Dr. Lilian Antwi Boateng

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PROFILE

Lilian Antwi Boateng has been an early career lecturer and researcher in the haematology and immunohematology Unit of the Kwame Nkrumah University of Science and Technology, Ghana since 2012. she supervises and undertakes research specialising in blood transfusion and red blood cell antigens and alloantibodies She handles all transfusion/ blood banking related topics for the undergraduate programmes in Medical Laboratory Technology, Nursing, Emergency nursing and veterinary Medicine. Lilian's aspiration in the long term is to progress professionally as a national and international transfusion research leader.

Lilian holds a PhD in Blood transfusion from the University of Liverpool, a Master of Science with distinction in Biomedical Science from the University of Westminster, United Kingdom and a first-class honours Bachelor of Medical Laboratory Technology from Kwame Nkrumah University of Science and Technology, Ghana. She also undertook a six months residency programme in blood banking at the University of Michigan and the University of Michigan blood bank reference laboratory as a fellow of the University of Michigan African Presidential Scholars Programme (UMAPS). She is currently pursuing a PhD in Tropical Medicine with the International Public Health Department of the Liverpool school of Tropical Medicine, United Kingdom. Her PhD is focused on optimising blood transfusion practices in sickle cell patients in Sub Saharan Africa.

Lilian has been the recipient of three scholarships; KNUST-UOW Bespoke scholarship, UMAPS scholarship and Commonwealth PhD scholarship. Since the beginning of her career as a researcher, she has won two seed grants, the DANIDA Building Stronger Universities seed grant and Science Technology Engineering and Mathematics (STEM) seed grant. All seed grants were channelled into advancing blood transfusion medicine in Ghana. The DANIDA seed grant focused on the prevalence of red blood cell alloimmunisation in multi transfused patients in Ghana and she published her findings in 2014 . The STEM project (2014-17) explored the prevalence and specificities of red cell alloantibodies in sickle cell patients and determined the frequencies of some blood group antigens in the patients.

Lilian also partnered with the Department of Pathology, University of Utah to pilot the development of antibody screening cells for antibody testing in Ghana based on the local donor population.

RESEARCH

Areas: Hematology · Genetics · Physiology · Biochemistry · Management of Technology and Innovation · Oncology

RESEARCH SUMMARY

26	172	7	6	0.82	4%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 26 publications listed below, 2014–2026. Field-weighted impact is the mean over the 26 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 26 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

lecturer 2012–present
Medical Diagnostics, KNUST, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2017–2031
International Public Health, University of Liverpool, Liverpool, United Kingdom

MSc 2010–2011
Biomedical science, University of Westminster, London, United Kingdom

Bsc 2005–2009
Medica Lab Tech, KNUST, Kumasi, Ghana

PUBLICATIONS

Journal articles 26

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. Stephen Twumasi, **Lilian Antwi Boateng**, Alain Mayindu Ngoma, Henk Schonewille (2026). Acute transfusion reactions in sub-Saharan Africa: A systematic review and meta-analysis. *Vox Sanguinis*. https://doi.org/10.1111/vox.70203
3. 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
4. Francis Agyei Amponsah, Benedicta Serwaa Obeng, Otchere Addai-Mensah, **Lilian Antwi Boateng**, Benedict Sackey, Isaac Acheampong, Prince Adoba, Edward Yaw Afriyie, Anthony Dwamena, Samuel Kwasi Appiah, Philip Amo-Kodieh, Felicia Broni Nartey (2026). Rapid Measurement of Erythrocyte Sedimentation Rate Using a Tube Positioned at a 45° Angle Compared With the Westergren Reference Method. *BioMed Research International*. https://doi.org/10.1155/bmri/8860256
5. Eunike C. McGowan, Antoine Lewin, Jian Ou-Yang, Saikat Mandal, Nour Almozain, Abiy Belay Ambaye, Jannison Karlly Cavalcante Ribeiro, **Lilian Antwi Boateng**, Carla Luana Dinardo, Praiseldy Langi Sasongko (2025). Engaging with young professionals in transfusion medicine: Insights from a needs assessment survey targeting an international cohort. *Vox Sanguinis*. https://doi.org/10.1111/vox.13783
6. Michael Muteti, Ephy Akoko, Caudencia Nyakundi, George Mochamah, Johnstone Makale, Patrick Ombati, Brian Tawa, Steven Nyanjom, **Lilian Antwi Boateng**, Russell E. Ware, Thomas N. Williams, Sophie Uyoga (2025). Erythrocyte alloimmunization in children with sickle cell anemia living in Kilifi, Kenya. *Blood Global Hematology*. https://doi.org/10.1016/j.bglo.2025.100016
7. 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, … **Lilian Antwi Boateng** and 11 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
8. Stephen Twumasi, Enoch Odame Anto, Christian Obirikorang, Richard Kobina Dadzie Ephraim, Benedict Sackey, Vivian Paintsil, Richard Owusu Ansah, Alfred Effah, Allwell Adofo Ayirebi, Angela Opoku, Godfred Yawson Scott, Leslie Osei, Joyce Duku, Emmanuel Asafo Adjei, **Lilian Antwi Boateng** (2025). Neutrophil gelatinase-associated lipocalin and fibrinogen-to-albumin ratio are indicators of kidney disease in sickle cell disease patients with microalbuminuria: a multicentre case-control study in Ghana. *BMC Nephrology*.

https://doi.org/10.1186/s12882-025-04427-2

9. Francis Agyei Amponsah, Otchere Addai-Mensah, **Lilian Antwi-Boateng**, Benedict Sackey, Richard Vikpebah Duneeh, Isaac Acheampong, Prince Adoba, Diana Venunye Ama Awi, Edward Yaw Afriyie, Richard Boateng, Abrafi Ayerakwa Anokye, Veronica Agyemang, Samuel Kofi Doe, Samuel Kwasi Appiah (2025). Serum Anti-Erythropoietin Autoantibodies and Their Association With Younger Age in Paediatric Malaria Cases. *BioMed Research International*. https://doi.org/10.1155/bmri/8845434

10. Hitoshi Ohto, Willy A. Flegel, Pieter F. van der Meer, Alain M. Ngoma, Kenneth E. Nollet, Nabajyoti Choudhury, Tobias J. Legler, Yoshihiko Tani, So-Yong Kwon, Tzong-Shi Chiueh, … **Lilian Antwi Boateng** and 50 others (2025). The 2024 international survey of platelet products and practice. *Transfusion and Apheresis Science*. https://doi.org/10.1016/j.transci.2025.104086

11. Richard Vikpebah Duneeh, Wina Ivy Ofori Boadu, Lois Tekutey Narh, Joseph Frimpong, Abdul-Wahab Mawuko, John Gameli Deku, Kofi Mensah, Charles Nkansah, Samuel Kwasi Appiah, Felix Osei Boakye, Enoch Odame Anto, **Lilian Antwi Boateng**, Benedict Sackey, Otchere Addai-Mensah (2024). Anaemia during pregnancy: a cross-sectional study of antenatal attendants at the Madina Pentecost Hospital, La Nkwantanang Municipality, Ghana. *Cogent Public Health*. https://doi.org/10.1080/27707571.2024.2353776

12. Antoine Lewin, Eunike McGowan, Jian Ou-Yang, **Lilian Antwi Boateng**, Carla Luana Dinardo, Saikat Mandal, Nour Almozain, Jannison Ribeiro, Syeldy Langi Sasongko (2024). The future of blood services amid a tight balance between the supply and demand of blood products: Perspectives from the ISBT Young Professional Council. *Vox Sanguinis*. https://doi.org/10.1111/vox.13590

13. Selina Mintaah, Enoch Odame Anto, Wina Ivy Ofori Boadu, Benedict Sackey, **Lilian Antwi Boateng**, Ezekiel Ansah, Emmanuel Ekow Korsah, Joseph Frimpong, Valentine Christian Kodzo Tsatsu Tamakloe, Peter Kuugemah Selleh and 12 others (2023). Coagulation Factors and Natural Anticoagulants as Surrogate Markers of Preeclampsia and Its Subtypes: A Case–Control Study in a Ghanaian Population. *Clinical and Applied Thrombosis/Hemostasis*. https://doi.org/10.1177/10760296231204604

14. Peter K. Selleh, Enoch O. Anto, Wina I. O. Boadu, Benedict Sackey, **Lilian A. Boateng**, Charles Nkansah, Frederick Nsafoah, Abdul R. Saasi, Selina Mintaah, Yaw A. Wiafe, Charles Derigubah, Emmanuel E. Korsah, Joseph Frimpong, Ezekiel Ansah, Valentine C. K. T. Tamakloe, Patrick Adu, Joseph Boachie, Otchere Addai-Mensah (2023). Quality of glycemic control in type 2 diabetes mellitus (T2DM) and its association with markers of coagulation and inhibitors of fibrinolysis: A case–control study in the Upper West Region, Ghana. *Health Science Reports*. https://doi.org/10.1002/hsr2.1297

15. Arwa Z. Al-Riyami, Barbara Masser, Eszter Herczenik, Satyam Arora, **Lilian Antwi Boateng**, Carla Luana Dinardo, Tyler Hutchinson, Yanli Ji, Syeldy Langi Sasongko, John-Paul Tung, Sathiya Murthi Panchatcharam (2022). Psychological impact of the COVID -19 pandemic on young professionals in blood banks and transfusion services: A global cross-sectional survey. *Vox Sanguinis*. https://doi.org/10.1111/vox.13236

16. Nembot Fogang Brice Armel, David Ofosu Ntiamoah, Gordon Asare Akuffo, Selina Mintaah, Michael Owusu, Benedict Sackey, **Lilian Antwi-Boateng**, Ganiwu Abdul, Max Annani-Akollor, Eddie-Williams Owiredu, Alexander Yaw Debrah, Otchere Addai-Mensah (2021). Coagulation abnormalities in childhood acute lymphoblastic leukemia: assessing the impact of L-asparaginase therapy in Ghana. *Thrombosis Journal*. https://doi.org/10.1186/s12959-021-00297-4

17. **Lilian A. Boateng**, Henk Schonewille, Peter C. Ligthart, Ahmad Javadi, Barbera Veldhuisen, Alex Osei-Akoto, Yvonne Dei-Adomakoh, Imelda Bates, C. Ellen Van der Schoot (2021). One third of alloantibodies in patients with sickle cell disease transfused with African blood are missed by the standard red blood cell test panel. *Haematologica*. https://doi.org/10.3324/haematol.2021.278451

18. Kwabena Owusu Danquah, Kofi Mensah, Charles Nkansah, Samuel Kwasi Appiah, Mark Noagbe, Yasmine Hardy, David O. Ntiamoah, **Lillian Antwi Boateng**, Max Efui Annani-Akollor, Eddie-Williams Owiredu, Alexander Yaw Debrah, Otchere Addai-Mensah (2020). Molecular Characterization of Glucose-6-Phosphate Dehydrogenase: Do Single Nucleotide Polymorphisms Affect Hematological Parameters in HIV-Positive Patients? *Journal of Tropical Medicine*. https://doi.org/10.1155/2020/5194287

19. Otchere Addai-Mensah, Daniel Gyamfi, Francis Agyei Amponsah, Max Efui Annani-Akollor, Kwabena

Owusu Danquah, **Lillian Boateng**, Eddie-Williams Owiredu, Edward Y. Afriyie, Richard Vikpebah Duneeh, Renate Asare, David Ofosu Ntiamoah, Richard Boateng (2019). Antierythropoietin Antibody Production Is Not Associated with Malaria and Malaria-Related Anaemia in Humans. *The Scientific World JOURNAL*. https://doi.org/10.1155/2019/5398732

20. Otchere Addai-Mensah, Daniel Gyamfi, Richard Vikpebah Duneeh, Kwabena O. Danquah, Max E. Annani-Akollor, **Lillian Boateng**, Eddie-Williams Owiredu, Francis A. Amponsah, Edward Y. Afriyie, Renate Asare, David Ntiamoah Ofosu (2019). Determination of Haematological Reference Ranges in Healthy Adults in Three Regions in Ghana. *BioMed Research International*. https://doi.org/10.1155/2019/7467512
21. **Lilian Antwi Boateng**, Alain Mayindu Ngoma, Imelda Bates, Henk Schonewille (2019). Red Blood Cell Alloimmunization in Transfused Patients With Sickle Cell Disease in Sub-Saharan Africa; a Systematic Review and Meta-Analysis. *Transfusion Medicine Reviews*. https://doi.org/10.1016/j.tmrv.2019.06.003
22. **Lilian A. Boateng**, Andrew D. Campbell, Robertson D. Davenport, Alex Osei-Akoto, Sheri Hugan, Akwasi Asamoah, Henk Schonewille (2019). Red blood cell alloimmunization and minor red blood cell antigen phenotypes in transfused Ghanaian patients with sickle cell disease. *Transfusion*. https://doi.org/10.1111/trf.15197
23. David Ntiamoah Ofosu, Otchere Addai-Mensah, **Lillian Antwi-Boateng**, Kwabena Anane, Eddie-Williams Owiredu (2018). Reference Intervals of Prothrombin Time and Activated Partial Thromboplastin Time and Their Association with Age among Healthy Adults in Kumasi, Ghana. *HAL (Le Centre pour la Communication Scientifique Directe)*.
24. Clement Opoku-Okrah, Daniel Kwasi Sam, Bernard Nkum, Elliot Eli Dogbe, **Lilian Antwi-Boateng**, Benedict Sackey, Daniel Gyamfi, Kwabena Owusu Danquah (2016). Sports anaemia and anthropometric evaluation of footballers at Kwame Nkrumah University of Science and Technology (KNUST). *Pan African Medical Journal*. https://doi.org/10.11604/pamj.2016.24.25.7244
25. **LA Boateng**, H Schonewille, B Sackey, S Owusu-Ofori, E Afriyie (2015). Prevalence of red blood cell antibodies among transfused patients at Komfo Anokye teaching (Kath) hospital, Ghana. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v34i3.4
26. W. Obeng-Denteh, K. Gyasi-Agyei, **L. Boateng** (2014). A Mathematical Modeling of School Feeding Programme in the Asem – Kumasi Cluster of Schools in Ashanti Region of Ghana. *British Journal of Mathematics & Computer Science*. https://doi.org/10.9734/bjmcs/2014/4949