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Academic Appointments

Program Lead

Bioinformatics Mentorship Program

Dhaka, Bangladesh

Apr 2026 - Present

- Design and direct a 12-week structured capacity-building curriculum focused on standardizing reproducible RNA-Seq research across dedicated cancer genomics tracks.
- Manage competitive student intake and program delivery, successfully graduating Cohort 01 and currently leading active mentorship for Cohort 02.
- Embed open-science practices from day one, training 10 mentees per cohort to utilize version-controlled workflows and reproducible methodologies.
- Guide participants through the end-to-end research lifecycle, transforming raw computational analyses into manuscript-ready outputs targeted for peer-reviewed publication.

Faculty (Bioinformatics)

cBLAST, University of Dhaka

Dhaka, Bangladesh

Aug 2023 - Present

- Teach specialized modules including Biomedical Machine Learning with Python and Data Science and Machine Learning for Biologists.
- Train students to leverage High-Performance Computing (HPC) infrastructure for scaling bioinformatics, AI models and handling complex biological datasets.
- Provide technical consultation and hands-on data analysis support to cBLAST students executing computational biology workflows.
- Collaborate with Dr. Zeba Islam Seraj to deliver advanced computational training that effectively bridges biological data with machine learning frameworks.

Program Lead

GSA Bioinformatics Internship

Dhaka, Bangladesh

Jul 2025 - Present

- Lead a multi-institutional bioinformatics capacity-building initiative in partnership with GNOBB, ASI School of Life, and SPSB to bridge the gap between formal education and reproducible research workflows
- Design and execute a structured curriculum for student cohorts, successfully graduating Cohort 01 and currently directing the training for Cohort 02.
- Train and mentor multiple cohorts of interns in standardized Single-Cell RNA-Seq and multi-omics pipelines via the GNOBB-ASI Bioinformatics Hub.

- Manage the cross-institutional logistics and program delivery from Dhaka, expanding access to hands-on computational biology mentorship across Bangladesh.

Teaching Assistant

Department of Microbiology, Jagannath University

Dhaka, Bangladesh
Oct 2022 - 1669852800

- Deliver targeted research methodology training to over 40 undergraduate students, standardizing experimental design and statistical analysis practices within public health microbiology.
- Support departmental infectious disease surveillance data processing by managing and verifying incoming laboratory and epidemiological datasets.
- Critically review student research proposals and literature assessments to cultivate rigorous scientific reasoning and adherence to academic writing standards.
- Assist senior faculty during laboratory practicals, ensuring undergraduate students master sterile techniques, media preparation, and microbial identification protocols.

Visiting Scholar

Department of Public Health, Daffodil International University

Dhaka, Bangladesh
Sep 2025 - Present

- Collaborate directly with the Head of the Department of Public Health to strategically enhance the department's research capacity and infrastructure.
- Mentor students in designing research projects and drafting manuscripts targeted for high-impact, ISI and Scopus-indexed (Q1/Q2) journals.
- Co-author and develop competitive research proposals to secure local and international external funding sources in partnership with DIU researchers.
- Participate in institutional research progress workshops and deliver specialized online courses as assigned by the department.

Leadership Experience

Founder, Bioinformatics Scientist & CEO

DeepBio Limited

Dhaka, Bangladesh
Jan 2025 - Present

- Establish and direct a specialized biotechnology start-up as Chief Executive Officer, leading a multidisciplinary team of 13 researchers focused on advanced cancer genomics and transcriptomics projects.
- Oversee the end-to-end execution of complex single-cell RNA-Seq (scRNA-seq) and bulk RNA-Seq analysis pipelines to uncover novel biological insights.
- Develop and benchmark scalable computational biology workflows tailored for high-accuracy biomarker discovery in cancer and neurodegenerative diseases.
- Manage corporate strategy, research infrastructure, and cross-institutional collaborations to accelerate data-driven discoveries in precision medicine.

Founder & Capacity Building Director

CHIRAL Bangladesh (Non-profit Research Institute)

Dhaka, Bangladesh
Jun 2020 - Present

- Lead a non-profit health research initiative as Executive Director, spearheading national capacity-building strategies in data science, research methodology, and computational biology.
- Train over 3,000 early-career researchers and healthcare professionals across Bangladesh, equipping them with foundational data literacy and modern computational biology workflows.
- Supervise the analytical development and peer-review pipeline for more than 15+ manuscripts, driving high-quality publications in bioinformatics and global public health.
- Coordinate multi-institutional research initiatives and field data collection efforts focused on regional health disparities, epidemiological trends, and community health dynamics.

Founder & Lead Instructor

DeepBio Academy

Dhaka, Bangladesh

Jun 2020 - Present

- Founded and lead a digital training platform specializing in high-end computational biology, designing comprehensive curricula for bulk RNA-Seq, single-cell RNA-Seq (scRNA-seq) workflows, multi-omics integration, and deep learning applications.
- Direct the deployment of cloud-based training laboratories, enabling students to access scalable infrastructure for practical bioinformatics modeling and data analysis.
- Mentor undergraduate researchers and biotech professionals in building robust computational portfolios that strictly emphasize open-science standards and version control.
- Scale instructional delivery to support thousands of global learners, bridging the gap between traditional life science education and modern data-driven research methodologies.

Community Engagement

GBD Senior Collaborator

Institute for Health Metrics and Evaluation

Washington, USA

Jan 2025 - Present

- Contribute advanced statistical modeling and analytical validation to Global Burden of Disease (GBD) studies, resulting in co-authored publications in high-impact journals including The Lancet family.
- Collaborate with a global network of international research cohorts to refine statistical methodologies and demographic frameworks for assessing global disease prevalence.

Nextflow Ambassador

Seqera

Barcelona, Spain

Jan 2025 - Present

- Advocate for the regional and global adoption of Nextflow-based DSL2 pipelines to ensure absolute reproducibility and cloud-level scalability in high-throughput single-cell and bulk RNA-Seq workflows.
- Facilitate technical workshops and community training sessions on workflow orchestration, empowering researchers to manage complex, multi-omic datasets with high analytical rigor.
- Engage with the international bioinformatics community to share best practices on containerization (Docker, Singularity) and cloud deployment for large-scale genomic data processing.

Education & Training

Bachelor of Science in Microbiology

Jagannath University

Dhaka, Bangladesh

2016—2019

- Medium of Instruction: English
- Capstone Project: Benchmarking Whole Genome Sequencing (WGS) Data Analysis Pipelines: A State-of-the-Art Performance Review in Microbial Genomics
- Supervisor: Dr. Syeda Tasneem Towhid

Master of Science in Microbiology

Jagannath University

Dhaka, Bangladesh

2019—2020

- Medium of Instruction: English
- Capstone Project: Genomic surveillance, clinical epidemiology, and outbreak response frameworks for Chikungunya in Bangladesh
- Supervisor: Dr. Syeda Tasneem Towhid

Specialized Training in AI for Public Health

Child Health Research Foundation (CHRF)

Dhaka, Bangladesh

2023

- Complete an intensive, specialized training curriculum focused on the intersection of artificial intelligence and epidemiology at the Child Health Research Foundation (CHRF).
- Master the application of machine learning algorithms and predictive modeling to address pressing challenges in public health and infectious disease surveillance.

Certificate Program in Interdisciplinary Computational Biology

BRAC University

Dhaka, Bangladesh

2026

- Completed an intensive training curriculum under the Certificate Program in Interdisciplinary Computational Biology at BRAC University, specializing in cross-disciplinary data workflows.
- Master computational frameworks and statistical tools required to analyze complex biological systems and bridge traditional life science methodologies with computer science.

Technical Skills

- **Programming Languages:** Python, R, Julia, SQL, Bash, JavaScript
- **Bioinformatics:** Bulk RNA-Seq, Single-Cell RNA-Seq, Spatial Transcriptomics, Multi-omics
- **Workflow Management & Reproducibility:** Nextflow (DSL2), nf-core, Docker, Singularity, Git, GitHub
- **AI in Biology:** Scikit-learn, PyTorch, RDkit, DeepChem
- **HPC & Cluster Computing:** SLURM (sbatch, sarray), Nextflow DSL2 with SLURM executor for scalable reusable pipelines
- **Cloud:** AWS S3, Google Cloud Storage for large genomic datasets

Research Interests

- **Bioinformatics:** Integrative analysis of bulk RNA-seq, single-cell RNA-seq, and spatial transcriptomics to identify robust immunological biomarkers and therapeutic targets within tumor microenvironments;
- **AI in Biology:** Deep learning applications in single-cell genomics, particularly for data integration and cell type annotation.

Teaching Interests

- **Programming & Data Analytics:** Programming in R and Python; exploratory data analysis; data visualization; reproducibility.
- **Bioinformatics:** Scalable, reproducible computational pipelines for single-cell, spatial, and bulk transcriptomics to elucidate complex disease biology (Bash, Nextflow, Docker).
- **AI in Biology:** Applying deep learning frameworks to single-cell genomics data for high-accuracy predictive modeling.

Publications

ORCID: [0000-0001-9323-4997](https://orcid.org/0000-0001-9323-4997) | [Google Scholar Profile](#)

Underline indicates mentee; ** undergraduate student; * corresponding

A. Journal Articles

1. **Hossain, M. J.**, Towhid, S.T., Sultana, S., Mukta, S.A., Gulshan, R., Miah, M.S. (2022) “Knowledge and Attitudes towards Thalassemia among Public University Students” *Microbial Bioactives*. 5(2). DOI: [10.25163/microbioacts.526325](https://doi.org/10.25163/microbioacts.526325) Survey-based study on thalassemia awareness among the Bangladeshi youth.
2. Towhid, S.T., **Hossain, M. J.**, Sammo, M.A.S., & Akter, S. (2022) “Perception of Students on Antibiotic Resistance and Prevention” *Eur. J. Bio. Biotech.* 3(3). DOI: [10.24018/ejbio.2022.3.3.341](https://doi.org/10.24018/ejbio.2022.3.3.341) Investigates student awareness and attitudes toward the antibiotic resistance crisis.
3. ***Hossain, M. J.**, Islam, M. W., Munni, U. R., Gulshan, R., Mukta, S. A., Miah, M. S., Sultana, S., Karmakar, M., Ferdous, J., & Islam, M. A. (2023) “Health-related quality of life among thalassemia patients in Bangladesh (SF-36)” *Scientific Reports*. 13(1). DOI: [10.1038/s41598-023-34205-9](https://doi.org/10.1038/s41598-023-34205-9) Assesses the physical and mental health burden on patients living with thalassemia.
4. Akter, M. M., & ***Hossain, M. J.** (2024) “Food consumption patterns and sedentary behaviors among university students” *Health Science Reports*. 7, e70259. DOI: [10.1002/hsr2.70259](https://doi.org/10.1002/hsr2.70259) Links dietary habits and lack of activity to health risks in students.
5. ***Hossain, M. J.**, Azad, A. K., Shahid, M. S. B., Shahjahan, M., & Ferdous, J. (2024) “Prevalence, antibiotic resistance pattern for bacteriuria from patients with UTIs” *Health Science Reports*. 7, e2039. DOI: [10.1002/hsr2.2039](https://doi.org/10.1002/hsr2.2039) Maps antibiotic resistance landscapes for UTI-causing bacteria in clinical settings.
6. ***Hossain, M. J.**, Das, M., Islam, M. W., Shahjahan, M., & Ferdous, J. (2024) “Community engagement and social participation in dengue prevention” *Health Science Reports*. 7, e2022. DOI: [10.1002/hsr2.2022](https://doi.org/10.1002/hsr2.2022) Evaluates how social participation impacts the effectiveness of dengue control.

7. Islam, M. W., Shahjahan, M., Azad, A. K., & ***Hossain, M. J.** (2024) “Factors contributing to antibiotic misuse among parents in Dhaka City” *Scientific Reports*. 14, 2318. DOI: [10.1038/s41598-024-52313-y](https://doi.org/10.1038/s41598-024-52313-y) Identifies parental socio-economic factors driving antibiotic misuse in children.
8. ***Hossain, M. J.**, Das, M., & Munni, U. R. (2024) “Urgent call for compulsory premarital screening for thalassemia prevention in Bangladesh” *Orphanet Journal of Rare Diseases*. 19, 326. DOI: [10.1186/s13023-024-03344-1](https://doi.org/10.1186/s13023-024-03344-1) Advocates for policy-driven premarital screening to reduce thalassemia incidence.
9. ***Hossain, M. J.**, Sony, S. A., Fariha, F. T. J., & Hossen, S. (2025) “Preventing the silent threat: A perspective on preparing Bangladesh for Human Metapneumovirus” *Health Science Reports*. 8, e71101. DOI: [10.1002/hsr2.71101](https://doi.org/10.1002/hsr2.71101) Strategic perspective on preparing health systems for HMPV outbreaks in Bangladesh.
10. Das, M., & **Hossain, M. J.** (2025) “Young stroke in Bangladesh: Addressing rare cases with diagnostic challenges” *Stroke and Vascular Neurology*. svn-2025-004178. DOI: [10.1136/svn-2025-004178](https://doi.org/10.1136/svn-2025-004178) Call for action on diagnosing and managing rare stroke cases in young Bangladeshi patients.
11. ***Hossain, M. J.**, Das, M., Shahjahan, M., Islam, M. W., & Towhid, S. T. (2025) “Clinical and hematological manifestation of dengue patients in 2022 outbreak” *Health Science Reports*. 8, e70356. DOI: [10.1002/hsr2.70356](https://doi.org/10.1002/hsr2.70356) Study details clinical profiles and blood changes during a major Dhaka dengue outbreak.
12. Shanta, A. S., Islam, N., Al Asad, M., Akter, K., Habib, M. B., **Hossain, M. J.**, Nahar, S., Godman, B., & Islam, S. (2024) “Resistance and co-resistance of metallo-beta-lactamase genes in diarrheal and urinary-tract pathogens” *Microorganisms*. 12(8), 1589. DOI: [10.3390/microorganisms12081589](https://doi.org/10.3390/microorganisms12081589) High prevalence of MBL genes found in clinical pathogens within Bangladesh.
13. Bari, S. M., Fuad, M., **Hossain, M. J.**, Ahammad, I., Begum, M., & Helal, M. M. U. (2025) “A meta-analysis of public RNA-Seq data identifies conserved stress responses in rainbow trout” *BMC Genomics*. 26, 999. DOI: [10.1186/s12864-025-12127-2](https://doi.org/10.1186/s12864-025-12127-2) Meta-analysis reveals conserved transcriptomic signatures of stress in rainbow trout.
14. Ahmed, M. Z., Billah, M. M., Ferdous, J., & ***Hossain, M. J.** (2025) “Pan-cancer analysis reveals immunological and prognostic significance of CCT5 in human tumors” *Scientific Reports*. 15, 14405. DOI: [10.1038/s41598-025-88339-z](https://doi.org/10.1038/s41598-025-88339-z) CCT5 identified as a pan-cancer biomarker linked to immune infiltration and prognosis.
15. Fariha, F. T. J., Fuad, M., Saha, C. S., Hossen, S., & ***Hossain, M. J.** (2025) “Comprehensive bioinformatics analysis reveals prognostic significance and immunological roles of WNT gene family in breast cancer” *Scientific Reports*. 15, 34490. DOI: [10.1038/s41598-025-13315-6](https://doi.org/10.1038/s41598-025-13315-6) WNT genes serve as critical prognostic biomarkers and immune regulators in breast cancer.

B. GBD Contributions

1. GBD 2023 Mental Disorder Collaborators (2026) “Updated trends in the global prevalence and burden of mental disorders, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023” *The Lancet*. DOI: [https://doi.org/10.1016/S0140-6736\(26\)00519-2](https://doi.org/10.1016/S0140-6736(26)00519-2)
2. GBD 2023 Breast Cancer Collaborators (2026) “Global, regional, and national burden of breast cancer among females, 1990–2023, with forecasts to 2050: a systematic analysis for the Global Burden of Disease Study 2023” *The Lancet Oncology*. DOI: [https://doi.org/10.1016/S1470-2045\(25\)00730-2](https://doi.org/10.1016/S1470-2045(25)00730-2)
3. GBD 2023 Headache Collaborators (2025) “Global, regional, and national burden of headache disorders, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023” *The Lancet Neurology*. DOI: [https://doi.org/10.1016/S1474-4422\(25\)00402-8](https://doi.org/10.1016/S1474-4422(25)00402-8)

4. GBD 2023 Vaccine Coverage Collaborators (2025) “Global, regional, and national trends in routine childhood vaccination coverage from 1980 to 2023 with forecasts to 2030: A systematic analysis for the Global Burden of Disease Study 2023” *The Lancet*. DOI: [https://doi.org/10.1016/S0140-6736\(25\)01037-2](https://doi.org/10.1016/S0140-6736(25)01037-2)
5. GBD 2021 Musculoskeletal Disorders and COVID-19 Collaborators (2025) “Global, regional, and national burden and trend of adult musculoskeletal disorders and discrepancy between pre-pandemic and pandemic of COVID-19” *BMC Medicine (Under Review)*.
6. GBD 2023 TB Collaborators (2025) “Global, regional, and national burden of tuberculosis and multidrug-resistant tuberculosis by HIV status, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023” *The Lancet Infectious Diseases (Under Review)*.
7. GBD 2023 Type 1 Diabetes Collaborators (2025) “The global burden of type 1 diabetes: a systematic analysis for the Global Burden of Disease Study 2023.” *Under Review*.
8. GBD 2023 Cervical Cancer Collaborators (2025) “Global, regional and national burden of cervical cancer and associated risk factors from 1990 to 2023 and forecasts to 2050: A systematic analysis for the Global Burden of Disease Study 202” *Under Review*.

C. Papers Under Review

1. Kundu, P., Shahariar, M., Munny, F. A., Riya, A. T., Lota, H. B., Ahmed, M. Z., Meme, M. A., Kona, U. M. P., Mahmuda, F., Chowdhury, S. S., Sraboni, S. A., & ***Hossain, M. J.** (2026) “Computational identification of *Taxus baccata*-derived phytochemicals targeting EZH2 to overcome therapeutic resistance in melanoma” *Scientific Reports*. DOI: <https://doi.org/10.21203/rs.3.rs-8494315/v1>
2. Islam, M. W., Rahman, M. M., Naznin, H., Hossain, M. S., Akter, T., Shatabde, Z. A., & ***Hossain, M. J.** (2025) “Integrative bioinformatics analysis reveals COL13A1 and COL23A1 as potential diagnostic and prognostic biomarkers in thyroid cancer” *Health Science Reports*.
3. Islam, M. W., Fariha, F. T. J., Ahmed, M. Z., Ferdous, J., Lota, H. B., Hossain, M. S., Kundu, P., Shahjahan, M., & ***Hossain, M. J.** (2025) “Bioinformatics-driven multi-omics profiling of CDK1 and CDK6 identifies prognostic and therapeutic roles in breast cancer” *Health Science Reports*.
4. Billah, M. M., Mabsurah, K., Ahammad, K., Yeana, I. J., Sumaiya, M., Islam, T., Bhattacharjee, A., Ferdous, J., & ***Hossain, M. J.** (2025) “Multi-omics pan-cancer analysis reveals an immunological role and prognostic potential of WDR76” *Discover Oncology*.
5. Sony, S. A., Kundu, L. R., Limon, M. H., Chowdhury, T. B. K., & ***Hossain, M. J.** (2025) “Predicting early antenatal care initiation at the first trimester among reproductive women in Bangladesh using machine learning” *BMC Pregnancy and Childbirth*.
6. ***Hossain, M. J.**, Shahariar, M., Barsha, LHJ, Shahjahan, M., Towhid, ST., Sheikh, MK., Hasan, MM., Rahman, MH., Sazid, MS. (2025) “Lack of knowledge and training about antibiotic resistance among community pharmacists in Bangladesh: a cross-sectional study” *Health Science Reports*.
7. Billah, M. M., Mabsurah, K., Ahammad, K., Yeana, I. J., Sumaiya, M., Islam, T., Bhattacharjee, A., Ferdous, J., & ***Hossain, M. J.** (2025) “Multi-omics pan-cancer analysis reveals an immunological role and prognostic potential of WDR76”
8. ***Hossain, M. J.**, Shahariar, M., Barsha, L. H. J., Shahjahan, M., Towhid, S. T., Sheikh, M. K., Hasan, M. M., Rahman, M. H., & Sazid, M. S. (2024) “Lack of knowledge and training about antibiotic resistance among community pharmacists in Bangladesh: A cross-sectional study” *Health Science Reports*.

D. Working Papers

1. **Hossain, M. J.**, Dev, P.C. (2026) “Fezf2-mediated cortical development: Multi-omics analysis” *Working Paper*. <https://github.com/hossainlab/fezf2-multiomics>
2. **Hossain, M. J.**, Dev, P.C. (NA) “EWSAtlas: A Harmonized Single-Cell Transcriptomics Atlas of Human Ewing sarcoma” <https://github.com/hossainlab/EWSAtlas>
3. **Hossain, M. J.**, Dev, P.C., & Shahariar, M. (2026) “Deep Learning-Driven AMR Drug Repurposing” *Working Paper*. https://github.com/hossainlab/amr_drug_repurposing
4. **Hossain, M. J.** (2026) “DeepAMR: AI-powered antimicrobial resistance prediction from genomic data” *Working Paper*. <https://github.com/hossainlab/DeepAMR>
5. **Hossain, M. J.**, ****Tabassum, R.**, ****Ahmad, F.**, ****Ahamed, M. S.**, ****Aditee, L. M.**, Fuad, M., Shahjahan, M. (2025) “The Pan-Cancer Consensus Transcriptome (PCCT): A Multi-Layered Meta-Analysis and Machine Learning Framework for Cross-Platform Biomarker Discovery” *Working Paper*. https://github.com/gsabioinforternship/Pancreatic_Cancer_Meta_Analysis/

Presentations

A. Invited Speaker

1. “Undergraduate Research - Importance, Benefits, and Challenges”. CHIRAL Bangladesh. Dhaka, Bangladesh. Mar 21, 2019.
2. “State the Art of Microbial Genome Analysis”. Jagannath University. Dhaka, Bangladesh. May 21, 2018.
3. “Computational Biology and Bioinformatics Research in Resource-Limited Settings: Strategies, Tools and Opportunities”. Jagannath University Higher Study and Research Society. Dhaka, Bangladesh. Jun 25, 2015.
4. “Mastering Biomedical Data Management”. IFMSA Bangladesh. Dhaka, Bangladesh. Apr 21, 2014.

B. Conference Presentations

1. “Fezf2-Mediated Cortical Development: Multi-Omics Single-Cell Analysis”, with ***Islam, MM.** Network of Young Biotechnologists Bangladesh. Dhaka, Bangladesh. Apr 20, 2026.
2. “Diagnostic and Electrophysiological Features of Hirayama Disease in Young Adult Male: A Case Report”, with Manisha Das. Institute of Epidemiology, Disease Control and Research (IEDCR). Dhaka, Bangladesh. May 21, 2020.
3. “Quantitative Microbial Risk Assessment from Vancomycin-Resistant *Enterococcus faecalis* and *Enterococcus faecium* from a Specific Neighborhood in Dhaka City, Bangladesh”, with Nayeem, M.U., Mrittika, M.A., Azad, A.K., Ferdous, J., Ahmed, S., Sanyal, S.K., Towhid, S.T.. Bangladesh Society of Microbiologists. Dhaka, Bangladesh. May 21, 2019.

C. Posters

1. “Identification of Subtype-Specific Prognostic Biomarkers in Esophageal Carcinoma through Integrated Bioinformatics Analysis”, with ****Ahmad, F.**, Fuad, M., Shahjahan, M., & **Hossain, M. J.**. Bangladesh Soci-

ety of Microbiologists. University of Dhaka, Bangladesh. Dec 25, 2025.

2. “Network-Driven Bioinformatics Approach Uncovers Prognostic Signatures and Therapeutic Targets in Pancreatic Ductal Adenocarcinoma”, with ****Aditee, L. M., Fuad, M., Shahjahan, M., & Hossain, M. J.** Bangladesh Society of Microbiologists. University of Dhaka, Bangladesh. Dec 25, 2025.
3. “Bioinformatic Analysis of Transcriptomic Data Reveals Molecular Signatures Driving Colorectal Cancer”, with ****Ahamed, M. S., Fuad, M., Shahjahan, M., & Hossain, M. J.** Bangladesh Society of Microbiologists. University of Dhaka, Bangladesh. Dec 25, 2025.
4. “Comparative Transcriptomic Meta-Analysis Reveals Shared and Distinct Transcriptional Networks and Pathway Crosstalk in Hepatocellular Carcinoma for Biomarker and Therapeutic Target Identification”, with ****Tabassum, R., Fuad, M., Shahjahan, M., & Hossain, M. J.** Bangladesh Society of Microbiologists. University of Dhaka, Bangladesh. Dec 25, 2025.

Teaching & Education

A. Courses Taught

Cohort.	Course	Level	N. Resp. / N. Enrolled	Instr. FCE* / Dept Mean
C01	AI4DD: AI in Drug Discovery: In Silico Toxicology Modeling	Ugrad	13 / 18	5 / 4.3
C02	AI4LS: AI for Life Sciences	Mixed	16 / 23	5 / 4.3
C04	bulkRNASeq101: Bulk RNA-Seq Analysis for Absolute Beginners	Ugrad	9 / 18	4.8 / 4.4
C03	scRNASeq101: Single-Cell for Absolute Beginners	Ugrad	15 / 21	4.9 / NA
C01	CCG101: Computational Cancer Genomics	Ugrad	13 / 22	5 / 4.4
C01	NGS101: NGS Data Analysis for Absolute Beginners	Mixed	18 / 21	4.9 / 4.4
C01	CN101: Computational Neurogenomics	Mixed	24 / 32	4.9 / 4.4

* Faculty Course Evaluations (FCE) are scored by students (1 = worst, 5 = best).

B. Workshops

1. “[Publication-ready Tables with R](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
2. “[Building Dashboard with R](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
3. “[Easystats for Biomedical Researchers](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
4. “[R for Bioinformatics](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
5. “[Data Analysis with R](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
6. “[R for Cancer Bioinformatics](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Apr 07, 2025.
7. “[R for Research](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Oct 01, 2023.
8. “[Machine Learning for Bioinformatics](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Aug 01, 2023.
9. “[RNA-Seq Analysis with R](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Aug 01, 2023.
10. “[AI for Drug Discovery](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Aug 01, 2023.
11. “[Cancer Bioinformatics](#)”. CHIRAL Bangladesh. Dhaka, Bangladesh. Aug 01, 2023.

12. “Python for Health Data Analytics”. CHIRAL Bangladesh. Dhaka, Bangladesh. Aug 01, 2023.
13. “Statistical Analysis with R for Research”. DeepBio Academy, CHIRAL Bangladesh. Dhaka, Bangladesh. Oct 01, 2014.
14. “Statistical Analysis with R for Research”. Genetic Engineering Club, JnU. Dhaka, Bangladesh. Oct 01, 2014.

Media Coverage

1. May 27, 2024, **The Business Standard**: Quoted in article [What the rise in self-medication tells us about the country’s healthcare system](#).
2. Feb 08, 2024, **The Business Standard**: Study featured in article [“Parental lack of antibiotic knowledge imperils child health in Bangladesh: Study”](#).

References

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