## ACADEMIC

## **CURRICULUM VITAE**

#### 1. Name- Surname: Abdullahi Ibrahim Umar

#### 2. Title: Asstistant Professor

#### **3. Educational Background:**

Degree	Department/Program	University	Year
Bachelor's	Biochemistry	Nigerian Institute of Leather and Science	2013
		Tehcnology	
Master's	Bioengineering	Cyprus International University	2016
PhD	Biomedical Engineering	Near East University	2021

#### 4. Master's / PhD Thesis

#### 4.1. Master's Thesis Title and Thesis Advisor(s):

• Preparation and Preservation of Tiger Nut using Chemical and Natural Method Professor Hatice Erkurt

#### 4.2.PhD Thesis /Medical Specialty Thesis Title and Advisor(s):

• Application of Artificial Intelligence in Microbiology and CRISPR. Ph.D. Thesis: Professor Mehmet Ozsoz and Associate Professor Sertan Serte

#### 5. Academic Titles:

Date of Assistant Professorship: 23 DECEMBER, 2022

Date of Associate Proferssorship:

Date of Professorship:

#### 6. Supervised Master's and PhD Theses:

6.1. Master's Theses: 2

6.2. PhD Theses: 2

#### 7. Publications

## 7.1. Articles Published in International Peer-Reviewed Journals (SCI,SSCI, AHCI, ESCI, Scopus)

- Crispr biosensing and Ai driven tools for detection and prediction of Covid-19. Journal of Experimental & Theoretical Artificial Intelligence, 1-17.
- Pneumonia Classification Using Deep Learning from Chest X-ray Images During COVID-19. Cognitive Computation https://doi.org/10.1007/s12559-020-09787-5
- Automated detection of Mycobacterium tuberculosis using transfer learning. The Journal of Infection in Developing Countries, 15(05), 678-686.
- Futuristic CRISPR-based biosensing in the cloud and internet of things era: an overview. Multimedia Tools and Applications 2020.
- Convolutional neural network for diagnosis of viral pneumonia and COVID-19 alike diseases. Expert Systems, e12705.
- CRISPR/Cas9 Gene Editing in Mammalian Cells Using LentiCRISPRv2/LentiGuide-Puro Vectors. In CRISPR-Cas Methods (pp. 281-299). Humana, New York, NY.
- Detection of Tropical Diseases Caused by Mosquitoes Using CRISPR-Based Biosensors. Tropical Medicine and Infectious Disease, 7(10), 309.
- Computer aided detection of tuberculosis using two classifiers. Biomedical Engineering/Biomedizinische Technik.
- Current Technologies for Detection of COVID-19: Biosensors, Artificial Intelligence and Internet of Medical Things (IoMT). Sensors, 23(1), 426.
- Large-scaled detection of COVID-19 from X-ray using transfer learning. International Journal of Imaging Systems and Technology.
- Computer-aided Detection of Tuberculosis from Microbiological and Radiographic Images. Data Intelligence, 1-26.
- Deep Learning and Transfer Learning Models for Detection of COVID-19. Artificial Intelligence of Health-Enabled Spaces, 63-101.
- Recent Development of Electrochemical and Optical Aptasensors for Detection of Antibiotics in Food Monitoring Applications
- Smart Graphene-Based Electrochemical Nanobiosensor for Clinical Diagnosis.
- CRISPR-based biosensor for the detection of Marburg and Ebola virus. Sensing and Bio-Sensing Research, 100601.

## 7.2. Articles Published in Other International Peer-Reviewed Journals

- Application of Crispr Technology for the Generation of Biofuels: A Review Journal of Fundamentals of Renewable Energy and Applications. 2019
- Comparative study of crispr-cas9 and CRISPR interference- (CRISPRi). Journal of Biomedical and Pharmaceutical Sciences 2019
- Analysis Tocopherol Using Chromatographic and Electrochemical Techniques Vitamin & Mineral Journal 2019.
- CRISPR Technology: Advantages, Limitations and Future Direction

# 7.3. Papers Presented at International Scientific Conferences and Published in Conference Proceedings

- Deep Learning Methods for Prediction of HLA-Peptide Interactions in IDB. In 2022 International Conference on Artificial Intelligence in Everything (AIE) (pp. 68-74). IEEE.
- An improved CNN-LSTM deep model for Classification of guideRNA in CRISPR-Casl2 System. In 2022 International Conference on Artificial Intelligence in Everything (AIE) (pp. 58-62). IEEE.

## 7.4. National/international Books or Book Chapters

- How Artificial Intelligence and IoT Aid in Fighting COVID-1 AI-Powered IoT for COVID-19
- CRISPR/Cas9 gene editing using LentiCRISPRv2 / lentiGuide-puro as vectors. CRISPR-Cas Methods Volume 2. Springer.

## 7.5. Articles Published in National Peer-Reviewed Journals

## 8. Art and Design Activities

## 9. Projects

## **10. Administrative Responsibilities**

Vice chairperson, Biomedical Engineering Department

## **11.** Memberships in Scientific and Professional Organizations

#### 12. Awards

- Best Young scientists 2022: Near East University
- Best Researcher Award: International Academic Awards

Academic	Semester	Course Name	Weekly Hours		Number of
Year			Theoretical	Practical	Students
2021 - 2022	Guz	BME 310 BIOMEDICAL ELECTRONICS	2	1	53
		BME497 CLINICAL ENGINEERING	3	0	12
		BME303 BIOMEDICAL IMAGING	2	1	17
	BAHAR	BME312 BIOMEDICAL INSTRUMENTATION II	2	1	58
		BME 102 BIOCHEMSITRY	3	0	70
		BME497 CLINICAL ENGINEERING BIO208 GENETICS			
2022 - 2023	GUZ	BME311 BIOMEDICAL INSTRUMENTATION I	2	1	51
		BME 310 BIOMEDICAL ELECTRONICS	2	1	43
		BME452 BIOMEDICAL SIGNAL PROCESSING	2	1	30
		BME497 CLINICAL ENGINEERING	3	0	30
	BAHAR	BME 102 BIOCHEMSITRY	3	0	40
		BME497 CLINICAL ENGINEERING	3	0	28
		BIO208 GENETICS	3	0	5
		BME495 COMPUTER AIDED DIAGNOSIS	2	1	5
	GUZ	BME 310 BIOMEDICAL ELECTRONICS	2	1	30
		BME452 BIOMEDICAL SIGNAL PROCESSING	2	1	30
		BME497 CLINICAL ENGINEERING	3	0	10
		BIO205 ECOLOGY	3	0	5
		BME 547/647 ARTIFICIAL INTELLIGENCE IN BIOMEDICINE	3	0	20

## 13. Undergraduate and Graduate Courses Taught in the Last Two Years