

Dr. Kingsley Badu

Kumasi Center for Collaborative Research for Tropical Medicine
Theoretical and Applied Biology (TAB),
Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana
kingsbadu@gmail.com / kbadu@knust.edu.gh / Mobile (+233) 265012563

Research interests: Transmission of Vector borne Infectious Diseases of Poverty, Developing biomarkers for infectious disease surveillance. Molecular Epidemiology of Zoonotic Infections and co-infections

Education

2014: PhD:	<i>Biol. Sciences (Immuno-biology)</i>	TAB - KNUST Ghana
2007: M.Phil.	<i>Clinical Microbiology</i>	SMS/KNUST/Ghana
2001: B.Sc.	<i>Biological Sciences</i>	TAB/KNUST/Ghana
2017: Certificate:	<i>Infectious Dis. modelling & applications</i>	LSHTM, London, UK
2016: Certificate:	<i>Biology of Parasitism</i>	MBL Woods Hole, USA

Positions and Employment

2020- date	<i>Senior Lecturer</i>	TAB, KNUST
2018 - date	<i>PI and Group leader</i>	Vector-borne Infectious Disease
2016 - 2020	<i>Lecturer</i>	TAB, KNUST
2016 - 2017	<i>Visiting Scientist</i>	CBIB, Uni., Bremen, Germany
2012 - 2016:	<i>Postdoc Fellow</i>	Noguchi Mem. Inst. University of Ghana
2008 - 2012:	<i>Visiting Scientist</i>	Kenya Medical Research Institute, Kenya

Honors/Professional membership

Honorary Chairman:	Affiliate Coordinating Council, African Academy of Science
Fellow:	African-German Network of Excellence in Science
Fellow:	African Research Excellence Fund (AREF)
Fellow:	AREF EXCEL Leadership Programme
Professional Member	American Society of Tropical Medicine
Professional Member	Entomological Society of Ghana
Professional Member	Immunological Society of Ghana
Professional Member	Ghana Science Association

Current Research Support -Research development, Project management

2019 - 2023: USD\$1,340,000.00 *Malaria Management through an On - Demand Diagnostic approach using Novel Ionic Probes: Role: Co-Principal Investigator* NIH R01Ai143809-6007100. **Role: Co Principal Investigator**

2018 - 2021: EUR €144,500.00 *PSOP24-377: An infectious bite marker for sensitive malaria detection. Role: Principal Investigator* EDCTP TMA2016CDF-1605

2018-2020: EUR €742,165.00 African German Research co-operation in infectiology (DFG), Grant Number DFG KE 428/13-1) **Role: Co Investigator**

2016-2017 EUR €10,000.00 *TWAS-DFG Cooperation Visits Programme for scientists from sub-Saharan Africa Ref.:3240285656 Fellowship DNA barcoding and vector incrimination of sandfly species implicated in leishmaniasis outbreak in Ghana.*

2015 - 2017: £23,000.00 Africa Research Excellence Fund MRF-157-0007-F-BADU Fellowship Developing Biomarker(s) of Infectious Anopheles Bite with a Potential for Blocking Malaria Transmission. Role: Principal Investigator Selected Publications

Relevant publications (selected)

1. **Badu K**, Thorn JP, Goonoo N, Dukhi N, Fagbamigbe AF, Kulohoma BW, Oyebola K. et al. *Africa's response to the COVID-19 pandemic: A review of the nature of the virus, impacts and implications for preparedness*. AAS Open Research. **2020 May** 18;3(19):19.
2. Mugabe, John Ouma, Kulohoma, B. K., Matoke-Muhia, D. et al. (2020). **Securing Africa's Health Sovereignty : Why Investing in Science and Innovation Matters. Working Paper. African Academy of Sciences** , Nairobi, Kenya.
3. Agordzo SK, **Badu K**, Addo MG, Owusu CK, et al. *Seroprevalence, risk factors and impact of Toxoplasma gondii infection on haematological parameters in the Ashanti region of Ghana: a cross-sectional study*. AAS Open Research. **2019 Nov** 26;2(166):166.
4. Mutala AH, **Badu K**, Owusu C, Agordzo SK, Tweneboah A, Ackom AD, Addo MG. *Impact of malaria on haematological parameters of urban, peri-urban and rural patients in the Ashanti region of Ghana: a cross-sectional study*. AAS Open Research. **2019 Jul** 29;2(27):27.
5. Agyemang AN, **Badu K**, Baffour-Awuah S, Owusu-Dabo E, et al. *Evaluation of onchocerciasis control in the Upper Denkyira East municipal in the forest area of Ghana: Responses of participants and distributors to the CDTI programme*. Acta tropica. **2018 Sep** 1;185:357-62.
6. Omondi, E.O., Nyabadza, F., Bonyah, E. and **Badu, K.**, 2017. **Modelling the infection dynamics of onchocerciasis and its treatment**. *Journal of Biological Systems*, 25(02), pp.247-277.
7. Bonyah, E., **Badu, K.** and Asiedu-Addo, S.K., **2016**. **Optimal control application to an Ebola model**. *Asian Pacific journal of tropical biomedicine*, 6(4), pp.283-289.
8. Garms R, **Badu K**, Owusu-Dabo E, Baffour-Awuah S, Adjei O, Debrah AY, et al. **Assessments of the transmission of Onchocerca volvulus by Simulium sanctipauli in the Upper Denkyira District, Ghana, and the intermittent disappearance of the vector**. *Parasitology Research*. **2015**; DOI: 10.1007/s00436-014-4287-9
9. **Badu K**, Gyan B, Appawu M, Mensah D, Dodoo D, Yan G, Drakeley C, et al. **Serological evidence of vector and parasite exposure in Southern Ghana: the dynamics of malaria transmission intensity**. *Parasite and Vectors* April **2015**. 8:251: DOI 10.1186/s13071-015-0861-y
10. **Badu K**, Afrane YA, Larbi J, Stewart VN, Waitumbi J, Angov E, Ong'echa JM, Perkins DJ, Zhou G, Githeko A, Yan G: Marked variation in MSP-119 antibody responses to malaria in western Kenyan Highlands. *BMC Infect Dis* **2012**, 12:50
11. Baum E, **Badu K**, Molina DM, Liang X, Felgner PL, and Yan G. Protein Microarray Analysis of Antibody Responses to *Plasmodium falciparum* in Western Kenyan Highland Sites with Differing Transmission Levels. *PLoS ONE* **2013**. 8(12): e82246. doi:10.1371