Ofosuhene Okofrobour Apenteng Assistant Professor of Mathematical Epidemiology

Section for Animal Welfare and Disease Control Department of Veterinary and Animal Sciences Faculty of Health and Medical Sciences University of Copenhagen

Postal address:

Grønnegårdsvej 8, 1870 Frederiksberg C

Email: ofap@sund.ku.dk Phone: +4535325466 Web: https://bit.ly/3HTXXss

### Research Interests

I am a mathematical epidemiologist who is interested in using and developing parameter estimation and identifiability techniques to model disease dynamics. My main areas of expertise are advanced mathematical epidemiology, and mathematical and statistical modelling. Estimating the causal impacts of economic interventions, focusing on simulations to study the spread of infectious disease transmission, including examining the impact of tourists, migrants, and injectable drug users on HIV/AIDS, COVID-19 vaccination hesitancy model, and population dynamics. I am eager to develop new modelling approaches, and theories, and to answer highly focused applied research questions that can aid in prevention control. I have developed a surveillance program based on metagenomics to detect antimicrobial resistance in Danish livestock production. I have collaborated with national and international authorities, researchers, experts, and stakeholders. I'm now working on HORIZON Europe-funded project "Enhanced and cost-effective biosecurity in livestock production" (BIOSECURE) and Ecology of Wildlife, Livestock, huMan and Infectious Diseases in changing environments (WiLiMan-ID), and Salmonella Dublin in cattle, Denmark. I have worked on several EU projects, including Promoting One Health in Europe through joint actions on foodborne zoonoses, antimicrobial resistance, and emerging microbiological hazards.

## Education

2013-2027	PhD in Mathematical Epidemiology, University of Malaysia, Malaysia.
2011-2013	MPhil in Computer and Mathematical Sciences, Auckland University of Technology, New Zealand.
2007-2009	MSc in Technomathematics, Lappeenranta University of Technology, Finland.
2001-2005	BSc in Mathematics, University of Cape Coast, Ghana.

#### Career History

Carcer i listor	y
Since 02/2023	Assistant Professor of Mathematical Epidemiology, University of Copenhagen, Denmark.
Since 2021	Adjunctive Professor and Visiting Lecturer: The Nelson Mandela African Institution of Science and Technology The School of Computational and Communication Science and Engineering (CoCSE). Arusha, Tanzania.
Nov.2022-Jan. 2023	Postdoc: Department of Clinical and Immunology, Zealand University Hospital, Næstved.
2018-2012	Postdoc: Research Group for Genomic Epidemiology, National Food Institute, Technical University of Denmark, Denmark.
Since 2019	Co-Lecturer: Fighting infectious diseases. Course Type: MSc, Research Group for Genomic Epidemiology, National Food Institute, Technical University of Denmark, Denmark.
2013-2017	Research Assistant: Investigating the network demographic modelling of infectious diseases, Department of Applied Statistics University of Malaya, Malaysia.
2011-2013	Teaching Assistant: Mathematical Sciences, Department Auckland University of Technology, New Zealand.
Oct.2011 – Mar.2012	Research Assistant: Mobile services and applications adoption modelling and coding Department of Information Technology and Software Engineering School of Engineering, Auckland University of Technology, New Zealand.

## Supervision

2022 Co-Supervisor: Stochastic-Based Model of Prostate Cancer Metastasis (Master's Thesis). On going

#### **Awards**

2023	Med-Vet-Net Association funding 2023
2013-2017	Research Assistantship Grant, University of Malaya, Malaysia.
Oct 2014	Best Paper Award: International Conference in Modeling Health Advances, San Francisco, USA, 22-24.

2011–2013 Research Assistantship Scholarship, Auckland University of Technology, New Zealand.

Dec 2011 - Mar
2012 DCT Faculty Summer Studentship, Auckland University of Technology, New Zealand.

# **Publication**

- 25 Publications (Total)
- 17 Peer reviewed publications
- 11 Publications as First Author
- 7 Conference Proceeding
- 7 Oral/Poster presentation at scientific conferences

## Academic Editors/Journal Reviewer

Since 2022	Editorial Board of PLOS ONE
Since 2021	Soft Computing
Since 2020	International Journal of Biomathematics
Since 2017	Preventive Veterinary Medicine
Since 2016	American Journal of Epidemiology
Since 2016	Applied Mathematical Modelling
Since 2016	Global Health Action
Since 2015	PLOS One
Since 2013	Applied Mathematics and Computation