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INSIGHT BIOMEDICAL



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WHAT MR. ABDUL MUJEEB KHALILI THINK ABOUT THE STUDENTS OF BIOMEDICAL ENGINEERING?

IN CONVERSATION WITH MR. UMER JILANI

SIGNING OF MOU WITH MEDICAL TECHNOLOGIES

CHECK WHAT'S NEW IN BETWEEN THE LINES!



Want your article to be published in the Newsletter? Contact us.

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RESEARCH PUBLICATIONS

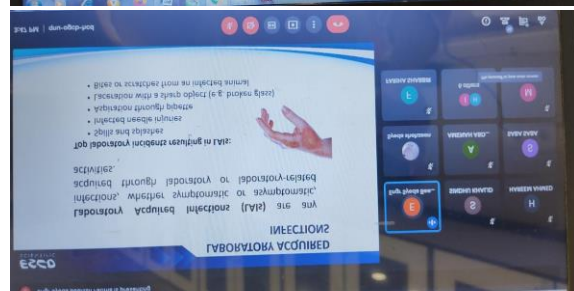
Traumatic upper and lower Limb amputations of Saudi Arabian locals: A ten-year epidemiological overview

Dr. Saad Jawaid Khan, Chairperson DBME, has published an article in HEC recognized journal **International Journal of Physiotherapy** in collaboration with Taibah University, Madinah Munawarah, Saudi Arabia.



Webinar: Biosafety Awareness

An online Biosafety Awareness webinar was conducted on 30th July 2021 with title **Working Safely with Biological Safety Cabinet and Laminar Flow Cabinets** by **Engr. Syeda Beenish Fatima**, Customer Support and Sales Executive ESCO-Pakistan, for the students of 3rd year of Biomedical Engineering Department, ZUFESTM for the course of Bio-Instrumentation-II.



Webinar: The Essentials of E-commerce

On Tuesday, 10th August 2021, the Office of Student Affairs Ziauddin University in collaboration with the students' council of ZUFESTM conducted a webinar, titled "The essentials of e-Commerce". The session will be hosted by our students, Ms. **Mahin Khan** and **Syeda Mahazaib Pasha** of ZUFESTM.

Panelists:

Mr. Nasir Saleem completed his M.B.A. (finance) in the year 2011. He currently serves as an e-Commerce manager for a high-end children's clothing company in the United States of America; managing a \$10M direct to consumer e-Commerce business.



ZIAUDDIN UNIVERSITY OFFICE OF STUDENT AFFAIRS ZIAUDDIN UNIVERSITY

THE ESSENTIALS OF E-COMMERCE

LIVE ON ZIAUDDIN UNIVERSITY

TUESDAY, 10th AUGUST 2021 | 11:00 AM

SUB-TOPICS:

- What counts as e-Commerce?
- Model of e-Commerce.
- How has e-Commerce changed shopping?
- Why do people use e-Commerce?
- Downsides to e-Commerce?
- Steps to setting up an e-Commerce Business?

HOSTED BY

MAHIN KHAN
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B.E. Biomedical Engineering

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3rd Year Student
Ziauddin University Faculty of Engineering, Science, Technology and Management
Bachelor in Business Administration

IN CONVERSATION WITH

NASIR SALEEM
E-commerce Manager, Managed \$10M direct-to-consumer e-commerce business for high-end children's clothing company.
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Appreciative Remarks About Students of Biomedical Department

Students with attributes like academic skills, awareness and good attitude makes up a good university student and are very likely to achieve the best in the higher society.

Recently, **Mr. Abdul Mujeeb Khalili**, Senior Manager (HOD) Biomedical Engineering Department, Tabba Heart Institute, in conversation with Dr. Saad Jawed Khan (Chairperson, DBME) said appreciative comments about students of Biomedical Engineering students. He Said, “*Students of Ziauddin University, Department of Biomedical Engineering are better than the students of any other university.*” These remarks about our students are pride of our department and will be motivational for other students as well.



Signing of MoU Between Biomedical Engineering Department and Medical Technologies

On 20th August 2021, Friday, Ziauddin University Department of Biomedical Engineering and Biomedical company **Medical Technologies** signed the MoU. The MoU was signed in the presence of following persons:

Academic Panel:

- Dr. Saad Jawaid Khan (Chairperson DBME)
- Dr. Faraz Jawed (In-charge Biomedical Department)
- Ms. Ambreen (Manager ORIC, Ziauddin University)
- Engr. Abdul Basit (In-charge MoU and Visit Committee)
- Engr. Sidra Abid Syed (Assistant Professor)
- Engr. Mehwish Faiz (Assistant Professor)
- Engr. Hira Zahid (Assistant Professor)
- Engr. Ali Asghar (Assistant Professor)
- Engr. Sana Rehan (Newsletter Committee)

Industrial Panel:

- Mr. Umer Jilani (CEO, Medical Technologies)
- Mr. Pervaiz Raza Chaudhry (CEO, BNS)
- Mr. Arsalan Pervaiz Chaudhry (MD, BNS)
- Mr. Abdul Aleem Shaikh (BDM, Medical Technologies)



IN CONVERSATION WITH

MR. UMER JILANI

Recently, we had conversation with CEO of Medical Technologies, Mr. Umer Jilani and had the opportunity to know more about his personal and professional life.



1. Tell our readers about yourself and your educational background.

U: My name is Umer Jilani. I was born on 23rd May in Karachi, Pakistan. I completed my secondary education from Metropolis Academy in 2005. Later I joined DJ Sindh Govt. Science College for intermediate studies. I had always wanted to study in the field of engineering so applied in Sir Syed University, NED University and Karachi University but in the end preferred to do Biomedical Engineering from NED University.

2. How was your university life?

U: University life wasn't very high profile for me. My mother suffered from cancer for a very long period and due to treatment and care taking, my studies suffered during those days. I had financial responsibilities as well so I started giving tuitions to students after university hours. All of these circumstances made my grades suffer and made me an average student. Even after all these hardships I continued my education and completed my degree in 2012. I'm thankful to all my teachers specially Dr. Saad Jawaid Khan for supporting me in my difficult times.

3. Tell us about your company Medical Technologies.

U: As a final year student, I had training internship of 6 months in All Med Solutions where I made a friend with whom I started a company in partnership named Trans firm Pvt. Lt. But as he was doing job as well so he couldn't continue it and we separated after 5 months. Then in 2013, I started the company Medical Technologies. Basically, MD Medical Technologies started with the objective to provide services for the equipment. Then gradually we added product line in which we introduced critical care devices like patient monitor, ECG machine, syringe pump, ventilators, suction machine, anesthesia machine, OT equipment and other many equipment for various other departments. Along we hospitals, we got linked with pharmaceutical industry as well starting with Getz Pharma. There we introduced disposable items like face masks, gloves, shoe covers, uniforms, lab coats, coveralls and many similar products. Many multinational pharmaceutical companies like Abbott, GSK, Pfizer and many local pharma companies approached us which sped up our process. One of my friends supplied meat in restaurants like Butler's Chocolate Café, Pantry and Bread N Bread so we supplied disposable items there as well. By then we started importing the products as well. Right now, Medical Technologies is dealing in 50+ products including hospital furniture. Recently we have started

working on research-based project **Artificial Robotic Arm** in collaboration with DOW University of Rehabilitation Centre and Pakistan Institute of Prosthetic and Orthotics, Hayatabad which was very successful as first time in Pakistan artificial robotic arms are provided to people by our company.

4. What was the motivation behind starting your own company?

U: The maternal side of my family were in garments business so I always had an objective that I will establish my own business after completion of my studies. Secondly, I wanted to earn money as well. Thirdly, I actually wanted to begin charity work as well. I wanted to build an Islamic Institute and help out people in need. You may find it surprising, but when I started my own business, I had many responsibilities and had only 30k to 40k rupees at that time. When you are new in market with limited resources, it gets difficult to survive in the market. So, we gradually carried our business forward while facing all the obstacles. The key was to never give up.

5. Who has inspired you in your life and why?

U: As a Muslim, my Inspiration is Prophet Muhammad ﷺ. I always make sure to apply the ways

of Sunnah in my business as well by avoiding forbidden acts, interest and banking loans.

Also, my mother has always been my role model. My father used to be in Abu Dhabi when me and my sister were kids so my mother did our upbringing alone and took care of our education as well. She was a very strong woman. In 1998, my mother got diagnosed with cancer. Even at that time she showed courage for us so we can be in better place in life. She struggled a lot in those 13 years of illness but never showed so we wouldn't be discouraged. My mother is one of the biggest reasons behind my success.

In current scenario, I admire Steve Jobs, Bill Gates and Warren Buffett. In Pakistan, my business inspiration is Malik Riaz.

6. Recently, Ziauddin University Department of Biomedical Engineering and Medical Technologies have signed a MoU. What is this contract about and how will it be beneficial for students?

U: There are many factors behind the signing of Memorandum of Understanding (MoU). Our, Dr. Saad Jawaid Khan and mine, objective was to give practical exposure to students of biomedical department, well groom them and provide them exposure to industry. There are many portions of this MoU. Firstly, covering lectures as we'll be training faculty members, students of 3rd and final year. There are different areas of training like we'll train them to establish their own business. Students will get training and lectures on psychology and mind sciences so they enter the industry with a strong mindset and have a successful practical life. Other than that, we'll be providing laboratory-

based facilities like upgrading existing labs and introducing new labs as well. We also will be arranging industrial visits, internship and training programs with bigger industries for students of Ziauddin University so after graduating they won't feel the gap between academia and industry.

7. How can industry and academia benefit from each other?

U: Industry utilizes the talent, knowledge and skills of students and provide them jobs and help them establish their businesses. Similarly, when universities link with the industries, they gain maximum benefits in form of student employment and exposure to different areas. Through mutual benefits, industry and academia both will fulfill each other's weaknesses.

8. You are also a media person and have appeared in many television shows. Please share some details about this as well.

U: As long as media life is concerned, I've faced print media and electronic media equally Alhamdulillah and have been offered anchor ship also in the past for health-related programs but as a guest I've appeared in many shows on different channels like Geo TV, AAG TV, ARY News and many others. The media provides you the medium to raise our voice for the betterment. During COVID crises, we provided disposable items like masks, gloves and hand sanitizer to hospitals and to people for free of cost and spread awareness as well through these channels.

9. Any message you want to give to our readers?

U: My message is that, in life first

thing you should implement is to have complete faith in Allah SWT. Because when your faith is strong, Allah SWT's help will always follow you. You'll get your way out of many problems just by having strong faith. Don't give up. Business is just like a roller coaster. Just like an ECG wave, there are many ups and downs in life. In business, you're never in a stationary position like you are in 9 to 5 job. Whatever stage you are in your life, don't give up. Failure is not the end. I faced many failures and huge losses but overcame them by moving forward. With every challenge you face, you climb a step up a ladder and that helps you in becoming a greater person.

Comments of Mr. Umer Jilani About Faculty and Students of Biomedical Department

In the MoU signing event, Mr. Umer Jilani wished that students from the department should be promoted more and more on every level. He praised the students working in the field as the students of the department are making their name in the market. He shared that he has delivered many lectures but the response of our faculty and students is unmatched. He also appreciated the course outline designed for department as by his words, it is up to the level of best universities of Karachi.

BETWEEN THE LINES

Crafting Smiles Through Grafting Skins

By – Ahmed Abbas (Semester-IV, Biotechnology, DBME)

Many lives have been lost due to extremism, intolerance and hatred that lead to wars, violence and injustice against humanity. These atrocities have caused many to die or become bedridden due to the injuries that their survival brought with itself. Rampant criminal activities that are rapidly escalating in countries, states and organizations due to lack of accountability has led to adverse effects on the growth of our society. We have sacred holy faith and doctrine theologies to nurture the seed of goodness within the hearts of people which does instill compassion and promote tranquility within the system. However, apart from correcting the moral compass of the individuals in our society substantial steps based on observations and experimentation using the knowledge of science and techniques of medicine can prove beneficial as well. These technologies will enable us to regenerate organs and vital parts of the body along with vital surgical procedures.

This is a technology which is established under the discipline of biotechnology which is related to "Regeneration of medicine and technology", besides, gene alteration. Further advancements are made by Additive manufacturing industries by developing a "Bio printing machine" with the collaboration of various scientists. Bio printing machines are capable of constructing tissues by utilizing the growing cells commonly known as stem cells. They can be taken either by an embryo or extracted from the bone marrow and are proficient enough to proliferate and can form a complete organ.

These recent techniques of modern times can benefit all those people who lost their limbs due to these acts of terror across the world, as now private doctors will be able to print the organs or at least replace or regenerate the damaged area. Bio printing uses a digital file as a blue print to print an object using cells and other biomaterials. These materials are created layer by layer by utilizing computer and MRI techniques.

The technology has been successful so far as we have achieved the formation of vital organs such as lungs, trachea, heart and bones. The next step is skin, as it is considered to be the largest organ of the body and is considered to be the first defense line to combat against foreign invaders and pathogens, this would help serve humanity in a large multitude. As it is visible to various diseases and injuries that require immediate assistance, skin grafts with the consent of the donor seem to be a viable solution to skin problems from infections to burns. The skin grafts will work by taking the unaffected part under consideration and will be registered to the affected area. The cells will communicate with the blood vessels and the skin will begin to grow. It's a profound quintessential copy and paste procedure that is practiced by the printing tool itself too. We can use this approach to win several battles in order to prevail the war against the idea of bleeding humanity to death by thousand cuts.