Profile of Prof. K. Nsiah

**University Degrees**

**BSc Biochemistry**: Second Class (Upper) 1980- Dept of Biochemistry, UST, Kumasi

**MPhil Biochemistry**: 1986-Department of Biochemistry, UST, Kumasi

**PhD Biochemistry**: 2013, KNUST, Kumasi

**Membership of professional Associations**

* University Teachers Association of Ghana
* Ghana Science Association

**Employment record**

**1980-1981** National Service: Teaching/Research Assistant, Department of Biochemistry,

 UST, Kumasi.

**1981-1985**: Demonstrator, Department of Biochemistry, UST**.**

**May 1985-January 31, 1986:** Assistant Lecturer

1986-September 30, 1997: **Lecturer**

October, 1997 to 31st July 2013: **Senior Lecturer**

1st August 2013 to date: **Associate Professor**

**From August 1st 2014 to 31st July 2015: Dean, School of Graduate Studies, Acting Dean, Faculty of Health and Applied Sciences, Christian Service University College (on Sabbatical leave)**

*Courses taught*

Biochemistry Practicals: Demonstrator for biochemistry practicals for first year students of the School of Medical Sciences and Faculty of Pharmacy (**1981-1985**)

Medical Biochemistry: Fourth year Biochemistry (**1986 to 2014**)

Enzymes: Fourth year Biochemistry (**1988 to date**)

Biological Chemistry First year: Department of Biological Sciences, Institute of Renewable Natural Resources, Department of Optometry Visual Science, Medical Laboratory Technology, Nursing. (**1986 to 2003**)

Biochemistry First year Midwifery Sandwich Programme (**2011**)

Biochemistry First year Department of Biomedical Engineering (**2012 to 2019**)

Metabolism of Drugs and Health Risk Toxicants Fourth year Biochemistry (**2012 to 2014**)

Medical Biotechnology for postgraduate Biochemistry and Biotechnology (2014)

Fermentation and Enzyme Technology; MSc Biotechnology, IDL (2018)

**Supervision of students’research projects**

**BSc**

Based on an average of three students per year, for 35 years, I have supervised over one hundred students in undergraduate research projects.

**MPhil**

I have supervised fourteen MPhil and MSc students.

**Service to the Community**

**1982-1988:** Executive member, UST branch of Ghana Science Association

**1991-1998:** Treasurer,KNUST branch of Ghana Science Association

**1990-1998**: Member of Editorial Board of Ghana Journal of Biochemistry and

Biotechnology

1998: Member of UST Committee on National Science and Technology Policy, set up by UST Branch of GSA.

**1985-1990**: Coordinator and chemistry tutor for sixth form supplementary classes organized by GSA

for secondary schools in Kumasi

**1994:** Resource person (instructor in chemistry) for a workshop organized by Ejisu District of GES

for Junior Secondary School teachers at Onwe

**1999** Resource person in Chemistry for a one-day workshop on “The effective teaching of Science and Mathematics in the Senior Secondary School”, organised by the Kwabre District of GES, at Aduman Secondary School

**1998-2000**: Member of National Executive of the Ghana Biochemical Society

**1989-1991:** National Secretary of the Ghana Science Association

**1995-2005:** Secretary of the KNUST branch of UTAG, I was a member of the National Executive

**2000 to date**: Referee for the Journal of Ghana Science Association

**2010 to 2014:** Speaker in a series of workshops organized by Prumed Medical Consult, on health issues, for teachers in the various sub-Metros of Kumasi. The Metro office of GES was a facilitator of this programme.

**2011to 2016:** External Examiner for the Department of Biochemistry, University of Cape Coast.

**2015 to 2017**: External Examiner for Department of Medical Biochemistry of the Medical School of University of Cape Coast

2020: Was among the resource persons invited by the Ministry of Health to help revise two documents; the National Health Policy and Workplace HIV and TB Policy for the Health Sector, for the year 2020.

**2014:** Appointment as Reviewer of papers for the 7th Annual International Applied Research Conference organized by Koforidua Polytechnic in July 2014.

**Service to the University**

**2017:** Have overseen the carrying out of comprehensive medical tests for over 200 members of staff of the eight Departments of the College of Science, KNUST, from 15th May to 31st May 2017. This exercise was undertaken by the Clinical Analyses Laboratory of the Department of Biochemistry and Biotechnology.

2017: As Coordinator, I have supervised the running of a programme for updating the skills of Technicians from various Departments of KNUST. Seventeen of these technicians were awarded a Diploma by KNUST on 22nd June 2017

**2017:** Member/Secretary of a 3-man Committee appointed by the College of Science for the creation of space for science laboratories.

**2016:** Chairman of College of Science Committee for Admission of undergraduate students.

**2014: Ch**arged by the President of Christian Service University College (CSUC) to present a draft proposal for the establishment of a programme in Physician Assistantship in CSUC. The proposal was submitted to the National Accreditation Board for review and has been accepted. A follow-up meeting was held in 2016, at the instance of the NAB.

**2013** Member of Committee set up by the Academic Board of KNUST to consider the application for affiliation to KNUST by Medicare College of Applied Sciences

**2012:** Chairman, Committee appointed by the Board of College of Health Sciences to consider the draft proposal of the establishment of School of Public Health.

**2012 to 2014**: Member of Committee responsible for the setting up laboratories for the College of Science and the School of Medical Sciences

**2012:** Chairman, Committee appointed by the Board of College of Health Sciences to consider the draft proposal of the syllabus for a six-year Pharm D programme.

**2012:** Assessor for Resit Examination, first and 2nd year Biochemistry courses, Human Biology, School of Medical Sciences, KNUST.

**2010:** Chairman, Committee set up by the Board of the College of Health Sciences to review the proposal for the BSc degree programme in Midwifery for the School of Medical Sciences, KNUST

**2011**: Chairman of Committee set up by the College of Science to draft a Certificate/Diploma Training programme for Technicians.

**2009 to date:** Chairman of Management Committee of Technocrat magazine**.**

**2009:** Faculty of Biosciences representative on the Board of Faculty of Forest Resources Technology, Sunyani.

**2008**: Coopted member of Committee set up by the Resource and Planning Department, to review the syllabus for the Department of Medical Laboratory Technology.

**2008-2009**: College of Science representative on Academic Board.

**2008 to date**: Editor, College of Science Newsletter, CoSNEWS**.**

**2008;** Member of the Committee for the review of syllabus for the Faculty of Biosciences

**2003 to date:** Member of Technocrat Management Committee

**2003 to date:** I have been the Chairman of the Management Committee of the Clinical Analyses Laboratory for medical diagnostic services; for teaching, research and income generation. The setting up of this laboratory was my initiative, and I have been in charge of the running of the place, since April 2003. The setting up of the place has enabled students have practical exposure in clinical biochemistry. Both undergraduate and postgraduate (to PhD level), have had some of their work carried out there.

 As at 2010, the gross income the laboratory has made was 76,384.50 cedis, and the net income around 23,970 cedis. For January 2014 to August 2014, the net income paid into the Production Unit account was 17,100 cedis. For 2015 and 2016, the net incomes were over sixty thousand cedis (ȼ 60,000) and forty thousand Ghana cedis (ȼ40,000), respectively.

**1990 to date**: Patron of Ghana Biochemical Students Association, KNUST branch**.**

**Areas of specialism**

Clinical Biochemistry, Clinical Enzymology

**Research Interest**

* Study of characteristics of stroke patients.
* The anti-asthmatic and toxicological profile of *Parquetina nigrescens*
* Finding the causes of anaemia and its management options
* Study on some clinical and biochemical features of diabetics.
* Studies on clinical, biochemical, haematological and other features of sickle cell subjects
* Metabolic syndrome and dietary pattern of diabetics.
* Setting up and operation of a clinical biochemistry laboratory for teaching, research and income generation

**Papers in refereed Journals**

1. E Akowuah and **K Nsiah** (2019) The Pattern of Malaria Infection in and Around the Kwame Nkrumah University of Science and Technology (KNUST) Campus
	1. Acta Scientific Medical Sciences 3 (Issue 3): 132-137
2. **K. Nsiah**, B. Bahaah, B. Oppong Afranie, S. Koffie, E. Akowuah and S. Donkor (2019) Oxidative Stress and Hemoglobin Level of Complicated and Uncomplicated Malaria Cases Among Children; A Cross Sectional-Study in Kumasi Metropolis, Ghana. Journal of Tropical Medicine Volume 2019, Article ID 8479076, 6 pages

# D. Afrifa, K. Nsiah, A. C. Afriyie , M. Moses (2019 Incidence of Cardiovascular Disease Risk Factors Among Football Players in Ashanti Region of Ghana. International Journal of Sport Studies for Health: [2 (2)](https://intjssh.com/en/issue/3101.html); e98153

1. Afrifa D., **Nsiah, K.** Appiah C.A. Moses, O.M. (2020) Dietary Intake and Body Composition Characteristics of National Football League Players International Journal of Sport Studies for Health: [3 (1)](https://sites.kowsarpub.com/intjssh/issue/3102.html); e104103
2. Ahenkorah B, **Nsiah K**, Baffoe P, Ofosu W, Gyasi C, Owiredu E-W (2020) Parasitic infections among pregnant women at first antenatal care visit in northern Ghana: A study of prevalence and associated factors. PLoS One 15(7): e0236514. https://doi.org/10.1371/journal.pone.0236514

# Nsiah, K. Bahaa, B., Oppong Afrane B. Acheampong E. (2020). Evaluation of red blood cell count as an ancillary index to hemoglobin level in defining the severe falciparum malarial anemia among Ghanaian children in low-resource communities. Heliyon 6 (3) 04605

1. **Nsiah**, K., V. P. Dzogbefia, A. Osei Akoto,D. Ansong. (2012) The prevalence of seropositivity to hepatitis B surface antigen and the corresponding hemato-biochemical features in sickle cell patients in Ghana. *Journal of Haematological Malignancies*. 2(1): 13-18
2. **Nsiah K.** (2012)Comparison of clinical and urinary features of sickle cell disease patients having elevated leucocyte levels, with their counterparts with normal counts. *Biochemistry- An Indian Journal*. 6 (1)
3. Dickson, R.A., Annan, K., Fleischer, T.C., Amponsah, I.K., **Nsiah, K.**, Oteng, J.A.(2012) Phytochemical investigations and nutritive potential of eight selected plants from Ghana.*Journal of Pharmacy and Nutrition Sciences.* 2: 172-177
4. **Nsiah, K**., V.P. Dzogbefia. (2011) As the clinico-pathological features take center stage in sickle cell disease, be mindful of the enzymatic undertones*.* [A review article]. *Biochemistry- An Indian Journal*. 5 (3):180-194
5. **Nsiah**, **K.,** V. P. Dzogbefia, D. Ansong, H. Boateng, D. Ocloo, Osei Akoto A. (2011) The pattern of AST and ALT changes in relation to haemolysis in sickle cell disease. *Clinical Medicine Insights; Blood Disorders* 4: 1-9
6. **Nsiah**, **K.,** V. P. Dzogbefia, D. Ansong, H. Boateng, D. Ocloo, E. Osei-Frempong, N. Kena Frempong, A. Osei Akoto. (2010) The incidence of malaria and the comparison of hematological and biochemical indices of Plasmodium falciparum-parasitemic and aparasitemic sickle cell disease (SCD) patients. *International Journal of Laboratory Hematology* 32 (pt 1) e197-e207
7. **Nsiah, K.,** Terlabi, E.O., Woode, E., Obiri, D.D., Ansah, C., Duwiejua, (2006) M. Toxicological assessment of Parquetina nigrescens extracts in rats. *Journal of Science and Technology*,26(2):24-31
8. Arthur, F.K.N., Yeboah, F.A., **Nsiah, K**., Nkrumah, P.K.N., Afreh, K.A., Agyenim-Boateng, K. (2006) Fasting blood glucose and glycosylated haemoglobin levels in randomly selected Ghanaian diabetic patients- the clinical implications. *Journal of Science and Technology.* 26 (1):8-13
9. **Nsiah, K**., Bedzra E.K.M. (2005) Studies on the use of some traditional skin preparations-ointments and creams. *Journal of the Ghana Science Association* 7(1): 19-25
10. **Nsiah, K**., Timah A. (2005) Identification of colour additives in some food products on the Ghanaian market. *Journal of the Ghana Science Association* 7(1): 14-18
11. **Nsiah, K**., Opare-Sem, O. Ankrah T.C., Ayishetu S.A. (2005) Characteristics of some patients with cerebrovascular accidents (CVA) at the Komfo Anokye Teaching Hospital, Kumasi, Ghana. *Journal of the Ghana Science Association* 7(2): 5-10
12. **Nsiah, K**., Opoku K.K. (2005) Phytochemical analysis and safety assessment of a herbal anti-haemorrhoid. *Journal of the Ghana Science Association* 7(2): 63-67
13. **Nsiah, K**., Appiah, K.K. Mensah, F.O. Mensah-Kordie J.P. (1998) Measurement of some blood proteins of children as an index of nutritional status. *Journal of the Ghana Science Association.*1(1): 84-88
14. **Nsiah, K**., Dzogbefia, V.P. Osei Akoto, A. Ansong, D. Ocloo D. (2013) Biochemical and hematological features of some acute and chronic presentations of sickle cell patients: Some conventional and non-conventional markers. *Journal of Investigational Biochemistry*. 2 (1):14-20
15. Firempong, C.K. **Nsiah**, **K.** Awunyo-Vitor, D. Dongsogo J.(2013) Soluble fluoride levels in drinking water-a major risk factor of dental fluorosis among children in Bongo community of Ghana. *Ghana Medical Journal*
16. P. Twumasi, **K. Nsiah** and E. Y. Osei (2014) Treatment of lead-poisoned rats through oral administration of palm oil extracts. African Journal of Biochemistry Research 8(2): 43-51

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1. H. Albiti, **K. Nsiah** (2014) Comparative haematological parameters of HbAA and HbAS genotype children infected with Plasmodium falciparum malaria in Yemen. Hematology 19(3):169-174
2. **K. Nsiah** (2013) Enzyme Course: Contents, Coverage and Students’ Feedback on Course and Teacher. Asian Journal of Education and e-Learning 01(04):198-205
3. C.K. Firempong, **K. Nsiah,** [D Awunyo-Vitor](http://www.ncbi.nlm.nih.gov/pubmed/?term=Awunyo-Vitor%20D%5Bauth%5D), and [J Dongsogo](http://www.ncbi.nlm.nih.gov/pubmed/?term=Dongsogo%20J%5Bauth%5D) (2013) Soluble Fluoride Levels in Drinking Water-A Major Risk Factor of Dental Fluorosis among Children in Bongo community of Ghana. Ghana Medical Journal 47(1):16-20**1Department of Biochemistry and Biotechnology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana**
4. S. N. Darko**, K. Nsiah,** P. Twumasi **(2013) Prevalence of papC and usp Virulence Factors in Uropathogenic Escherichia coli Causing Asymptomatic Urinary Tract Infections in Adolescents**  British Journal of Microbiology Research:3(3):423-430**2Department of Agricultural Economics, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana**
5. P. Barnes, **K. Nsiah**, F. Mensah (2014)The contribution of different risk factors in the occurrence of stroke.American Journal of Health Research 2(6): 387-391
6. P Twumasi, P Darko, **K Nsiah** (2013) Comparative Study on Diagnosis of Urinary Tract Infection among Adolescents in the Kumasi Metropolis Using Dipstick, Culture and PCR Methods. J Gh Sci Asso. 15 (1):63-70
7. **K. Nsiah**, V. P. Dzogbefia, D Ansong, A Osei-Akoto (2014) The Diagnostic Implications of Spot Urinalysis of Subjects from a Ghanaian Sickle Cell Clinic. Journal of Internal Medicine Research2(2):15-20
8. **K Nsiah**, A. Osei-Akoto D Ansong (2014) The Drug Regimen Prescribed for Sickle Cell

 Patients Attending a Clinic in Kumasi, Ghana,in a Period of One Year. Open Journal of

 Blood Disorders 04:1-8

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| 1. N.A.A. Amartey, **K. Nsiah**, F.O.Mensah (2015) Plasma Levels of Uric Acid, Urea and Creatinine in Diabetics Who Visit the Clinical Analysis Laboratory (CAn-Lab) at Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. J Clin and Diag Res.9 (2) BC05-BC09
2. **K. Nsiah**, V. Owusua Shang, K. Agyenim Boateng, F.O. Mensah (2015) Prevalence of metabolic syndrome in type diabetes mellitus patients. Int J Applied Basic Med Res. 5 (2):131-136
3. Ahenkora B., **Nsiah, K**., Baffoe P. (2016). Sociodemographic and Obstetric Characteristics of Anaemic Pregnant Women Attending Antenatal Clinic in Bolgatanga Regional Hospital. Scientifica Volume 2016, Article ID 4687342, 8 pages
4. C.K. Firempong, **K. Nsiah**, F. A. Yeboah(2016). **Some clinical and haematological effects of G6PD deficiency among individuals with sickle cell disorders in Kumasi, Ghana.** J. Med. Res., 2016;2(3):81-85
5. Sunyazi, S.S., **Nsiah, K.**, Mensah, F.O. (2015). Prediabetes and some associated risk factors in children and young adults in rural and urban communities in Kassena Nankana District, Ghana. J Clin Biomedic Sciences 5(3): 107-113
6. Ambrose Atosona, A., LarbieC., Marina A. Tandoh M.A. and **Nsiah, K (2016) Prevalence, Risk Factors and Predictors of Diabetes-related Sexual Dysfunction.** British Journal of Medicine and Medical Research,17 (11):1-10
7. **K. Nsiah** (2016). Factors that determine the performance of BSc undergraduate nursing students in Biological Chemistry in Christian Service University College. The Journal of Applied Sciences, Arts and Theology 1:17-27
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