

Curriculum Vitae

ISHRAT JABEEN

E-mail: ishrat.jabeen@northsouth.edu and ijabeen2018@gmail.com

Contact No: 55668200, Ext: 6259

Highlights

- ✓ Currently working as an **Associate Professor** in the **Department of Biochemistry & Microbiology**, North South University from November 01 2023 till to date.
- ✓ Recently worked as a **Senior Lecturer** in the **Department of Biochemistry & Microbiology, North South University (NSU)** from Fall 2009 to Spring 2013.
- ✓ Recently worked as an **Assistant Proctor, North South University**, from June 2009 till 2013.
- ✓ Recently worked as a Faculty member (**Senior Lecturer**) in the **Environmental Science and Management Dept., NSU** from Spring 2005 to Summer 2009.
- ✓ Recently worked as a **Faculty Advisor** of NSU Debate Club and also **Earth club**, North South University.
- ✓ PhD in Plant Genetics from Monash University (January 2019).
- ✓ Completed **Master of Research (MRes)** in **Medical Biochemistry and Molecular Biology** from the **Institute of Biomedical and Life Sciences (IBLS)**, 2003-2004. **University of Glasgow**, Glasgow, Scotland, UK.
- ✓ Completed Master in Science (MSc) from the **Department of Biochemistry and Molecular Biology, University of Dhaka** in 1998 (Exam held in 2000).
- ✓ Worked as an **Assistant Biotechnology Advisor** in the **Ministry of Science and Information & Communication technology (MOSICT)**.

Scholastic's Records

Doctor of Philosophy (PhD)

PhD from **Monash University** in January 2019.

Research is based on **Genetic analysis of rice differing in glycemic index (GI)**.

Master of Research (MRes)

MRes in **Medical Biochemistry and Molecular Biology** in 2004 from the **Institute of Biomedical and Life Sciences (IBLS), University of Glasgow**, Glasgow, Scotland, UK and passed with Merit (B).

Master of Science (MSc)

M.Sc. (Thesis student) from **Biochemistry** in 1998 (Exam. Held in 2000), **University of Dhaka** and passed with 1st class 2nd with 68.9%.

Bachelor of Science in Honors (BSc)

B.Sc from **Biochemistry** in 1997 (Exam held in 1998), **University of Dhaka** and passed with 1st class 1st with 66.31%.

Higher Secondary Certificate (H.S.C)

H.S.C in 1994 from **Viqarunnisa Noon College**, under the educational Board of Dhaka and got 1st division (with star marks and 91.1% marks) from science group.

Secondary School Certificate (S.S.C)

S.S.C in 1992 from **Viqarunnisa Noon School**, under the educational Board of Dhaka and got 1st division (with star marks and 88.7% marks) from science group.

Awards

- Was awarded the **Ministry of Science, Technology and Innovation, Malaysia** 2013-2016 and **School of Science, Monash University** to pursue PhD in Monash University Malaysia.
- Was awarded the **Commonwealth Scholarship and Fellowship Plan (CSFP)** 2003-2004 for the MRes in University of Glasgow, Glasgow, Scotland, UK.
- Was awarded **National Science and Technology (NST)**, Bangladesh fellowship (2000-2001) for working on Plant Biotechnology and Molecular Biology.

Working Experience

Faculty member (Assistant Professor), Dept. of Biochemistry & Microbiology, NSU.

1. Currently working as an Assistant Professor in the **Dept. of Biochemistry & Microbiology, North South University** from 2019 till to date.

Major responsibilities include:

- Maintaining student consulting for courses.
- Testing and evaluating students under direct supervision.
- Submitting the final grades within stipulated time period.
- Attending faculty and parent-teacher meetings.
- Helping NSU on academic and other matters including Different types of laboratory tests, beyond set office hours.

Courses that I do teach at undergraduate level include:

- Introduction to Biology (BIO103)
- Introduction to Biochemistry (BIO201)
- Chemistry (Basic) (CHE101)
- Biophysical Chemistry (CHE201)
- Metabolism I (BBT315)
- Metabolism II/Integrated Metabolism (BBT335)
- Cell Biology (BBT401/BBT 316)
- Endocrinology (BBT307/BBT417)
- Environmental Biotechnology (BBT427)
- Basic Biochemistry (MS in Biotech BBT601)
- Plant Biotechnology (MS in Biotech BBT645)

Conduct Laboratory (Experiments are as following) work:

1. **Biochemical tests** (Glucose, Proteins, LHD/HDL/Cholesterol estimation in Blood serum and supplied sample, Urea, Creatinine, in serum by enzymatic method, Aminotransferase (ALT and ASP) in serum, Creatinine kinase (CK) in serum).

2. **Immunology tests** (Blood Grouping, Widal test, Veneral Disease Research Laboratory (VDRL) test, ASO/CRP test, HBsAg determination test)
3. **Molecular Biology** (preparation of TE buffer, isolation of DNA from onion, Preparation of PBS buffer, CTAB/DTAB buffer, isolation of genomic DNA from whole human blood using CTAB/DTAB buffer, Isolation and purification of Genomic DNA from *E.coli*, quantification of nucleic acid concentration by optical density measurement)

Supervise students at undergraduate levels for their Thesis works and Internship both in NSU and Outside (ICDDR,B Chittagong Veterinary and Animal Sciences University (CVASU) and University of Dhaka).

Duration of period: Spring 2009 till to date as an Assistant Professor and Fall 2009 - Fall 2018 as a senior Lecturer.

2. Worked as the first female **Assistant Proctor, NSU.**

Major responsibilities include:

- To oversee all university events and activities round the clock, by turn or rotation along with other 2 Assistant Proctors, including after hours and on weekends,
- To work together at larger events to maintain student discipline and orderliness.

Duration of period: From June 2009 to March 2013.

3. Worked as a Lecturer and then promoted as a **Senior Lecturer** in the **Environmental Science and Management department, North South University.**

Major responsibilities included:

- Maintaining student consulting for courses.
- Testing and evaluating students under direct supervision.
- Submitting the final grades within stipulated time period.
- Attending faculty and parent-teacher meetings.
- Helping NSU on academic and other matters including Different types of laboratory tests including water quality tests, Microbial tests, beyond set office hours.
- Supervised Thesis of undergraduate students and other students for their internship.

Courses that taught at undergraduate level:

- Introduction to Environmental Science, Introduction to Biology, Human Biology, Environment and Health, Environmental Chemistry, Environmental Microbiology, Environmental Toxicology.

Duration of period: From Spring 2005 to Summer 2009.

4. Served as a **Faculty Advisor** of **NSU Debate club** and also served as a **Faculty Advisor** of one of the creative student's organizations '**Earth club**'- **student's activities club NSU.**

My responsibility included guiding the Club and its members in all club related matters (Conduct Seminars, Workshops, Day-long trip, Field-Trip, National and International Day celebration) within the NSU code of conduct.

Duration of period: Fall 2006 (November 1st, 2006) to August 2009 and April 2010 till August 2011.

Voluntary Services in the Virology laboratory in ICDDR, B

- Tissue Culture for maintaining cell line-MDCK (Influenza virus), MA104 (Rotavirus), Splitting, harvesting and inoculating different cell lines with viruses
- Enzyme Linked Immunosorbent Assay (ELISA) for Rota Virus in Stool sample
- Polyacrylamide Gel Electrophoresis (PAGE) and Polymerase Chain Reaction (PCR) for Rota Virus.
- Haemagglutination test (HA) for Influenza Virus

Duration of period: October 2004 to December 2004.

MRes Student in the Molecular Pharmacology Group, University of Glasgow, UK

The Research is based on

- ✓ Subcellular Fractionation of the mouse fibroblast into membrane-cytoskeleton and cytosolic fractions
- ✓ Translocation of G-proteins from the cytosol to the membrane by performing SDS-PAGE
- ✓ Immunoblot analysis (Western Blot)
- ✓ GST-Pull down assay of the required protein.

Duration of period: October 2003 to March 2004.

MRes Student in the Biochemical Parasitology Group, University of Glasgow, UK

The research is based on the uptake assay of a transporter gene *AT-B* that is cloned from the parasitic protozoa *Trypanosoma brucei brucei*-responsible for the sleeping sickness in Africa.

Duration of period: May 2004 to August 2004.

Assistant Biotechnology Advisor in MOSICT, Bangladesh

Worked as an Assistant Biotechnology Advisor in a project named “Ministry of Science and Information & Communication technology Strengthening project” under the Ministry of Science and Information & Communication technology.

Duration of period: January 2003 to August 2003.

Teaching Assistant, Environmental Studies Dept, NSU.

Worked as a Teaching assistant in the Environmental Studies department in the North South University and assisted the faculty in preparing course materials.

Major responsibilities included:

- Maintaining class related records
- Helping in scheduling and arranging exams

- Helping students in preparing assignments and understanding course materials
- Working in the environment lab as a lab assistant in maintaining the lab
- Helping students in carrying out various tests regarding water quality.

Duration of period: Fall 2001 to Fall 2002.

Other experiences

- Worked as a lab demonstrator and also as a marker in the School of Science, Monash University Malaysia during PhD program.
- Worked as an MPhil student (not completed) in the **Plant Biotechnology Laboratory of Biochemistry and Molecular Biology Dept. of Dhaka University** and the research is based on DNA fingerprinting of traditional rice varieties using expressed sequence tags related to salt tolerant genes.
- Worked as a Research fellow in **Plant Biotechnology and Molecular Biology laboratory of Biochemistry and Molecular Biology Dept. University of Dhaka.**
- Working experiences in various places of Molecular Biology and Plant Biotechnology such as Polymerase Chain Reaction (PCR), Randomly Amplified Polymorphic DNA (RAPD), and transformation of Plasmid DNA in the Plant Biotechnology laboratory of Dhaka University during my thesis period.
- Worked in the Molecular genetics' lab in the Immunology Dept. of **BIRDEM, Dhaka, Bangladesh** from July 2001 to August 2001.

Paper Done

Mohammed I. Al-Salabi, Lynsey J. M. Wallace, Denise Candlish, **Ishrat Jabeen**, Sreekantan N. Ajith, and Harry P. de Koning (2007). “**Molecular Interactions Underlying the Unusually High Adenosine Affinity of a Novel Trypanosoma brucei Nucleoside Transporter.**” *MOLECULAR PHARMACOLOGY* Vol. 71:921–929, 2007, No. 3; *Printed in U.S.A.*

Rahman O, Nadim H K, Khaleque A, **Jabeen I**, and Islam S (2012). “**Dietary intake of urea from puffed rice in Bangladesh**”. *Bangladesh Journal of Medical Science*. Vol 18, Number 1, March 2012.

Kazi Nadim Hasan, Fahmida Nasrin, M abu Taher, Sharif Neaz, Sohikul Islam, Obaidur Rahman, **Ishrat Jabeen**, M Abdul Khaleque, Sharif Akhteruzzam (2012). “**Comparative analysis of Hepatitis C virus (HCV) RNA, anti-HCV and liver transaminase levels as markers and predictors of infectivity in HCV infection.**” *Bangladesh Journal of Medical Science, BJMS* 18.

Ishrat Jabeen, Muhammed Hafiz, Wickneswari Ratnam, Tilakavati Karupaiyah, Sharifa Dipti, Naoko Fujita, Takayoki Umemoto, Zhongli Li, Sadequr Rahman (2021). “**Differential expression of three key starch biosynthetic genes in developing grains of rice differing in glycemic index**”. *Journal of cereal Science* 99 (2021).

Farhana Haque, **Ishrat Jabeen**, Chaman Ara Keya, **S. R. Shuvo** (2022). “**Whole-genome sequencing and comparative analysis of heavy metals tolerant *Bacillus anthracis* FHq strain isolated from tannery effluents in Bangladesh**”. *AIMS Microbiology*, 8 (2):227–239.

Sanjida Bari Ananna, Sohikul Islam, **Ishrat Jabeen**, Ishtiaque Ahammad, SM Mostofa Kamal, Mohammad Shamim Hossain, SM Mostofa Kamal Khan and Mahmud Hossain (2022). “**Detection of**

Multi –Drug -Resistance (MDR) Mycobacterium tuberculosis among Suspected Tuberculosis Patients in Bangladesh using Line Probe Assay". Bioresearch Communications, Volume 8, Issue 2, July 2022.

Alam, J., Rahman, M.M., Halder, J., Islam, M.R., Sarkar, N., **Jabeen, I.**, Hossain, M.M.K., Rubaya, R., Alim, M.A., Bhuyan, A.A. and Jahan, N., 2022. **Myxovirus resistance (Mx) Gene Diversity in Avian Influenza Virus Infections**. *Biomedicines*, 10(11), p.2717.

Uddin, M.J., Haque, F., **Jabeen, I.** and Shuvo, S.R., 2022. **Characterization and whole-genome sequencing of an extreme arsenic-tolerant Citrobacter freundii SRS1 strain isolated from Savar area in Bangladesh**. *Canadian Journal of Microbiology*, 69(1), pp.44-52.

Fatimah Az Zahra, Ishrat Jabeen, Mohammed Jafar Uddin, Nazmun Nahar, Sohikul Islam, Sabbir R Shuvo (2022). **“Genomic analysis to elucidate the antibiotic resistance mechanism of extremely drug-resistant Pseudomonas aeruginosa strains isolated from Bangladesh”**. Bioresearch Communications, Volume 9, Issue 1, January 2023.

Jabeen, I., Mahamud, S.I., Islam, S., Lamisa, A.B., Anjum, A., Oishy, S.H. and Shuvo, S.R., **“Genomic identification and characterization of prophages associated with Citrobacter freundii strains”**. J Adv Biotechnol Exp Ther. 2023 Sep; 6(3): 648-658.

Jabeen, I., Islam, S., Hassan, A.I., Tasnim, Z. and Shuvo, S.R., 2023. A brief insight into Citrobacter species-a growing threat to public health. *Frontiers in Antibiotics*, 2, p.1276982.

Thesis Topic in PhD, Monash University

Genetic analysis of rice differing in glycemic index (GI).

Thesis Supervisor

Sadequr Rahman, Professor of Plant Genetics
Monash University Malaysia

Thesis Topic in MSc, University of Dhaka

Transformation efficiencies of aromatic and salt tolerant high yielding rice varieties using constructs containing genes for antibiotic resistance and for the production of osmolyte, mannitol.

Thesis Supervisor

Dr. Zeba Islam Seraj, Professor
Department of Biochemistry and Molecular Biology, University of Dhaka, Bangladesh

First Project of MRes, University of Glasgow

Sphingosine-1-phosphate (S1P) induced activation of Rac and Rho proteins in CCL39fibroblasts.

Project Supervisor

T.M.Palmer, PhD.

Assistant Professor
Division of Biochemistry and Molecular Biology
Institute of Biomedical and Life Sciences

University of Glasgow, Scotland
Second Project of MRes, University of Glasgow

Characterization of a novel *Trypanosoma brucei* transporter, AT-B by heterologous expression in yeast.

Project Supervisor

Dr. Harry De Koning

Professor

Parasite Biochemistry and Pharmacology

Associate (School of Life Sciences)

University of Glasgow, Scotland

Professional Membership:

1. General Member of Bangladesh Biochemical Society Since 2012 till to date.
2. General Member of Graduate Biochemist Association, Bangladesh Since 2012 till to date.
3. General Member of Bangladesh Biosafety and Biosecurity Association. Since 2012 till to date.
4. General Member of American Society of Microbiology, Bangladesh since 2012 till to date.
5. General Member of Bangladesh Biochemical Society since 2018 till to date.
6. General Member of Commonwealth Scholarship Commission, UK since 2005 till to date.
7. General Member of University of Glasgow Alumni association since 2005 till to date.
8. General Member of Monash University Alumni association since 2005 till to date.

Supervision of Undergraduate project & MS Thesis at NSU

Department of Biochemistry and Microbiology, NSU.

Graduate and undergraduate Levels (Thesis & Projects)

2023

1. Phenotypic and Genotypic detection of Extended Spectrum β -Lactamase (ESBL) producing *Enterobacteriaceae* bacteria isolated from Local Chicken samples of Dhaka City. **(Thesis)**
2. Characterization of carp mitogenome of Halda river. **(Thesis)**
3. Genotypic Detection of the Extended Spectrum Beta-lactamase (ESBL) producing bacteria from drinking water samples in Dhaka city. **(Thesis)**
4. Isolation and Screening of Extended Spectrum Beta Lactamases (ESBL) Producing Bacteria from Fish samples from a local Market, Dhaka.
5. Prevalence of *CMY*, *DHA* and *OXA* genes in Extended Spectrum β - Lactamase (ESBL) producing bacteria isolated from local chicken sample in Dhaka city.
6. Phenotypic detection & molecular characterization of Extended-spectrum β -lactamases (ESBL) Producing *Enterobacteriaceae* species from red meat available in Dhaka city. **(Thesis)**
7. Phytochemical and Therapeutic Potential of *Citrus grandis*.
8. Prevalence of *bla*CTX-M, *bla*SHV, *bla*ACT-1 and identification of 16S ribosomal RNA (16S rRNA) among Extended-spectrum beta-lactamases (ESBL) producing *Enterobacteriaceae* from Beef and Shrimp samples available in Dhaka City
9. Emergence of Extended Spectrum β - Lactamase (ESBL) producing *Enterobacteriaceae* bacteria isolated from Tilapia fish of Dhaka City”: An investigation into resistance pattern, phenotypic and genotypic detection of *bla*CTX-M
10. Prevalence of *SHV*, *DHA* & *ACT-1* genes in Extended Spectrum β -Lactamase (ESBL) & AmpC producing bacteria isolated from *Labeo Rohita*.

11. Molecular characterization of Extended spectrum β - lactamase producing *Enterobacteriaceae* found in *Labeo rohita* (Rohu fish) samples collected from local market in Dhaka city.
12. Isolation And Detection of Extended Spectrum Beta Lactamases (ESBL) Producing Bacteria from Broiler Chicken Sample from Local Market of Dhaka.
13. Detection of Extended Spectrum Beta-Lactamase (ESBL)-Producing Bacteria from broiler chicken around Dhaka city.
14. Extended Spectrum β -Lactamases (ESBL) producing bacteria in shrimp samples available in Dhaka city.
15. Detection & Prevalence of Extended-Spectrum Beta-Lactamase (ESBL) Producing Bacteria From Rui Fish In Dhaka City.
16. Genotypic Detection of *CMY*, *DHA*, *VIM*, *TEM* among Extended Spectrum Beta-lactamase (ESBL) producing bacteria from local chicken of Dhaka city.
17. Analyzing predominance of TEM and VIM-type Extended Spectrum Beta-lactamase (ESBL) in *Enterobacteriaceae*-producing bacteria of Tilapia and Pangas fish from Dhaka city.
18. Microbiome Analysis through Shotgun Sequencing of Soil Samples from Various Dhaka City Sites in Bangladesh. (Thesis)

2022

1. APOBEC3B is a Potential Driver of T2DM induced Non-Hodgkin Lymphoma (NHL).
2. *E.Coli* Contamination and Antimicrobial Resistance (AMR) in drinking water: Bangladesh.
3. Isolation of Extended-spectrum beta-lactamases (ESBL) producing bacteria in served water.
4. Identification of Plant based Bioactive Molecules for the Inhibition of SARs- CoV-2.
5. Role of plant-derived bioactive compounds against skin infections.
6. Antimicrobial activity of medicinal plant extracts and phytochemicals-The review.
7. Plant Secondary Metabolites: A Panacea Against Drug Resistant Bacteria
8. The role of medicinal plants fighting against hormonal disorders
9. Isolation of Extended Spectrum Beta-Lactamase (ESBL)-producing *Enterobacteriaceae* from Local Lemon Species in Dhaka City
10. Plant derived anticancer compounds as new perspectives in drug discovery
11. Isolation of Extended Spectrum Beta-Lactamase (ESBL)-producing *Enterobacteriaceae* from fruits in Dhaka city
12. Isolation and Screening of Extended Spectrum Beta Lactamases (ESBL) Producing Bacteria from Foods of Plant Origin and Animal Origin
13. Prevalence of SHV and CTX gene in Extended Spectrum β -Lactamase (ESBL) producing bacteria isolated from local chicken
14. Therapeutic Effects of Antibiotics against Gram-negative Bacteria in Southeast Asia
15. Production of bioplastic film from stubble, starch-based fruits and determining the safe analysis of the bioplastic films with the help of chemical oxygen demand (cod) test

2021

1. Gut Microbiota of Indigenous and Poultry Chicken in Asian Countries – A Review”.
2. Isolation and Characterization of Fungi associated with Pumpkin, Sweet Potato and Cucumber.
3. Isolation and characterization of Extended Spectrum Beta-Lactamase (ESBL) producing *Enterobacteriaceae* from water samples of various food vendors in Dhaka city.
4. The Prevalence of Extended-Spectrum B-Lactamase (ESBL) Producing Bacteria From Drinking Water Around Dhaka City Through An Integrated Approach Of Phenotypic Screening And Genotypic Analysis Of B-Lactamase Genes.

5. Characterization of Extended-Spectrum β -Lactamase (ESBL) producing *Enterobacteriaceae* From Water Samples in Dhaka City.
6. Identification & Characterization of Extended Spectrum Beta-Lactamase (ESBL) Gene Producing Bacterial Strains Isolated from Drinking Water of Dhaka City, Bangladesh.
7. Molecular identification and characterization of Extended-Spectrum Beta-Lactamases (ESBL)-producing bacteria containing anti-microbial resistant genes of water samples collected from food vendors around Dhaka city, Bangladesh.
8. Identification of the *TEM-1* gene in *Klebsiella* strains of water samples collected from food vendors in Dhaka City.

2020

1. Phenotypic screening for the prevalence of Extended-Spectrum β -Lactamase (ESBL) producing bacteria from water samples collected from canteen and dining areas around Dhaka city
2. Occurrence and biochemical profiles of Extended-Spectrum β -Lactamase (ESBL)-producing bacteria from effluents around Dhaka city
3. Characterization of Fungi associated with Tomato, Eggplant and Cauliflower
4. Isolation and Identification of Microorganisms Present in Various Personal In-Use Cosmetics
5. Prevalence of Extended Spectrum β -Lactamase (ESBL)-Producing *Enterobacteriaceae* in vegetables in Asian Countries
6. Comparative analysis of Coronavirus (COVID-19) genome isolated from different parts of the world

2019

1. Detection of *myxovirus* resistance (*mx*) gene and its diversity in poultry chicken by polymerase chain reaction restriction fragment length polymorphism (pcr-rflp)

2013

1. Expression analysis of *snf* gene in jute (SDLT). Faisal Bin Rashid.
2. Interleukin 10 promoter polymorphism on GBS patients. Imtiaj

2012

1. Genetic prevalence of Norovirus in urban clinic in Bangladesh. Wisam Babar.
2. Sub-typing of Guillain-Barre Syndrome (GBS) variants depending on clinical parameter. Hossain Mahmud Sajib.

2011

1. Genetic Characterization of Human Pandemic A/H1N1 circulating in Bangladesh. Adnin Ashrafi.
2. Determination of unique identifiers of traditional landraces. Fatima Al Zahra.
3. Guillain-Barré syndrome and Anti-GM1 antibody & Comparative analysis of different treatment options. Ishtiaque Ahmed.

2010

1. Isolation and Identification of Bacterial Endophytes in Jute. Taha.

Department of Environmental Science and Management, NSU

Graduate level (Thesis and Intern)

- Assessment of Hygiene Practice among the Urban Slum Dwellers of Dhaka City, Fatema T Z, 2008.

- Hygiene Assessment in water and Sanitation Programs at Urban Slums, Shahnoor H, **2007**.
- The effects of cooking facilities in a household on the indoor air pollution induced diseases, Zareef T M, **2006**.
- Assessing water quality of ice used in food, Fatima AR, **2005**.
- Birds of pakhhir char, Abudullah A D, **2005**.

Conference and Workshops attended (2014-2024)

Conference and Workshops attended (2024)

1. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Prevalence of extended spectrum β -lactamase (ESBL) producing gram-negative bacteria isolated from local chicken available in Dhaka city” by Adrita Khanum, Protik Dutta, Sabbir Rahman Shuvo and Ishrat Jabeen. (**Abstract ID: ENR-P22**).
2. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Emergence of extended spectrum β -lactamase (ESBL) producing Enterobacteriaceae bacteria isolated from Tilapia fish in Dhaka city” by Tajri Tabassum Zisha, Protik Dutta, Sabbir Rahman Shuvo, and Ishrat Jabeen. (**Abstract ID: FAR-P15**).
3. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Uncovering multi-drug resistance mechanisms of Bangladeshi Staphylococcus aureus isolates through whole-genome sequence analysis” by Afia Anjum, Jarin Tabassum, A.k.m. Imrul Hassan, Ishrat Jabeen, Sohikul Islam', and Sabbir R. Shuvo. (**Abstract ID: OHA-P09**).
4. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Characterization and occurrence of the TEM-type extended spectrum β -lactamase (ESBL) in Enterobacteriaceae producing bacteria isolated from a raw, local chicken in Dhaka city” by Sumaita Iffat Ismam, Sabbir Rahman Shuvo and Ishrat Jabeen. (**Abstract ID: OHA-P10**).
5. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Isolation and characterization of bacteriophage against multidrug-resistant Stenotrophomonas maltophilia” by Kowshik Pal, Sattajith Roy, Fahmida Haque, Fardia Rahman, Ishrat Jabeen and Sabbir R. Shuvo. (**Abstract ID: OHA-P11**).
6. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Beta lactamases (ESBL) producing bacteria from affordable fish samples from a local market, Dhaka” by Mosa Asia Begum, Ishrat Jabeen. (**Abstract ID: OHA-P21**).
7. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Analyzing the effect of carbon sources and vitamin E on multi-drug resistant Escherichia coli” by Mst. Sadia Islam, Zerine Tasnim, Sohikul Islam, Ishrat Jabeen, Sabbir R. Shuvo. (**Abstract ID: IPR-P02**).
8. Poster presentation in the 37th BSM Annual Conference 2023, organized by Bangladesh Society of Microbiologists (BSM) held on January, 2024. “Genomic identification and characterization of prophages associated with Stenotrophomonas maltophilia strains” by Sattajith Roy, Kowshik Pal, Sohikul Islam, Ishrat Jabeen and Sabbir Rahman Shuvo. (**Abstract ID: OBR-P02**).

Conference and Workshops attended (2023)

1. Poster presentation in the 3rd International Electronic Conference on Antibiotics, organized by Sciforum, MDPI held on December, 2023. Comparative Analysis of Extended Spectrum β -Lactamase (ESBL) Producing *Enterobacteriaceae* Isolated from Local and Broiler Chicken Samples in Dhaka City: A Study in Antibiotic Resistance” by Protik Dutta, Sabbir Rahman Shuvo, Ishrat Jabeen (Abstract ID: sciforum-082645).
2. Poster presentation in the ICBHA held on September 01, 2023 based on “A comparative study of Extended Spectrum β -Lactamase (ESBL) producing *Enterobacteriaceae* bacteria isolated from local and broiler chicken samples of Dhaka City” by Protik Dutta, Sabbir Rahman Shuvo, Ishrat Jabeen. (Abstract ID: P-1-30).
3. Poster presentation in the ICBHA held on September 01, 2023 based on “Prevalence of Extended-spectrum β -lactamases (ESBL) producing bacteria in *Labeo Rohita* (Rohu fish) samples” by Sadiya Parvin, Sumaiya Hasan Tihi, Sabbir Rahman Shuvo, Ishrat Jabeen. (Abstract ID: P-1-29)
4. Flash talk in the ICBHA held on September 01, 2023 based on “Isolation and Detection of Extended-spectrum β -lactamase (ESBL)-producing Bacteria in Rohu Fish” by Sumaiya Hasan Tihi, Sadiya Parvin, Sabbir Rahman Shuvo, Ishrat Jabeen. (Abstract ID: FT-2-8)
5. Poster presentation in the ICBHA held on September 01, 2023 based on “Genomic analysis of antibiotic resistance mechanisms of *Staphylococcus aureus* isolated from Bangladesh” by Jarin Tabassum, A.K.M. Imrul Hassa, Ishrat Jabeen, Sohikul Islam, and Sabbir Rahman Shuvo. (Abstract ID: P-1-43)
6. Poster presentation in the ICBHA held on September 01, 2023 based on “The impact of vitamin E on multi-drug resistant *Escherichia coli*” by Zerine Tasnim, Sohikul Islam, Ishrat Jabeen, and Sabbir Rahman Shuvo. (Abstract ID: P-1-44)
7. Poster presentation in the ICBHA held on September 02, 2023 based on “Bacteriophage: An alternative therapy to kill multi-drug resistant *Pseudomonas aeruginosa*” by Fahmida Haque, Kowshik Pal, Sattajith Roy, Sohikul Islam, Ishrat Jabeen, and Sabbir Rahman Shuvo. (Abstract ID: P-2-20)
8. Poster presentation in the ICBHA held on September 02, 2023 based on “Characterization of Extended-spectrum β lactamase (ESBL) producing bacteria in vegetable samples” by Chowdhury Fatema Tuz Zohra Hossain, Protik Dautta, Sabbir Rahman Shuvo, Ishrat Jabeen. (Abstract ID: P-2-51)
9. Poster presentation in the ICBHA held on September 02, 2023 based on “ESBL-producing Gram-negative bacteria in Ready-to-Eat Vegetables & Herbs: A Concerning Trend in Kitchen Markets in Dhaka” by Munmun Faria Iqbal, Kaniz Fatema, Ifrat Jahan Silvy, Arafa Omar, Protik Dutta, Sohikul Islam, Ishrat Jabeen, and Sabbir Rahman Shuvo. (Abstract ID: P-2-64)

Conference and Workshops attended (2021-2022)

1. Poster presentation in the 2nd International conference on Genomics, Nanotech, and Bioengineering-2022 (ICGNB-2022) hosted by North South University, held on June 26-28, 2022 entitled as “An integrated approach of phenotypic and genotypic analysis of β -lactamase in ESBLProducing *Enterobacteriaceae* from served water samples in Dhaka” by Kaifi Sultana Kabbo, Ahmed Ishtiaque, Ishrat Jabeen (Abstract ID: IDP-010).
2. Poster presentation in the 2nd International conference on Genomics, Nanotech, and Bioengineering-2022 (ICGNB-2022) hosted by North South University, held on June 26-28, 2022 entitled as “APOBEC3B - A potential driver of Type 2 Diabetes Mellitus (T2DM) induced Non-

Hodgkin's Lymphoma" by Md. Hadiul Islam, M. Anwar Hossain, Sajib Chakraborty, Ishrat Jabeen (Abstract ID: GGP-008).

3. Poster presentation in the 2nd International conference on Genomics, Nanotech, and Bioengineering-2022 (ICGNB-2022) hosted by North South University, held on June 26-28, 2022 entitled as "Biofilm producing ability of an extensive-drug resistant *Acinetobacter baumannii* isolated from ICU patient from Dhaka" by Sadia Ferdous, Mohtasim Billah, Kristi Paul Hridi, K.M. Shaerul Islam, Ishrat Jabeen, Sohedul Islam (Abstract ID: IDP-006).
4. Poster presentation in the 2nd International conference on Genomics, Nanotech, and Bioengineering-2022 (ICGNB-2022) hosted by North South University, held on June 26-28, 2022 entitled as "Whole genome sequencing and comparative analysis of heavy metals tolerant *Bacillus anthracis* FHq isolated from Bangladesh" by Farhana Haque, Ishrat Jabeen, Chaman Ara Keya, and Sabbir R. Shuvo (Abstract ID: ESP-012).
5. Poster presentation in the 2nd International conference on Genomics, Nanotech, and Bioengineering-2022 (ICGNB-2022) hosted by North South University, held on June 26-28, 2022 entitled as "*Citrobacter freundii* SRS1: an extreme arsenic tolerance strain isolated from Savar, Bangladesh: by Mohammad Jafar Uddin, Farhana Haque, Ishrat jabeen, Sabbir R. Shuvo (Abstract ID: ESP-013).
6. Poster presentation in the 1st INTERNATIONAL E-CONFERENCE ON MICROBIOLOGY: COVID-19 & CURRENT ISSUES, Primeasia University, held on January 21, 2021, entitled as "The prevalence of Extended-Spectrum β -Lactamase (ESBL) producing bacteria from drinking water around Dhaka city through an integrated approach of phenotypic screening and genotypic analysis of β -lactamase genes" by Kaifi Sultana Kabbo & Ishrat Jabeen (Abstract ID: FIM-14).
7. Poster presentation in the 1st INTERNATIONAL E-CONFERENCE ON MICROBIOLOGY: COVID-19 & CURRENT ISSUES, Primeasia University, held on January 21, 2021, entitled as "Isolation and Characterization of Extended Spectrum Beta-Lactamase (ESBL) Producing Enterobacteriaceae from Water Samples of Various Food Vendors in Dhaka City" by Amanta Rahman & Ishrat Jabeen (Abstract ID: FIM-15).
8. Poster presentation in the 1st INTERNATIONAL E-CONFERENCE ON MICROBIOLOGY: COVID-19 & CURRENT ISSUES, Primeasia University, held on January 21, 2021, entitled as "Isolation and characterization of fungi from different types of vegetables available in local markets in Dhaka city" by Md. All Asim Toky & Ishrat Jabeen (Abstract ID: FIM-9).

Conference and Workshops attended (2014-2018)

1. Ishrat Jabeen, Monash Science Symposium 2018 Cell and Molecular Biology field under the oral presentation category for the title 'Genetic Analysis of Rice Differing in Glycemic Index (GI).'
2. Jabeen I., Ratnam W., Karupaiah T., Song B.K., and Rahman S. "Proteomic and Genetic approaches to identify markers influencing rice starch digestibility". 2nd International Conference on Molecular Biology and Biotechnology 2017, awarded a prize for excellent poster presenter.
3. Jabeen I., Yazid M. H. M., Ratnam W., Karupaiah T., and Rahman S. "Identification of Novel rice genes influencing starch digestibility". 21st Biological Sciences Graduate Congress (BSGC) 2016, University of Malaya.

4. Ishrat Jabeen, Muhammad Hafiz Bin Mohd Yazid, Wickneswari Ratnam, Tilakavati Karupaiah, Ton So Ha, Sharifah Dipti, Khandaker Aminul Kabir and Sadequr Rahman. "Genetic and Transcriptomic approaches to identify markers influencing rice starch digestibility". Malaysia International Biology Symposium 2016 (*i-SIMBIOMAS 2016*), University Putra Malaysia.
5. Ishrat Jabeen, Wickneswari Ratnam, Tilakavati Karupaiah on "Marker analysis of *Wx* gene influencing rice starch digestibility". Monash Science Symposium 2014.
6. Ishrat Jabeen. 'Rice: Friend or foe?' Research in a Flash. Monash Science Symposium 2014.

Research Projects

NSU-CTRG project as a Principal Investigator on "Molecular characterization and antibiotic resistance pattern analysis of Extended-Spectrum β -Lactamase (ESBL)-producing bacteria from fresh fruits and vegetables available in Dhaka city" funded by CTRGC (CTRG-22-SHLS-06).

Duration: 2022-2023.

R & D project as a Principal Investigator on "molecular characterization of extended spectrum beta-lactamase (ESBL) producing Enterobacteriaceae from water samples of various food vendors in Dhaka city" funded by Ministry of Science & Technology, Dhaka, Bangladesh.

Durations: 2021-2022.

NSU-CTRG project as a Principal Investigator on "Isolation and characterization of extended-spectrum β -lactamase (ESBL)-producing Enterobacteriaceae from effluents around Dhaka city" funded by CTRGC (CTRG-19/SHLS/07). NSU.

Duration: 2019-2021.

Computer Literacy

Operating System: MS Windows 97'. Office 365.

Application Packages: MS Word, MS Excel, MS Power Point, MS Access

Program languages: Statistical data analysis using SPSS, Python for data science & machine learning, and RStudio for data analysis

Language Proficiency

Proficient to communicate both verbally and in text in English and Bengali both in professional and social surrounding.

Leisure pursuit

Playing Musical Instrument like Violin, guitar, Travelling, Painting, and Watching Movies.

Personal Information

Father's Name-Late Lehaj Uddin

Mother's Name- Dilruba Khanam

Husband's Name – Tarique Mohammed Ashraf

Date of Birth- 1st December, 1977

Nationality- Bangladeshi by birth

Religion- Islam (Sunni)

Marital Status-Married

Blood Group- O+ (positive)

Permanent Address- Vill: Mukundgati, P.O: Belkuchi

Present Address- House: 295, Flat: B1, Road: 13, Block:A, Bashundhara Residential Area, Dhaka-1229, Bangladesh

Home District- Shirajgange, Bangladesh

References

Dr. Zeba Islam Seraj

Professor

Dept. of Biochemistry and Molecular Biology

University of Dhaka

Bangladesh

Dr. Abdul Khaleque

Professor

Dept of Biochemistry & Microbiology

North South University,

Dhaka

Bangladesh

Dr. Sadequr Rahman

Professor of Plant Genetics

School of Science

Monash University

Malaysia

Dr. Harry De Koning

Professor

Parasite Biochemistry and Pharmacology

Division of Infection and Immunity

Institute of Biomedical and Life Sciences

University of Glasgow, Scotland, UK



Updated on 19 February, 2024.