Samuel Abokyi

Lecturer · Optometry
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RESEARCH

Interests: Natural Resources · Biodiversity · Ecology

Areas: Epidemiology · Ophthalmology · Public Health, Environmental and Occupational Health · Radiology, Nuclear Medicine and Imaging · Molecular Biology · Cognitive Neuroscience

RESEARCH SUMMARY

58	758	15	24	1.34	10%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 58 publications listed below, 2012–2026. Field-weighted impact is the mean over the 39 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 39 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

PhD Student 2016–present
School of Optometry, Hong Kong Polytechnic University, Kowloon, Hong Kong SAR

Lecturer 2012–present
Optometry, University of Cape Coast, Cape Coast, Ghana

Principal Research Assistant 2011–2012
Optometry, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

The Hong Kong Polytechnic University
SO, Kowloon, Hong Kong SAR

Ph.D. (Optometry) 2016–2021
School of Optometry, Hong Kong Polytechnic University, Hong Kong, China

Doctor of Optometry (OD) degree 2004–2010
Department of Optometry and Vision Science, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 54

1. **Samuel Abokyi** (2026). The Potential of Self-Controlled Focus for Myopia Prevention: A Pilot Study Using a Mobile Phone. *Translational vision science & technology*. https://jov.arvojournals.org/article.aspx?articleid=2811644
2. Bright Vandyke Okyere, Benedict Ayobi, Hope Katumba, **Samuel Abokyi** (2025). Eye Focusing Ability Can Predict Glycated Hemoglobin Level of Type-1 Diabetes Patients. *Health Science Reports*. https://doi.org/10.1002/hsr2.71174
3. Michael Ntodie, Dennis Quarshie, Prince Mordi, Kwame Osei Okyere, **Samuel Abokyi**, Augustine N. Nti (2025). Impact of uncorrected refractive errors on eye-related quality of life and functional vision in a

cohort of African children. *Ophthalmic and Physiological Optics*. https://doi.org/10.1111/opo.13529

4. **SN Abokyi** (2025). The re-emergence of a sniffing culture in Tamale-Northern Ghana. *UDS International Journal of Development*. https://www.ajol.info/index.php/udsijd/article/view/309014
5. **Samuel Abokyi** (2025). 视网膜疾病的年龄相关驱动机制及转录因子 EB 靶向治疗的神经保护作用. *中国神经再生研究(英文版)*. https://scholar.google.com/scholar?cluster=14458071927530106272&hl=en&oi=scholarr
6. **Samuel Abokyi** (2024). Age-related driving mechanisms of retinal diseases and neuroprotection by transcription factor EB-targeted therapy. *Neural regeneration research*. https://pmc.ncbi.nlm.nih.gov/articles/PMC11317960/
7. **Samuel Abokyi** (2024). Anthropological Study of Indigenous Weapon Production Among the Anufor of Northern Ghana. *European journal of development studies*. https://www.academia.edu/download/118040228/246.pdf
8. **Samuel Abokyi** (2024). Coenzyme Q10 eyedrops conjugated with vitamin E TPGS alleviate neurodegeneration and mitochondrial dysfunction in the diabetic mouse retina. *Frontiers in cellular neuroscience*. https://doi.org/10.3389/fncel.2024.1404987
9. **Samuel Abokyi**, Dominic Kwarteng, Michael Ntodie, Patience Ayerakwah, Samuel Bert Boadi-Kusi, Khathutshelo Percy Mashige, Alex Ilechie (2024). Early assessment of vision-related quality of life predicts long-term spectacle-wear compliance. *Discover Public Health*. https://doi.org/10.1186/s12982-024-00307-6
10. **Samuel Abokyi**, M Ntodie (2024). Influence of psychological stress on intraocular pressure fluctuation in normal and glaucomatous eyes in young adults. *Investigative Ophthalmology & Visual Science*. https://iovs.arvojournals.org/article.aspx?articleid=2799019
11. **Samuel Abokyi**, Prince Mordi, Michael Ntodie, Benedict Ayobi, Emmanuel Kwasi Abu (2024). Intraocular Pressure Response to Perceived Stress in Juvenile-Onset Open Angle Glaucoma. *Journal of Glaucoma*. https://doi.org/10.1097/ijg.0000000000002478
12. **Samuel Abokyi** (2024). The Effects of Matrix Metalloproteinases-2 Overexpression in Human Retinal Pigmented Epithelial Cells and Its Function in Photoreceptor Outer Segment Phagocytosis. *Investigative Ophthalmology & Visual Science*. https://iovs.arvojournals.org/article.aspx?articleid=2796888
13. Emmanuel Kwasi Abu, Carl Halladay Abraham, Albert Kofi Dadzie, Enyam Amewuho Morny, Michael Ntodie, Stephen Ocansey, **Samuel Abokyi**, Andrew Owusu-Ansah, Naa Adjeley Addo, Michael Williams, Asantewaa Aboagye-McCarthy, Godfred Sakyi-Badu, Paa Kwesi Fynn Hope, Peter Osei-Wusu Adueming (2023). Central contrast sensitivity perimetry discriminates between glaucomatous and non-glaucomatous eyes. *Therapeutic Advances in Ophthalmology*. https://doi.org/10.1177/25158414231208284
14. **Samuel Abokyi** (2023). In vitro methods in autophagy research: Applications in neurodegenerative diseases and mood disorders. *Frontiers in molecular neuroscience*. https://doi.org/10.3389/fnmol.2023.1168948
15. **Samuel Abokyi**, Nyamaah Mensah Sekyere, Stephen Ocansey (2023). Maximal incremental exercise improves macular photostress recovery time and lowers intraocular pressure in healthy athletes. *Journal of science and medicine in sport*. https://doi.org/10.1016/j.jsams.2023.09.017
16. **Samuel Abokyi** (2023). Modifiable and non-modifiable risk factors associated with primary open-angle glaucoma progression. *Investigative Ophthalmology & Visual Science*. https://iovs.arvojournals.org/article.aspx?articleid=2787017
17. **Samuel Abokyi**, George Ghartey-Kwansah, Dennis Yan-yin Tse (2023). TFEB is a central regulator of the aging process and age-related diseases. *Ageing Research Reviews*. https://doi.org/10.1016/j.arr.2023.101985
18. Emmanuel K Abu, Ebenezer O Antiri, Stephen Ocansey, Michael Ntodie, **Samuel Abokyi**, Carl Halladay Abraham (2022). Associations between personality traits and adherence to treatment in patients with primary open–angle glaucoma in an African population. *Clinical and Experimental Optometry*. https://doi.org/10.1080/08164622.2022.2075253

19. Michael Ntodie, Eugene B Enimah, Yaw O Akoto, Joseph N Yennu, **Samuel Abokyi**, Emmanuel K Abu (2021). Application and repeatability of ocular biometric measures for gaze position calibration in children. *Ophthalmic and Physiological Optics*. https://doi.org/10.1111/opo.12866

20. **Samuel Abokyi**, Sekyere Nyamaah Mensah, Heinz Otchere, Yaw Osei Akoto, Michael Ntodie (2021). Differential effect of maximal incremental treadmill exercise on tear secretion and tear film stability in athletes and non-athletes. *Experimental Eye Research*. https://doi.org/10.1016/j.exer.2021.108865

21. **Samuel Abokyi**, Sze-Wan Shan, Christie Hang-I Lam, Kirk Patrick Catral, Feng Pan, Henry Ho-Lung Chan, Chi-Ho To, Dennis Yan-Yin Tse (2021). Targeting Lysosomes to Reverse Hydroquinone-Induced Autophagy Defects and Oxidative Damage in Human Retinal Pigment Epithelial Cells. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms22169042

22. **Samuel Abokyi**, Sze wan Shan, Chi-ho To, Henry Ho-lung Chan, Dennis Yan-yin Tse (2020). Autophagy Upregulation by the TFEB Inducer Trehalose Protects against Oxidative Damage and Cell Death Associated with NRF2 Inhibition in Human RPE Cells. *Oxidative Medicine and Cellular Longevity*. https://doi.org/10.1155/2020/5296341

23. George Ghartey-Kwansah, Frank Adu-Nti, Benjamin Aboagye, Amandus Ankobil, Edward Eyipe Essuman, Yeboah Kwaku Opoku, **Samuel Abokyi**, Emmanuel Kwasi Abu, Johnson Nyarko Boampong (2020). Autophagy in the control and pathogenesis of parasitic infections. *Cell & Bioscience*. https://doi.org/10.1186/s13578-020-00464-6

24. **Samuel Abokyi**, Chi-Ho To, Tim T. Lam, Dennis Y. Tse (2020). Central Role of Oxidative Stress in Age-Related Macular Degeneration: Evidence from a Review of the Molecular Mechanisms and Animal Models. *Oxidative Medicine and Cellular Longevity*. https://doi.org/10.1155/2020/7901270

25. **Samuel Abokyi**, Patience Ansomah Ayerakwah, Sampson Listowell Abu, Emmanuel Kwasi Abu (2020). Controlled blood sugar improves the eye's accommodative ability in type-1 diabetes. *Eye*. https://doi.org/10.1038/s41433-020-1058-y

26. Alex Ilechie, Seth Wanye, Carl H Abraham, Josiah B Sarpong, Emmanuel Abu, **Samuel Abokyi**, Enyam Morny, Bismark Mensah, Maclean O Amoako, Simon Fosu-gyeabour (2020). Inter-regional trends in causes of childhood blindness and low vision in Ghana. *Clinical and Experimental Optometry*. https://doi.org/10.1111/cxo.13041

27. **Samuel Abokyi**, Chi Ho To, Sze Wan Shan, Henry Ho-lung Chan, Dennis Y. Tse (2019). Molecular mechanisms associated with the protective effect of the disaccharide trehalose against oxidative damage in the human retinal pigment epithelial cells. *Investigative Ophthalmology & Visual Science*.

28. Alex Azuka Ilechie, **Samuel Abokyi**, Samuel Boadi-Kusi, Eugene Enimah, Ezinne Ngozi (2019). Self-adjustable Spectacle Wearing Compliance and Associated Factors among Rural School Children in Ghana. *Optometry and Vision Science*. https://doi.org/10.1097/opx.0000000000001382

29. C Darko-Takyi, M Ntodie, **S Abokyi**, S Kyei (2018). Accommodative anomalies in symptomatic school children in Cape Coast Metropolis, Ghana. *Journal of the Nigerian Optometric Association*. https://www.ajol.info/index.php/jnoa/article/view/173691

30. **Samuel Abokyi**, Chi Ho To, Sze Wan Shan, Henry Ho-lung Chan, Dennis Y. Tse (2018). Cigarette smoke oxidant, hydroquinone, downregulates p62 and Nrf2 protein expressions in human RPE and induces cell death. *Investigative Ophthalmology & Visual Science*.

31. **Samuel Abokyi**, George Manuh, Heinz Otchere, Alex Ilechie (2017). Knowledge, usage and barriers associated with contact lens wear in Ghana. *Contact Lens and Anterior Eye*. https://doi.org/10.1016/j.clae.2017.05.006

32. Michael Ntodie, Sampson L. Abu, Samuel Kyei, **Samuel Abokyi**, Emmanuel K. Abu (2017). Near vision spectacle coverage and barriers to near vision correction among adults in the Cape Coast Metropolis of Ghana. *African Health Sciences*. https://doi.org/10.4314/ahs.v17i2.31

33. Linda Gyanfosu, George Koffuor, **Samuel Abokyi**, Akua Abruquah, Felix Eze (2016). Availability of antifungal eye drops in hospital and private retail pharmacies: a survey conducted in Kumasi, Ghana. *International Journal of Community Medicine and Public Health*. https://doi.org/10.18203/2394-6040.ijcmph20163908

34. **S Abokyi**, J Owusu-Mensah, K A Osei (2016). Caffeine intake is associated with pupil dilation and enhanced accommodation. *Eye*. https://doi.org/10.1038/eye.2016.288

35. **Samuel Abokyi**, Alex Ilechie, Gifty Boateng, GeorgeAsumeng Koffuor (2016). Effect of preserved and preservative-free timolol eye drops on tear film stability in healthy Africans. *Nigerian Medical Journal*. https://doi.org/10.4103/0300-1652.182071

36. Linda Gyanfosu, George Koffuor, **Samuel Abokyi**, Ben Danso (2016). Evaluating the diagnosis and management of oculomycosis in Ghana. *Journal of Applied Pharmaceutical Science*. https://doi.org/10.7324/japs.2016.601104

37. Linda Gyanfosu, George Koffuor, **Samuel Abokyi**, Ben Ababio-Danso (2016). Eye Care Practitioners' Perception of Oculomycosis in Ghana. *Journal of Advances in Medicine and Medical Research*. https://doi.org/10.9734/bjmmr/2016/25261

38. SAMUEL BERT BOADI-KUSI OD, Rekha Hansraj, Khathutshelo Percy Mashige, Alfred Osafo-Kwaako, Alex Azuka Ilechie, **Samuel Abokyi** (2016). Prevalence and Causes of Visual Impairment and Blindness among Cocoa Farmers in Ghana. *Ophthalmic Epidemiology*. https://doi.org/10.1080/09286586.2016.1254805

39. Emmanuel Kwasi Abu, **Samuel Abokyi**, Dorcas Obiri-Yeboah, Richard Kobina Dadzie Ephraim, Daniel Afedo, Lawrence Duah Agyeman, Samuel Bert Boadi-Kusi (2016). Retinal Microvasculopathy Is Common in HIV/AIDS Patients: A Cross-Sectional Study at the Cape Coast Teaching Hospital, Ghana. *Journal of Ophthalmology*. https://doi.org/10.1155/2016/8614095

40. **Samuel Abokyi**, Alex Ilechie, Kwansema Adadzewa Asaam, Michael Ntodie (2015). Fasting Plasma Sugar: A Predictor of Accommodative Function in Diabetes. *Current Eye Research*. https://doi.org/10.3109/02713683.2015.1056803

41. Samuel Kyei, George Asumeng Koffuor, Paul Ramkissoon, **Samuel Abokyi**, Osei Owusu-Afriyie, Eric Addo Wiredu (2015). Possible Mechanism of Action of the Antiallergic Effect of an Aqueous Extract of Heliotropium indicum L. in Ovalbumin-Induced Allergic Conjunctivitis. *Journal of Allergy*. https://doi.org/10.1155/2015/245370

42. Alex Azuka Ilechie, **Samuel Abokyi**, Andrew Owusu-Ansah, Samuel Bert Boadi-Kusi, Andrew Kofi Denkyira, Carl Halladay Abraham (2015). Self-refraction Accuracy with Adjustable Spectacles among Children in Ghana. *Optometry and Vision Science*. https://doi.org/10.1097/opx.0000000000000561

43. **Samuel Abokyi**, Alex Ilechie, Peter Nsiah, Charles Darko-Takyi, Emmanuel Kwasi Abu, Yaw Jnr Osei-Akoto, Mathurin Youfegan-Baanam (2015). Visual impairment attributable to uncorrected refractive error and other causes in the Ghanaian youth: The University of Cape Coast Survey. *Journal of Optometry*. https://doi.org/10.1016/j.optom.2015.04.002

44. George Asumeng Koffuor, Alex Boye, Jones Ofori-Amoah, Samuel Kyei, **Samuel Abokyi**, Raymond Appiah Nyarko, Ruth Naalukyem Bangfu (2014). Anti-inflammatory and safety assessment of Polyscias fruticosa (L.) Harms (Araliaceae) leaf extract in ovalbumin-induced asthma. *The Journal of Phytopharmacology*. https://doi.org/10.31254/phyto.2014.3506

45. George Koffuor, Jones OforiAmoah, Samuel Kyei, Stephen Antwi, **Samuel Abokyi** (2014). Anti-tussive, muco-suppressant and expectorant properties, and the safety profile of a hydro-ethanolic extract of Scoparia dulcis. *International Journal of Basic & Clinical Pharmacology*. https://doi.org/10.5455/2319-2003.ijbcp20140606

46. GeorgeAsumeng Koffuor, Samuel Kyei, EmmanuelA Asiamah, ClementNsobire Atobiga, Agnes Awuah, **Samuel Abokyi** (2014). Antiallergic effect of an aqueous leaf extract of Pistia stratiotes in murine model of ovalbumin-induced allergic conjunctivitis. *Pharmacognosy Research*. https://doi.org/10.4103/0974-8490.138243

47. Emmanuel K Abu, Abena A Yeboah, Stephen Ocansey, Samuel Kyei, **Samuel Abokyi** (2014). Epidemiology of ocular disorders and visual impairment among school pupils in the Cape Coast Metropolis, Ghana. *British Journal of Visual Impairment*. https://doi.org/10.1177/0264619614561690

48. **S Abokyi**, AK Thomford (2014). Evaluating the effect of an aqueous extract of Pistia stratiotes Linn (Araceae) on tear secretion and tear film stability in ICR mice. *Journal of Applied Pharmaceutical Science*.

https://doi.org/10.7324/japs.2014.40801

49. OCANSEY STEPHEN, **S Abokyi** (2014). Patients' Information Leaflets: Its' Influence on Ophthalmic Patient Education and Medication Compliance. *Journal of Advances in Medicine and Medical Research*. https://doi.org/10.9734/bjmmr/2014/6383

50. Michael Ntodie, Lisa Danquah, Himal Kandel, **Samuel Abokyi** (2014). Toward eliminating blindness due to uncorrected refractive errors: assessment of refractive services in the northern and central regions of Ghana. *Clinical and Experimental Optometry*. https://doi.org/10.1111/cxo.12195

51. GodwinO Ovenseri-Ogbomo, **Samuel Abokyi**, GA Koffuor, Eric Abokyi (2013). Knowledge of diabetes and its associated ocular manifestations by diabetic patients: A study at Korle-Bu Teaching Hospital, Ghana. *Nigerian Medical Journal*. https://doi.org/10.4103/0300-1652.119602

52. **S Abokyi**, Abu (2012). Dry Eyes: An Adverse Effect of Systemic Antihistamine Use in Allergic Conjunctivitis Management. *Research Journal of Pharmacology*. https://www.academia.edu/download/71018072/Dry_Eye_An_Adverse_Effect_of_Systemic_An20211002-25952-wuj8j6.pdf

53. **S Abokyi**, M Ntodie, S Kyei (2012). Epidemiological profile and pharmacological management of allergic conjunctivitis: A study in Ghana. *Int J Pharm Biomed Res*. https://www.academia.edu/download/71018094/Epidemiological_profile_and_pharmacologi20211002-20467-1127m37.pdf

54. **S Abokyi**, M Ntodie, S Kyei (2012). International Journal of PHARMACEUTICAL AND BIOMEDICAL. *Int J Pharm*. https://ir.ucc.edu.gh/server/api/core/bitstreams/f7fea13b-cfd9-4381-842d-a6354009b26c/content

Conference papers 2

1. **Samuel Abokyi** (2024). Trehalose mitigates autophagy dysfunction and oxidative damage preceding retinal degeneration in the aging retina of mice via TFEB. *The International Conference of Vision and Eye Research (iCover2024)*. https://research.polyu.edu.hk/en/publications/trehalose-mitigates-autophagy-dysfunction-and-oxidative-damage-pr/

2. **Samuel Abokyi** (2023). Relationship between Body Mass Index, Physical Activity, and Dry Eye Signs and Symptoms in Tertiary Students: Implications for Prevention and Management. *The African Council of Optometry (AFCO) 2023 AGM*. https://research.polyu.edu.hk/en/publications/relationship-between-body-mass-index-physical-activity-and-dry-ey/

Reports 2

1. **Samuel Abokyi** (2021). Antioxidative role of autophagy in the protection against in vitro and in vivo oxidative stress-induced models of age-related retinal degeneration. *Hong Kong Polytechnic University*. https://theses.lib.polyu.edu.hk/handle/200/11765

2. **SN Abokyi** (2018). The interface of modern partisan politics and community conflicts in Africa: the case of Northern Ghana conflicts. *African Studies Centre Leiden*. https://www.ascleiden.nl/sites/default/files/working_paper_143_def.pdf