

Admissions Office,  
The University of Bergen,  
December 10, 2021

**MOTIVATION LETTER FOR MASTER'S DEGREE STUDIES IN MATHEMATICS**  
**AT UNIVERSITY OF BERGEN - HILLARY ANUMU MENSAH**

I am applying for the MSc. Mathematics program at the University of Bergen (UiB) because I want to explore the relationship between statistics, data analysis, and mathematics. My interest in the subject has been fuelled by my two years of study at the Kwame Nkrumah University of Science and Technology, and a three-year diploma at Cape Coast Technical University, during which I learned basic principles of mathematics and statistics. I hope that the master's program in Mathematics at UiB will help me deepen my understanding of mathematical theories and methods, and I look forward to studying in an international friendly environment in your renowned institute.

Effective data analysis is key to achieving most of the Sustainable Development Goals (SDGs) and my master's will help me gain the skills required to analyse and solve problems in a variety of fields. I want to improve the economy of my country, Ghana, and facilitate the achievement of the SDGs particularly goal three.

In 2016, I worked on a research project at Korle Bu Teaching Hospital, Accra Ghana, to identify the risk factors of birth asphyxia. The project involved an unmatched case-control study design of about 2400 data collected at the neonatal intensive care unit (NICU) of the Korle Bu Teaching Hospital between the years 2010 to 2014. Results showed that Intrapartum factors and neonatal factors in the index of pregnancy have an association with birth asphyxia.

In my role as a Biostatistician at Korle Bu Teaching Hospital, I designed and conducted research related to the health and safety of the public. As part of my research, I surveyed more than 1500 patients across various departments of Korle Bu Teaching Hospital to determine the average waiting time for various patient visits. The results of the survey showed average waiting times of about two hours. To determine why these average waiting

times were so high, I designed an experiment to find out which factors contributed to the long waiting times. The results of the survey indicated that medical personnel caused more than 70% of the long waiting times. This proves my capability in research and makes me the ideal candidate for the programme.

I have been following your university for a long time as a result of my deep interest in the field of Mathematics and Statistics, and I believe as a candidate from Africa, I will not only be contributing to the diversity of the program and the university's international reputation in rankings, but also my perspective as a candidate from Africa will prove valuable to the learning experiences of my colleagues. I am eager to study under the direction of your distinguished faculty, and I appreciate your careful inspection of my application.

Warm Regards,

Hillary Anumu Mensah