

World Pharmacists Day 2019



The Department of Pharmacy organized a daylong event in commemoration of World Pharmacists Day on September 25, 2019. The event was sponsored by Beximco Pharmaceuticals Ltd. and Beacon Pharmaceuticals Ltd. This year's theme, 'Safe and Effective Medicines for All', aimed to promote the crucial role of pharmacists in safeguarding patient safety through improving medicine use and reducing medication errors.

The morning started with a panel discussion featuring distinguished experts from the pharmaceutical industry, where Mr. Jahangir Hyder, Head of Business Development, ACME Laboratories Ltd. was the key note speaker of the discussion. The other panelists included Dr. Riad Mamun Prodhani, Managing Director and Country President, Novartis (Bangladesh) Ltd.; Mr. Md. Mizanur Rahman, Executive Director, Operations, Square Pharmaceuticals Ltd.; Mr. Ahmed Kamrul Alam, Director, Marketing, Square Pharmaceuticals Ltd.; Mr. M. Motiar Rahman, Director, QA, Eskayef Pharmaceuticals Ltd.; Mr. Ehsan Aziz, General Manager, Marketing, Incepta Pharmaceuticals Ltd.; and Mr. Hasan Uz Zaman, Head, Vision Acceleration, Roche Bangladesh Ltd. The panelists participated in a highly engaging session where the topic was 'Counterfeit Medicines: A Global Problem'. The experts shared their valuable insights on medicines that are highly likely to be counterfeited and measures currently being taken by pharmaceutical companies to prevent counterfeit drugs. The panel agreed on several measures that can be taken in the future to abolish the counterfeit drug industry. One of the measures agreed on was carrying out public awareness campaigns through an industrial-academia partnership. The panelists also emphasized on the importance of digitalization of the supply chain and the need for a strong regulatory framework in combatting drug counterfeiting.

The panel discussion was followed by the finale of the first ever *i-TELL* Challenge where participants presented on topics related to the 'Future of Medicine.' The winners for each group were: Group 1- Syeda Maliha Ahmed (Monitoring Health Using Ingestible Capsule); Group 2- Amal Chowdhury and Adiba Binte Razzak (Treatment Through Video Games); Group 3- Shihab Ud Dawla, Nasrin Ahmed Tahrim (Cannabis: A Potential Aid in Cure) and Bagdad Ahmed (Financial Weapon to Cure Cancer: Too Risky or Worthy?).

The afternoon session started off with the final round of the Pharma Debate 2019 competition in which the students debated on the topic 'It is ethical to use genetically modified mosquitoes to fight mosquito-borne diseases.' After a very engrossing exchange of opinions, the team against the motion, consisting of Wakyaya Brian and Namanda Fred, were deemed victorious. The debate was followed by a seminar on 'Good Pharmacy Practice in Clinical Settings' by Mr. Mohamed Ramzy Ismail, Technical Officer, Essential Drugs and Other Medications, WHO Country Office Bangladesh. Mr. Ismail described the roles that graduate pharmacists can perform in hospitals to improve outcomes of medical treatments. He also provided advice on how the academic curriculum can be modified to train students for such roles. He also mentioned that the WHO is already working with the Bangladesh government to introduce jobs for graduate pharmacists in public healthcare institutions. The last part of the afternoon session featured the semi-final and final rounds of the Pharma QuizBee competition. After much suspense, Md. Ismail Raju and Anika Akter became winners of the competition. Throughout the day, there were snacks available for everyone present and lunch was also arranged for the participants of the various events. Throughout the day, there was a booth which had facilities to check blood glucose level and BMI, and where students of the Department of Pharmacy handed out leaflets to students, faculty, staff and guardians of the students of the university. The leaflets included information that would be useful in daily life to maximize the safety and effectiveness of commonly used medicines. In addition, representatives from the Brac University Medical Team and the Brac University Counseling Unit were also present to provide their services.

The daylong event was closed off with an award giving ceremony where the Chairperson, Professor Dr. Eva Rahman Kabir handed out prizes to the winners and the volunteers. She also thanked everyone including the authorities of Brac University for their support and cooperation.

Source: [Department of Pharmacy](#)

Seminar on Future of the Brain by Dr. Newton Howard

The Department of Pharmacy of Brac University successfully organized a seminar on “The Future of the Brain” on 13th of October at the BracU auditorium and had the privilege of having Professor Dr. Newton Howard as the keynote speaker. Professor Dr. Vincent Chang, Vice Chancellor, Brac University; Dr. Sultan Hafiz Rahman, Professorial Fellow and Former Executive Director of BIGD, member of Board of Trustees of BracU; Jonathan Cartmell, Vice President, International & Head of HR; Professor Dr. Eva Rahman Kabir, Head, Department of Pharmacy, BracU; faculty members and students of different departments besides pharmacy were present in the seminar.

Dr. Howard who is the Professor of Computational Neurosciences and Functional Neurosurgery at the University of Oxford is also the Director of the Synthetic Intelligence Laboratory at MIT (where he had served as the Founder and Director of the MIT Mind Machine Project from 2008 to 2012) and the Founder of the Brain Sciences Foundation.

His current research involves understanding how the endogenous processes within the human brain produce consciousness, thought and language, with the objective of providing methods of early detection and advanced treatment of neurological disorders. At the seminar, he presented his research outcome of how innovative chips can be implanted within the human brain to help patients live with the symptoms of neurological diseases like Parkinson’s. Dr. Howard illustrated through a video presentation how essential tremors can be stopped by electrical pulses to the thalamus, a part of the brain controlling muscle activity, to block the signals causing the tremor. In addition, he spoke about a process called optogenetics that promises the scope of controlling cells which have been genetically modifying using naturally occurring photosensory molecules. He emphasized on how the technology can be used to restore human dignity in today’s world in addition to mitigation of symptoms of neurological diseases.

The presentation was followed by a question answer session from the audience where the students were actively engaged. In his concluding remarks Dr. Howard admired the students of Brac University for their enthusiasm and said how delighted he was to see the young curious minds actively participating and seeking to learn more.



Source: [Department of Pharmacy](#)

Monitoring Health Using Ingestible Capsule

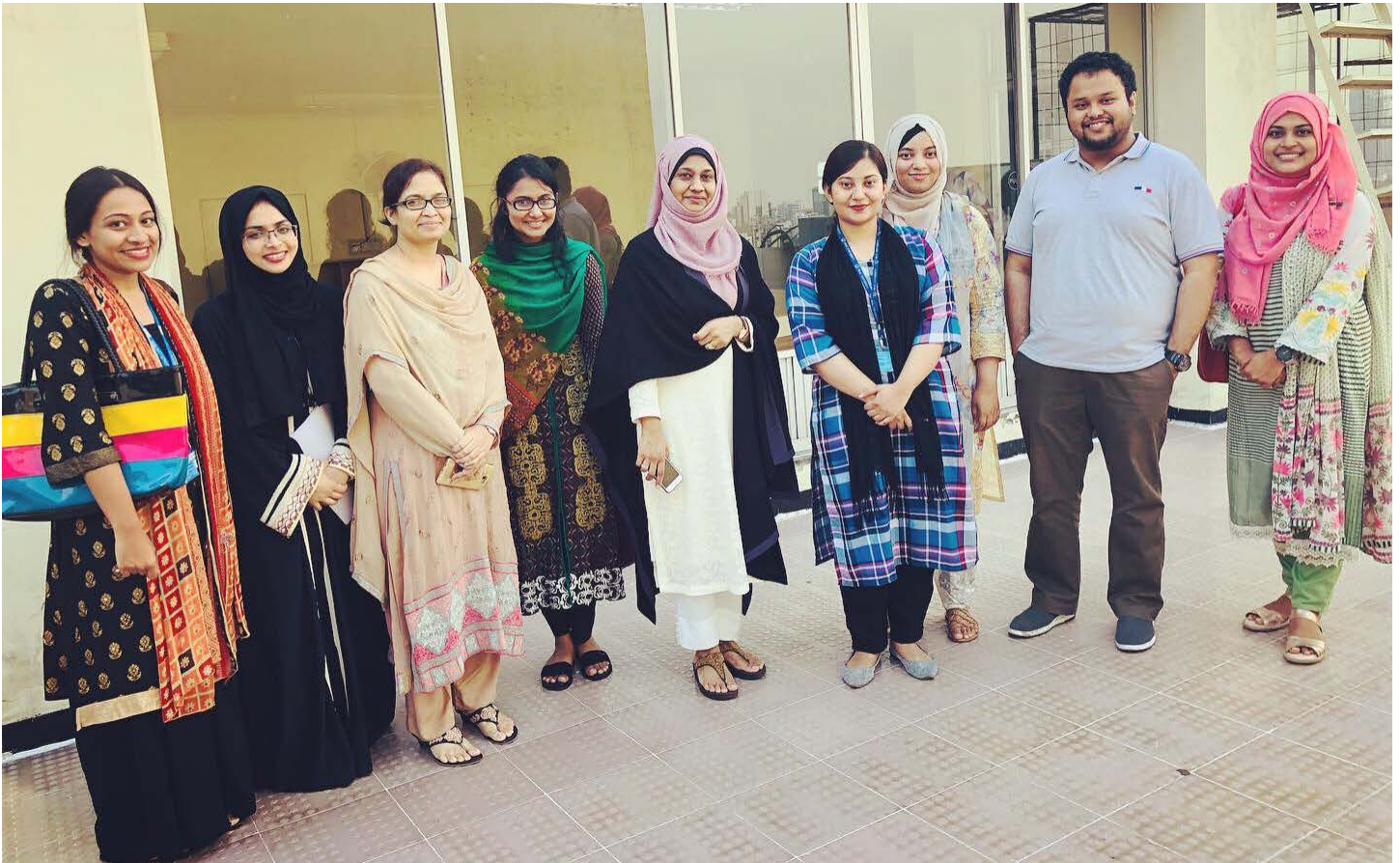


One promising invention that is currently being developed by a research collaboration between the scientists of MIT, Draper, and Brigham and Women’s Hospital is the ingestible electronic capsule for significant medical applications. The capsule makes use of an ingestible sensor which helps deliver medications inside the human body and also communicate relevant information to doctors and patients using Bluetooth technology. The device is operated using a smartphone, allowing a maximum distance of an arm length from the body to enhance security and dissolves harmlessly after a residence period of one month in the stomach. The capsule is designed to guide drug delivery, tune drug dosages, and will play a significant role in instances when the drugs must be time-released to work over a

period of time. It is able to monitor both the vital signs of the body as well as detect infections, allergic reactions, or other ailments in the body and then release medication in response. The Bluetooth technology also can be used to communicate with other wearable and implantable medical devices in the patients’ body to communicate information to the doctor via smartphone. The 3D printed capsule unfolds into a Y shape once it is swallowed exposing 4 compartments containing drugs, and allows gradual release for the drugs for long term treatment. The capsule is built from alternating layers of stiff and flexible polymers, allowing it to withstand the acidic environment of the stomach. Currently, a small silver-oxide battery powers the device but researchers plan to replace it in the future with an external antenna or even a person’s stomach acid. The team has already launched a company which is working on developing the technology for human use, aiming to test it on humans in about two years.

Presented by: Syeda Maliha Ahmed at *i-TELL Challenge, 2019*

B.Pharm Project Presentations



In the month of October, students of the Department of Pharmacy, who finished their undergraduate projects gave their project presentations. The examining committee consisting of the Chairperson, the Academic Coordinator along with the respective project supervisors were responsible for grading individual students on their presentations. The projects encompassed both laboratory work and non-lab related work such as reviews and surveys.

Research was undertaken across a variety of themes and hence a wide range of innovative topics were presented on. Themes included pharmaceutical technology, phytopharmacology, pharmacology, microbiology, computational biology and medicinal chemistry.

Source: [Department of Pharmacy](#)