Nicholas Ekow Thomford

Senior Lecturer · Medical Biochemistry
University of Cape Coast

ORCID 0000-0002-3152-5817 · https://pgmg-lab.com pgmg-lab.com · Google Scholar scholar.google.com/citations?user=Fb4M2FoAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/7ac2fbf3-8d6a-4b6d-99fa-a88d7d3279ca

PROFILE

My research interests are in precision and genomic medicine. I focus on pharmacogenomics of herb/drug-drug interactions and genomic basis for diseases in African populations and potential therapeutic targets towards personalized medicine. My lab (https://pgmg-lab.com) focuses on understanding genetic basis for therapeutic variations and susceptibility to communicable and non-communicable diseases in African populations. We research into malaria, HIV, hepatitis and cardiovascular diseases. Our goal is to develop genomic diagnostic panels that can help understand drug response, malaria host and parasite genomic signatures that influence drug and parasite resistance, predictive tools for hepatitis progression and cardiovascular diseases. We undertake community engagement which helps us to educate our rural folks mostly on disease understanding and prevention. Our lab has expertise in research, genotyping and molecular biology techniques such as TaqMan, sequencing, PCR-RFLP and clinical studies. The lab currently has ongoing grants from European and Developing Countries Clinical Trials Partnership, International Foundation of Science and National Research Foundation of South Africa.

RESEARCH

Interests	Human Genetics · Medical Genetics · Pharmacogenomics · Infectious diseases · genomics · herb-drug interaction · cardiogenetics · CHD · HIV · malaria genomics
Areas	Molecular Biology · Pharmacology · Epidemiology · Infectious Diseases · Oncology · Cancer Research

RESEARCH SUMMARY

64	3,953	26	32	4.78	35%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 64 publications listed below, 2015–2026. Field-weighted impact is the mean over the 60 works scored for it; 1.00 is the world average for works of the same field, type and year. 21 of the 60 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer 2021–present
Medical Biochemistry, University of Cape Coast, Cape Coast, Ghana

Research Associate 2020–present
Pathology, University of Cape Town, Cape Town, South Africa

Facilitator/Tutor 2015–present
Human Biology, University of Cape Town, Rondebosch, South Africa

Postdoctoral Research Fellow 2017–2019
Pathology, University of Cape Town, Cape Town, South Africa

Assistant Lecturer 2012–2017
Medical Biochemistry, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2014–2017
Human Genetics, University of Cape Town Department of Medicine, Cape Town, South Africa

MPhil 2008–2011
Medical Biochemistry, University of Ghana College of Health Sciences, Accra, Ghana

BSc 2002–2006
Biochemistry, University of Ghana, Legon, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

RATED RESEARCHER (Y2) 2020
PATHOLOGY, National Research Foundation, Pretoria, South Africa

HONORARY RESEARCH ASSOCIATE
PATHOLOGY, UNIVERSITY OF CAPE TOWN, CAPE TOWN, South Africa

PUBLICATIONS

Journal articles 63

1. Richmond Owusu Ateko, Andrew Decker, Eric N. Y. Nyarko, Elikem Kumahor, **Nicholas Ekow Thomford**, Afua B Adjei, Justice Kumi, Samuel Mawuli Adadey, Yacoba Atiase, Henry Asare-Anane (2026). Additional file 1 of Diagnostic utility of fasting versus non-fasting blood glucose: contextualising testing strategies-a narrative review. *Figshare*. https://doi.org/10.6084/m9.figshare.33400850.v1
2. Hawawu Hussein, Andrew Matchado, Olufunke Florence Ajeigbe, Phdelia Theresa Doegah, Twaambo Euphemia Hamoonga, Takana Mary Silubonde, Gudani Goodman Mukoma, **Nicholas Ekow Thomford**, Andrew Macnab (2026). Adolescents' interest in breastfeeding practices: using school-based education to promote future DOHaD-related parenting in Africa. *Journal of Developmental Origins of Health and Disease*. https://doi.org/10.1017/s2040174426100506
3. Oksana Ryabinina, Joel Adu Twum, John Anyimadu, Hilary Kenneth Addison, Paul Jerrod Amoako, Samuel Badu Nyarko, **Nicholas Ekow Thomford** (2026). Age-Related Variations in Clinical and Biochemical Profiles of People Living With HIV. *AIDS Research and Treatment*. https://doi.org/10.1155/arat/1670270
4. Oksana Ryabinina, Francis Ohene Addo, **Nicholas Ekow Thomford**, Francis Zumesew, Alexandra Adjakie Debrah, Paul Nsiah, Isabel Oduro-Boateng, Nasara Umaimah Abubakar Sadiq, Raji Sakibu Abdul, Reindoff Junior Ofori -Atta, Emmanuel Timmy Donkoh (2026). Antihypertensive medication adherence and associated risk factors among adults with hypertension: a cross-sectional study in a teaching hospital, Ghana. *BMC Cardiovascular Disorders*. https://doi.org/10.1186/s12872-025-05410-3
5. Richmond Owusu Ateko, Andrew Decker, Afua Bontu Adjei, Samuel Mawuli Adadey, Eric Nana Yaw Nyarko, **Nicholas Ekow Thomford** (2026). Burden and patterns of dyslipidaemia among adult Ghanaians: A systematic review. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0350185
6. Richmond Owusu Ateko, Andrew Decker, Eric N. Y. Nyarko, Elikem Kumahor, **Nicholas Ekow Thomford**, Afua B Adjei, Justice Kumi, Samuel Mawuli Adadey, Yacoba Atiase, Henry Asare-Anane (2026). Diagnostic utility of fasting versus non-fasting blood glucose: contextualising testing strategies-a narrative review. *Diabetology & Metabolic Syndrome*. https://doi.org/10.1186/s13098-026-02213-0
7. Evelyn Yayra Bonney, Emmanuel Frimpong Gyekye, Jonathan Klutse, Dzidzor Aku Attoh, Yeena Abla Tay, **Nicholas Ekow Thomford**, Mary Amoakoh-Coleman, Kwadwo Ansah Koram, George Boateng Kyei, Collins Stephen Ahorlu (2025). Barriers and facilitators of integrating cervical cancer screening into routine HIV care and acceptability of self-sampling for HPV DNA testing among people with HIV: an exploratory study in southern Ghana. *Frontiers in Public Health*. https://doi.org/10.3389/fpubh.2025.1679325
8. **Nicholas Ekow Thomford**, Oksana Ryabinina, Joel Adu Twum, John Anyimadu, Samuel Badu Nyarko, Akwasi Anyanful, Martins Ekor, George Boateng Kyei (2025). Cohort profile: the pharmacogenomics and

pharmacokinetics study in Ghanaian HIV patients (GenoPharm-GH). *BMC Genomic Data*. https://doi.org/10.1186/s12863-025-01369-4

9. **Nicholas Ekow Thomford**, Tracy Kellermann, Joel Adu Twum, John Anyimadu, Charné Dixon, Dennis Sappor, Dee Blackhurst, Prince Amoah Barnie, Oksana Ryabinina, Samuel Badu Nyarko, Robert Peter Biney, Martins Ekor, George B. Kyei (2025). Drug-drug interaction between dolutegravir and artemether-lumefantrine in HIV and malaria mono- and co-infections: a pharmacogenetic analysis from Ghana. *AIDS Research and Therapy*. https://doi.org/10.1186/s12981-025-00787-9
10. Richmond Owusu Ateko, Adrian David Marais, Dirk Jacobus Blom, Samuel Mawuli Adadey, **Nicholas Ekow Thomford**, Diane Mary Blackhurst (2025). Dysbetalipoproteinaemia in genetically predisposed Ghanaians. *Lipids in Health and Disease*. https://doi.org/10.1186/s12944-025-02787-0
11. Francis E. Agamah, Akwasi Anyanful, Oksana Ryabinina, Joel Twum, Mahadia Tunga, Michelle Skelton, Christian D. Bope, Emile R. Chimusa, **Nicholas E. Thomford** (2025). Enabling data-driven decision-making for innovative health care and delivery in Africa. *npj Health Systems*. https://doi.org/10.1038/s44401-025-00047-y
12. Helena Quayson, Joseph Humphrey Kofi Bonney, Daniel Sam, Gloria Francisca Nuer-Allornuvor, Roland Osei Saahene, **Nicholas Ekow Thomford**, Benjamin Amoani, Francis Abrokwah, Karen Pomeyie, Musah Kalaamullah Salisu, Prince Amoah Barnie (2025). Expression patterns of plasma microRNAs in patients with cervical cancer from two teaching hospitals in Ghana. *Journal of Cancer Research and Clinical Oncology*. https://doi.org/10.1007/s00432-025-06281-z
13. Karen Pomeyie, Joseph Humphrey Kofi Bonney, Benjamin Amoani, Roland Osei Saahene, **Nicholas Ekow Thomford**, Wishwell Pomeyie, Francis Abrokwah, Helena Quayson, Salisu Kalaamullah Musah, Selina Appiah, Deborah Pratt, Magdalene Sarah Ofori, Alexander Owusu-Ansah, Prince Amoah Barnie (2025). HIV-1 diagnostic, prognostic and ART-resistance detection potential of selected MiRNAs. *BMC Infectious Diseases*. https://doi.org/10.1186/s12879-025-11135-7
14. Samuel Badu Nyarko, Joel Adu Twum, Aikins Sarpong Obeng, Helena Dede Djangba, Oksana Ryabinina, Foster Kyei, George Boateng Kyei, **Nicholas Ekow Thomford** (2025). Viral kinetics among persons living with HIV (PLWH) on Dolutegravir-based antiretroviral Regimen: A retrospective and prospective analysis from selected HIV clinics in Ghana. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0324360
15. **Nicholas Ekow Thomford**, Susanna Aba Abraham, Samuel Badu Nyarko, Robert Peter Biney (2024). A consideration of CYP2D6 genetic variations in the Ghanaian population as a potential 'culprit' for the tramadol 'abuse crisis'. *BMC Medical Genomics*. https://doi.org/10.1186/s12920-023-01773-8
16. Faustina Adu, Ebenezer Aniakwaa-Bonsu, Samuel Badu Nyarko, Aikins Sarpong Obeng, Richmond Owusu Ateko, Akwasi Anyanful, **Nicholas Ekow Thomford** (2024). Host cytokine genetic polymorphisms in a selected population of persons living with hepatitis B virus infection in the central region of Ghana. *BMC Gastroenterology*. https://doi.org/10.1186/s12876-024-03456-9
17. **Nicholas Ekow Thomford**, Tracy Kellermann, Robert Peter Biney, Charné Dixon, Samuel Badu Nyarko, Richmond Owusu Ateko, Martins Ekor, George B. Kyei (2024). Therapeutic efficacy of generic artemether–lumefantrine in the treatment of uncomplicated malaria in Ghana: assessing anti-malarial efficacy amidst pharmacogenetic variations. *Malaria Journal*. https://doi.org/10.1186/s12936-024-04930-1
18. **Nicholas Ekow Thomford**, Faustina Adu, Cyril Gavor-Kwashi, Samuel Badu Nyarko, Paul Nsiah, Richard Dadzie Ephraim, George Adjei, Akwasi Anyanful (2023). An exploratory pharmacogenetic screening of SLC22A6, SLC22A8, ABCC4 and ABCC10 genes in a cohort of Ghanaian HBV patients. *Egyptian Journal of Medical Human Genetics*. https://doi.org/10.1186/s43042-023-00428-8
19. **Nicholas Ekow Thomford**, Akwasi Anyanful, Richmond Owusu Ateko, Dee Blackhurst, Robert Peter Biney, Dennis Boadi, Samuel Badu Nyarko, Martins Ekor, George Boateng Kyei (2023). Apolipoprotein E genetic variation, atherogenic index and cardiovascular disease risk assessment in an African population: An analysis of HIV and malaria patients in Ghana. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0284697
20. **Nicholas Ekow Thomford**, Fiifi Ndom Dampson, George Adjei, Sebastian Eliason, Martins Ekor, George Boateng Kyei (2023). Psychometric assessment of HIV stigma in patients attending a tertiary facility: An initial validation of the Berger HIV stigma scale in a Ghanaian perspective. *PLoS ONE*. https://doi.org/

10.1371/journal.pone.0282193

21. Katherine L. Beaverson, Daria Julkowska, Mary Catherine V. Letinturier, Annemieke Aartsma-Rus, Jennifer Austin, Juan Bueren, Simon Frost, Misako Hamamura, Jane Larkindale, Greg LaRosa, Rita Magenheim, Annamaria Merico, Anna Maria Gerdina Pasmooij, Vinciane Pirard, **Nicholas Ekow Thomford**, Michihiko Wada, Durhane Wong-Rieger, Adam L. Hartman (2023). The IRDiRC Chrysalis Task Force: making rare disease research attractive to companies. *Therapeutic Advances in Rare Disease*. https://doi.org/10.1177/26330040231188979

22. Charlotte Osafo, **Nicholas Ekow Thomford**, Jerry Coleman, Abraham Carboo, Chris Guure, Perditer Okyere, Dwomoa Adu, Richard Adanu, Rulan S. Parekh, David Burke (2022). APOL1 genotype associated risk for preeclampsia in African populations: Rationale and protocol design for studies in women of African ancestry in resource limited settings. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0278115

23. Olufunke Ajeigbe, Getachew Arage, Michael Besong, Winnie Chacha, Rachana Desai, Phidelia Doegah, Twaambo E Hamoonga, Hawawu Hussein, Andrew Matchado, Sthembile Mbotwe-Sibanda, … **Nicholas Ekow Thomford** and 10 others (2022). Culturally relevant COVID-19 vaccine acceptance strategies in sub-Saharan Africa. *The Lancet Global Health*. https://doi.org/10.1016/s2214-109x(22)00251-0

24. **Nicholas Ekow Thomford** (2022). Natural Compounds for COVID-19 Antiviral Drug Discovery. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2022.0121

25. Esther Sarpong, Desmond Omane Acheampong, George Nkansah Rost Fordjour, Akwasi Anyanful, Enoch Aninagyei, Derek A. Tuoyire, Dee Blackhurst, George Boateng Kyei, Martins Ekor, **Nicholas Ekow Thomford** (2022). Zero malaria: a mirage or reality for populations of sub-Saharan Africa in health transition. *Malaria Journal*. https://doi.org/10.1186/s12936-022-04340-1

26. Oppah Kuguyo, Racheal S. Dube Mandishora, **Nicholas Ekow Thomford**, Rudo Makunike-Mutasa, Charles F. B. Nhachi, Alice Matimba, Collet Dandara (2021). High-risk HPV genotypes in Zimbabwean women with cervical cancer: Comparative analyses between HIV-negative and HIV-positive women. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0257324

27. George Adjei, Yeetey A. Enuameh, **Nicholas E. Thomford** (2021). Prevalence of COVID-19 genomic variation in Africa: a living systematic review protocol. *JBI Evidence Synthesis*. https://doi.org/10.11124/jbies-20-00516

28. Gaston K. Mazandu, Victoria Nembaware, **Nicholas E. Thomford**, Christian Bope, Ousmane Ly, Emile R. Chimusa, Ambroise Wonkam (2020). A potential roadmap to overcome the current eastern DRC Ebola virus disease outbreak: From a computational perspective. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00282

29. Kevin Dzobo, Dimakatso Alice Senthebane, Chelene Ganz, **Nicholas Ekow Thomford**, Ambroise Wonkam, Collet Dandara (2020). Advances in Therapeutic Targeting of Cancer Stem Cells within the Tumor Microenvironment: An Updated Review. *Cells*. https://doi.org/10.3390/cells9081896

30. Kevin Dzobo, Chelene Ganz, **Nicholas Ekow Thomford**, Dimakatso Alice Senthebane (2020). Cancer Stem Cell Markers in Relation to Patient Survival Outcomes: Lessons for Integrative Diagnostics and Next-Generation Anticancer Drug Development. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2020.0185

31. **Nicholas Ekow Thomford**, Robert Peter Biney, Emmanuel Okai, Akwasi Anyanful, Paul Nsiah, Prosperity G. Frimpong, Dominic O. Boakye, Charles A. Adongo, Paul Kruszka, Ambroise Wonkam (2020). Clinical Spectrum of congenital heart defects (CHD) detected at the child health Clinic in a Tertiary Health Facility in Ghana: a retrospective analysis. *Journal of Congenital Cardiology*. https://doi.org/10.1186/s40949-020-00034-y

32. Radia Hassan, Imane Allali, Francis E Agamah, Samar S M Elsheikh, **Nicholas E Thomford**, Collet Dandara, Emile R Chimusa (2020). Drug response in association with pharmacogenomics and pharmacomicrobiomics: towards a better personalized medicine. *Briefings in Bioinformatics*. https://doi.org/10.1093/bib/bbaa292

33. Gaston K Mazandu, Christopher Hooper, Kenneth Opap, Funmilayo Makinde, Victoria Nembaware, **Nicholas E Thomford**, Emile R Chimusa, Ambroise Wonkam, Nicola J Mulder (2020). IHP-PING—generating integrated human protein–protein interaction networks on-the-fly. *Briefings in Bioinformatics*.

https://doi.org/10.1093/bib/bbaa277

34. **Nicholas Ekow Thomford**, Doreen Mhandire, Collet Dandara, George B. Kyei (2020). Promoting Undetectable Equals Untransmittable in Sub-Saharan Africa: Implication for Clinical Practice and ART Adherence. *International Journal of Environmental Research and Public Health*. https://doi.org/10.3390/ijerph17176163

35. Şenay Görücü Yılmaz, Hakan Bozkurt, Arinao Ndadza, **Nicholas Ekow Thomford**, Murat Karaoğlan, Mehmet Keskin, Necla Benlier, Collet Dandara (2019). Childhood Obesity Risk in Relationship to Perilipin 1 (PLIN1) Gene Regulation by Circulating microRNAs. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2019.0150

36. Francis E Agamah, Gaston K Mazandu, Radia Hassan, Christian D Bope, **Nicholas E Thomford**, Anita Ghansah, Emile R Chimusa (2019). Computational/in silico methods in drug target and lead prediction. *Briefings in Bioinformatics*. https://doi.org/10.1093/bib/bbz103

37. Collet Dandara, **Nicholas Ekow Thomford**, Tashinga E. Bapiro (2019). Herbal Remedies: Throwing Off Phenotype Prediction—A Culprit for Pharmacogenomic-Guided Drug Therapy and Drug Safety. *Clinical Pharmacology & Therapeutics*. https://doi.org/10.1002/cpt.1509

38. Denis Awany, Imane Allali, Shareefa Dalvie, Sian Hemmings, Kilaza S. Mwaikono, **Nicholas E. Thomford**, Andres Gomez, Nicola Mulder, Emile R. Chimusa (2019). Host and Microbiome Genome-Wide Association Studies: Current State and Challenges. *Frontiers in Genetics*. https://doi.org/10.3389/fgene.2018.00637

39. **Nicholas Ekow Thomford**, Christian Domilongo Bope, Francis Edem Agamah, Kevin Dzobo, Richmond Owusu Ateko, Emile Chimusa, Gaston Kuzamunu Mazandu, Simon Badibanga Ntumba, Collet Dandara, Ambroise Wonkam (2019). Implementing Artificial Intelligence and Digital Health in Resource-Limited Settings? Top 10 Lessons We Learned in Congenital Heart Defects and Cardiology. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2019.0142

40. Kevin Dzobo, Sampson Adotey, **Nicholas E. Thomford**, Witness Dzobo (2019). Integrating Artificial and Human Intelligence: A Partnership for Responsible Innovation in Biomedical Engineering and Medicine. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2019.0038

41. Kevin Dzobo, **Nicholas Ekow Thomford**, Dimakatso A. Senthebane (2019). Targeting the Versatile Wnt/β-Catenin Pathway in Cancer Biology and Therapeutics: From Concept to Actionable Strategy. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2019.0147

42. Arinao Ndadza, **Nicholas Ekow Thomford**, Stanley Mukanganyama, Ambroise Wonkam, Mpiko Ntsekhe, Collet Dandara (2019). The Genetics of Warfarin Dose–Response Variability in Africans: An Expert Perspective on Past, Present, and Future. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2019.0018

43. Kevin Dzobo, **Nicholas Ekow Thomford**, Dimakatso Alice Senthebane, Hendrina Shipanga, Arielle Rowe, Collet Dandara, Michael Pillay, Keolebogile Shirley Caroline M. Motaung (2018). Advances in Regenerative Medicine and Tissue Engineering: Innovation and Transformation of Medicine. *Stem Cells International*. https://doi.org/10.1155/2018/2495848

44. Kevin Dzobo, Naseeha Hassen, Dimakatso Alice Senthebane, **Nicholas Ekow Thomford**, Arielle Rowe, Hendrina Shipanga, Ambroise Wonkam, M. Iqbal Parker, Shaheen Mowla, Collet Dandara (2018). Chemoresistance to Cancer Treatment: Benzo-α-Pyrene as Friend or Foe? *Molecules*. https://doi.org/10.3390/molecules23040930

45. Oppah Kuguyo, Nomsa Tsikai, **Nicholas E. Thomford**, Thulani Magwali, Mugove G. Madziyire, Charles F.B. Nhachi, Alice Matimba, Collet Dandara (2018). Genetic Susceptibility for Cervical Cancer in African Populations: What Are the Host Genetic Drivers? *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2018.0075

46. **Nicholas Ekow Thomford**, Kevin Dzobo, Nana Akyaa Yao, Emile Chimusa, Jonathan Evans, Emmanuel Okai, Paul Kruszka, Maximilian Muenke, Gordon Awandare, Ambroise Wonkam, Collet Dandara (2018). Genomics and Epigenomics of Congenital Heart Defects: Expert Review and Lessons Learned in Africa. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2018.0033

47. **Nicholas Ekow Thomford** (2018). Molecular Sciences. *Int. J. Mol. Sci*. https://ir.ucc.edu.gh/server/api/core/bitstreams/04723479-347c-4d3a-972e-fdca2eda0f98/content

48. **Nicholas Ekow Thomford**, Dimakatso Alice Senthebane, Arielle Rowe, Daniella Munro, Palesa Seele, Alfred Maroyi, Kevin Dzobo (2018). Natural Products for Drug Discovery in the 21st Century: Innovations for Novel Drug Discovery. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms19061578

49. Kevin Dzobo, Dimakatso Alice Senthebane, **Nicholas Ekow Thomford**, Arielle Rowe, Collet Dandara, M. Iqbal Parker (2018). Not Everyone Fits the Mold: Intratumor and Intertumor Heterogeneity and Innovative Cancer Drug Design and Development. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2017.0174

50. **Nicholas Ekow Thomford**, Kevin Dzobo, Emile Chimusa, Kerstin Andrae-Marobela, Shadreck Chirikure, Ambroise Wonkam, Collet Dandara (2018). Personalized Herbal Medicine? A Roadmap for Convergence of Herbal and Precision Medicine Biomarker Innovations. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2018.0074

51. Dimakatso Senthebane, Tina Jonker, Arielle Rowe, **Nicholas Thomford**, Daniella Munro, Collet Dandara, Ambroise Wonkam, Dhirendra Govender, Bridget Calder, Nelson Soares, Jonathan Blackburn, M. Parker, Kevin Dzobo (2018). The Role of Tumor Microenvironment in Chemoresistance: 3D Extracellular Matrices as Accomplices. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms19102861

52. **Nicholas Ekow Thomford**, Kevin Dzobo, Faustina Adu, Shadreck Chirikure, Ambroise Wonkam, Collet Dandara (2017). Bush mint (Hyptis suaveolens) and spreading hogweed (Boerhavia diffusa) medicinal plant extracts differentially affect activities of CYP1A2, CYP2D6 and CYP3A4 enzymes. *Journal of Ethnopharmacology*. https://doi.org/10.1016/j.jep.2017.09.023

53. Dimakatso Alice Senthebane, Arielle Rowe, **Nicholas Ekow Thomford**, Hendrina Shipanga, Daniella Munro, Mohammad A. M. Al Mazeedi, Hashim A. M. Almazyadi, Karlien Kallmeyer, Collet Dandara, Michael S. Pepper, M. Iqbal Parker, Kevin Dzobo (2017). The Role of Tumor Microenvironment in Chemoresistance: To Survive, Keep Your Enemies Closer. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms18071586

54. **Nicholas E. Thomford**, Buyisile Mkhize, Kevin Dzobo, Keleabetswe Mpye, Arielle Rowe, M. Iqbal Parker, Ambroise Wonkam, Michelle Skelton, Alison V September, Collet Dandara (2016). African Lettuce (Launaea taraxacifolia) Displays Possible Anticancer Effects and Herb–Drug Interaction Potential by CYP1A2, CYP2C9, and CYP2C19 Inhibition. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2016.0117

55. Kevin Dzobo, Dimakatso Alice Senthebane, Arielle Rowe, **Nicholas Ekow Thomford**, Lamech M. Mwapagha, Nasir Al-Awwad, Collet Dandara, M. Iqbal Parker (2016). Cancer Stem Cell Hypothesis for Therapeutic Innovation in Clinical Oncology? Taking the Root Out, Not Chopping the Leaf. *OMICS A Journal of Integrative Biology*. https://doi.org/10.1089/omi.2016.0152

56. Kevin Dzobo, Taegyn Turnley, Andrew Wishart, Arielle Rowe, Karlien Kallmeyer, Fiona Van Vollenstee, **Nicholas Thomford**, Collet Dandara, Denis Chopera, Michael Pepper, M. Parker (2016). Fibroblast-Derived Extracellular Matrix Induces Chondrogenic Differentiation in Human Adipose-Derived Mesenchymal Stromal/Stem Cells in Vitro. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms17081259

57. **Nicholas Thomford**, Kevin Dzobo, Denis Chopera, Ambroise Wonkam, Alfred Maroyi, Dee Blackhurst, Collet Dandara (2016). In Vitro Reversible and Time-Dependent CYP450 Inhibition Profiles of Medicinal Herbal Plant Extracts Newbouldia laevis and Cassia abbreviata: Implications for Herb-Drug Interactions. *Molecules*. https://doi.org/10.3390/molecules21070891

58. **Nicholas Thomford**, Charles Awortwe, Kevin Dzobo, Faustina Adu, Denis Chopera, Ambroise Wonkam, Michelle Skelton, Dee Blackhurst, Collet Dandara (2016). Inhibition of CYP2B6 by Medicinal Plant Extracts: Implication for Use of Efavirenz and Nevirapine-Based Highly Active Anti-Retroviral Therapy (HAART) in Resource-Limited Settings. *Molecules*. https://doi.org/10.3390/molecules21020211

59. **Nicholas E Thomford** (2016). Molecular Sciences. *Int. J. Mol. Sci*. https://ir.ucc.edu.gh/server/api/core/bitstreams/f96b5546-c3c9-4d5d-a01d-d2bb1a025344/content

60. **Nicholas E Thomford** (2016). Supplementary Materials: Fibroblast-Derived Extracellular Matrix Induces Chondrogenic Differentiation in Human Adipose-Derived Mesenchymal Stromal/Stem Cells in Vitro. *Int. J. Mol. Sci*. https://www.researchgate.net/profile/Kevin-Dzobo/publication/324597319_ijms-17-01259-s001/data/5ad79249458515c60f58875a/ijms-17-01259-s001.pdf

61. Kevin Dzobo, Matjaz Vogelsang, **Nicholas E. Thomford**, Collet Dandara, Karlien Kallmeyer, Michael S. Pepper, M. Iqbal Parker (2016). Wharton's Jelly-Derived Mesenchymal Stromal Cells and Fibroblast-Derived Extracellular Matrix Synergistically Activate Apoptosis in a p21-Dependent Mechanism in WHCO1 and MDA MB 231 Cancer Cells In Vitro. *Stem Cells International*. https://doi.org/10.1155/2016/4842134

62. **Nicholas Thomford**, Kevin Dzobo, Denis Chopera, Ambroise Wonkam, Michelle Skelton, Dee Blackhurst, Shadreck Chirikure, Collet Dandara (2015). Pharmacogenomics Implications of Using Herbal Medicinal Plants on African Populations in Health Transition. *Pharmaceuticals*. https://doi.org/10.3390/ph8030637

63. **Nicholas E Thomford** (2015). www. mdpi. com/journal/pharmaceuticals. *Pharmaceuticals*. https://ir.ucc.edu.gh/server/api/core/bitstreams/b0db5b35-7757-412b-823c-63cbed602dbf/content

Book chapters 1

1. Kevin Dzobo, **Nicholas Ekow Thomford**, Arielle Rowe, Dimakatso Alice Senthebane, Collet Dandara (2019). Single-Cell Omics: Deciphering Tumor Clonal Architecture. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-12-814919-5.00005-1