

MUHTADI MD. WALIULLAH

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Department of pathology, Sher-e-Bangla Agricultural University, Dhaka-1207

PROFESSIONAL SUMMARY

A top-ranking Veterinary Science graduate (M.Sc. & B.Sc.) and National Science & Technology Fellow with proven research experience in zoonotic diseases and antibiotic efficacy. Highly skilled in molecular biology techniques (WGS, PCR), data analysis (R, SPSS), and scientific presentation. Seeking to contribute expertise in infectious diseases and public health to a research-driven academic or institutional environment.

ACADEMIC BACKGROUND

M.SC. IN PATHOLOGY

4/4 CGPA

Merit: 1st

SHER-E-BANGLA AGRICULTURAL UNIVERSITY 2023 - 2025

Thesis: Molecular detection & risk factor analysis of diseases associated with zoonoses in broiler and sonali chickens at live bird markets in Dhaka.

B.SC. IN VETERINARY SCIENCE & ANIMAL HUSBANDRY

3.95/4 CGPA

Merit: 1st

SHER-E-BANGLA AGRICULTURAL UNIVERSITY 2017 - 2022

Thesis: Trends of antibiotic usage and their efficacy against common pathogens in Bangladesh.

HIGHER SECONDARY

5/5 GPA

NEW GOVT. DEGREE COLLEGE

2013 - 2015

SECONDARY

5/5 GPA

HARIMOHAN GOVT. HIGH SCHOOL

2011 - 2013

PROFESSIONAL & RESEARCH EXPERIENCE

LECTURER

2026-Present

DEPARTMENT OF PATHOLOGY

Faculty of Veterinary Medicine and Animal Science, Sher-e-Bangla Agricultural University (SAU), Bangladesh (<https://sau.edu.bd/teacher/434>)

RESEARCH ASSISTANT

2023 - 2025

SHER-E-BANGLA AGRICULTURAL UNIVERSITY RESEARCH SYSTEM (SAURES)

Project title: Molecular detection & risk factor analysis of diseases associated with zoonosis in broiler and Sonali chickens at live bird market in Dhaka city.

POSTER PRESENTATION IN BCSIR CONGRESS-2023

2024

BANGLADESH COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (BCSIR)

Title: Trends of antibiotic usage and their efficacy against common pathogens in Bangladesh.

ORAL PRESENTATION IN 31ST BSVER ANNUAL SCIENTIFIC CONFERENCE

2024

BANGLADESH SOCIETY FOR VETERINARY EDUCATION AND RESEARCH (BSVER)

Title: Molecular detection & risk factor analysis of diseases associated with zoonosis in broiler and Sonali chickens at live bird market in Dhaka city.

POSTER PRESENTATION IN 6TH NATIONAL SCIENTIFIC CONFERENCE ON FOOD SAFETY AND HEALTH

2024

BANGLADESH SOCIETY FOR SAFE FOOD (BSSF)

Title: Detection & characterization of Peste des Petits Ruminants virus (PPRV) in meat byproducts in slaughtered goats at local meat market of Bangladesh.

PUBLICATIONS

- Dhar, A. K. S., Marma, A. Y., Waliullah, M. M., Islam, M. M., Jahan, M. S., & Sultana, S. (2025). Necropsy-based diagnosis and commonly used drugs for poultry diseases in the Jamalpur district, Bangladesh. *Asian Journal of Medical and Biological Research*, 11(3), 59-72.
- Marma, A. Y., Kabir, S., Dhar, A. K. S., Waliullah, M. M., & Sultana, S. (2025). Prevalence and risk factors associated with Peste des Petits Ruminants (PPR) in Jashore, Bangladesh: Prevalence and risk factors associated with PPR in goat. *Research in Agriculture Livestock and Fisheries*, 12(1), 15-23.
- Waliullah, M. M., Masum, M. A., & Rahman, A. (2023). Trends of antibiotic usage and their efficacy against common pathogens in Bangladesh. In *Proceedings of the BCSIR Congress 2023* (p. 382). Bangladesh Council of Scientific and Industrial Research (BCSIR).
- Waliullah, M. M., Marma, A. Y., Badhy, S. C., Chowdhury, M. G. A., & Sultana, S. I. (2025). Molecular detection and risk factor analysis of zoonotic diseases in broiler and Sonali chickens at live bird markets in Dhaka City. In *Proceedings of the 31st Annual Scientific Conference of BSVER (ASCon XXXI)*. Bangladesh Society for Veterinary Education and Research (BSVER), BAU, Mymensingh, Bangladesh.
- Sultana, S., Waliullah, M. M., Marma, A. Y., Islam, M. R., & Noor Ali Khan, M. A. H. Detection and characterization of Peste des Petits Ruminants virus (PPRV) in meat byproducts in slaughtered goats at local meat market of Bangladesh. In *Proceedings of the 6th National Scientific Conference on Food Safety and Health*.

RESEARCH INTEREST

- Infectious and zoonotic disease
- Immunology
- Public health
- Virology
- Vaccinology
- One Health

TRAINING AND INTERNSHIP

TRAINING ON "WGS DATA ANALYSIS"

08/01/2026 to 23/01/2026 (5 days training)

BIOLAB, BANGLADESH

Content:

- WGS data quality assessment & Pre-processing
- Genome assembly & annotation
- Mobile genetic element identification
- AMR gene and virulence factor detection
- Multi-locus sequence typing (MLST)
- Comparative & pan genomic analysis

TRAINING ON "BIOINFORMATICS BASIC TO ADVANCED"

25/12/2025 to 01/01/2026 (4 days training)

DAWN OF BIOINFORMATICS LIMITED BANGLADESH

Content:

- Basics of Genomics, Proteomics data analysis
- Basic Theory of Sequence Alignment
- PCR Primer Designing with Analysis
- In Silico Structural and Functional Annotation
- Hypothetical Proteins Active Site Prediction
- Molecular Docking

WORKSHOP ON "INTRODUCTORY OF BIOINFORMATICS"

21/11/2025 to 06/12/2025 (15 days)

SAU COMPUTER CLUB (SAUCC)

Content:

- Introduction to Linux (Ubuntu)
- Essential Terminal Commands
- Basic Shell Scripting (.sh files) for automation
- Pipeline execution in the terminal

TRAINING ON "BIOINFORMATICS"

18/08/2025 to 24/08/2025 (7 days)

CENTRAL DISEASE INVESTIGATION LABORATORY (CDIL)

Content:

- WGS data quality assessment
- Genome assembly & annotation
- Data visualization (Phylogenetic trees, heatmaps)
- Sequence submission (NCBI/ENA)

TRAINING ON "WHOLE GENOME SEQUENCING"

12/08/2025 to 14/08/2025 (3 days)

CENTRAL DISEASE INVESTIGATION LABORATORY (CDIL)

Content:

- Illumina sequencing workflow
- Library preparation
- Quality control of reads
- Data preprocessing & trimming

TRAINING ON "ADVANCED BACTERIAL DIAGNOSIS"

03/08/2025 to 05/08/2025 (3 days)

CENTRAL DISEASE INVESTIGATION LABORATORY (CDIL)

Content:

- Bacterial identification (Selective media)
- Bacterial identification (MALDI-TOF)
- Automated biochemical testing
- Automated antimicrobial susceptibility testing

INTERNSHIP

January 2025 to June 2025 (6 months)

CENTRAL DISEASE INVESTIGATION LABORATORY (CDIL)

Content:

- Pathogen detection & identification
- Biochemical characterization
- Antimicrobial susceptibility testing (AST)
- HA, HI & ELISA
- DNA/RNA extraction
- PCR (Conventional, qPCR, RT-PCR)
- Gel Electrophoresis
- Chicken embryo viral culture

TRAINING ON "FUNDAMENTALS OF RESEARCH METHODOLOGY" 04/01/25 to 09/02/25 (37 days)
BANGLADESH INSTITUTE OF GOVERNANCE AND MANAGEMENT (BIGM)

Content:

- Research Problem Identification and Formulation
- Literature Review and Development of Research Question
- Conceptual Framework and Hypothesis Development
- Research Methodology and Design
- Experimental Designs and Data Collection
- Sample size determination
- Data management
- Fundamental statistics (Descriptive Statistics , Test of Hypothesis, Relationships of Variables) using SPSS
- Graphical Presentation
- Basic Qualitative Research Methods
- Qualitative Data Collection Tools and Techniques
- Ethical Issues in Conducting Research
- Crafting a Research Proposal
- Research Report Writing and Referencing

TRAINING ON "STATISTICAL MODELING WITH R" 19/04/25 to 25/05/25 (37 days)
BANGLADESH INSTITUTE OF GOVERNANCE AND MANAGEMENT (BIGM)

Content:

- Fundamentals of R Programming
- Data Cleaning
- Data Transformation
- Data Exploration and Visualization
- Hypothesis Testing
- Regression Analysis
- Time Series Analysis
- Multivariate Analysis
- Panel Data Analysis
- Case Study

SPSS TRAINING FOR AGRICULTURAL EXPERIMENTS AND RESEARCH 29/11/24 to 11/01/25 (44 days)
SHER-E-BANGLA AGRICULTURAL UNIVERSITY COMPUTER CLUB

Content: Statistical tests used in experimental research, Data analysis using SPSS, Graphical presentation

MASSIVE OPEN ONLINE COURSE (MOOC) ON "MONITORING, ASSESSING AND MITIGATING THE RISKS OF VECTOR-BORNE DISEASES" 2025
VECTORACT PROJECT - FUNDED BY EU UNDER GA #101083215

Content: Identify vectors, Transmission cycles, Factors of disease emergence, Preventive measures

TRAINING ON "R FOR RESEARCH" 23/08/23 to 06/09/23 (15 days)
CHIRAL BANGLADESH

Content: Fundamentals of R, R Packages, Data cleaning, Data wrangling , Data analysis, Data visualization

CLINICAL TRAINING 20/11/22 to 4/12/22 (15 days)
WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES

Content: Veterinary clinical practices, Radiography, Surgery, and Medicine.

4TH CEVET CE PROGRAM 19/12/2020 to 23/12/2020 (05 days)
BANGLADESH COLLEGE OF VETERINARY SURGEONS

Content: Innovations and practices in veterinary sector

CLINICAL TRAINING ON "DAIRY, POULTRY & PET" 1/11/2020 to 8/12/2020 (38 days)
BANGLADESH VETERINARY POST GRADUATE INSTITUTE (BVPGI)

Content: Veterinary clinical practices, Surgery, and Medicine.

LABORATORY SKILLS

- Histopathology
- Bacterial isolation & culture
- Biochemical characterization
- Bacterial staining
- Antibiotic susceptibility testing
- MALDI-TOF mass spectrometry
- Hemagglutination (HA) & Hemagglutination inhibition (HI) assays
- ELISA techniques
- DNA/RNA extraction & purification
- Virus isolation
- PCR (Conventional, RT-PCR, qPCR)
- Gel electrophoresis
- Cell culture
- Viral culture in chicken embryos
- Whole Genome Sequencing (Illumina)

HONORS AND AWARDS

NATIONAL SCIENCE & TECHNOLOGY FELLOWSHIP MINISTRY OF SCIENCE AND TECHNOLOGY, BANGLADESH	2023
DEAN'S AWARD FOR SCHOLARS FACULTY OF ANIMAL SCIENCE AND VETERINARY MEDICINE, SAU	2022
DEAN'S AWARD FOR SCHOLARS FACULTY OF ANIMAL SCIENCE AND VETERINARY MEDICINE, SAU	2021
DEAN'S AWARD FOR SCHOLARS FACULTY OF ANIMAL SCIENCE AND VETERINARY MEDICINE, SAU	2020
DEAN'S AWARD FOR SCHOLARS FACULTY OF ANIMAL SCIENCE AND VETERINARY MEDICINE, SAU	2019
DEAN'S AWARD FOR SCHOLARS FACULTY OF ANIMAL SCIENCE AND VETERINARY MEDICINE, SAU	2018

LEADERSHIP & OUTSTANDING PERFORMANCES

2nd RUNNER UP , 3 MINUTE THESIS PRESENTATION COMPETITION Awarded for best research and presentation. The program was organized by the World Veterinary Poultry Association (WVPA)	2025
ORGANIZER , INTER-VETERINARY SCHOOL DEBATE COMPETITION Spearheaded the planning and execution of the debate competition in collaboration with the Bangladesh Veterinary Association, bringing together students from multiple institutions.	2025
TEAM LEAD & CHAMPION , 1ST BANGLADESH VETERINARY OLYMPIAD Led the "Superbugs" team of 5 members to secure first place in the inaugural national competition co-organized by the National Veterinary Dean Council and the Food and Agriculture Organization (FAO) of the United Nations.	2022

FIRST PLACE WINNER, WORLD VETERINARY DAY POSTER COMPETITION 2021 & 2022
Awarded first place in consecutive years in a national design competition organized by the Department of Livestock Services of Bangladesh, The Vet Executive, and the Bangladesh Veterinary Association.

GENERAL SECRETARY, KKNIH DEBATING CLUB, SAUDS 2019 - 2021
Managed all club activities, organized debating workshops, and coordinated participation in university-wide competitions for the Sher-e-Bangla Agricultural University Debating Society (SAUDS).

ASSISTANT ROVER MATE, SHER-E-BANGLA AGRICULTURAL UNIVERSITY ROVER SCOUT GROUP 2019-2020
Assisted in leading scout troop activities, mentoring junior members, and organizing community service initiatives.

VACCINATOR, MASS DOG VACCINATION (MDV) PROGRAM 2019
Administered 500 canine vaccinations as part of a nationwide public health campaign under the Ministry of Health to help control the spread of rabies.

PROFESSIONAL MEMBERSHIP

MEMBER, BANGLADESH VETERINARY COUNCIL (BVC) 2023-Present
Registered member of the official national council representing veterinarians across Bangladesh.

MEMBER (MCVS), BANGLADESH COLLEGE OF VETERINARY SURGEONS (BCVS) 2023-Present
Achieved membership through a competitive veterinary board examination, signifying a commitment to the highest standards of veterinary practice and continuous professional development in Bangladesh.

COMPUTER SKILLS

- R Programming
- SPSS
- QGIS
- Endnote / Mendeley / Zotero
- Adobe Illustrator
- BioRender

LANGUAGES SPOKEN

- Bengali (Native)
- English (Proficient in reading, writing, speaking & listening)
- Hindi (Elementary)

REFERENCES

DR. SAJEDA SULTANA
ASSOCIATE PROFESSOR & CHAIRMAN

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Sher-e-Bangla Agricultural University

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DR. MD. ABDUL MASUM
PROFESSOR

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