**Md. Jubayer Hossain**

**Research Experiences**

**Center for Health Innovation, Research, Action, and Learning ‑ Bangladesh** Dhaka, Bangladesh

Founder, Management Lead & Data Analyst June 2020 ‑ Present

**International Centre for Diarrhoeal Disease Research, Bangladesh** Dhaka, Bangladesh

Research Intern, Health Systems and Population Studies Division February 2022 ‑ June 2022

**Bio‑Bio‑1:: Bioinformatics Research Discussion Group** Dhaka, Bangladesh

Team Member, Bioinformatics Group February 2017 ‑ June 2019

**Academic Credentials**

**Jagannath University** Dhaka, Bangladesh

Master of Science in Microbiology January 2019 ‑ January 2020

**Jagannath University** Dhaka, Bangladesh

Bachelor of Science in Microbiology January 2016 ‑ January 2019

**Publications**

1. Towhid, S. T., **Hossain, M. J.**, Sammo, M. A. S., & Akter, S. (2022). Perception of Students on Antibiotic Resis‑ tance and Prevention: An Online, Community‑Based Case Study from Dhaka, Bangladesh. European Journal of Biology and Biotechnology, 3(3), 14–19. <https://doi.org/10.24018/ejbio.2022.3.3.341>

2. **Hossain, M.J.**, Towhid ST, Sultana S, Mukta SA, Gulshan R, Miah MS (2022). Knowledge and Attitudes towards

Thalassemia among Public University Students in Bangladesh. Microbial Bioactives, 5(2), [https://doi.org/](https://doi.org/10.25163/microbbioacts.526325)

[10.25163/microbbioacts.526325.](https://doi.org/10.25163/microbbioacts.526325)

**Papers Under Review**

1. **Hossain, M.J.**, Towhid, S. T., Akter, S., Shahjahan, M., Roy, T., Akter, B., & Nodee, T. A. (2022). Self‑Management of Diabetic Patients from the Urban Areas in Bangladesh. MedRxiv (Cold Spring Harbor Laboratory). [https:](https://doi.org/10.1101/2022.08.23.22279128)

[//doi.org/10.1101/2022.08.23.22279128 (P](https://doi.org/10.1101/2022.08.23.22279128)LOS Global Public Health)

2. **Hossain, M. J.**, Islam, M. W., Munni, U. R., Gulshan, R., Mukta, S. A., Miah, S., Sultana, S., Karmakar, M., Ferdous,

J., & Islam, M. A. (2023). Health‑related quality of life among thalassemia patients in Bangladesh using the SF‑

36 questionnaire. Research Square (Research Square). [https://doi.org/10.21203/rs.3.rs-2528887/](https://doi.org/10.21203/rs.3.rs-2528887/v1)

[v1 (Scientific](https://doi.org/10.21203/rs.3.rs-2528887/v1) Reports)

**Conferences**

1. Nayeem,M.U.,Mrittika,M.A.,**Hossain, M.J.**, Azad,A.K.,Ferdous,J.,Ahmed,S.,Sanyal,S.K., Towhid,S.T(2023). Quan‑ titative Microbial Risk Assessment from Vancomycin‑resistant Enterococcus faecalis and Enterococcus faecium from a specific neighbourhood in Dhaka City,Bangladesh([36th BSM Annual Conference, Bangladesh Society of](https://drive.google.com/file/d/1cW5BpYWZEZm-dF8UdBGsOvI7fq8fwtNU/view?usp=sharing) [Microbiologists)](https://drive.google.com/file/d/1cW5BpYWZEZm-dF8UdBGsOvI7fq8fwtNU/view?usp=sharing)

2. Shahid,M.S.B., Azad,A.K.,Ferdous,J.,Towhid,S.T., **Hossain, M.J.** (2023). Prevalence, Antibiotic Resistance Pat‑ tern for Bacteriuria from Patients with Urinary Track Infections([36th BSM Annual Conference, Bangladesh So‑](https://drive.google.com/file/d/14YwHlHa93hwYAcpZB_4lDJBN6fRcLaC8/view?usp=sharing) [ciety of Microbiologists)](https://drive.google.com/file/d/14YwHlHa93hwYAcpZB_4lDJBN6fRcLaC8/view?usp=sharing)

3. Das,M., Azad,A.K.,Barman,A.K.,Holy,N.A.,Akter,N., **Hossain, M.J.**(2023). Experiences and Side Effects Follow‑ ing COVID‑19 Vaccination in Bangladesh: a cross‑sectional community‑based e‑survey([36th BSM Annual Con‑](https://drive.google.com/file/d/11iXPMBtPNBSBT7g4Uul0FjgnFMyuLHyj/view?usp=sharing) [ference, Bangladesh Society of Microbiologists)](https://drive.google.com/file/d/11iXPMBtPNBSBT7g4Uul0FjgnFMyuLHyj/view?usp=sharing)

4. Akter, S.,**Hossain, M. J.**, Towhid, S. T., Sammo, M. A. S.(2022). Perception of Students on Antibiotic Resistance and Prevention: An Online, Community‑Based Case Study from Dhaka, Bangladesh.([36th BSM Annual Confer‑](https://drive.google.com/file/d/1BvFGBkU7xzBD8unzYeN5gbLH3pzAnB5h/view?usp=sharing) [ence, Bangladesh Society of Microbiologists)](https://drive.google.com/file/d/1BvFGBkU7xzBD8unzYeN5gbLH3pzAnB5h/view?usp=sharing)

**Working Papers**

1. **Hossain, M.J.**, Azad,A.K., Islam, M. W.,Shahjahan, M.(2022). Factors influencing knowledge of antibiotic usage among patients of school‑going children.

2. **Hossain, M.J.**, Abul Kalam Azad, Md. Atik Shahriar Sammo (2022). A KAP Study on the Impact of C‑section on

Infant Gut Microbiota among Public University Students in Bangladesh

3. **Hossain, M.J.**, Towhid, S. T.,Azad,A.K.,Das,M., Islam, M. W., Shahjahan, M.(2022). The role of community par‑

ticipation and social engagement in the prevention and control of dengue fever in Dhaka City.

4. **Hossain, M.J.**, Towhid, S. T.,Azad,A.K.,Das,M., Islam, M. W., Shahjahan, M., Jannatul,F.S.(2022). Clinical Pre‑

sentation of Dengue Patients in Dhaka City

5. **Hossain, M.J.**, Towhid, S. T.,Das,M., Islam, M. W., Shahjahan, M. (2023). Knowledge, Attitudes, and Prac‑ tices among University Students regarding the Concept of “Safe Marriages” for Thalassemia Prevention in Bangladesh.

**Data Science Projects**

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| 1. | Bioinformatics Approach for Profiling Antibiotic Resistance genes from Metagenomic DNA Sequence | [](https://github.com/hossainlab/ARGs) |
| 2. | Heart Disease Analysis and Prediction Using Machine Learning | [](https://github.com/hossainlab/Heart-Study) |
| 3. | Diabetes Prediction using Machine Learning | [](https://github.com/hossainlab/Diabetes-Prediction) |
| 4. | Hepatitis Mortality Prediction using Machine Learning | [](https://github.com/hossainlab/Hepatitis-Mortality) |

**Skills**

• **Programming Languages:** Python, R, SQL, Julia, JavaScript

• **Data Science:** scikit‑learn, PyCaret, Dask, PySpark

• **GIS & Remote Sensing:** ArcGIS, Geopandas, Xarray, Giovani

• **Analytics Softwares:** SPSS, PowerBI, Microsoft Excel

• **Survey Tools:** RedCap, KoboToolBox, EpiCollect, Google Forms

• **Academic Writing Tools:** Microsoft Word, LaTeX, Mendeley

• **Bioinformatics:** BioPython, Bioconductor, BioPandas, Galaxy, NGS, RNASeq, ssRNASeq

• **Miscellaneous Skills:** UNIX, Version Control(Git), Web Scraping, APIs

**Teaching Experience**

**Jagannath University, Dhaka** [Website](https://jnu.ac.bd/dept/portal/web/microbiology)

Teaching Assistant, Department of Microbiology October 2022 ‑ December 2022

**Research Internship Program** [Course Website](https://training.chiralbd.org/courses/research-internship-program-spring-2023/)

Lead Organizer & Instructor, CHIRAL Bangladesh January 2023 ‑ Present

**Health Research ToolBox: A Step by Step Guide for Beginners** [Course Website](https://chiral-hrt.netlify.app/)

Lead Organizer & Instructor,CHIRAL Bangladesh June 2021 ‑ Present

**Virtual Weekend Workshop ‑ Data Analysis with R** [Course Website](https://chiraltraining.github.io/WW01_DataAnalysiswithR/)

Lead Organizer & Instructor,CHIRAL Bangladesh January 2023 ‑ Present

**Research Data Analysis with SPSS** [Course Website](https://training.chiralbd.org/courses/research-data-analysis-with-spss/)

Lead Organizer & Instructor,CHIRAL Bangladesh January 2021 ‑ Present

**Python for Health Data Science** [Course Website](https://github.com/hossainlab/PY4HDS)

Lead Organizer & Instructor,CHIRAL Bangladesh August 2022 ‑ Present

**References**

Syeda Tasneem Towhid, Ph.D. [towhidst@mib.jnu.ac.bd](mailto:towhidst@mib.jnu.ac.bd)

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Associate Professor, Department of Microbiology, Jagannath University, Dhaka +8801732788272