# Md. Jubayer Hossain

#### FOUNDER, MANAGEMENT LEAD & DATA ANALYST

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

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## 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

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#### **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)
- 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, Accepted)

#### Conferences\_

- 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 Track 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, 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

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Teaching Assistant, Department of Microbiology

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

Course Website

Lead Organizer & Instructor, CHIRAL Bangladesh

June 2021 - Present

Virtual Weekend Workshop - Data Analysis with R

Course Website

Lead Organizer & Instructor, CHIRAL Bangladesh

January 2023 - Present

**Research Data Analysis with SPSS** 

Course Website January 2021 - Present

Lead Organizer & Instructor, CHIRAL Bangladesh

Course Website

**Python for Health Data Science** Lead Organizer & Instructor, CHIRAL Bangladesh

August 2022 - Present

#### References.

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Abul Kalam Azad, Ph.D.

Associate Professor, Department of Microbiology, Jagannath University, Dhaka

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