9734/bjmmr/2017/32565
34. **Samuel Essien-Baidoo** (2016). Prevalence of Asymptomatic Bacteriuria in a Sub-population of Tertiary Female Students: Antimicrobial Resistance Patterns and Group-specific Risk Factors. *Journal of Medical and Biological Science Research*. https://www.academia.edu/download/77405849/Boye_20et_20al.pdf
35. A Boye, P Mate-Siakwa, **S Essien-Baidoo** (2016). Schistosoma haematobium co-infection with soil-transmitted helminthes: prevalence and risk factors from two communities in the central region of Ghana. *International Journal of Medicine and Biomedical Research*. https://search.proquest.com/openview/c96a0c6ce8de8ef210d19c93084be4c7/1?pq-origsite=gscholar&cbl=2028855
36. Justice Afrifa, SethA Gyekye, WilliamKBA Owiredu, RichardKD Ephraim, **Samuel Essien-Baidoo**, Samuel Amoah, DavidL Simpong, AaronR Arthur (2015). Application of sigma metrics for the assessment of quality control in clinical chemistry laboratory in Ghana: A pilot study. *Nigerian Medical Journal*. https://doi.org/10.4103/0300-1652.149172
37. RichardK.D. Ephraim, Worlanyo Tashie, Hope Agbodzakey, SamuelAsamoah Sakyi, **Samuel Essien-Baidoo**, Prince Adoba, Patrick Adu, Joyce Ampong (2015). Dipstick urinalysis findings in children with Plasmodium falciparum in the South Tongu District: A case-control study. *Nigerian Medical Journal*. https://doi.org/10.4103/0300-1652.169748
38. Kwabena Dankwa, Ransford Kumi, Richard Ephraim, Latif Adams, Daniel Amoako-Sakyi, **Samuel Essien-Baidoo**, Samuel Nuvor (2015). Intestinal Parasitosis among Primary School Pupils in Coastal Areas of the Cape Coast Metropolis, Ghana. *International Journal of TROPICAL DISEASE & Health*. https://doi.org/10.9734/ijtdh/2015/18026
39. Yvonne A. Aryeetey, **Samuel Essien-Baidoo**, Irene A. Larbi, Kwaku Ahmed, Abena S. Amoah, Benedicta B. Obeng, Lisette van Lieshout, Maria Yazdanbakhsh, Daniel A. Boakye, Jaco J. Verweij (2013). Molecular Diagnosis of Schistosoma Infections in Urine Samples of School Children in Ghana. *American Journal of Tropical Medicine and Hygiene*. https://doi.org/10.4269/ajtmh.12-0571
40. **SE Baidoo** (2013). T cell-derived leptin contributes to increased frequency of T helper type 17 cells in female patients with Hashimoto's thyroiditis. *Clinical & Experimental Immunology*. https://academic.oup.com/cei/article-abstract/171/1/63/6420946
41. **Samuel Essien Baidoo** (2013). β-Glucan enhances antitumor immune responses by regulating differentiation and function of monocytic myeloid-derived suppressor cells. *European journal of immunology*. https://doi.org/10.1002/eji.201242841
42. **Samuel Essien Baidoo** (2012). Glucocorticoid-induced tumor necrosis factor receptor family-related protein exacerbates collagen-induced arthritis by enhancing the expansion of Th17 cells. *The American journal of pathology*. https://www.sciencedirect.com/science/article/pii/S0002944011010820
43. **Samuel Essien Baidoo** (2012). Increased frequency of circulating follicular helper T cells in patients with rheumatoid arthritis. *Journal of Immunology Research*. https://doi.org/10.1155/2012/827480
44. **Samuel Essien Baidoo** (2012). Up-regulation of GITRL on dendritic cells by WGP improves anti-tumor immunity in murine Lewis lung carcinoma. *Public Library of Science*. https://doi.org/10.1371/journal.pone.0046936
45. **Samuel Essien Baidoo** (2011). IL-4 can inhibit IL-17 production in collagen induced arthritis. *Iranian journal of immunology*. http://iji.sums.ac.ir/article_17028.html

46. DNA Tagoe, **SE Baidoo**, I Dadzie, D Tengey, C Agede (2011). Potential sources of transmission of hospital acquired infections in the volta regional hospital in Ghana. *Ghana Medical Journal*. https://doi.org/10.4314/gmj.v45i1.68918

47. **Samuel Essien Baidoo**, I Dadzie (2010). A study of bacterial contamination of Ghanaian currency notes in circulation. *The Internet Journal of Microbiology*. https://www.academia.edu/download/49475132/A_study_of_bacterial_contamination_of_Gh20161009-19258-4cmzyj.pdf

48. **SE Baidoo** (2010). Intestinal helminth infection and anaemia during pregnancy: A community based study in Ghana. *African journal of microbiology research*. https://academicjournals.org/journal/AJMR/article-full-text-pdf/D882E8314154

49. **S Baidoo**, I Dadzie, H Nyarko (2009). A comparison of the antimicrobial (antifungal) properties of garlic, ginger and lime on Aspergillus flavus, Aspergillus niger and Cladosporium herbarum using organic and water …. *The Internet Journal of Tropical Medicine*. https://www.academia.edu/download/91405035/7275.pdf

Conference papers 1

1. **S Essien-Baidoo** (2019). ART regimen and other sociodemographics does not affect cytokine expression in HIV patients in Ghana. *EUROPEAN JOURNAL OF IMMUNOLOGY*. https://scholar.google.com/scholar?cluster=8489659848850201663&hl=en&oi=scholarr