# **Department of Pharmacy**



#### **Vision**

The vision of the Department of Pharmacy is to be the preeminent institution in pharmacy education, research and practice where graduates are prepared to lead in pharmaceutical industry, academia and allied sectors at home and abroad.

#### Mission

The mission of the Department is to develop competent professionals, scientists academicians by providing the highest quality educational experience. The department fosters a learning-centered, research-oriented professionally motivated educational and environment that encourages individuals to make positive contributions to the health sector. It cultivates relationships with the key stakeholders to meet the changing needs and shape of the evolving health care system. The department achieves its mission by striving for excellence in education, service and research, all directed towards enhancing health and the quality of life of people.

# **Academic Programs**

UAP launched 4 years Bachelor of Pharmacy (B. Pharm) program in 1996. UAP is a pioneer in launching 1 year Master of Science in Pharmaceutical Technology (MS Pharm Tech) program. The syllabuses are approved by the UCG and accredited by Pharmacy Council of Bangladesh.

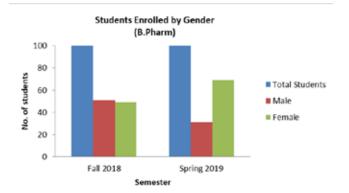
The Department of Pharmacy is one of the most enlightened and established departments of the university as well as in the country. Following a bisemester system, the B. Pharm program requires minimum 8 semesters to prepare students to become pharmacists while the MS Pharm Tech program requires minimum 2 semesters to instruct and train the graduate pharmacists for working as integrated team members of healthcare system.

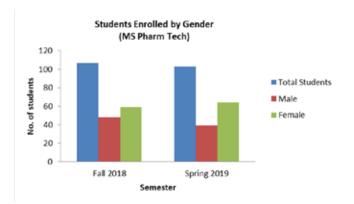
## **In-take Capacity and Admission**

The department admits 100 students in the undergraduate and 100 students in the graduate program in each of the two semesters in a year. From its inception in 1996 with only 6 students enrolled in B. Pharm program it has expanded in 2018 to 100 enrollment.

Students having an overall GPA of 8 in SSC and H.S.C combined are eligible to apply for admission in the undergraduate program. All the applicants have to excel both in a competitive written test and an oral interview before being selected for admission. In Spring 2018, for the B. Pharm program 743 students applied for admission and out of them only 100 were finally selected for admission after rigorous screening.

The admission trend in MS Pharm Tech program is similar like B. Pharm; back in 2003 when the graduate program was first introduced, only 15 students were admitted; now the admission to program has remarkably reached to 100 in 2018. Only the applicants who have a B. Pharm degree from an accredited institution are selected for MS Pharm Tech admission. In Spring 2018 semester 100 candidates were selected for the MS Pharm Tech program from among 182 students who graduated from universities, such as, NSU, EWU, USTC, Brac University, Southeast University, Northern University, Gono Bishwabidyalay, and the like.





## **Faculty Members**

The Department of Pharmacy is very proud of its passionate, enthusiastic, and highly qualified faculty team which includes 27 full-time, 4 inter-departmental and 16 part-time faculty members. The full-time faculty members are expert academicians and researchers from renowned universities at home and abroad, such as, Dhaka University, Jahangirnagar University and University of Leicester and University of Nottingham, UK; Kanazawa University and Niigata University, Japan; China Pharmaceutical University, China. They all have extensive knowledge and experience in their respective areas of specialization. They are harmonized by highly competent part-time faculty members from University of Dhaka and different pharmaceutical industries, such as, Sanofi Aristopharma Limited, Bangladesh, Renata Pharmaceuticals Limited, and the like.

## **Faculty Members**

# Dr. Mohiuddin Ahmed Bhuiyan

Professor & Head, until April 30, 2019 PhD (Japan), M. Pharm and B. Pharm. (DU)

#### Dr. Swarnali Islam Khandaker

Professor, Head, from May 1, 2019 PhD, M. Pharm and B. Pharm (DU)

#### Dr. Sardar Mohammad Ashraful Islam

Professor, Coordinator, MS Pharm Tech PhD, M. Pharm and B. Pharm (DU)

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### **Mohammad Shahriar**

**Associate Professor** 

MS Pharm Tech and B. Pharm (UAP)

#### **Dr. Irin Dewan**

**Associate Professor** 

PhD (JU), MS Pharm Tech and B. Pharm (UAP)

#### Dr. Zabun Nahar

**Associate Professor** 

PhD, M. Pharm and B. Pharm (DU)

#### Dr. Md. Ahsanul Haque

**Assistant Professor** 

PhD (Japan), M. Pharm and B. Pharm. (DU)

#### Dr. Md. Rabiul Islam

**Assistant Professor** 

PhD (DU), M. Pharm and B. Pharm (DU)

#### **Dr. Zahid Sadek Chowdhury**

**Assistant Professor** 

PhD (Japan), M. Pharm and B. Pharm (DU)

#### Md. Asaduzzaman

**Assistant Professor** 

M. Pharm and B. Pharm (DU)

#### **Waheeda Nasreen**

**Assistant Professor** 

Masters in Research (UK), B. Pharm (UAP)

#### Mahjabeen Gazi

**Assistant Professor** 

MS Pharm Tech and B. Pharm (UAP)

#### Sayeeda Fahmee Chowdhury

**Assistant Professor** 

MS Pharm Tech and B. Pharm (UAP)

#### Kanij Nahar Deepa

**Assistant Professor** 

M. Pharm and B. Pharm (DU)

#### Md. Hamiduzzaman

**Assistant Professor** 

M. Pharm. and B. Pharm (DU)

#### **Sadia Noor**

**Assistant Professor** 

M. Pharm and B. Pharm (DU)

#### Samia Shabnaz

**Assistant Professor** 

M. Pharm and B. Pharm (DU)

#### A.H.M. Nazmul Hasan

**Assistant Professor** 

M. Pharm and B. Pharm (JU)

## **Fayad Bin Abdus Salam**

**Assistant Professor** 

M. Pharm and B. Pharm (DU)

#### **Kaniz Afroz Tanni**

Lecturer

M. Pharm and B. Pharm (DU)

#### Ishrat Jahan

Lecturer

M. Pharm and B. Pharm (DU)

### **James Regun Karmoker**

Lecturer

MS Pharm Tech and B. Pharm (UAP)

#### **Nishat Jahan**

Lecturer

MSc in Applied Biomolecular Technology (UK)

#### **Nadia Kabir**

Lecturer

MS in Pharmacology (China), B. Pharm (UAP)

## Sumaya Huque

Lecturer

MS Pharm Tech and B. Pharm (UAP)

#### **Fahad Bin Imtiaz**

Lecturer

M. Pharm and B. Pharm (DU)

#### Parsa Sanjana Haque

Lecturer

M. Pharm and B. Pharm (DU)

#### **Sharmin Sultana**

Lecturer

M. Pharm and B. Pharm (DU)

#### **Shomita Ferdous**

Lecturer

MSc (University of Texas, USA), M. Pharm (DU)

# **Department Facilities**

The department conducts teaching and research activities in modern well-equipped classrooms using specialist teaching and learning materials and laboratories purposefully designed to a high standard for providing a motivating learning environment that meets the needs of the profession.

The core resources that are provided by the department are its seven spacious air conditioned

class rooms equipped with modern sound systems and multimedia projectors that are connected to computers that have fast internet connections.

The areas of strength of the Pharmacy department are its fourteen highly equipped teaching and research laboratories which are equipped with up-to-date analytical instruments and machineries for evaluation of various dosage forms, design and manufacture of dosage forms, understanding of microbial disease pathogenesis and transmission, study of biochemical and biological studies of potential drug substance of natural origin. The department has two formulation and quality control laboratories which are unique and developed by simulating the labs of top pharmaceutical industries.

## **Areas of Strength**

The areas of strength in the department of Pharmacy is its atmosphere of professionalism and advance knowledge of the faculty members in accordance with its state-of-art research facilities that support highly sophisticated studies on drug action. The dedicated faculty members provide maximum effort for improving the quality of teaching-learning. Through sincere communication they ensure that each student receives right guideline for their studies such as getting the course outlines, teaching materials and other supporting assistance. They also allocate advising time for the students after classes to sit and meet with them for any kind of queries or difficulties concerning their course.

Pharmaceutical in-plant training is a part of the B. Pharm. curriculum and required for professional registration from Pharmacy Council of Bangladesh. It is one of the areas of strength of Pharmacy department that exposes the students to practical applications of education so as to connect the practice in industry with university curriculum and build their technical skills and capability.

The role that the pharmaceutical industries play in UAP pharmacy education is a unique strength of the Department. In every semester 80-90 students go to a number of local and international pharmaceutical companies for their in-plant training for a period of 2 to 4 weeks. In this period, the students gather practical knowledge and

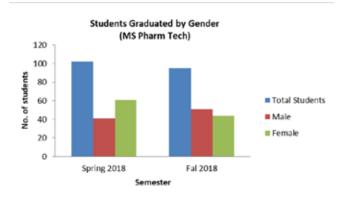
experience regarding the manufacturing process of different dosage forms, In-Process Control procedure, Quality Control procedure, Validation process, Packaging technology and Regulatory guidelines. After completion of the training, the Pharmaceutical Company give them a certificate which is essential for their professional career and plays an important role to obtain the certificate of registered pharmacist from the Bangladesh Pharmacy Council.

## **Achievements of the Department**

The Department of Pharmacy has awarded B. Pharm degrees to 160 students and MS Pharm Tech degrees to 197 students in the year 2018-19. It is duly accredited by the Pharmacy Council of Bangladesh. The graduate students are working as health care professionals at top national and international pharmaceutical companies such as Square Pharmaceuticals Ltd, Beximco Pharma Ltd, Incepta Pharmaceuticals Ltd, Eskayef Bangladesh Ltd, ACME Laboratories Ltd, Aristopharma Ltd, Opsonin Pharma, Radiant Pharmaceuticals Ltd, Orion Pharma, Sanofi Bangladesh Ltd, Glaxo SmithKline Bangladesh Ltd etc. A few of them are employed as faculty members at various universities in the country, such as, East West University, BRAC University, Southeast University and City University.

The department has a long-standing reputation for high quality research with an overall aim of improved healthcare outcomes. The faculty members who are devoted in continual study and recent developments in the field have regular publications in high impact factor journals such as, Journal of Pharmaceutics, Journal of Diabetes Mellitus, BMC Psychiatry, Cancer Epidemiology and Tumor Biology. The majority of research is conducted at the wellequipped laboratories of the department with active involvement of students. As a result, students having opportunities to advance their knowledge through diverse project works are familiar with research methodologies, idea generation, laboratory work and scientific reading/writing and have published thesis works with their supervisors. Only top students who have a research interest and excelled in the first six months of one-year Master's program are selected for thesis involvement. The strength of thesis experience helps many of the graduates

to take research as career in international institutions and thus contribute immensely to the health-care field.



# **Departmental Events and Co-curricular Activities**

The department is regular in organizing and participating in a variety of co-curricular activities, workshops and seminars. The highlights of the department's events and co-curricular activities include the following.

### **Seminars Organized**

The department regularly organizes different seminars which are academically supportive for the faculty members as well as for the students. During the year, the Department organized the following seminars:

A seminar on 'Experimental Study Design' was organized on April 16, 2019. The objective was to learn techniques and innovations in research design. Mr. Shyfuddin Ahmed, a Scientist at ICDDR,B, with experience of receiving research funds from NIH and NHLBI of USA, Mr. Shyfuddin Ahmed presented a fruitful guidance on how to design experimental study, randomize control trials and various other aspects of quasi-experimental design. All the faculty members and students of the Department attended the seminar.



Prof. Dr. Mohiuddin Ahmed Bhuiyan handed over a crest of UAP to the Keynote Speaker, Mr. Shyfuddin Ahmed

Dr Isa Naina Mohamed, Associate Professor, Department of Pharmacology, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM) as the Keynote Speaker gave a seminar on 'Sharing Research Ideas and Research Experience'. The other invited speakers were Dr. Ima Nirwana Soleiman, Professor, Department of Pharmacology and Deputy Dean, Faculty of Medicine, Universiti Kebangsaan Malaysia; Dr Md. Selim Reza, Professor, Department of Pharmaceutical Technology, University of Dhaka. At the beginning, the Head, Department of Pharmacy, UAP gave a presentation on the research activities of the department and highlighted its achievements.

One very significant outcome of this seminar is a likely research collaboration between UKM and UAP. As a part of that process Prof. Bhuiyan has visited UKM to present research activities of the Department of Pharmacy.



Post seminar meeting with the faculty members of the department

A seminar on 'Possible Impact of National Drug Policy 2016 on Pharmaceutical Sector of Bangladesh' was organized by the Department on 31 January, 2018 at UAP Campus. Dr. A. B. M. Faroque, Professor, Department of Pharmaceutical Technology, Faculty of Pharmacy of University of Dhaka was the Keynote Speaker. The seminar focused on how the steps taken by the government helped thrive the local pharmaceutical companies following the Drug Ordinance 1982. The speaker emphasized on the opportunities created under the National Drug Policy-2016 and how best those opportunities could be well utilized by the local pharmaceutical companies in business at home and abroad. Prof. Dr. Mohiuddin Ahmed Bhuiyan, Head, Department of Pharmacy concluded the seminar with thanks and presented a UAP crest to the keynote speaker. The faculty members and the students were among the attendees.



Guest Speaker Prof. Dr. A. B. M. Faroque receiving crest from Head of Department

A seminar on 'Mental Health at University Campus and How to Deal with Study Related Stress' in collaboration with Sun Pharmaceutical (Bangladesh) Ltd. was held on 7th November, 2018. The objective of the seminar was to make students familiar with the components of stress and proactive stress management skills. A renowned psychiatrist and media personality, Dr. Mekhala Sarkar, Associate Professor, Department of Psychiatry, National Institute of Mental Health (NIMH) was the keynote speaker. Later, Mr. Pintu Bhushan Mitra (UAP Alumni), Senior Product Manager of Marketing Planning Department, Sun Pharmaceutical (Bangladesh) Ltd made a presentation on their company and corporate social responsibility campaign.



Dr Mekhala Sarkar Speaking at the Seminar

#### **Co-curricular Activities**

The fully functional clubs of the department are Pharma Science Club, Pharmacy Debating and Quiz Club, Social Awareness Club, Photography Club, Cultural Club and Sports Club. Programs like debate and quiz competitions, blood donations, winter cloth distributions, oral saline supply to flood victims, photography exhibitions, cultural programs, cricket and football tournaments, indoor games competitions, and annual picnic are all organized by these clubs. Aside from the club activities, the department regularly organizes poster presentations, wall magazine display and industrial visit.

#### Pharma Science Club

Pharma Science Club organized a day-long Pharma Fiesta 2018, a day long event, at the campus premises on July 19, 2018. The motto of the Fiesta 2018 was to bring 'Aspiring Pharmacists under One Roof'. The program consisted of several segments like Olympiad, poster presentation and stall exhibition. A total of 202 participants from 15 different public and private universities participated in the event. Eminent pharmacists from various corners of Bangladesh were present as honorable guests. Brac University became champion in Pharma Olympiad while University of Dhaka and University of Asia Pacific earned the position of 1st and 2nd Runner-up, respectively. Sanofi Bangladesh Ltd, Eskayef Pharmaceuticals Ltd and Square Pharmaceuticals Ltd Bangladesh sponsored the Fiesta, while Maasranga Television, Kaler Kantho and Radio Dhoni 91.2 FM were the media partners for the event. Nestle Bangladesh limited was the beverage partner.



Vice Chancellor, National Professor Dr Jamilur Reza Choudhury, Chief Guest at the stall of Pharma Science Club in Pharma Fiesta 2018

The Pharma Science Club organized an educational seminar on 'Higher Studies Abroad: Prospects & Challenges' hosted by Graduate Resource Enhancing Center in the Department of Pharmacy. The purpose of this seminar was to familiarize students about the processes and requirements needed to make a successful application for higher studies abroad. speakers of the seminar were Shishir Banik (IELTS Instructor, GREC) and Shuvo Kumar (Faculty, GREC). Dr. Mamoon Rashid, Assistant Professor of Pharmaceutical Sciences at Appalachian College of Pharmacy, USA joined the seminar through Skype and answered questions from the participants. More than hundred students and the faculty members participated in this seminar.



Prof. Dr Mohiuddin Ahmed Bhuiyan presenting Crest to the Keynote Speaker

## **Intra Department Poster Exhibition**

Pharma Science Club of the Department arranged an Intra Department Poster Exhibition at the university premises on 14 January, 2019.

The program aimed at showcasing various health related concepts and strengthening the capacity of the students to exhibit their potential. 25 teams, each comprising of 5 members submitted their posters from different semesters. The Champion team was from the 1<sup>st</sup> year 2<sup>nd</sup> semester and their poster title was 'Sayeba's Method: Blessings of Maternity Health Science'.



Prof. Mohiuddin Ahmed Bhuiyan & Prof. S.M. Ashraful Islam visiting the Program

#### Visit to Pharmaceutical Plants

Study tours to Pharmaceutical industries are regularly organized in every semester to give students exposure to industrial plants. The teachers and students from different batches participate in these tours to enrich their theoretical knowledge and to be familiar with the environment of the pharmaceutical industries.

Accompanied by four faculty members a team of third year second semester students visited ACME Laboratories Ltd at Dhamrai on November 17, 2018. The purpose of such visit was to provide students an exposure to real work environment and help them relate their classroom learning to real life situations.



Students of Pharmacy Department with the Executive Director of ACME Laboratories

# Professor Dr. Md. Habibur Rahman Scholarship Award Ceremony

The Department of Pharmacy organized Prof. Dr. Md. Habibur Rahman Scholarship Award Ceremony on 18 June 2019 at the University campus. The event was sponsored by Ex-Pharmacy Students' Association (EPSA) of UAP. Twelve meritorious students received awards for achieving highest grades in 'Biopharmaceutics and Pharmacokinetics'. Prof. Dr. Md. Habibur Rahman was an expert in this field. Mrs. Habibur Rahman distributed the awards among the students as Chief Guest. Among others, Prof. Dr. Md. Selim Reza, Faculty of Pharmacy, University of Dhaka and Mr. Mahbubul Hague, Secretary of Bangladesh Pharmacy Council spoke at the award ceremony. The speakers paid tribute to Prof. Dr. Md. Habibur Rahman for his great contribution in pharmacy education as well as pharmacy profession.



Prof. Dr Md. Habibur Rahman Scholarship Recipients with Mrs Habibur Rahan

#### Social Awareness Club

Social Awareness Club organized a voluntary Blood Donation Campaign in cooperation with the Quantum Foundation. The program started at 10 AM and continued till 5 PM at UAP Plaza. During the campaign a total of 53 students volunteered in the registration process and after preliminary on-site medical screening of health history, body weight and blood pressure, 50 students were finally selected for blood donation.



National Prof. Dr. Jamilur Reza Choudhury is seen at the Blood Donation Camp

Another voluntary blood donation camp was jointly organized by the Pharmacy Social Awareness Club and Quantum Foundation on January 22, 2019. National Prof. Dr Jamilur Reza Choudhury, Vice Chancellor, UAP inaugurated the event as Chief Guest. Prof. Dr Mohiuddin Ahmed Bhuiyan, Head, faculty members and students of the department were present at the blood donation camp. A total of sixty three students registered as intending donors in. The donors were screened for Hepatitis B, Hepatitis C. Syphilis, AIDS and Malaria at free of cost. After the check-up facilitated by Quantum Foundation Team, a total of 50 units of blood was donated by students of the university in the day-long camp. The donors were given a donor card from **Ouantum Foundation.** 



**Blood Donation Program Fall 2018** 

### **Photography Club**

The department is pioneer in establishing the first photography club, called PhotoPhilic at UAP. The club was formed as a home for all Photography enthusiasts to find the likeminded young people since 2012. From the beginning the members of PhotoPhilic tried their outmost to search for young talents in photography. For this purpose, four grand photography exhibitions along with two mobile photography contests were arranged during the last 6 years.

PhotoPhilic brought back the fourth grand photo exhibition 'The Expressions 4' at UAP campus on 27 and 28 January, 2019. Over 200 photos were submitted and only 60 were selected for the exhibition. A brochure of all selected photographs of the exhibition was published. Each participant was provided with a certificate, a T-shirt of PhotoPhilic and a catalogue of selected photographs. Somoy TV and City FM were the official media partners of the program.



Chief Guest Dr. Kabir with Photo Catalogue, 'The Expressions 4'

As a part of the regular activities of the club of photography the Department, PhotoPhilic arranged four 'Photowalk' in 2018. Every photowalk is followed by a photo contest. In addition, there are weekly photo contests to encourage the young photographers of the department. The club arranged a 'Photo Adda', a photo discussion session with ex-president of the club, Riduanul Islam on December 9, 2018. PhotoPhilic has its own facebook page at which the results of the photo contests and other activities are regularly published.





Members of PhotoPhilic during the 27th and 30th Photo Walk

# **Sports and Recreations**

A lot of indoor and outdoor games and sport tournaments are being organized throughout the year by Sports Club of the Department. The Sports Club is one of most active clubs of the department; it is actively involved in arranging indoor and outdoor sports in the department on regular basis throughout the year. Activity of this club brings joy and festivity to the students, faculty and staff, bringing students together for participating in different games which ultimately improves the brotherhood among the students of different semesters and promote their leadership, management and competency skills. Sports club usually arranges Intra Department Football Tournament in Spring semester and Intra Department Cricket Tournament and Indoor Games in Fall semester.

The indoor games that the Sports Club arranged at the university premises on 24 December, 2018 for wide range participation of the students during the year were: Table Tenis, Chess, carrom, Dart throw, Ludu, and special games for the teachers.



Prize distribution of Intra Department Football Tournament, 2018

## **Pharmacy Cultural Club**

On 31 January, 2019, the cultural club of the department arranged a delightful cultural program for the outgoing students of 38<sup>th</sup> batch. Prof. Dr Mohiuddin Ahmed Bhuiyan, Head of the Department congratulated the outgoing batch of students for their successful completion of B. Pharm program and advised them to uphold the fame of the Department and the University through their performance as pharmacy professional. Students from different batches performed in fascinating musicals, choreographed dances and stage dramas in the East Plaza.



Cultural Program, Fall 2018

# **Faculty Leadership**

# Prof. Dr. Mohiuddin Ahmed Bhuiyan, Head of the Department until April, 2019

**Joint Secretary**, Bangladesh Pharmaceutical Society for two consecutive terms July 2012 till present.

**Member** to the Executive Committee of Japanese Universities Alumni Association in Bangladesh (JUAAB) for the next 2 years from 01 April, 2019.



Annual General Meeting of JUAAB

## **Alumni Leadership**

Mr. Muhammad Mahbubul Haque, an Alumni of Pharmacy Department graduated in 2004, has been recently appointed as Secretary of Pharmacy Council of Bangladesh. The Department held a reception for him at UAP Auditorium and felicitated him with a crest on November 8, 2018. The ex-students, current students and the members of the faculty attended the celebration.



Mr. Muhammad Mahbubul Haque receiving crest from the Vice Chancellor of UAP, National Prof. Dr Jamilur Reza Choudhury, BOT Member Al-haj Mohammed Mohsin, and Head of Pharmacy Department Prof. Mohiuddin Ahmed Buiyan

# **Faculty Capacity Development**

Three Assistant Professors (Ms. Tahiatul Shams, Mr. Md. Abu Sufian and Ms. Kanij Nahar Deepa) and two Lecturers (Mr. Md. Abdullah Al Noman and Mr. Md. Mubarak Hossain) are on study leave

for pursuing PhD.

The new faculty members are usually offered a day-long orientation program. Three new faculty members -- Ms Shomita Ferdous, Ms Sharmin Sultana and Ms Farina Aziz who joined the department in the current year were given orientation.

The faculty members of the Department attended training sessions on 'How to use Orbund' the tools to carry out registration and assessment. The training was given the by the IT section of UAP

# **Faculty Members' Services to Academic Community**

#### **Professor Dr Mohiuddin Ahmed Bhuiyan**

- a. **Member**, PhD Oral Examination Committee, Department of Pharmacy, Jahangirnagar University, 2 May 2019.
- b. **External Member,** Examination Committee of M. Pharm (Pharm. Tech.), Dhaka University, 25 March 2019.

**Professor Dr Swarnali Islam Khanadaker Membe**r, PhD Oral Examination Committee,
Department of Pharmacy, Jahangirnagar
University, January 21, 2019.

# **Department Goals for the Next Year**

The department has taken initiative to offer a second master's program in Clinical Pharmacy and Pharmacology from next year to enhance the scope of research and meet the demands of the industry.

# **Publications of Faculty Members**

## A. Peer-reviewed Journal Papers

Afrin, S., Ishrat, I., Hasan, A. H. M. N. & Deepa, K.N. (2018). Novel approaches of herbal drug delivery. *Journal of Pharmaceutical Research International*, 21(5), 1-11.

Das, S., Huque, S., Anwar, M.R., Gorapi, M.Z. H., Chowdhury, S.F. & Shahriar, M. (2018). Analytical methods of six FDA approved molecular entities used for the treatment of non-small cell lung cancer: a concise review. *International Journal of Pharmacy*, 8(1), 33-46.

Hamiduzzaman, M., Salam, F.B.A., Hasan, A.H.M.N. & Santa, S.A. (2018). Qualitative analysis of *Lactobacillus* strains in milk probiotics. *International Journal of Advanced Research*, 6(10), 154-164.

Haque, M.A., Sheikh, M.A., Mamun, A.A., Yano, S., Hashimoto, M., Shido, O. & Nagai, A. (2018). A mesenchymal stem cell line transplantation improves neurological function and angiogenesis in intraventricular amyloid beta-infused rats. *Current Alzheimer & Research*. 15, 1331-1342.

Hasan, A.H.M.N., Islam, M.A.U., Rahman, S., Nishi, Z.M., Hossain, M.J., Gorapi, M.Z.H., Jamil, F., Sufian, M.A., Nahar, Z., Deepa, K.N., Hamiduzzaman, M., Asaduzzaman, M. & Bhuiyan, M.A. (2019). Level of stress, predisposing factors and status of mental health among pharmacy students of a private university of Dhaka, Bangladesh: a cross sectional study. *Health*, 11, 222-232.

Hossain, M. J., Biswas, S., Shahriar, M., Chowdhury, M.M., Islam, S. & Ahsan, C.R. (2018). Phytochemical screening, antimicrobial activity, antioxidant capacity and in vivo anticancer activity of *Lannea coromandelica* bark extracts. *IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)*, 13(3) Ver. II, 19-25.

Hossain, M. S., Islam, R., Sultana, S., Rahman, M. H., Bhowmick, A. & Fatema-Tuz-Zohra, T. S. (2018). Investigation of thrombolytic and antioxidant potentials of *Centella asiatica*. *Galore International Journal of Health Sciences and Research*, 3(4), 52-58.

Hossain, M. J., Alam, M.G., Biswas, S., Isah, I.S., Shahriar, M. & Islam, S. (2018). Prevalence and antibiotic resistance pattern of *Pseudomonas* and *Acinetobacter spp.* isolated from blood samples of the intensive care unit (ICU) patients. *International Journal of Advanced Research in Biological Sciences*, 5(8), 186-195.

Hossain, M. J., Biswas, S., Islam, S., Shahriar, M. & Ahsan, C.R. (2019). *In vitro* phytoconsituents investigation, antioxidant capacity, antimicrobial activity and *in vivo* anticancer activity of *Mucuna poggei* fruit peel extracts obtained by different extraction approaches. *Turkish Journal of Biotechnology*. 102, 120-129.

Hossain, M. J., Biswas, S., Shahriar, M., Islam, S. & Ahsan, C.R. (2018). *In vivo* anticancer activity on ehrlich ascites carcinoma (EAC) cells and *in vitro* antimicrobial activity of *Psidium guajava* bark extracts. *Bangladesh Journal of Microbiology*, 35(1), 79-81.

Islam, S.H., Alauddin, M., Alam, F., Anwar, M.R., Dewan, I. & Islam, S.M.A. (2018). Development and validation of stability-indicating RP-HPLC method for simultaneous estimation of rosuvastatin and glibenclamide. *World Journal of Pharmacy and Pharmaceutical Sciences*, 7(5), 22-37.

Islam, S.M.A., Dewan, I., Khatun, R., Haider, S.S. & Reza, M.S. (2019). Development and validation of a simple RP-HPLC method for the estimation of atorvastatin in self emulsifying drug delivery system (SEDDS). World Journal of Pharmacy and Pharmaceutical Sciences, 8(4), 1-10.

Jahan, I., Ahmed, S., Islam, M. R., Hai, A.N.M.A., Islam, M.F., Bhuiyan, M.A. & Nahar, Z. (2019). Association of ORAI1 genetic polymorphism with serum calcium and phosphorus levels in non-dialysis chronic kidney disease patients: a case-control. *Cureus*, 11(4), 4564.

Jannath, S., Nayeema,I., Jahan, N. & Deepa, K.N. (2018). Comparative performance evaluation of different brands of ketorolac tromethamine (NSAID'S) generic tablets. *Advancements in Bioequivalence & Bioavailability*, 1(2), 1-5.

Karmokar, F., Asaduzzaman, M., Islam, M. S., Shahriar, M. & Shabnaz, S. (2018). The influence of SMAD1 gene polymorphisms on colorectal cancer susceptibility in Bangladeshi population: A case-control study. *FEBS Open Bio*, 8 (1), 107–496.

Karmoker, J. R., Hasan, I., Ahmed, N., Saifuddin, M., & Reza, M.S. (2019). Development and optimization of acyclovir loaded mucoadhesive microspheres by box-behnken design. *Dhaka University Journal of Pharmaceutical Sciences*, 18 (1), 1-12.

Mao, J., Yang, H., Cui, T., Pan, P., Kabir, N., Chen, D. & Yang, Y. (2018). Combined treatment with sorafenib and silibinin synergistically targets both HCC cells and cancer stem cells by enhanced inhibition of the phosphorylation of STAT3/ERK/AKT. *European Journal of Pharmacology*, 832, 39-49.

Nahar, S., Islam, S.M.A, Khandaker, S.I., Nasreen, W., Hoque, O. & Dewan, I. (2018). Formulation and evaluation of metoprolol tartrate loaded niosomes using 2<sup>3</sup> factorial design. *Journal of Pharmaceutical Research International*, 22(6), 1-17.

Nahid, N.A, Apu, M. N. H, Islam, M. R., Shabnaz, S., Chowdhury, S. M., Ahmed, M. U., Nahar, Z., Islam, M. S., Islam, M. S. & Hasnat, A. (2018). DPYD\*2A and MTHFR C677T predict toxicity and efficacy, respectively, in patients on chemotherapy with 5-fluorouracil for colorectal cancer. *Cancer Chemotherapy and Pharmacology*, 81(1),119-129.

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#### **B.** Peer-reviewed Book Chapter

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