Prof. Edmund Ekuadzi

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PROFILE

Edmund Ekuadzi is a Professor of Pharmacognosy at the Kwame Nkrumah University of Science and Technology (KNUST), Ghana, and Dean of the International Programmes Office. His research focuses on antimalarial and antimicrobial natural products from Ghanaian medicinal plants, and he has authored over 40 peer-reviewed publications. He teaches undergraduate and postgraduate courses in Pharmacognosy and Herbal Medicine, has held visiting research positions at the University of Dundee and Novartis Institutes for Biomedical Research, and is a Fellow of the Ghana Young Academy of Arts and Sciences

RESEARCH

Interests	Natural product chemistry · Ethnopharmacology · Anti-infective agents · Structure elucidation · Pharmacy
Areas	Plant Science · Molecular Biology · Pharmacology · Biochemistry · Complementary and alternative medicine · Food Science

RESEARCH SUMMARY

47	649	15	23	1.18	14%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 47 publications listed below, 2010–2026. Field-weighted impact is the mean over the 42 works scored for it; 1.00 is the world average for works of the same field, type and year. 6 of the 42 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Professor 2025–present
Pharmacognosy, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Associate Professor 2022–2025
Pharmacognosy, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Visiting Research Fellow 2019
Welcome Center for Antiinfective Research, Drug Discovery Unit, University of Dundee, Dundee, United Kingdom

Senior Lecturer 2018–2022
Department of Pharmacognosy, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Lecturer 2013–2018
Pharmacognosy, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Research Fellow 2012
Natural Products Unit, Novartis Institutes for BioMedical Research Basel, Basel, Switzerland

Graduate Assistant 2009–2013
Department of Pharmacognosy, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2009–2013
Pharmacognosy, Kwame Nkrumah University of Science and Technology Faculty of Pharmacy and Pharmaceutical Sciences, Kumasi, Ghana

Bachelor of Pharmacy 2004–2008
Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Dean 2025–present
International Programmes Office, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Assignment Holder 2018–present
Building Stronger Universities III (DANIDA Funded Project, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Member 2016–present
Society for Medicinal Plant and Natural Product Research, Darmstadt, Germany

Member 2015–present
Local Organizing Committee. GC-MS Training: A Hands On Approach, Pan African Chemistry Network, Kumasi, Ghana

Member 2014–present
University Teachers Association of Ghana, Kumasi, Ghana

Member 2010–present
Pharmaceutical Society of Ghana, Kumasi, Ghana

Visiting Research Scholar 2019
Welcome Center for Anti-Infective Research, University of Dundee, Dundee, United Kingdom

Head 2018–2025
Central Laboratory, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Chairperson 2017–2019
Ashanti Region, Pharmaceutical Society of Ghana, Kumasi, Ghana

Vice Chairman 2015–2017
Ashanti Region, Pharmaceutical Society of Ghana, Kumasi, Ghana

Assignment Holder 2014–2017
Building Stronger Universities II (DANIDA Funded Project), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

PUBLICATIONS

Journal articles 47

1. Reinhard Isaac Nketia, Desmond Nkrumah, Silas Adjei, Arnold Forkuo Donkor, Daniel Anokwah, Evelyn Asante-Kwatia, Isaac Kingsley Amponsah, **Edmund Ekuadzi**, Gustav Komlaga (2026). Antimalarial Potential of Phragmanthera capitata : An Insight Into the Activity of Its Extracts and Isolated Compounds. *Natural Product Communications*. https://doi.org/10.1177/1934578x261456116
2. MK Laryea, KMW Abotsi, RA Dickson, **E Ekuadzi** (2026). Antiplasmodial and anti-trypanosomial monoterpene indole alkaloids from Picralima nitida. *Natural Product Research*.
3. Makafui Adzo Gbemu, Susana Dufie Boatey, Prince Dagadu Okyere, Yaw Duah Boakye, John Nii Addotey,

Rita Akosua Dickson, **Edmund Ekuadzi** (2026). In vitro and in silico evaluation of Picralima nitida monoterpene indole alkaloids as antimicrobial resistance modifiers. *Oriental Pharmacy and Experimental Medicine*. https://doi.org/10.1007/s13596-026-00917-2

4. Prince Dagadu Okyere, Christian Chukwuma Ndu, Donatus Wewura Adongo, Charles Kwaku Benneh, Eric Woode, **Edmund Ekuadzi**, Wonder Kofi Mensah Abotsi, Eric Boakye-Gyasi, Priscilla Kolibea Mante (2025). Antidepressant-like effect of picralima nitida total crude alkaloidal fraction in mice. *Scientific African*. https://doi.org/10.1016/j.sciaf.2025.e02548
5. Silas Adjei, Isaac Kingsley Amponsah, **Edmund Ekuadzi**, Christopher Hamilton, Jelena Gavrilovic, Oliver Dillon, Amr El-Demerdash, Evelyn Asante-Kwatia (2025). Assessment of Wound Healing Properties of Medicinal Plants: The Case of Berlinia confusa. *Natural Product Communications*. https://doi.org/10.1177/1934578x241311978
6. Makafui Adzo Gbemu, Susana Dufie Boatey, Denick Amon, Prince Okyere Dagadu, Priscilla Kolibea Mante, Yaw Duah Boakye, **Edmund Ekuadzi** (2025). Isolation and characterization of antimicrobial compounds from Picralima nitida (Apocynaceae). *Phytochemistry Letters*. https://doi.org/10.1016/j.phytol.2025.103426
7. Denick Amon, Prince Manu, Evelyn Asante-Kwatia, Priscilla Kolibea Mante, Cynthia Amaning Danquah, Lawrence Sheringham Borquaye, **Edmund Ekuadzi** (2024). Antimicrobial resistance modifying effects and molecular docking studies of Affinine, derived from Tabernaemontana crassa. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02382
8. Michael Konney Laryea, Kofi Mensah Wonder Abotsi, Eric Woode, Rita Akosua Dickson, Lauren Webster, **Edmund Ekuadzi** (2024). Antiplasmodial and anti-trypanosomial monoterpene indole alkaloids from Picralima nitida. *Natural Product Research*. https://doi.org/10.1080/14786419.2024.2434710
9. Michael Konney Laryea, Gilbert Boadu Ampomah, **Edmund Ekuadzi**, Rita Akosua Dickson, Lawrence Sheringham Borquaye (2023). Antimalarial compounds from the climbing stems of salacia debilis. *Natural Product Research*. https://doi.org/10.1080/14786419.2023.2272288
10. Prince Karikari, James Oppong-Kyekyeku, **Edmund Ekuadzi**, Samuel Oppong Bekoe, Rita Opoku, Daniel Nimako Amprako, Emmanuel Addo-Yobo, Sandra Kwarteng Owusu, Bernard Arhin, Adegoke G. Falade, Ganiyu Arinola, Adeleye S. Bakarey, John I. Anetor, Kevin J. Mortimer (2023). Development and Validation of an RP-HPLC Method for the Quantitative Analysis of Triclosan in Human Urine. *Journal of Chemistry*. https://doi.org/10.1155/2023/6684834
11. Sumaiya Bandile Amidu, Vivian Etsiapa Boamah, **Edmund Ekuadzi**, Priscilla Kolibea Mante (2023). Gut-Brain-axis: effect of basil oil on the gut microbiota and its contribution to the anticonvulsant properties. *BMC Complementary Medicine and Therapies*. https://doi.org/10.1186/s12906-023-04211-5
12. Isaac Kingsley Amponsah, Gina Flor Ramos, Benjamin Kingsley Harley, Joseph Adusei Sarkodie, **Edmund Ekuadzi**, Elikplim Kwesi Ampofo, Inemesit Okon Ben (2022). Anti-inflammatory, Antioxidant and Cytotoxic Activities of Guibourtia ehie on Human Prostate (PC-3) and Breast Cancer (MC-7) Cell Lines and in silico Studies on Its Metabolite 7,4′-Dihydroxyflavone. *Chemistry Africa*. https://doi.org/10.1007/s42250-022-00359-8
13. Anthony Sarfo, Wonder Kofi Mensah Abotsi, **Edmund Ekuadzi**, Eric Woode (2022). Ceiba pentandra (L.) Gaertn hydroethanolic leaf extract exhibits anticonvulsant properties in mouse models. *Phytomedicine Plus*. https://doi.org/10.1016/j.phyplu.2022.100263
14. Richard Kwamla Amewu, Patrick Amoateng, Patrick Kobina Arthur, Prince Asare, Isaac Asiamah, Daniel Boamah, Isaac Darko Otchere, Cedric Dzidzor Amengor, **Edmund Ekuadzi**, Kelly Chibale, Susan Jane Farrell, Regina Appiah-Oppong, Dorcas Osei-Safo, Kevin David Read, Ian Hugh Gilbert, Dorothy Yeboah-Manu (2022). Drug discovery research in Ghana, challenges, current efforts, and the way forward. *PLoS neglected tropical diseases*. https://doi.org/10.1371/journal.pntd.0010645
15. James Oppong-Kyekyeku, Samuel Oppong Bekoe, **Edmund Ekuadzi**, John Nii Adotey Addotey, Samuel Asare-Nkansah (2022). HPLC-HRESI-MSn Characterization of Polyphenolic Compounds in the Stem Bark of Chlorophora regia A. Chev (Moraceae). *Journal Of Tropical Pharmacy And Chemistry*. https://doi.org/10.25026/jtpc.v6i2.419

16. Thomas Osafo, Trudy Janice Philips, Abigail Kusiwaa Adomako, Lawrence Sheringham Borquaye, **Edmund Ekuadzi**, Regina Appiah-Opong, Rita Akosua Dickson (2022). In vitro antileishmanial activity and molecular docking studies of lupeol and monostearin, isolated from Parkia biglobosa. *Scientific African*. https://doi.org/10.1016/j.sciaf.2022.e01464

17. Caleb Nketia Mensah, Gilbert Boadu Ampomah, Jehoshaphat Oppong Mensah, Edward Ntim Gasu, Caleb Impraim Aboagye, **Edmund Ekuadzi**, Nathaniel Owusu Boadi, Lawrence Sheringham Borquaye (2022). N-alkylimidazole derivatives as potential inhibitors of quorum sensing in Pseudomonas aeruginosa. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e12581

18. Temidayo D. Popoola, Peter A. Segun, **Edmund Ekuadzi**, Rita A. Dickson, Olanrewaju R. Awotona, Lutfun Nahar, Satyajit D. Sarker, Amos A. Fatokun (2022). West African medicinal plants and their constituent compounds as treatments for viral infections, including SARS-CoV-2/COVID-19. *DARU Journal of Pharmaceutical Sciences*. https://doi.org/10.1007/s40199-022-00437-9

19. Emmanuel Adom, **Edmund Ekuadzi**, Eric Boakye-Gyasi, Isaac Kingsley Amponsah (2021). Pharmacognostic evaluation of three Apocynaceae plants that share the same West African local names. *Phytomedicine Plus*. https://doi.org/10.1016/j.phyplu.2021.100157

20. Aaron Opoku Antwi, **Edmund Ekuadzi**, Eric Boakye-Gyasi, Ohui Nyadubea Agbettor, Christabelle Awurakua Opare, Rodney Atobrah, Rita Akosua Dickson (2021). Pseudocedrela kotschyi limits airway inflammation in ovalbumin-induced asthma in guinea pigs. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e01023

21. Getnet Yimer, **Edmund Ekuadzi**, Pius Fasinu, Andreia Cristina de Melo, Goonaseelan (Colin) Pillai (2021). Traditional medicines for COVID-19: Perspectives from clinical pharmacologists. *British Journal of Clinical Pharmacology*. https://doi.org/10.1111/bcp.14981

22. Bernard K. Turkson, Merlin L. K. Mensah, George H. Sam, Abraham Y. Mensah, Isaac K. Amponsah, **Edmund Ekuadzi**, Gustav Komlaga, Emmanuel Achaab (2020). Evaluation of the Microbial Load and Heavy Metal Content of Two Polyherbal Antimalarial Products on the Ghanaian Market. *Evidence-based Complementary and Alternative Medicine*. https://doi.org/10.1155/2020/1014273

23. Frederick W.A. Owusu, Mariam E. Boakye-Gyasi, Priscilla K. Mante, **Edmund Ekuadzi**, Kwabena Ofori-Kwakye, Eric Woode (2019). Formulation and evaluation of sustained release matrix tablets of capparis erythrocarpos roots extract to improve patient compliance in management of arthritis. *Scientific African*. https://doi.org/10.1016/j.sciaf.2019.e00172

24. M.A. Twumasi, A. Tandoh, P.K. Mante, **E. Ekuadzi**, M.E. Boakye-Gyasi, C.K. Benneh, D. Kumadoh, E. Woode (2019). Leaves and stems of Capparis erythrocarpos, more sustainable than roots, show antiarthritic effects. *Journal of Ethnopharmacology*. https://doi.org/10.1016/j.jep.2019.111890

25. Lawrence Sheringham Borquaye, **Edmund Ekuadzi**, Godfred Darko, Hubert Senanu Ahor, Sarah Twumwah Nsiah, Jemima Asi Lartey, Abdul-Hakim Mutala, Vivian Etsiapa Boamah, Eric Woode (2019). Occurrence of Antibiotics and Antibiotic-Resistant Bacteria in Landfill Sites in Kumasi, Ghana. *Journal of Chemistry*. https://doi.org/10.1155/2019/6934507

26. Twumasi Mary A, **Ekuadzi Edmund**, Mante Priscilla K, Boakye-Gyasi Mariam E, Mensah Merlin LK, Woode Eric (2019). Pharmacognostic Studies of the Leaves, Stem and Root of Capparis erythrocarpos Isert (Capparaceae). *Pharmacognosy Journal*. https://doi.org/10.5530/pj.2019.1.19

27. Victor Wumbor-Apin Kumbol, Wonder Kofi Mensah Abotsi, **Edmund Ekuadzi**, Eric Woode (2018). Albizia zygia root extract exhibits antipsychotic-like properties in murine models of schizophrenia. *Biomedicine & Pharmacotherapy*. https://doi.org/10.1016/j.biopha.2018.07.030

28. **Edmund Ekuadzi**, Robert P Biney, Charles K Benneh, Bismark Osei Amankwaa, Jonathan Jato (2018). Anti-inflammatory properties of betulinic acid and xylopic acid in the carrageenan-induced pleurisy model of lung inflammation in mice. *Proceedings for Annual Meeting of The Japanese Pharmacological Society*. https://doi.org/10.1254/jpssuppl.wcp2018.0_po3-10-8

29. Felix Agyei Ampadu, Eric Boakye-Gyasi, Newman Osafo, Charles Kwaku Benneh, **Edmund Ekuadzi**, Eric Woode (2018). Antipleuritic and Vascular Permeability Inhibition of the Ethyl Acetate-Petroleum Ether Stem Bark Extract ofMaerua angolensisDC (Capparaceae) in Murine. *International Journal of Inflammation*.

https://doi.org/10.1155/2018/6123094

30. Godfred Darko, **E Ekuadzi** (2018). Disposal of unused and expired medicines in Ghana. *West African Journal of Pharmacy*. https://scholar.google.com/scholar?cluster=4425978877945939788&hl=en&oi=scholarr

31. **Edmund Ekuadzi**, Robert P. Biney, Charles K. Benneh, Bismark Osei Amankwaa, Jonathan Jato (2017). Antiinflammatory properties of betulinic acid and xylopic acid in the carrageenan-induced pleurisy model of lung inflammation in mice. *Phytotherapy Research*. https://doi.org/10.1002/ptr.5993

32. **E. Ekuadzi**, R. A. Dickson, T. C. Fleischer, S. O. Dapaah, E. O. Reynolds, E. S. Akpabey, M. G. Fianu (2017). Antimicrobial and modulation effects of selected Ghanaian medicinal plants. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v36i3.1

33. Andrews W. Tetteh, Merlin L. Mensah, Kwame O. Boadu, Kwesi P. Thomford, Michael O. Agyemang, Kofi Annan, Rita Dickson, Abraham Y. Mensah, Isaac K. Amposah, **Edmund Ekuadzi**, Emmanuel D. J. Owusu-Ansah (2017). Clinical Evaluation of the Safety and Effectiveness of Adutwumwaa Malamix: A Polyherbal Product for the Treatment of Uncomplicated Malaria in Ghana. *Journal of Applied Pharmaceutical Science*. https://doi.org/10.7324/japs.2017.70706

34. Merlin LMensah, Kofi Annan, Abraham Y. Mensah, **Edmund Ekuadzi**, Merlin L. K. Mensah, Solomon Habtemariam (2015). A Novel Triterpene from the Roots of Paullinia pinnata: 6α-(3′-methoxy-4′-hydroxybenzoyl)-lup-20(29)-ene-3-one. *Natural Product Communications*. https://doi.org/10.1177/1934578x1501000405

35. EA Mireku, AY Mensah, MLK Mensah, **E Ekuadzi**, RA Dickson (2014). Antimicrobial and Antioxidant Activities of the Stem Bark of Cussonia bancoensis. *Journal of Medical and Biomedical Sciences*. https://doi.org/10.4314/jmbs.v3i2.2

36. K Annan, **E Ekuadzi**, C Asare, D Pistorius, L Oberer, BA Gyan, M Ofori (2014). Antiplasmodial clerodane diterpene alkaloids from the stem bark of Polyalthia longifolia. *Planta Medica*. https://doi.org/10.1055/s-0034-1382535

37. Kofi Annan, **Edmund Ekuadzi**, Cindy Asare, Kwame Sarpong, Dominik Pistorius, Lukas Oberer, Ben A. Gyan, Michael Ofori (2014). Antiplasmodial constituents from the stem bark of Polyalthia longifolia var pendula. *Phytochemistry Letters*. https://doi.org/10.1016/j.phytol.2014.10.028

38. M William, G Kuffour, **E Ekuadzi**, M Yeboah, M ElDuah, P Tuffour (2014). Assessment of psychological barriers to cervical cancer screening among women in Kumasi, Ghana using a mixed methods approach. *African Health Sciences*. https://doi.org/10.4314/ahs.v13i4.28

39. **E. Ekuadzi**, R.A. Dickson, T.C. Fleischer, I.K. Amponsah, D. Pistorius, L. Oberer (2014). Chemical constituents from Gouania longipetala and Glyphaea brevis. *Natural Product Research*. https://doi.org/10.1080/14786419.2014.921685

40. **E Ekuadzi**, R Dickson (2014). GHANAIAN MEDICINAL PLANTS-A SOURCE OF WOUND HEALING AGENTS: 397. *Basic & Clinical Pharmacology & Toxicology*. https://scholar.google.com/scholar?cluster=7791402180162411354&hl=en&oi=scholarr

41. GA Koffuor, R Dickson, SY Gbedema, **E Ekuadzi**, G Dapaah, LF Otoo (2014). The Immunostimulatory and Antimicrobial Property of two Herbal Decoctions used in the Management of Hiv/Aids in Ghana. *African Journal of Traditional Complementary and Alternative Medicines*. https://doi.org/10.4314/ajtcam.v11i3.24

42. **Edmund Ekuadzi**, Rita Dickson, Theophilus Fleischer, Kofi Annan, Dominik Pistorius, Lukas Oberer, Simon Gibbons (2013). Flavonoid glycosides from the stem bark ofMargaritaria discoideademonstrate antibacterial and free radical scavenging activities. *Phytotherapy Research*. https://doi.org/10.1002/ptr.5053

43. RA Dickson, TC Fleischer, **E Ekuadzi**, G Komlaga (2012). Anti-Inflammatory, Antioxidant, and Selective Antibacterial Effects of Euadenia eminens Root Bark. *African Journal of Traditional Complementary and Alternative Medicines*. https://doi.org/10.4314/ajtcam.v9i2.14

44. **E Ekuadzi**, RA Dickson (2012). Antibacterial, anti-inflammatory and antioxidant properties of Gouania longipetala Hemsl. *Int J Pharm Sci Res*. https://www.academia.edu/download/116673557/10-Vol.-3-

Issue-5-May-2012-IJPSR-1221-Paper-10.pdf

45. Samuel Kyei, **E Ekuadzi** (2012). Possible mechanism of anti-inflammatory activity and safety profile of aqueous and ethanolic leaf extracts of Pistia stratiotes Linn (Araceae). *Journal of the Ghana Science Association*. https://ir.ucc.edu.gh/server/api/core/bitstreams/82ce3394-9b8a-4528-8fbb-7d39e0b6f0d1/content

46. RA Dickson, K Annan, **E Ekuadzi**, G Komlaga (2011). Antibacterial, anti-inflammatory, and antioxidant effects of the leaves and stem bark of Glyphaea brevis (Spreng) Monachino (Tiliaceae): A comparative study. *Pharmacognosy Research*. https://doi.org/10.4103/0974-8490.85001

47. RA Dickson, TC Fleischer, **E Ekuadzi**, AY Mensah, K Annan, E Woode (2010). Antibacterial, Antioxidant and Anti-inflammatory Properties of Margaritaria discoidea, a Wound Healing Remedy from Ghana. *Pharmacognosy Journal*. https://doi.org/10.1016/s0975-3575(10)80007-0