David Larbi Simpong

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RESEARCH

Interests	Novel biomarkers identification for early diagnosis and management of diseases
Areas	Physiology · Psychiatry and Mental health · Nutrition and Dietetics · Hematology · Molecular Biology · Pediatrics, Perinatology and Child Health

RESEARCH SUMMARY

38	394	11	11	1.86	25%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 38 publications listed below, 2013–2026. Field-weighted impact is the mean over the 32 works scored for it; 1.00 is the world average for works of the same field, type and year. 8 of the 32 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Academic Researcher 2016–2020
Pual Flechsig Institut für Hirnforshung, Universität Leipzig, Leipzig, Germany

Lecturer 2014–2016
Medical Laboratory Science, University of Cape Coast, Cape Coast, Ghana

Researcher 2011–2013
Pathology, University of Ghana Medical School, Accra, Ghana

Senior Research Assistant 2010–2011
Medical Laboratory Technology, University of Cape Coast, Cape Coast, Ghana

Biomedical Scientist intern 2009–2010
Cape Coast Teaching Hospital, Ghana Health Service, Accra, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2016–2020
Universität Leipzig, Leipzig, Germany

Master of Philosophy (MPhil.) in Pathology 2011–2013
Department of Pathology, University of Ghana, Legon, Ghana

BSc. Medical Laboratory Science 2005–2009
Medical Laboratory Science, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 37

1. Foster Appiah, **David Larbi Simpong**, Esther Marfo, George Nkrumah Osei, Maxwell Hubert Antwi, Kwaku Sarfo Manu, John Dogah, Ansumana Bockarie (2026). Association between lipid levels and dementia risk among older Ghanaian adults. *Journal of Alzheimer s Disease*. https://doi.org/10.1177/13872877261430772
2. Foster Appiah, **David Larbi Simpong**, George Nkrumah Osei, John Dogah, Esther Marfo, Maxwell Hubert

Antwi, David Mawutor Donkor, Kwaku Sarfo Manu, Ansumana Bockarie (2026). Blood lipids as accessible biomarkers for early dementia risk screening: Bridging diagnostic gaps in resource-limited settings. *Journal of Alzheimer s Disease Reports*. https://doi.org/10.1177/25424823261475263

3. **David Larbi Simpong** (2026). Measuring the composition and availability of human resources for health by sex in 204 countries and territories, 1990–2023, and workforce gaps for universal health coverage: a …. *The Lancet Public Health*. https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(26)00145-3/fulltext

4. Albertha Maku Adu, **David Larbi Simpong**, David Mawutor Donkor, Kwaku Sarfo Manu, Maxwell Hubert Antwi, Linus Kpelle, George Nkrumah Osei, Ansumana Bockarie (2026). Parasitic Infections and Associated Cognitive Outcome Among School-Aged Children in Africa: A Systematic Review. *Brain and Behavior*. https://doi.org/10.1002/brb3.71326

5. George Nkrumah Osei, Linus Kpelle, Foster Appiah, Kabutey Nartey, Albertha Maku Adu, **David Larbi Simpong**, Justice Afrifa (2026). Peripheral oxidative stress related biomarkers in Alzheimer's disease: A systematic review of their implications for diagnosis and disease monitoring. *Alzheimer s & Dementia Diagnosis Assessment & Disease Monitoring*. https://doi.org/10.1002/dad2.70354

6. Linus Kpelle, Ansumana Bockarie, Maxwell Hubert Antwi, George Nkrumah Osei, David Mawutor Donkor, David Brodie-Mends, Albertha Maku Adu, **David Larbi Simpong** (2026). Population disparities in Alzheimer's disease: A systematic review of fluid and neuroimaging biomarkers. *Alzheimer s & Dementia Diagnosis Assessment & Disease Monitoring*. https://doi.org/10.1002/dad2.70263

7. **David Larbi Simpong**, Charles Ekow Spike Cartey, Olivia Mawunyo Timpo, Joseph Boachie, Patrick Adu (2025). Anemia status is associated with insufficient iodine levels in pregnant women in rural settings: a two-centre observational study. *Discover Medicine*. https://doi.org/10.1007/s44337-025-00334-5

8. Edward Jenner Tettevi, **David Larbi Simpong**, Mahmoud Maina, Samuel Adjei, Elias Asuming-Brempong, Mike Y. Osei-Atweneboana, Augustine Ocloo (2025). Antibiotic-Induced Gut Dysbiosis Modulates Alzheimer's Disease-Associated Gene Expression and Protein Aggregation in 3xTg-AD Mice via the Gut–Brain Axis. *Brain and Behavior*. https://doi.org/10.1002/brb3.70946

9. Maxwell Hubert Antwi, Ansumana Bockarie, George Nkrumah Osei, David Mawutor Donkor, **David Larbi Simpong** (2025). Cytokines and immune biomarkers in neurodegeneration and cognitive function: A systematic review among individuals of African ancestry. *Alzheimer s & Dementia*. https://doi.org/10.1002/alz.70514

10. George Nkrumah Osei, Ansumana Bockarie, Albert Akpalu, Peter Osei-Wusu Adueming, Maxwell Hubert Antwi, Foster Appiah, Linus Kpelle, David Mawutor Donkor, **David Larbi Simpong** (2025). Diagnostic potential of near-infrared spectroscopy in mild cognitive impairment and neurodegenerative disorders: Implications for resource-limited settings. *Alzheimer s & Dementia*. https://doi.org/10.1002/alz.70769

11. John Dogah, Ansumana Bockarie, Eric Kwame Kunkah, Adwoa Abrafi Boampong, George Nkrumah Osei, Kwasi Baffour Gyimah, Stephen Teye, Esther Marfo, David Mawutor Donkor, **David Larbi Simpong** (2025). Evaluation of sleep quality and its determinants among individuals with diabetes mellitus and/or hypertension: A cross-sectional study. *IBRO Neuroscience Reports*. https://doi.org/10.1016/j.ibneur.2025.06.015

12. David Mawutor Donkor, Esther Marfo, Ansumana Bockarie, Edward Jenner Tettevi, Maxwell Hubert Antwi, John Dogah, George Nkrumah Osei, **David Larbi Simpong** (2025). Genetic and environmental risk factors for dementia in African adults: A systematic review. *Alzheimer s & Dementia*. https://doi.org/10.1002/alz.70220

13. Ansumana Bockarie, Richael Odarkor Mills, Kofi Ulzen-Appiah, Albert Akpalu, Cecelia Smith-Togobo, Bernice Akua Frimpong, Ishmael Obeng-Ofosu, George Nkrumah Osei, Josephine Anterkyi Bentil, Patrick Adu, **David Larbi Simpong** (2025). Pattern of central nervous system related diseases and deaths: a 10-year study in a Ghanaian tertiary care facility. *Brain Disorders*. https://doi.org/10.1016/j.dscb.2025.100300

14. **David Larbi Simpong**, George Nkrumah Osei, Richeal Odarko Mills, Christopher Amaleyele Anyebem, Benjamin Kofi Aikins, Charlotte Gyanwaa Melfah, Bridget Amoanimaa Osei, Ansumana Bockarie (2024). Exploration of demographic prevalence of mild cognitive impairment using Montreal cognitive

assessment: A cross-sectional pilot study in the Cape Coast Metropolis, Ghana. *IBRO Neuroscience Reports*. https://doi.org/10.1016/j.ibneur.2024.11.008

15. Edward Jenner Tettevi, Deryl Nii Okantey Kuevi, Balagra Kasim Sumabe, **David Larbi Simpong**, Mahmoud B. Maina, Julius T. Dongdem, Mike Y. Osei-Atweneboana, Augustine Ocloo (2024). In Silico Identification of a Potential TNF-Alpha Binder Using a Structural Similarity: A Potential Drug Repurposing Approach to the Management of Alzheimer's Disease. *BioMed Research International*. https://doi.org/10.1155/2024/9985719
16. **David Larbi Simpong**, Ansumana Bockarie, Akosua Bema Kumah, Alex Bismark Atta-Owusu, Mordecai Eshun, Bernice Akua Frimpong, Beatrice Bachella, George Nkrumah Osei (2024). Poor sleep quality remains a major challenge among tertiary education students in Ghana: A cross-sectional study in a Ghanaian University. *IBRO Neuroscience Reports*. https://doi.org/10.1016/j.ibneur.2024.12.014
17. Nicodemus Larbi Simpong, Charity Tenu Afefa, Leander Yimpuri, Betty Akum, Afia Safo, Simon-Junior Edziah, **David Larbi Simpong**, Patrick Adu (2023). Establishing pregnancy-specific haematological reference intervals in Ghana; a three-center cross-sectional study. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0274422
18. Samuel Amoah, Andrew Nicholas Yartey, Praise Fosu Adjei, Margaret Owusu-Akyaw, Joseph Boachie, **David Larbi Simpong**, Patrick Adu (2023). HBV Infection Is an Intermediate-Risk Disease, Whereas Anaemia Is a Mild-to-Moderate Public Health Problem in Young Ghanaian Adults: A Four-Year Retrospective Analysis of Students' Medical Records. *BioMed Research International*. https://doi.org/10.1155/2023/9318984
19. Cecilia Smith-Togobo, Adam Abdul Fatau, Magalys Cuba Lopez, Felix Kpor, **David Larbi Simpong**, George Osei Yiadom, Emmanuel Akomanin Asiamah (2023). Tectona grandis (Teak Tree) Young Leaf Extract as a Histological Stain. *Journal of Biomedical Science and Engineering*. https://doi.org/10.4236/jbise.2023.162002
20. Edward Jenner Tettevi, Mahmoud Maina, **David Larbi Simpong**, Mike Y. Osei-Atweneboana, Augustine Ocloo (2022). A Review of African Medicinal Plants and Functional Foods for the Management of Alzheimer's Disease-related Phenotypes, Treatment of HSV-1 Infection and/or Improvement of Gut Microbiota. *Journal of Evidence-Based Integrative Medicine*. https://doi.org/10.1177/2515690x221114657
21. Regina Elorm Amoaning, Ernestina Siaw Amoako, Grace Arezie Kyiire, Dennis Dela Owusu, Happy Bruce, **David Larbi Simpong**, Patrick Adu (2022). Anaemia Prevalence More Than Doubles in an Academic Year in a Cohort of Tertiary Students: A Repeated-Measure Study in Cape Coast, Ghana. *Advances in Hematology*. https://doi.org/10.1155/2022/4005208
22. Cecilia Krampah, Franklin Nyanzu, Abraham Quaye, Patrick Adu, Emmanuel Akomanin Asiamah, Benjamin Aboagye, **David Larbi Simpong** (2021). Crude extracts from Allium cepa skin and Sorghum bicolor seed can provide as non-toxic and eco-friendly cytoplasmic stains. *Practical Laboratory Medicine*. https://doi.org/10.1016/j.plabm.2021.e00239
23. Grace Ali-Baya, Emmanuel Zenile, Bridgette Obuor Aikins, Regina Elorm Amoaning, **David Larbi Simpong**, Patrick Adu (2021). Poor haemoglobin-haematocrit agreement in apparently healthy adult population; a cross-sectional study in Cape Coast Metropolis, Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e07720
24. Patrick Adu, Simon Banom, Mawunya Komla Amediku, Regina Elorm Amoaning, Augustina Afia Asantewaa Quarshie, **David Larbi Simpong** (2020). Poor iron store recovery in voluntary blood donors in the northern zone of Ghana; a five-month three-centre cohort study. *Transfusion and Apheresis Science*. https://doi.org/10.1016/j.transci.2020.103040
25. **DL Simpong** (2019). TDP-43 Selbst-Interaktion wird durch die Redox-aktive Substanz Auranofin moduliert. *Nervenheilkunde*. https://doi.org/10.1055/s-0039-1685047
26. **David Larbi Simpong**, Richard KD Ephraim, LA Fondjo (2019). The Effect of Chemotherapy on Clinical, Haematological and Biochemical Profile in Breast Cancer Patients Undergoing Chemotherapy at Cape Coast Teaching Hospital; A Longitudinal .... *Journal of Cancer and Tumor International*. https://hal.science/hal-05339981/
27. **David Larbi Simpong**, Richard Harry Asmah, Cecilia Krampah, Patrick Kafui Akakpo, Patrick Adu, Du-Bois

Asante, Simon Naporo, Andrew Anthony Adjei, Richard Kwasi Gyasi (2018). HER-2 Protein Overexpression in Patients with Gastric and Oesophageal Adenocarcinoma at a Tertiary Care Facility in Ghana. *The Scientific World JOURNAL*. https://doi.org/10.1155/2018/1564150

28. **David Larbi Simpong**, Yaw Asante Awuku, Kenneth Kwame Kye-Amoah, Martin Tangnaa Morna, Prince Adoba, Stephen Kofi Anin, Patrick Adu (2018). High Iodine Deficiency among Pregnant Women in Periurban Ghana: A Hospital-Based Longitudinal Study. *Journal of Nutrition and Metabolism*. https://doi.org/10.1155/2018/9706805
29. **David Larbi Simpong** (2018). TDP-43 self-interaction is modulated by redox-active compounds Auranofin, Chelerythrine and Riluzole. *Scientific Reports*. https://www.nature.com/articles/s41598-018-20565-0
30. P Adu, **DL Simpong** (2017). Addressing the challenge of iodine deficiency in developing countries. *MOJ Public Health*. https://www.researchgate.net/profile/Patrick-Adu/publication/314300331_Addressing_the_Challenge_of_Iodine_Deficiency_in_Developing_Countries/links/58c02a24aca272a178e6f4a8/Addressing-the-Challenge-of-Iodine-Deficiency-in-Developing-Countries.pdf
31. 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
32. Yaw Asante Awuku, **David Larbi Simpong**, Ishmael Kunateh Alhassan, Derek Anamaale Tuoyire, Taiba Afaa, Patrick Adu (2017). Prevalence of helicobacter pylori infection among children living in a rural setting in Sub-Saharan Africa. *BMC Public Health*. https://doi.org/10.1186/s12889-017-4274-z
33. **David L. Simpong**, Patrick Adu, Rashid Bashiru, Martin T. Morna, Francis A. Yeboah, Kafui Akakpo, Richard K. D. Ephraim (2016). Assessment of iodine status among pregnant women in a rural community in ghana - a cross sectional study. *Archives of Public Health*. https://doi.org/10.1186/s13690-016-0119-y
34. Patrick Adu, **David Larbi Simpong**, Godfred Takyi, Richard K. D. Ephraim (2016). Glucose-6-Phosphate Dehydrogenase Deficiency and Sickle Cell Trait among Prospective Blood Donors: A Cross-Sectional Study in Berekum, Ghana. *Advances in Hematology*. https://doi.org/10.1155/2016/7302912
35. 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
36. Enoch Odame Anto, MA Nyame, SA Sakyi, EO Antoh, **DL Simpong** (2014). Co-existence of malaria and urinary tract infection among children under five: A cross-sectional study of the Assin-South Municipality, Ghana. *Journal of Medical and Biomedical Sciences*. https://doi.org/10.4314/jmbs.v2i4.5
37. **David Larbi Simpong** (2014). Effects of Body Mass Index and Age on Prostate Specific Antigen: A Study on Men Attending a Tertiary Hospital in Ghana. *Journal of Advances in Medicine and Medical Research*. https://doi.org/10.9734/bjmmr/2014/7569

Theses 1

1. **DAVID LARBI Simpong** (2013). Human Epidermal Growth Factor Receptor-2 Overexpression in Patients with Gastric and Oesophageal Adenocarcinoma-A Retrospective Study on Ghanaian Cancer Patients who attended .... *University of Ghana*. https://ir.ucc.edu.gh/server/api/core/bitstreams/b7989714-05aa-4e7d-bd9a-fe4d4b037790/content