

Md Nurul Islam, DVM, MVM

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EDUCATION

- Ph.D. University of Wisconsin - Madison, USA, 2023- present,**
Department of Forestry and Wildlife Ecology
The dynamics of environmentally transmitted pathogens: spatiotemporal patterns in host behaviors and pathogen exposure risk
Committee: Wendy Turner (advisor), Timothy R. Van Deelen, Johnny Uelman, Christian Che-Castaldo & Marie Gilbertson
- MVM Massey University, New Zealand, November 2016**
Institute of Veterinary, Animal, and Biomedical Sciences
Determining the association of date palm sap collection, marketing, and consumption practices with the risk of Nipah virus infection in people
Committee: Joanna McKenzie (advisor), Md Ahasanul Hoque, Mahbubur Rahman & Mahmudur Rahman
- DVM Chattogram Veterinary & Animal Sciences University, Bangladesh, March 2014**
Faculty of Veterinary Medicine
Prevalence and antibiogram of E. coli and Salmonella spp. isolates in small fruit bats (Rousettus leschenaulti) and associated public health risk in Bangladesh
Committee: Md Ahasanul Hoque (advisor)

PROFESSIONAL APPOINTMENTS

Current

Graduate Research Assistant, University of Wisconsin - Madison, USA, *September 2023- present*

Previous

Technical Advisor (Animal Health), Eastern Mediterranean Public Health Network (EMPHNET), *September 2022 – August 2023*

- Led technical initiatives for FETPV curriculum development, anthrax and AMR surveillance, and One Health programs.
- Managed the implementation of FETPV training workshops, facilitated stakeholder engagement, and contributed to GHD/EMPHNET program expansion.
- Coordinated project fund disbursement, liaised with government agencies, and ensured timely and effective project execution.
- Strengthened strategic communication and partnerships while contributing to the leadership and management of the FETPV technical team.

Technical Coordinator (FETPV), Eastern Mediterranean Public Health Network (EMPHNET), *April 2019 – August 2022*

- Mentored Field Epidemiology Training Program (FETP) Fellows and conducted outbreak investigation & surveillance training.
- Developed and validated Bangladesh's first-ever FETPV curriculum, ensuring key stakeholder engagement.
- Liaised with universities to facilitate smooth academic operations as EMPHNET's focal person.
- Enhanced One Health collaboration between FETP and human health sectors, ensuring joint outbreak investigations and surveillance.

Veterinary Consultant (One Health), Institute of Epidemiology, Disease Control and Research (IEDCR), *November 2016 - March 2019*

- Strengthened public health actions under the Global Health Security Agenda (GHSA), focusing on emerging infectious events in Bangladesh.
- Assisted national surveillance and emergency teams in conducting zoonotic disease surveillance and investigating outbreaks in animal populations.
- Provided technical expertise to enhance zoonotic disease surveillance at IEDCR, including Influenza, Nipah, Chikungunya, leptospirosis and anthrax.
- Facilitated multidisciplinary collaboration by organizing technical meetings, capacity-building workshops, and stakeholder discussions on emerging zoonotic diseases (EZDs) and outbreak response strategies.

One Health Epidemiology Fellow (Wildlife Health), Massey University, *October 2014 – October 2016*

- Supported the One Health Bangladesh Secretariat in coordinating zoonotic disease surveillance and response initiatives.
- Investigated wildlife-associated human disease outbreaks and contributed to epidemiological research programs.
- Developed protocols and standard operating procedures (SOPs) for zoonotic disease detection, prevention, and control.
- Engaged with interdisciplinary teams and external partners to advance One Health principles through research, outbreak response, and policy development.

Research Assistant, Chattogram Veterinary and Animal Sciences University (CVASU), *May 2014 – September 2014*

- Provided field support for an FAO-funded project focused on the ecology of Highly Pathogenic Avian Influenza (HPAI) at the interface of wild and domestic ducks.
- Assisted the field team in the safe capture and handling of wild birds, following established protocols for disease surveillance.
- Contributed to biological sample collection and the systematic sorting of specimens under the supervision of senior researchers.
- Performed primary data entry and maintained organized inventories of field samples to support project documentation.
- Gained foundational experience in disease ecology fieldwork, including the implementation of biosecurity measures during wildlife-human interactions.

PUBLICATIONS

Peer reviewed:

1. Lanszki, Z., Lanszki, J., Cserkés, T., Martella, V., Diakoudi, G., Lanave, G., Islam, M.M.N., Akter, M.S. and Kemenesi, G., 2025. Comparative Genome Sequencing of Canine Distemper Virus Across Different Continents and Lineages, using Nanopore Technology. *International Journal of Infectious Diseases*, 152, p.107531. <https://doi.org/10.1016/j.ijid.2024.107531>
2. Debnath, N., Rahman, M., Flora, M.S., Shirin, T., Kalam, M.A., Kabir, J., Sufian, A., Alamgir, A.S.M., Islam, M.R., Husain, M.M., **Islam, M.N.**, Rimi, N.A. & Rahman, M. (2024). Toward the Institutionalization of a One Health Agenda: What the World can

Learn from Bangladesh. One Health Cases, p.ohcs20240018

<https://doi.org/10.1079/onehealthcases.2024.0018>

3. Ábrahám Á, **Islam MN**, Gazdag Z, Khan, SA, Chowdhury S, Kemenesi G, Akter S. Bacterial Metabarcoding of Raw Palm Sap Samples from Bangladesh with Nanopore Sequencing. *Foods*. 2024 April 23; 13:1285. <https://doi.org/10.3390/foods13091285>
4. Lanszki Z, Islam MS, Shikder MF, Sarder MJU, Khan SA, Chowdhury S, **Islam MN**, Tauber Z, Tóth GE, Jakab F, Kemenesi G, Akter S. Snapshot study of canine distemper virus in Bangladesh with on-site PCR detection and nanopore sequencing. *Scientific Reports*. 2024 April 22; 14:9250. <https://doi.org/10.1038/s41598-024-59343-6>
5. Khalil, I., Sayeed, M.A., Sarkar, M., **Islam, M.N.**, Osmani, M.G., Islam, M., Chowdhury, S., Mohsin, M.A.S. and Hoque, M.A., 2024. Web-Based Passive Surveillance: Multifactorial Assessment of Sonali Chicken Diseases and Antimicrobial Prescription Pattern in Bangladesh. *Veterinary Sciences*, 11(12), p.662. <https://doi.org/10.3390/vetsci11120662>
6. Hailat, E., Amiri, M., Debnath, N., Rahman, M., Islam, M.N., Fatima, Z., Khader, Y. and Al Nsour, M., 2023. Strengthening the one health approach in the Eastern Mediterranean Region. *Interactive Journal of Medical Research*, 12(1), p.e41190. <https://doi.org/10.2196/41190>
7. Akter, S., Rahman, M.M., Sayeed, M.A., Islam, M.N., Hossain, D., Hoque, M.A. and Koop, G., 2020. Prevalence, aetiology and risk factors of subclinical mastitis in goats in Bangladesh. *Small Ruminant Research*, 184, p.106046. <https://doi.org/10.1016/j.smallrumres.2020.106046>
8. Hassan, M.M., Kalam, M.A., Alam, M., Shano, S., Faruq, A.A., Hossain, M.S., Islam, M.N., Khan, S.A. and Islam, A., 2020. Understanding the community perceptions and knowledge of bats and transmission of Nipah virus in Bangladesh. *Animals*, 10(10), p.1814. <https://doi.org/10.3390/ani10101814>
9. Rahman, M., Islam, S., Masuduzzaman, M., Alam, M., Chawdhury, M.N.U., Ferdous, J., **Islam, M.N.**, Hassan, M.M., Hossain, M.A. and Islam, A., 2018. Prevalence and diversity of gastrointestinal helminths in free-ranging Asian house shrew (*Suncus murinus*) in Bangladesh. *Veterinary world*, 11(4), p.549. <https://doi.org/10.14202/vetworld.2018.549-556>
10. Islam, M.N., Shaikat, A.H., Islam, K.M.F., Shil, S.K., Akter, S., Rahman, M.M., Hassan, M.M., Islam, A., Khan, S.A. and Furey, N., 2015. First record of Ratanaworabhans Fruit Bat *Megaerops niphanae* Yenbutra & Felten, 1983 (Chiroptera: Pteropodidae) from Bangladesh. *Journal of Threatened Taxa*, 7(11), pp.7821-7824. <https://doi.org/10.11609/JoTT.o4387.7821-4>
11. Koop G, Islam MN, Rahman MM, Khatun M, Ferdous J, Sayeed MA, Islam MN, Ahaduzzaman M, **Akter S**, Mannan A, Hassan MM, Dissanayake R, Hoque MA. Risk factors and therapy for goat mastitis in a hospital-based case-control study in Bangladesh. *Preventive Veterinary Medicine*. 2015 Feb 1; 124:52-57. <https://doi.org/10.1016/j.prevetmed.2015.12.007>
12. Hossain, M.B., **Islam, M.N.**, Shaikat, A.H., Yasin, M.G., Hassan, M.M., Islam, S.K.M.A., Rahman, A., Mamun, M.A. and Khan, S.A., 2013. Biochemical profile of wild-captured Indian flying fox (*Pteropus giganteus*) in Bangladesh. *Bangladesh Journal of Veterinary Medicine*, 11(1), pp.75-79. <https://doi.org/10.3329/bjvm.v11i1.17095>

Manuscripts in preparation (Drafts available by request)

Islam MN, Sultan Mahmood Mohammad Nizam Uddin, Chowdhury.... Roger Morris “From Tree to Table: Assessing the Risk of Nipah Virus Transmission Through Date Palm Sap Collection and Consumption Practices in Bangladesh.”

Policies and protocols

1. IUCN SSC Bat Specialist Group (BSG), **Recommended Strategy for Researchers to Reduce the Risk of Transmission of SARS-CoV-2 from Humans to Bats** (Version-1, 2020), https://www.iucnbsg.org/uploads/6/5/0/9/6509077/iucn_map_recommendations_for_researchers_v.1.0_final.pdf
2. World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO) and World Organisation for Animal Health (OIE), **Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries** (2019) https://www.woah.org/fileadmin/Home/eng/Media_Center/docs/EN_TripartiteZoonosesGuide_webversion.pdf
3. One Health Secretariat Bangladesh, **Strategic Framework and Action Plan for the Application of a One Health Approach in Bangladesh (2017 – 2021)** <https://faolex.fao.org/docs/pdf/bgd206570.pdf>
4. Institute of Epidemiology, Disease Control and Research (IEDCR), **National Guideline for Management and Prevention of Human Anthrax** (2019)

GRANTS AND AWARDS

Research Grants:

1. **Capacity building in the field of higher education, European Education and Culture Executive Agency, 2022 - (\$345,734)**
Project Title: Building the Practical and Theoretical Knowledge Capacity to Monitor, assess, and Mitigate the risks of vector-borne diseases in Bangladesh
Principal Investigator: Gabor Kemensi
Role: Co-Principal Investigators
2. **National Laboratory of Virology, University of Pécs, 2019 - (\$103,200)**
Project Title: Rapid identification of targeted pathogens in Indian Flying Fox (*Pteropus giganteus*) using field-based molecular diagnostics tools
Principal Investigator: Gabor Kemensi
Role: Co-Principal Investigators
3. **European Union for Integrating One Health Education for Action, 2016 - (\$35,000)**
Project Title: Association of date palm sap collection, marketing, and consumption practices with risk of Nipah virus infection in people in Bangladesh
Principal Investigator (s): Md Nurul Islam, Sultan Mahmud & Nizam Uddin Chowdhury
4. **Rufford Small Grants for Nature Conservation, 2014 - (\$7,000)**
Project Title: Capacity building for bat conservation and research in Bangladesh through community involvement
Role: Principal Investigator (Student Grants)
5. **Columbus Zoo and Aquarium Conservation Fund Application, 2013 - (\$3,000)**
Project Title: Health Status Survey Fruits Bat with their Abundance, Distribution and Roosting Sites in Bangladesh
Principal Investigator: Shahneaz Ali Khan
Role: Co-Principal Investigators
6. **Bat Conservation International through Global Grassroots Program, 2012 - (\$5,000)**
Project Title: Strengthening the community approach towards conservation of Bats through myths elimination and conservation education in Bangladesh
Role: Principal Investigator (Student Grants)

Competitive Fellowships & Travel Grants

1. **NSF EEID Scholarship**, Biology of Vector-borne Diseases (BVBD) Course, Institute for Health in the Human Ecosystem (\$2,500) — 2025
2. **Research Exchange Award**, National Research Development and Innovation Office (NKFIH), Hungary (\$2,500) — 2023
3. **AuthorAID Travel Grant**, International Network for the Availability of Scientific Publications (INASP) (\$1,500) — 2017

Professional Awards & Honors

1. **BCI Conservation Impact Award in Advocacy**, Bat Conservation International, 2022
2. **Dean's Special Award for Exceptional Field Achievement**, Chittagong Veterinary and Animal Sciences University, 2013

PRESENTATIONS

- (4) **Islam MN**, Sultan Mahmood Mohammad Nizam Uddin, Chowdhury.... Roger Morris (2016), Case-control Area Study of Risk Factors for Exposure of Village Residents to Nipah Virus in Bangladesh, The 4th International One Health Congress, Melbourne, Australia, 3-7 December 2016
- (3) Ariful Islam, Jonathan H Epstein, Melinda K. Rostal, Md Enayet, Hossain, **Islam MN**, Peter Daszak (2016), Middle East Respiratory Syndrome Coronavirus (Mers-cov) Antibodies In Dromedary Camels (*Camelus Dromedarius*) In Bangladesh The 4th International One Health Congress, Melbourne, Australia, 3-7 December, 2016
- (2) Shovon Chakma, Islam K, Asaduzzaman M, **Islam MN**,Joanna McKenzie, Peter Jolly, Masako Wada, Roger Morris (2016), Social Network Analysis of Poultry Movement and Contact Patterns to Assess Transmission Potential of Exotic Subtypes of Avian Influenza in Poultry- Dense Districts of Bangladesh, The 4th International One Health Congress, Melbourne, Australia, 3-7 December 2016
- (1) **MN Islam**, AH Shaikat, SA Khan, Ariful Islam, MM Hassan & MA Hoque; Operationalizing Bat Conservation Education Program in Bangladesh with a Special Focus of Nipah Encephalitis Outbreak, The 3rd International Southeast Asian Bat Conference (SEABCO) 2015 (*Best Oral Presentation Award*)

MENTORING AND TEACHING**Graduate Student Mentoring**

2022 Masters Co-Supervisor
Sudeb Sarker

Graduate Courses Teaching

2021, 2023: Outbreak Investigation and Response (OIR -602), Chattogram Veterinary and Animal Sciences University, *Course Coordinator (3 Credits)*

2022: Disease Control and Prevention, Chattogram Veterinary and Animal Sciences University, *Course Coordinator (4 Credits)*

PROFESSIONAL AFFILIATIONS

- Member, Wildlife Disease Association
- Member, Bat Specialist Group, IUCN Species Survival Commission
- Member, Bangladesh Veterinary Council

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- Member, Bat Conservation International
- Member, British Ecological Society

ADDITIONAL TRAINING AND WORKSHOPS

- Biology of Vector-borne Diseases (BVBD), Institute for Health in the Human Ecosystem (2025). Focus: Holistic approaches to emerging pathogens and interdisciplinary disease ecology.
- Safe Capture Chemical Immobilization training, San Diego Zoo Wildlife Alliance Academy, University of Wisconsin-Stevens Point, 2022 - USA
- Data to Policy (D2P), Vital Strategies, and the U.S. Centers for Disease Control and Prevention (CDC), 2019 - Bangladesh
- Training of National Rapid Response Team for Public Health Emergency and Outbreak Investigations, IEDCR, 2018 - Bangladesh
- Workshop on Evaluation of Disease Control Policy and Economics, Massey University, New Zealand, 2015 - Bhutan
- Regional One Health Economics and Policy Workshop- South Asia & Thailand, Massey University, New Zealand, 2016 - Thailand
- Scenario-Based Workshop for One Health Approach to Emerging Infectious Disease Investigation, Massey University, New Zealand, 2016 - Nepal

REFERENCES

Available upon request