

**Curriculum vitae of
Professor Dr. Farzana Islam Rume**
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Born 02 of May 1979 in Chattogram (Bangladesh), citizen of Bangladesh.

Aim

Academic career in microbiology, immunology and public health field.

Areas of Interest (research)

Clinical and public health microbiology, immunoproteomics, antimicrobial resistance, molecular diagnostics.

Areas of Interest (teaching)

Bacteriology, Virology, Immunology, Food hygiene, Public health.

Academic qualifications

2012 - 2017	PhD in Biological Sciences (Microbiology), Dhaka University, Dhaka, Bangladesh
2007 - 2009	MS in Biotechnology, Patuakhali Science and Technology University, Patuakhali, Bangladesh
1998 - 2002 (Year of passing 2005)	DVM, Chittagong University, Chattogram, Bangladesh

Current and previous positions held

Dec, 2018 – till now	Professor, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.
2014 - 2018	Associate Professor, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.
2009 - 2014	Assistant Professor, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.
2008 - 2009	Lecturer, Department of Microbiology and Public Health, Patuakhali

Science and Technology University, Bangladesh.	
2005 - 2008	Lecturer, Department of Animal Breeding and Genetics, Barisal Govt. Veterinary College, Barisal, Bangladesh.
2012	Chairman, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.
2017 – till now	Research Supervisor of MS in Microbiology and MS in Veterinary Public Health, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.
Sep, 2018 to May, 2019	Chairman, Department of Microbiology and Public Health, Patuakhali Science and Technology University, Bangladesh.

Recently participated in conference/seminar/workshop/training

August 13-16, 2019	Present a paper (Immunogenicity of the local anthrax vaccine strain in animal models) and attend International Veterinary Immunology Symposium (IVIS -2019), Seattle, WA, USA.
December 29, 2017	Present a paper (Risks for cattle anthrax in Bangladesh: A case-control study), 30 th Annual conference 2017, Bangladesh Society of Microbiologists, Dhaka University, Bangladesh.
September 17- 18 2017	Present a paper (Molecular Epidemiology of Anthrax in Domestic Animals of Bangladesh) and got 1st prize for poster presentation , 9 th One Health Bangladesh Conference, Dhaka, Bangladesh.
June 1-5 2017	Present a paper (Genetic Characterization of Bovine Anthrax in Bangladesh) and attend the ASM microbe-2017 conference, New Orleans, USA, a conference organized by American Society for Microbiology.
May 14-16, 2017	Present a paper (Molecular characterization of <i>Bacillus anthracis</i> strains circulating in Bangladesh) in International Conference on Genomics, Nanotech and engineering-2017' (ICGNB 2017), North South University, Dhaka.
December 26- 28, 2015	International conference 2015, Bangladesh Society of Microbiologists, Dhaka University, Bangladesh.
October 27-30, 2015	Present a paper (Investigation on <i>Bacillus anthracis</i> circulating in Bangladesh through the analysis of soil samples in areas at risk and imported animal feed) in 7th International Bacillus ACT 2015 Meeting, The Grand, New Delhi, India

May 04-22, 2015	Joint-Research and Training Program at Anthrax Reference Center of Italy and Department of Biotechnology and Vaccines, Istituto Zooprofilattico Sperimentale of Puglia and Basilicata, Italy.
November 20, 2014 to March 14, 2015	Act as a Research Visiting Scholar at Henan Agricultural University, Zhengzhou, China.

Research projects conducted individually or group

No.	Project Title	Funding Authority	Project Period and Status
01.	Determination of Antimicrobial Resistance and Residues in Livestock and Poultry Food Products and Feed in Bangladesh.	Bangladesh Agricultural Research Council (BARC), Dhaka	July,2018 to June, 2021
02.	Detection of milk adulterants and microbial quality evaluation in the raw and pasteurized milk sold in Barisal district of Bangladesh.	RTC research grants, Patuakhali Science and Technology University.	July, 2019 to June, 2020
03.	Prevalence of bacterial diseases and their antibiotic resistance status in chickens of Barishal district.	RTC research grants, Patuakhali Science and Technology University.	July, 2018 to June, 2019

Scholarship and grants

2015	BAS-USDA Fellowship for PhD research.
2014	Research grants from Comprehensive Disaster Management Programme (CDMP II)

Academic and professional organizations

2015 - date	Life Member of Bangladesh Society of Microbiologists
2017 - date	Life Member of One World One Health-Bangladesh Initiative
2017 - date	Life Member of Bangladesh Veterinary Association

Experience in implementing project/research

Title of the project/ research activity	Donor/ sponsor	Position in the project	Year	
			From	To
01. Determination of Antimicrobial Resistance and Residues in Livestock and Poultry Food Products and Feed in Bangladesh.	NATP-2, Bangladesh Agricultural Research Council (BARC), Dhaka	Principal Investigator (PSTU component)	2018-2021	
02. Isolation of probiotic Lactobacillus from various types of meat and evaluation of its antibacterial activity against <i>Staphylococcus</i> spp.	Ministry of Science and Technology (MoST)	Principal Investigator	2023- 2024	
03. Isolation of Lactobacillus from cow milk and assess their probiotic action against pathogen.	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2023- 2024	
04. Epidemiology of mycoplasmosis in chickens in coastal region of Bangladesh	Ministry of Science and Technology (MoST)	Principal Investigator	2022- 2023	
05. Evaluation of fecal contamination using MPN and TVC and assessment of cultural sensitivity pattern of microorganisms isolated from drinking water.	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2022- 2023	
06. Isolation, identification, and risk factor assessment of mycotoxicogenic fungi isolated from commercial animal feedstuff in Barisal, Bangladesh	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2021- 2022	
07. Enhancement of shelf life of raw dairy milk by using modern chemicals and biopreservative	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2020- 2021	
08. Detection of milk adulterants and microbial quality evaluation in the raw and pasteurized milk sold in Barisal district of Bangladesh	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2019- 2020	

09. Prevalence of bacterial diseases and their antibiotic resistance status in chickens of Barishal district.	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2018- 2019
10. Phenotypic Characterization and Antibiotic Resistance Profiles of <i>Enterococcus</i> spp. in Broiler Poultry from Selected Farms in Barishal, Bangladesh	RTC research grants, Patuakhali Science and Technology University	Principal Investigator	2024- 2025
11. Exploring the Prevalence and Antibiotic Resistance Profiles of <i>Enterococcus</i> spp. in animals in the Coastal Regions of Bangladesh	Ministry of Science and Technology (MoST)	Principal Investigator	2024- 2025

Academic publishing and reviewing

Publications in last 5 years (Impact Factor Journals)

2025	Mousumi, I. J., Sayed A., Kayesh M.E.H., Rume F. I. Bacteriological assessment of water quality in Barishal, Bangladesh: potability testing and antibiogram profiling. <i>J Water Health.</i> 2025 Apr;23(4):450-460. doi: 10.2166/wh.2025.258. Epub 2025 Mar 11.
2024	Karim MR, Li J, Harun AB, Rume FI, Zhang L. Molecular characterization and zoonotic risk assessment of <i>Cryptosporidium</i> spp. in children and calves in Bangladesh. <i>One Health.</i> 2024;100692. IF: 5 (Q1). https://doi.org/10.1016/j.onehlt.2024.100692.
2023	Li J, Karim MR*, Siddiki SHMF, Chen Y, Qin Z, Rume FI, Zhang L. Potential zoonotic transmission of <i>Giardia duodenalis</i> between children and calves in Bangladesh. <i>Transboundary and Emerging Diseases,</i> 2023, Article ID 8224587, 12 pages, 2023. IF: 4.521 (Q1). https://doi.org/10.1155/2023/8224587
2022	Karim MR, Rume FI, Li D, Li J, Zhang L. First molecular characterization of <i>Enterocytozoon bieneusi</i> in children and calves in Bangladesh. <i>Transboundary and Emerging Diseases.</i> 2022, 69(4): 1999-2007. IF: 5.005 (Q1).
2021	Karim MR, Li J, Rume FI, Sumon SMMR, Selim ASM, Hoda N, Zhang L. Occurrence and molecular characterization of <i>Cryptosporidium</i> spp. and <i>Giardia duodenalis</i> among captive mammals in the Bangladesh National Zoo. <i>Parasitology International.</i> 2021, 84 (2021): 102414. IF: 1.993 (Q2).
2021	Rume FI, Karim MR, Biswas PK, Yasmin M, Ahsan CR. Climate change and its influence on occurrence and distribution of Anthrax in Bangladesh. <i>International Journal of Infectious Diseases.</i> 2021, 101(S1): 411. IF: 12.074 (Q1).
2020	Karim MR, Rume FI, Rahman ANMA, Zhang Z, Li J, Zhang L. Evidence for zoonotic potential of <i>Enterocytozoon bieneusi</i> in its first molecular characterization in captive mammals at Bangladesh National Zoo. <i>Journal of Eukaryotic Microbiology.</i> 2020, 67(4): 427-435. IF: 3.189 (Q3).

2020	Rume FI, Karim MR, Ahsan CR, Yasmin M, Biswas PK. Risk factors for bovine anthrax in Bangladesh, 2010–2014: a case-control study. <i>Epidemiology and Infection</i> . 2020, 148(e67): 1-6. IF: 2.122 (Q2).
2021	Matubber, B. ., Rume, F. I. ., Hoque Kayesh, M. E. ., Rahman, M. M. ., Amin, M. R. ., Asgar, M. A. ., & Anower, A. M. . (2021). Antibiotic resistance and residue in chicken, cattle, buffalo and goat meats in different southern districts of Bangladesh. <i>Asian-Australasian Journal of Food Safety and Security</i> , 5(1), 19–26. https://doi.org/10.3329/aajfss.v5i1.55014
2021	Reza, S. T., Ansari, W. K., Karim, M. R., Anower, A. M., & Rume, F. I. (2021). Tradition of raw milk consumption and its health impact among people living in the coastal regions of Bangladesh. <i>Asian-Australasian Journal of Bioscience and Biotechnology</i> , 6(1), 10–18. https://doi.org/10.3329/aaxbb.v6i1.54876
2019	Islam, J., Rume, F. I., Liza, I. J., Chaudhary, P. K., & Anower, A. M.). Assessment of subclinical mastitis in milch animals by different field diagnostic tests in Barishal district of Bangladesh . <i>Asian-Australasian Journal of Bioscience and Biotechnology</i> , 4(1), 24–33. https://doi.org/10.3329/aaxbb.v4i1.64872
2018	Mostary S, Hussain K, Hasan I, and Rume FI, 2018. Retrospective study of foot and mouth disease in cattle at Babugonj upazila of Barisal district. <i>Res. Agric. Livest. Fish.</i> 5 (1): 43-48.
2018	Hasan, A., Reza, A., Rume, F. I., Meher, M. M., Parvej, M. S., & Anower, A. M. (2018). Prevalence and Antibiotic Resistance Pattern of <i>Escherichia coli</i> Isolated from Raw Dairy Milk. <i>Turkish Journal of Agriculture - Food Science and Technology</i> , 6(9), 1108–1113. https://doi.org/10.24925/turjaf.v6i9.1108-1113.1788
2016	Rume FI , Ahsan CR, Biswas PK, Yasmin M, Braun P, Walter MC , Antwerpen M, Grass G, Hanczaruk M. Unexpected genomic relationships between <i>Bacillus anthracis</i> strains from Bangladesh and Central Europe. <i>Infection, Genetics and Evolution</i> .30: 82-88. (Impact Factor – 2.88)
2016	Rume FI, Affuso A, Serrecchia L, Rondinone V, Manzulli V, Campese E, Pietro Di Taranto PD, Biswas PK, Ahsan CR, Yasmin M, Fasanella A, Hugh-Jones M. Genotype Analysis of <i>Bacillus anthracis</i> Strains Circulating in Bangladesh. <i>PLoS ONE</i> . 10 (2): 1-14 (Impact Factor – 2.806)
2016	Rume FI, Antwerpen M, Braun P, Biswas PK, Yasmin M, Grass G, Ahsan CR, Hanczaruk M. Genome sequence of <i>Bacillus anthracis</i> strain Tangail-1 from Bangladesh. <i>Genome Announcement</i> . 4 (4): e00748-16. (Impact Factor – 1.44)
2015	Karim MR, Dong H, Li T, Yu F, Li D, Zhang L, Li J, Wang R, Li S, Li X, Rume FI, Ning C. Predomination and new genotypes of <i>Enterocytozoon bieneusi</i> in captive nonhuman primates in zoos in China: high genetic diversity and zoonotic significance. <i>PLoS ONE</i> 10: e0117991. (Impact Factor – 3.534)
2015	Karim MR, Zhang L, Yu F, Wang R, Jian F, Dong H, Zhang S, Rume FI, Ning C, Xiao L. Multi-locus analysis of <i>Giardia duodenalis</i> from nonhuman primates kept in zoos in China: geographical segregation and host-adaptation of

	assemblage B isolates. Infect. Genet. Evol. 30: 82-88. (Impact Factor – 3.264)
2014	Karim MR, Dong H, Yu F, Jian F, Zhang L, Wang R, Zhang S, Rume FI , Ning C, Xiao L. Genetic diversity in <i>Enterocytozoon bieneusi</i> isolates from dogs and cats in China: host specificity and public health implications. J. Clin. Microbiol. 52: 3297-3302. (Impact Factor – 4.232)
2014	Karim MR, Wang R, Dong H, Zhang L, Li J, Zhang S, Rume FI , Qi M, Jian F, Sun M, Yang G, Zou F, Ning C, Xiao L. Genetic polymorphism and zoonotic potential of <i>Enterocytozoon bieneusi</i> from nonhuman primates in China. Appl. Environ. Microbiol. 80:1893-1898. (Impact Factor – 3.952)
2014	Karim MR, Wang R, He X, Zhang L, Li J, Rume FI , Dong H, Qi M, Jian F, Zhang S, Sun M, Yang G, Zou F, Ning C, Xiao L. Multilocus sequence typing of <i>Enterocytozoon bieneusi</i> in nonhuman primates in China. Vet. Parasitol. 200:13-23. (Impact Factor – 2.545)
2014	Karim MR, Zhang S, Jian F, Li J, Zhou C, Zhang L, Sun M, Yang G, Zou F, Dong H, Li J, Rume FI , Qi M, Wang R, Ning C, Xiao L. Multilocus typing of <i>Cryptosporidium</i> spp. and <i>Giardia duodenalis</i> from nonhuman primates in China. Int. J. Parasitol. 44: 1039-1047. (Impact Factor – 3.404)
2014	Karim MR, Yu F, Li J, Li J, Zhang L, Wang R, Rume FI , Jian F, Zhang S, Ning C. First molecular characterization of enteric protozoa and the human pathogenic microsporidian, <i>Enterocytozoon bieneusi</i> , in captive snakes in China. Parasitol. Res. 113:3041-3048. (Impact Factor – 2.327)

Publications in last 5 years (International Journals)

2014	Khan MSI, Rume FI , Chowdhury MMM, Begum MR, Karim MR. Occurrence of tuberculosis in rhesus macaque from Chittagong Zoo in Bangladesh: a public health concern. Chinese Journal of Zoonoses. 30(9), 106-109.
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