

Round Table Discussion: Importance of Future Readiness in Employability

PHARMA HIGHLIGHTS



The Department of Pharmacy organized another successful round table discussion in its continued seminar series on "How to Prepare Competent, Future-Ready Pharmacy Graduates" on 21 March, 2019 at GDLN center, Brac University. This time the focal point of the discussion was "Importance of Future Readiness in Employability". Distinguished industry guests, faculty members, alumni and students all participated in this highly engaging session. The prominent members of the pharmaceutical industry who participated in the discussion included, Dr. Riad Mamun Prodhani Managing Director & Country President Novartis (Bangladesh) Limited, M. Motiar Rahman Director, QA Eskayef Pharmaceuticals Ltd, Mahbubul Karim COO Incepta Pharmaceuticals Ltd., Jahangir Hyder Head of Business Development The ACME Laboratories Ltd., SK Abdul Gani Head Patient Access & KAM Novartis (Bangladesh) Limited and Susmita Laila Head of Global Regulatory Compliance Eskayef Pharmaceuticals Ltd.

At the beginning Dr. Riad Mamun Prodhani acknowledged the contribution of pharmacists in the current success of the pharmaical industry in Bangladesh and mentioned that he would like to see the continuation of this success through the efforts of the upcoming graduates. All the honorable discussants agreed that the fresh graduates should be self-motivated and also be able to define their own success. They shared that employers are hiring based on the right attitude and mindset of the graduates. Additionally, the speakers emphasized on professionalism, networking, agility, and personal integrity of fresh graduates. It also came out in the discussion that pharmacists are involved in decisions about medicines and health care, they are closely connected to private and public life. So they have to bear in mind the ethics and responsibilities that characterize Pharmacy as a professional practice. The industry experts expect graduates to have strong communication skills which is facilitated by the knowledge they gain. Students who participated in the discussion were highly engaged throughout the session and asked a number of questions to the expert panel which led to an interactive session.

Source: Department of Pharmacy

3 Minute Challenge 2019: Innovation in Drug Development, Delivery, and Usage



The Department of Pharmacy, Brac University, organized a 'Three Minute Challenge 2019' on Thursday, the 4th of April, at the Brac University Auditorium. The theme for this first-time challenge was "Innovation in Drug Development, Delivery and Usage", where students of the department onstage presented exciting new developments and innovations in the Pharma world clearly and engagingly, to a lay audience, in no more than three minutes. The competition aimed to showcase the students' talents in researching and presenting revolutionary

breakthroughs in the pharmaceutical landscape, as well as provide a holistic reflection on student learning and engagement with novel scientific ideas. They were also given the creative freedom to enhance their presentation with pictures, illustrations, objects and devices. They addressed major innovations in the pharmasphere in their presentations, such as Personalized Medicine, Electronic Aspirin, 3D/4D Printing Technology of Dosage Forms, etc. The presentations were evaluated in two main categories - depth of content and presentation style. Recognition awards will be matriculated for the brightest student presentations at an exclusive award ceremony the upcoming week. The 'Three Minute Challenge' sets a standard for science communication competitions in the country, being in line with international academic competitions such as the Three Minute Thesis (3MT).

Source: Department of Pharmacy

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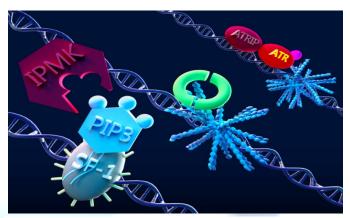
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A Cellular Mechanism for Repairing DNA Damage is revealed

The Massachusetts Institute of Technology's (MIT) Inherited metabolic compounds, in which the body is unable to break down a specific nutrient, are usually caused by an error in one gene and can cause a wide range of devastating health problems.

A team of researchers has found that a rare kind of genetic mutation, a repeat expansion, is to blame for three kinds of rare, undiagnosed conditions that affect children. These mutations are very difficult to identify as the entire genome has to be sequenced to reveal them. This is because there is no deleterious change in the sequence. These mutations instead affect nearby DNA causing them to be a few hundred times as longer than it should be. It was explained that to detect this kind of abnormal DNA multiplication, you can only use whole-genome sequencing and then there would be a need to search through billions of pieces of DNA.

The researchers had to take a new approach to reveal the cause. Genes contain sequences that code for protein, called exons. Many times, scientists will only check those areas that code for protein to look for errors that lead to disease. Recently the scientists have identified one such process, which allows human cells to stop picking up new mutations as they replicate.



Their research showed that an enzyme, glutaminase, that normally converts an amino acid called glutamine into a molecule called glutamate, is involved in these metabolic diseases. The scientists still have to figure out whether the symptoms are arising because glutamine is accumulating, or glutamate is absent. However, taken together, rare diseases with an unknown cause have a significant impact on the lives of many people. The work revealed unexpected ways in which cells deal with inherited DNA damage. With the identification of the key proteins driving this process, scientists have laid the foundation for investigations into potential therapeutic applications.

Source: New England Journal of Medicine

Dovato: Approved Drug for HIV-1

To prevent disease progression of HIV, the treatment must be effective enough to suppress the viral load in the blood. Recently, a two-drug, fixed dose, complete regimen has been approved by the U.S Food and Drug Administration (FDA), to treat these patients. The drug is taken as a single tablet called Dovato and it comprises of dolutegravir and lamivudine. Previously, the three-drug regimen was used to treat HIV patients but the discovery of this two-drug regimen will help the patients to avoid any toxicity or potential drug interactions that could arise from taking a third drug. It also has the added benefit of taking both drugs as a single tablet and eliminates the need to take multiple tablets. Dovato was proven successful in clinical trials when the treatment maintained low-levels of HIV RNA in the patient's blood for a minimum of 48 weeks. However, for patients who have both HIV and hepatitis B, Dovato must be taken with caution. These patients must seek additional treatment for

their hepatitis B or possibly a different drug regimen. In addition, if these patients are already taking medication containing lamivudine to treat their hepatitis B, there is a risk of developing resistance to lamivudine. Other side effects of Dovato includes headache, diarrhea, nausea, insomnia and fatigue.



Source: FDA

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