

Md. Jubayer Hossain

FOUNDER, MANAGEMENT LEAD & DATA ANALYST

Center for Health Innovation, Research, Action, and Learning - Bangladesh (CHIRAL Bangladesh)

✉ hossainmj.me@gmail.com | 🏠 [hossainlab.github.io](https://github.com/hossainlab) | 📱 [hossainlab](https://www.linkedin.com/company/hossainlab) | 📺 [hossainmj](https://www.youtube.com/channel/UCv33333333333333333333)

Research Experiences

Center for Health Innovation, Research, Action, and Learning - Bangladesh

Founder, Management Lead & Data Analyst

Dhaka, Bangladesh

June 2020 - Present

International Centre for Diarrhoeal Disease Research, Bangladesh

Research Intern, Health Systems and Population Studies Division

Dhaka, Bangladesh

February 2022 - June 2022

Bio-Bio-1:: Bioinformatics Research Discussion Group

Team Member, Bioinformatics Group

Dhaka, Bangladesh

February 2017 - June 2019

Academic Credentials

Jagannath University

Master of Science in Microbiology

Dhaka, Bangladesh

January 2019 - January 2020

Jagannath University

Bachelor of Science in Microbiology

Dhaka, Bangladesh

January 2016 - January 2019

Publications

1. Towhid, S. T., **Hossain, M. J.**, Sammo, M. A. S., & Akter, S. (2022). Perception of Students on Antibiotic Resistance 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/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://doi.org/10.1101/2022.08.23.22279128> (PLOS 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/v1> (Scientific 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). *Quantitative 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 Microbiologists)
2. Shahid, M.S.B., Azad, A.K., Ferdous, J., Towhid, S.T., **Hossain, M.J.** (2023). *Prevalence, Antibiotic Resistance Pattern for Bacteriuria from Patients with Urinary Tract Infections* (36th BSM Annual Conference, Bangladesh Society of Microbiologists)
3. Das, M., Azad, A.K., Barman, A.K., Holy, N.A., Akter, N., **Hossain, M.J.** (2023). *Experiences and Side Effects Following COVID-19 Vaccination in Bangladesh: a cross-sectional community-based e-survey* (36th BSM Annual Conference, Bangladesh Society of Microbiologists)
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 Conference, Bangladesh Society of Microbiologists)

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 participation 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 Presentation of Dengue Patients in Dhaka City
5. **Hossain, M.J.**, Towhid, S. T.,Das,M., Islam, M. W., Shahjahan, M. (2023). Knowledge, Attitudes, and Practices among University Students regarding the Concept of “Safe Marriages” for Thalassemia Prevention in Bangladesh.

Data Science Projects

1. Bioinformatics Approach for Profiling Antibiotic Resistance genes from Metagenomic DNA Sequence
2. Heart Disease Analysis and Prediction Using Machine Learning
3. Diabetes Prediction using Machine Learning
4. Hepatitis Mortality Prediction using Machine Learning



Skills

- **Programming Languages:** Python, R, SQL, Julia, JavaScript
- **Data Science:** scikit-learn, PyCaret, Dask, PySpark
- **GIS & Remote Sensing:** ArcGIS, Geopandas, Xarray, Giovanni
- **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

Teaching Assistant, Department of Microbiology

Website

October 2022 - December 2022

Research Internship Program

Lead Organizer & Instructor, CHIRAL Bangladesh

Course Website

January 2023 - Present

Health Research ToolBox: A Step by Step Guide for Beginners

Lead Organizer & Instructor,CHIRAL Bangladesh

Course Website

June 2021 - Present

Virtual Weekend Workshop - Data Analysis with R

Lead Organizer & Instructor,CHIRAL Bangladesh

Course Website

January 2023 - Present

Research Data Analysis with SPSS

Lead Organizer & Instructor,CHIRAL Bangladesh

Course Website

January 2021 - Present

Python for Health Data Science

Lead Organizer & Instructor,CHIRAL Bangladesh

Course Website

August 2022 - Present

References

Syeda Tasneem Towhid, Ph.D.

Assistant Professor, Department of Microbiology, Jagannath University, Dhaka

towhidst@mib.jnu.ac.bd

+8801746208281

Abul Kalam Azad, Ph.D.

Associate Professor, Department of Microbiology, Jagannath University, Dhaka

akazad88@mib.jnu.ac.bd

+8801732788272