Akua Karikari

Senior Lecturer · Biomedical Sciences
University of Cape Coast

ORCID 0000-0002-0259-7168 · Homepage directory.ucc.edu.gh/p/akua-afriyie-karikari · Google Scholar scholar.google.com/citations?user=WKimoBwAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/84a5dae9-652c-4542-b6b0-8770f81a922c

RESEARCH

Interests: Neurodegenerative diseases · Neuro-inflammation · Neurotoxicology

Areas: Public Health, Environmental and Occupational Health · Biochemistry · Cellular and Molecular Neuroscience · Epidemiology · Molecular Biology · Nutrition and Dietetics

RESEARCH SUMMARY

21	427	6	5	1.45	9%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 21 publications listed below, 2013–2025. Field-weighted impact is the mean over the 11 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 11 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer
Biomedical Sciences, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD (Neuroscience) 2015–2019
Department of Neurology, Julius-Maximilians-Universität Würzburg, Wurzburg, Germany

PUBLICATIONS

Journal articles 16

1. Daniel L. Egbenya, Lord B. Amponsah, Ireneaus Nyame, El-Gibbor C. Rolinklaka, Rose Nanabin, Lovinger M. Nyave, Stephen B. G. Oppong, Jephthah K. N. Boadi, Dzifianu A. Edoh-Torgah, Isaac B. Mensah, **Akua A. Karikari** (2025). Exploring the Nexus Between Alcohol Consumption, Sleep Deprivation, and Memory Among Male Students at a Tertiary Institution in Ghana. *Brain and Behavior*. https://doi.org/10.1002/brb3.70744
2. Abida Islam Pranty, Leon-Phillip Szepanowski, Wasco Wruck, **Akua Afriyie Karikari**, James Adjaye (2024). Hemozoin induces malaria via activation of DNA damage, p38 MAPK and neurodegenerative pathways in a human iPSC-derived neuronal model of cerebral malaria. *Scientific Reports*. https://doi.org/10.1038/s41598-024-76259-3
3. Meshack Antwi-Adjei, Ernest Obese, Emmanuel Awintiig Adakudugu, Benjamin Aboagye, Daniel Anokwah, **Akua Afriyie Karikari**, Roberta Antwi-Adjei, Elvis Ofori Ameyaw (2024). Persicaria lanigera (Polygonaceae) leaf extract exhibits antiulcerogenic and antiproliferative activities against acetic acid-induced ulcerative colitis and cotton pellet-induced granuloma tissue in rats. *Asian Pacific Journal of Tropical Biomedicine*. https://doi.org/10.4103/apjtb.apjtb_286_24
4. John Ekman, Philip Quartey, Abdala Mumuni Ussif, Niklas Ricklund, Daniel Lawer Egbenya, Gideon Akuamoah Wiafe, Korantema Mawuena Tsegah, **Akua Karikari**, Håkan Löfstedt, Francis Tanam Djankpa (2023). Dynamics of pre-shift and post-shift lung function parameters among wood workers in Ghana. *Annals of Occupational and Environmental Medicine*. https://doi.org/10.35371/aoem.2023.35.e39

5. Akosua Bonsu Karikari, **Akua Afriyie Karikari**, Nana Afia Karikari (2023). Exploring the Knowledge of Meningitis and Treatment Preference of Residents of Kete-Krachi in the Oti Region of Ghana. *OALib*. https://doi.org/10.4236/oalib.1110199
6. **Akosua Bonsu Karikari** (2023). When Contraception Mean No Pregnancy: Narrative Account of Contraception Use among Reproductive-Aged Women at the Tamale Teaching Hospital, Ghana. *J. Soc. & Soc. Welfare*. https://access.heinonline.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jrlsasw50&section=29
7. Akosua Bonsu Karikari, Nana Afia Karikari, **Akua Afriyie Karikari**, Amos Apraku (2023). When Contraceptive Means No Pregnancy: Narrative Account of Contraceptive Use among Reproductive Women at the Tamale Teaching Hospital, Ghana. *The Journal of Sociology & Social Welfare*. https://doi.org/10.15453/0191-5096.4617
8. Akosua Bonsu Karikari, **Akosua Bonsu Karikari**, Akua Afriyie Karikari, Nana Afia Karikari (2023). "Going Free Range" an Exploratory Inquiry into the Practice of Open Defecation in the Dungu Community of Tamale, Ghana. *Current Urban Studies*. https://doi.org/10.4236/cus.2023.112017
9. **Akua A Karikari** (2022). Neurodegeneration by α-synuclein-specific T cells in AAV-A53T-α-synuclein Parkinson's disease mice. *Brain, behavior, and immunity*. https://www.sciencedirect.com/science/article/pii/S0889159122000101
10. Elvis Ofori Ameyaw, Ernest Obese, Du-Bois Asante, Robert P. Biney, **Akua A. Karikari**, Emmanuel A. Adakudugu, Bright G. Dzotefe, Maddison Adanusa (2021). Effect of xylopic acid on alloxan-induced diabetic neuropathy in rats. *International Journal of Basic & Clinical Pharmacology*. https://doi.org/10.18203/2319-2003.ijbcp20211011
11. Robert Peter Biney, Francis Tanam Djankpa, Silas Acheampong Osei, Daniel Lawer Egbenya, Benjamin Aboagye, **Akua Afriyie Karikari**, Abdala Ussif, Gideon Akuamoah Wiafe, David Nuertey (2021). Effects of in utero exposure to monosodium glutamate on locomotion, anxiety, depression, memory and KCC2 expression in offspring. *International Journal of Developmental Neuroscience*. https://doi.org/10.1002/jdn.10158
12. **Akua A Karikari** (2017). AAV1/2-induced overexpression of A53T-α-synuclein in the substantia nigra results in degeneration of the nigrostriatal system with Lewy-like pathology and motor impairment: a …. *Acta Neuropathologica Communications*. https://doi.org/10.1186/s40478-017-0416-x
13. **AA Karikari** (2016). Lymphocytes have a detrimental effect on motor behavior in the AAV1/2 A53T α-synuclein mouse model of Parkinson's disease: 800. *Movement Disorders*. https://scholar.google.com/scholar?cluster=15824455385722782125&hl=en&oi=scholarr
14. Johnson Nyarko Boampong, **Akua Afryie Karikari**, Elvis Ofori Ameyaw (2015). In vivo antiplasmodial and in vitro antioxidant properties of stem bark extracts of Haematostaphis barteri. *Asian Pacific Journal of Tropical Biomedicine*. https://doi.org/10.1016/j.apjtb.2015.02.002
15. **Akua Karikari**, EO Ameyaw, JN Boampong (2014). Anti-uveitogenic effect of xylopic acid in Sprague Dawley rats. *Eur J Exp Biol*. https://ir.ucc.edu.gh/server/api/core/bitstreams/0d2392f1-43b7-4aae-bbb5-a7268c9fde01/content
16. Osei Owusu-Afriyie, Elvis Ofori Ameyaw, Johnson Nyarko Boampong, **Akua Afriyie Karikari** (2014). CODEN (USA): EJEBAU. *European Journal of Experimental Biology*. https://ir.ucc.edu.gh/server/api/core/bitstreams/99d84172-fd4c-47f3-ab9c-ab8d8216d777/content

Book chapters 2

1. **Akua A. Karikari**, Wasco Wruck, James Adjaye (2021). Transcriptome-based analysis of blood samples reveals elevation of DNA damage response, neutrophil degranulation, cancer and neurodegenerative pathways in Plasmodium falciparum patients. *Malaria Journal*. https://doi.org/10.1186/s12936-021-03918-5
2. **Akua A Karikari** (2019). Generation and analysis of viral vector-mediated rodent models for Parkinson's disease. *Alpha-Synuclein: Methods and Protocols*. https://doi.org/10.1007/978-1-4939-9124-2_21

Conference papers 1

1. **Akua Afriyie Karikari** (2019). CD4+ T-lymphocytes exacerbate neurodegeneration in a new A53T-alpha synuclein expressing mouse model for Parkinson's disease. *JOURNAL OF NEURAL TRANSMISSION*. https://scholar.google.com/scholar?cluster=2873857066127628 28&hl=en&oi=scholarr

Reports 1

1. **Akua Afriyie Karikari** (2013). DIFFERENTIATION-INDUCED CHANGES IN ANTIOXIDANT CAPACITY AND ANTIOXIDANT RESPONSE IN SH-SY5Y CELLS: ROLE OF NRF2. *University of Montana*. https://scholarworks.umt.edu/etd/321/

Theses 1

1. **Akua Afriyie Karikari** (2022). Alpha Synuclein Specific T Lymphocytes Promote Neurodegeneration in the A53T-α-synuclein Parkinson's Disease Mouse Model. *Universität Würzburg*. https://opus.bibliothek.uni-wuerzburg.de/frontdoor/index/index/docId/18308