Samuel Boampong Nkrumah

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Education & Work Experience

Franko Trading Enterprises - Ghana, Financial Auditor University of Missouri - Columbia Biochemistry PhD Program

Fisk University, B.Sc. Biology

Opoku Ware School, WASSCE Cert. in General Science

October 2019 — January 2020 August 2018 — January 2019 August 2014 — May 2018

August 2010 - May 2013

Software, Skills & Coursework

Github

Python, R, Machine Learning

Coursera Bioinformatics III (Comparing Genes, Proteins and Genomes)

Awards

UCLA-HBCU Bruins in Genomics Summer Research Fellowship

MIT Biology Gould Summer Research Fellowship

Erastus Milo Cravath Presidential Scholarship, Fisk University

June – August 2018

June – August 2017

August 2014 – May 2018

Research Experience

Participant June 2021

ASBCB Omics Codeathon

• Explored a machine learning model for classifying breast cancer subtypes using omics data.

Summer Research Intern

June – August 2018

UCLA Bruins in Genomics Summer Research Program

Mentor: Dr. Stan Nelson

Developed an efficient computational method for fingerprinting DNA and RNA patient samples.

Summer Research Intern

June – August 2017

MIT Biology Summer Research Program

Mentor: Dr. Tom Schwartz

• Tested the utility of a nanobody suite for crystallizing a substructure of the Nuclear Pore Complex.

Undergraduate Researcher

June 2015 – August 2017

Meharry Medical College

Mentor: Dr. Jamaine Davis

- Used computational programs to compare and analyze BRCT domain protein sequences.
- Developed Java based string algorithms for processing and analyzing DNA and protein sequences.
- Studied BRCT domain interactions and their implications for DNA repair.

Undergraduate Researcher

August 2014 – April 2015

Fisk University

Mentor: Dr. Brian Nelms

• Studied the role of the FKH-8 transcription factor in *C.elegans* neurodegeneration.

Other Projects

Brest Cancer Pred August 2021

 Developed K-Nearest Neighbor and Elastic Net models for predicting Beast Cancer using TCGA DNA Methylation Data

Academic Work

Protein Folding from the Perspective of Chaperone Action (2019) arXiv. November 2019

Presentations

"Verifying Identity of DNA and RNA specimen through SNP analysis"

Department of Human Genetics, UCLA: Summer Program Showcase August 2018

"Characterization of Nucleoporin Nanobodies"

ABRCMS Conference October 2017

Department of Biology, MIT: Summer Program Showcase

August 2017

Teaching

Peer Tutor, Chemistry and Math, Fisk University.

August 2014 – August 2017

Teaching Assistant, Intermediate Algebra, Fisk University.

August 2015

Leadership & Service

Volunteer, MLK Day of Service, Fisk University. 2017

Student Fellow, <u>Clinton Global Initiative University</u>. 2016

Campus Representative, Clinton Global Initiative University, Fisk University. 2016

Student Leader, First-Love Bible Studies Group, Fisk University 2014 – 2016