UNIVERSITY OF SHARJAH
where civilizations meet
College of Medicine

College of Medicine Newsletter

April 2016

EDITOR: HIBA JAWDAT BARQAWI

Dean's message of the month

By Professor Qutabya Hamid

This month has been a busy one. Exams are around the corner and faculty, staff and students alike are busy preparing for them, each in their own way.

The last few weeks have been event-filled and we have been lucky to celebrate some wonderful achievements by our students and faculty.

The long-awaited and anticipated student research week is upon us. There have been some excellent talks and our college beautifully decorated with posters from students' research not only from our college and university but from colleges around the region.

This month also marked the opening of the Pathology museum and we are so grateful for Baraha Hospital for their generous contribution of samples and for the hard work by our Pathology Department for setting this up so well.

Lots of hard work awaits us all and I wish you all the best of luck.

Professor Qutayba Hamid MD, PhD, FRCP, FRS

Dean College of Medicine

Student Research Week is currently ongoing.

There have been impressive posters and captivating oral presentations as well as other activities.

In the next issue, we will look at the events that took place during this week so watch this space.

IN THIS ISSUE:

COLLEGE NEWS

Adjunct Faculty Development Program:

The College of Medicine- University of Sharjah is planning a CME accredited Faculty Development Program tailored for clinician educators from different specialties and different clinical settings affiliated to the College of Medicine at the University of Sharjah.

The program is planned to introduce the clinicians to the specific nature of medical education both in class and in clinical environment where triad of interaction takes place between the clinical teacher, students/residents and the patient.

The program is planned to highlight the important roles of the clinician as educator, scholar and professional, with special emphasis on his/her role as a clinical teacher.

The first cohort was run very successfully between the 8th- 12th of March 2016 and was attended by 33 participants from different hospitals in Sharjah and Dubai. The feedback from the participants was very good and there was extensive interaction between them and the facilitators.

The second workshop will take place in the period 2nd-4th of May 2016.

Facilitators in the program are Dr. Mohamed Elhassan Abdalla (Coordinator), Prof. Nabil Sulaiman, Dr. Emad Nossair and Dr. Nermine Samir.

Crash Course Program:

The crash course program which is tuned for Year 5 students to prepare for their final examination is underway. This course was a revision program for Year 5 students. It was mainly conducted by the adjunct faculty from hospitals.

Because it was optional, attendance was variable. Some sessions were very well attended and some not as good. The feedback was that many sessions were very helpful.

The plan for next year is to create an Academic Day (Thursday) where these tutorials are conducted on a weekly basis.

Inauguration of the Pathology Museum:

The opening ceremony took place on Monday 25th April 2016 in the presence of the Chancellor Hamid Al Nuaimy and Dr. Sharifa El Emdi representative from Al Baraha Hospital, as well as Dr. Ahmed Barkouki, Dr. Gamal Abd El Al, the pathologists who have put in great effort over the past 10-15 years in order to gather and preserve all those specimens.

The museum is donated to the College of Medicine from Al Baraha Hospital. A special thank you must be awarded to the Department of Pathology; Dr. Mohamed Al Homssi and Dr. Maha Guimei for their hard work and efforts in the setting up of this museum.

Health Awareness Week:

From the 10th- 14th April 2016, Year 1 students were involved in Health Awareness Week Activities. This year, the WORLD HEALTH DAY theme for 2016 was Diabetes. Similar to the previous years, our Year 1 students prepared posters as well as presentations which they displayed and presented on Thursday 14th April 2016. Our dean Prof. Qutayba invited the Chancellor Prof. Hamid Al Nuaimy to attend.

- Health Awareness Week (HAW) and World Heath Day:

HAW was designed to introduce first year students to a variety of prevention health services in the Emirate of Sharjah and the surrounding areas. Through participation in a range of activities, students will develop a greater awareness of prevention health services, communities and practices. These experiences will help the students to develop an understanding of the mechanisms and issues involved in providing prevention health services to various populations as well as identifying areas in need of improvement.

During this week, students celebrate the World Health Day through a wide variety of activities. These activities are (observe and practice under supervision at selected Prevention Health Care Organizations, attend presentations on different prevention health services in UAE such as (Health Services (in general) in the UAE, Maternal and Child Health Services including immunization, Health Education and Promotion and Preventive Services in the UAE). In the last two days of this week, students are divided into groups and sub-groups that are assigned to prepare Presentations, Posters and educational videos on various aspects related to the week's activities.

Community Health Program Year 3

Community Health (also called Population Health or Public Health) is the science of preventing disease, and promoting, protecting and improving the health of a community. A community is defined as "a group of people who share some important features of their lives and use some common agencies and institutions." The WHO defines health as "A balanced state of well-being resulting from harmonious interactions of body, mind, and spirit."

Students in year 3 will consolidate and build on their community health knowledge from Foundation Year and Years 1 and 2; namely the principles of health enhancement and promotion, epidemiology and statistics, health services and promotion research projects. The CHP during Year 3 provides students with essential knowledge, skills and attitudes related to community health through field activities, classroom sessions and self-directed assignments. These activities will examine the scope and potential impact of community health as an organized health care intervention and discipline, encompassing theory and practice. The focus of attention will be on common preventive activities to address the needs of vulnerable populations i.e. people with special needs, those living with chronic and disabling disease states, elderly people, maternal and child health as well as socio-economically disadvantaged groups. Students will also explore ethical issues associated with health and health risk prevention, as well as issues impacting these community groups, and contributing environmental and occupational factors and problems. The role of community health agencies and programs related to all levels of prevention and health promotion will also be examined.

The CHP committee responsible for the planning, organization, implementation and evaluation of the program as well as assessment:

- Dr. Nabil Sulaiman (Head of the Program)
- Dr. Nahed Abdulkhalek (Family Health Program Coordinator)
- Dr. Hend Fouad (Coordinator)

The particular focus of CHP in Year 3 is preventive medicine in various health care settings and occupational and environmental medicine:

- Sharjah City for Humanitarian Services
- Old People’s Home
- The Preventive Health Services (including the Communicable Disease Centre; CDC and Health Education Department), Al-Khalidiya Health Centre
- The Municipality (including Food Control Laboratory, Food Inspection Visits and Health Inspection Department)


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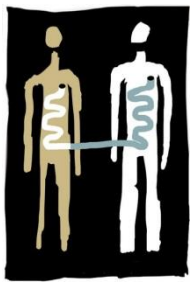
منطقة الشارقة الطبية
إدارة الطب الوقائي
MINISTRY OF HEALTH
SHARJAH MEDICAL DIST.
ADMINISTRATION OF PREVENTIVE MEDICINE


Al Khaldia Health Center


Social Services Department
حكومة الشارقة
دائرة الخدمات الاجتماعية
دار
رعاية
المسنين
OLD PEOPLE'S HOME

VIRAL NEWS



Faecal Transplant Pills: Therapy for *C.diff* infections

Article Submitted by: Hiba J. Barqawi

Faecal Microbiota Transplant

Faecal Microbiota Transplant (FMT) is a procedure in which faecal matter, or stool, is collected from a tested healthy human donor, mixed with a saline or other solution, strained, and the stool preparation infused into the intestine of a patient, by colonoscopy, endoscopy, sigmoidoscopy, or enema.

The purpose of faecal transplant is to replace good bacteria that has been killed or suppressed, usually by the use of antibiotics, causing bad bacteria, specifically *Clostridium difficile*, *or C. diff*., to over-populate the colon. This infection causes a condition called *C. diff*. colitis, resulting in often debilitating, sometimes fatal diarrhoea.

Healing *Clostridium difficile* Infections (CDI)

C. diff. is a very serious infection, and the incidence is on the rise throughout the world. The CDC reports that approximately 347,000 people in the U.S. alone were diagnosed with this infection in 2012. Of those, at least 14,000 died. Some estimates place that number in the 30,000 to 50,000 range, if the U.S. used the same cause of death reporting methods as most of the rest of the world.

Faecal transplant has also had promising results with many other digestive or auto-immune diseases, including Irritable Bowel Syndrome, Crohn's Disease, and Ulcerative Colitis. It has also been used around the world to treat other conditions, although more research in other areas is needed.

History of FMT

Faecal transplant was first documented in 4th century China, known as "yellow soup". It has been used for over 100 years in veterinary medicine, and has been used regularly for decades in many countries as the first line of defence, or treatment of choice, for *C. diff*. It is customary in many areas of the world for a new-born infant to receive a tiny amount of the mother's stool by mouth, thought to provide immediate population of good bacteria in the baby's colon, thereby jump-starting the baby's immune system.

Faecal transplant has been used in the U.S., sporadically since the 1950's, without much regulation. It has gained popularity in the U.S. in the past few years, although experts estimate that total number of treatments to date in the U.S. remains below 500 patients.

In late spring of 2013, the FDA announced it was classifying faecal matter as both an Investigational New Drug (IND) and a Biologic, and that only physicians currently in possession of an approved IND application would be allowed to continue performing faecal transplant.

This resulted in less than 20 physicians in the U.S. being allowed to perform faecal transplant. There was a groundswell of opposition from physicians and patients, and on June 17th, 2013, the FDA reversed their position, and announced that qualified physicians could continue to perform FMT for recurrent *C. diff*. only, with signed consents from patients and tested donor stool.

This has resulted in more and more physicians beginning to perform faecal transplants, but there are still only limited numbers serving the large population needing the treatment. There are also many patients who do not have a donor to assist them. And there are many patients who have never even heard of this treatment, even though the success rate for treatment of recurrent *C. diff*. is estimated to be well over 90%.

In all documentation, dating back to 4th century China, *there has never been a single, serious side effect reported from faecal transplant*.

Highly Effective Treatment

Faecal Transplant is a low-cost, low-risk, highly effective treatment. It is not currently covered by most insurance companies, as it is still classified as an experimental treatment.

Faecal transplant pills: Large-scale production begins following successful dosing study

Non-profit stool bank launched by MIT researchers will provide the first faecal transplant pill for clinical use

A new pill created by a team of MIT-trained researchers provides faecal transplant therapy without requiring the traditional, more invasive stool delivery methods.

The FMT Capsule G3 pills will serve as a treatment option for recurrent *Clostridium difficile* infections (rCDI) that don't respond to standard antibiotic treatment. The pill will also serve as a new tool for researching future applications of microbiome-based therapies.

Delivering faecal microbiota transplantation by pill reduces both the procedural costs and risks associated with the more invasive delivery methods. It was the strongly preferred by patients in a survey published in Clinical Infectious Diseases.

The pill was created by OpenBiome, a non-profit stool bank dedicated to expanding safe access to faecal microbiota transplantation therapies and catalysing research into the human microbiome. Founded in 2012 by a team of microbiologists, clinicians, and public health advocates from Harvard and MIT, OpenBiome has since provided over 7000 treatments to more than 450 clinical partners across six countries, and has supported 10 clinical and translational research studies.

OpenBiome's FMT Capsule G3 uses a patent-pending Microbial Emulsion Matrix (MEM) technology, which preserves the viability of complex bacterial communities while ensuring capsules' long-term physical stability. This feature allows for widespread provision of a faecal transplant pill—encapsulation methodologies used in the field to date have yielded capsules that degraded within minutes.

Faecal microbiota transplantation has been shown across multiple studies to be 89 percent effective in treating Clostridium difficile infection, while standard antibiotic therapies yield cure rates of less than 40 percent. C. difficile is the most common hospital-acquired infection in the U.S., and one in five patients with C. difficile will have to endure the infection more than once.

Results from a pilot, multi-centre randomized dose-finding study with 17 patients led by Dr. Monika Fischer, MD, MSCR, Clinical Assistant Professor of Medicine at Indiana University, and Dr. Jessica Allegretti, MD, MPH, associate gastroenterologist at Brigham and Women's Hospital and instructor of medicine at Harvard Medical School, found an initial efficacy rate of 70 percent in both low and high dose groups receiving OpenBiome's FMT capsules. Treatment with a high dose after an initial nonresponse yielded an aggregate clinical cure rate of 94 percent. There were no adverse events reported.

The results, presented on Monday morning at an award-winning late-breaking oral presentation at United European Gastroenterology Week in Barcelona, Spain, are comparable to previously published investigations of the efficacy of encapsulated FMT. The abstract may be viewed using the conference's online program tool.

"This is a compelling step towards providing evidence-based FMT capsule treatments for patients," said Dr. Zain Kassam, MD, MPH, Chief Medical Officer of OpenBiome. "Although colonoscopic delivery remains the gold standard for FMT in terms of efficacy, these results suggest that FMT capsules may emerge as an effective and less invasive therapy option. We hope to help usher in a universe in which patients suffering from this crippling diarrheal infection have safe access to FMT without having to undergo a procedure."

Similar to other microbiota preparations already provided by OpenBiome, FMT Capsule G3 may be used to treat patients with rCDI under the FDA's enforcement discretion guidelines, or to treat other conditions under an Investigational New Drug application. Encapsulated FMT is a particularly useful tool for clinical research because it allows investigators to evaluate maintenance FMT therapy without requiring participants to undergo repeated invasive procedures.

"OpenBiome's FMT Capsule G3 is a major step forward for FMT patients, physicians, and clinical researchers because it reduces the procedure-related risks and discomforts of FMT," said Dr. Mark Smith, PhD, Research Director at OpenBiome. "We have already seen the remarkable impact of standardizing FMT for the treatment of rCDI through traditional routes of administration, and we are thrilled to add capsules as a new option to further expand patients' safe access to care."

To learn more about this topic please visit the following websites:

- http://www.openbiome.org/fmtcapsules
- http://jama.jamanetwork.com/article.aspx?articleid=1916296
- http://www.npr.org/sections/health-shots/2014/10/11/355126926/frozen-poop-pills-fight-life-threatening-infections

FEATURED STAFF-

Manal Fayad is an Administrative Assistant at the College of Medicine.

She graduated with a BA in Psychology in 2011 from Peralta Colleges in California, USA.

She previously worked with psychologists in both hospitals and universities. She can speak 3 languages.

Manal joined the college in February 2016. She works in the Clinical Sciences Department and coordinates Year 5 academic activities.

Amani Bawab is an Administrative Assistant at the College of Medicine.

She graduated with a BA in Public Relations from the University of Sharjah in 2015.

Amani joined the college in November 2015. She works directly with Professor Qutayba and is heavily involved with the Recruitment at our College. She arranges interviews with prospective applicants and makes the appointment decisions and is the coordinator in the Recruitment Committee.

Walaa Nihlawi is an Institutional Effectiveness Officer at the College of Medicine. She is part of the Deanship of Quality Assurance, Institutional Effectiveness and Accreditation at University of Sharjah.

She graduated with a BSc in Information Technology Multimedia from the University of Sharjah in 2014.

Walaa joined the college in February 2016. She is responsible for the implementation of online assessment management and e-portfolio software, Taskstream. She also trains and supports medical students and faculty with the development of academic program mission statements, goals, assessment techniques, and completing accreditation reports.

Nada Othman is an Administrative and Financial Coordinator at the College of Medicine.

She graduated with BA in Economics from Damascus University in 2010. She is currently completing her MSc (MSA) in Accounting at Damascus University.

Nada joined the college in January 2016. She handles all the purchasing for the college as well as dealing with the college financial need and issues and following up with the IT center, central laboratories and recruitment department and communicating with external faculty. She is also involved in the events and special occasions planning, execution and follow up.

Faculty Achievements, Awards & Special Recognition

Awards and Special Recognition:

Prof. Nabil Sulaiman has contributed to the Quality Pharmacy program conducted by Global Pharma in collaboration with Dr Al Ahdal and Dr Asseri from KSA as well as Dr Awai Al Shaikh the dean of Shaikh Mohamed Bin Rashid College of Medicine. The aim of the program is to upskill pharmacists to adapt more active role in patients care and education.

Conference Participation:

Prof. Azzam Magazachi participated in the **World Congress and Expo on Oncology and Radiology** hosted in Dubai by giving an oral presentation entitled '**A New Mechanism of Action for Multiple Sclerosis Drugs to Treat Cancer Patients**' on April 19th 2016.

Dr. Ahmed El- Serafy participated in the **CiRA/ISSCR International Symposium** in Kyoto, Japan from the 22nd to 24th of March 2016, where he gave an oral presentation entitled: **'Opposing roles for DNA methylation and histone deacetylation inhibitors in controlling adipogenic differentiation'**. This was during a meeting called 'Pluripotency: From Basic Science to Therapeutic Applications International Symposium' organized by the Center for induced pluripotent cells Research and Application in Kyoto University in collaboration with The International Society for Stem Cell Research.

Publications:

Prof. Mohamed Al-Hajjaj recently had an article published:

- Alharbi N S, Al-Barrak A M, Al-Moamary M S, Zeitouni M O, Idrees M M, Al-Ghobain M O, Al-Shimemeri A A, Al-Hajjaj MS. **The Saudi Thoracic Society pneumococcal vaccination guidelines-2016**. Ann Thorac Med [serial online] 2016 [cited 2016 Apr 17]; 11:93-102.

Dr. Nihar Dash and **Prof. Azzam Magazachi** have an article in press that will be published soon:

- Dash NR, Maghazachi AA (2016) **BCG Vaccine-Beginning of its End**. MOJ Immunol 3(2): 00085. DOI: 10.15406/moji.2016.03.00085

Congratulations to our faculty and staff members on their successes and achievements and we wish them the best of luck in all their future endeavours.

Student Awards and Achievements

Hamdan Award:

Our 5th year medical student **Vida Salmanpour,** 4th year medical student **Ahmed A Nugud** and 3rd year medical student **Arab Hammoudeh** have been granted the **Sheikh Hamdan Award for Distinguished Academic Performance: University Student Category**. This award is given annually to five male and five female students who are enrolled in higher education institutes around the UAE.

Publications:

A group of Year 5 students published a research article in the **Archives of osteoporosis Journal**: http://link.springer.com/journal/11657

- Salmanpour V et al. (2016) **Vitamin D deficiency: knowledge and practices among the adult Population in Sharjah, United Arab Emirates**. Arch Osteoporos 11(15). DOI: 10.1007/s11657-016-0269-0

The authors of this article are: **Vida Abdolhamid Salmanpour** (main author), **Hassan Salah Ibrahim, Ahmad Ghassan Salameh**, **Amel Mohammed Yahya**, **Basel Kamal Debal.**

A group of Year 3 students published a research article in the **International Journal of Travel Medicine and Global Health:** http://journals.bmsu.ac.ir/ijtmgh/index.php/ijtmgh/article/view/158

- Ismayl G et al. Practices and attitudes to prevention of travel-related infectious diseases in United Arab Emirates. Int J Travel Med Glob Health. 2016; 4(1):133-8.

The authors of this article are: **Ghiath Ismayl** (main author), **Mohamad Balchi, Yaman Hukan, Menatallah Mohamed**, **Rana Wehbe.**

Medical Competition:

On Saturday 9th April 2016, SCOME (Standing Committee of Medical Education) hosted the Intercollegiate OSCE showdown at University of Sharjah. Students from 4 different medical colleges competed in clinical skills and physical examination. Ghiath Ismayl, a 3rd year medical student, represented the University of Sharjah.

The students were expected to perform a certain physical examination in front of the students, in just 7 minutes. There was a jury of doctors to assess and give a score. This was a fruitful event as it gave the opportunity for medical students to put their skills to the test. It was also beneficial for them to interact with each other, and hear feedback from the students themselves as well as the jury. It was a well-organised and productive environment.

Ghiath competed and won 1st place in the showdown for Neurological Examination.

Ghiath being awarded by the organizing team

Student Conference Participation

Our Year 3 students **Ahmad Osama Saqer, Shaymaa Ghazal, Juman Adnan Babi and Ranya Haidar Alkhafaji** presented their group Community Based Research (CBR) project at the **3rd International Family Medicine Conference and Exhibition** in Dubai from the 17th to 19th April 2016. The main author and presenter was **Ahmad Osama Saqer**.

The project involved studying the views and establishing the awareness of the UAE public on the HPV vaccine and its link to cervical cancer as well as the willingness of parents to vaccinate their daughters. The poster was entitled: **'Knowledge and Awareness about Cervical Cancer Vaccine (HPV) Among Parents in Sharjah'.** The other student involved in this project is: **Mohamed Mohsen El-Mekresh**.

This group of students were supervised by **Drs. Hiba Barqawi, Amal Hussain and Nahed Abdul Khalek.**

The students were awarded **1st place** in the **Student Poster Presentation category** and were given certificates of recognition for their outstanding participation as well as being invited to give an oral presentation on this topic at next year's conference and encouraged to submit their work for publication.

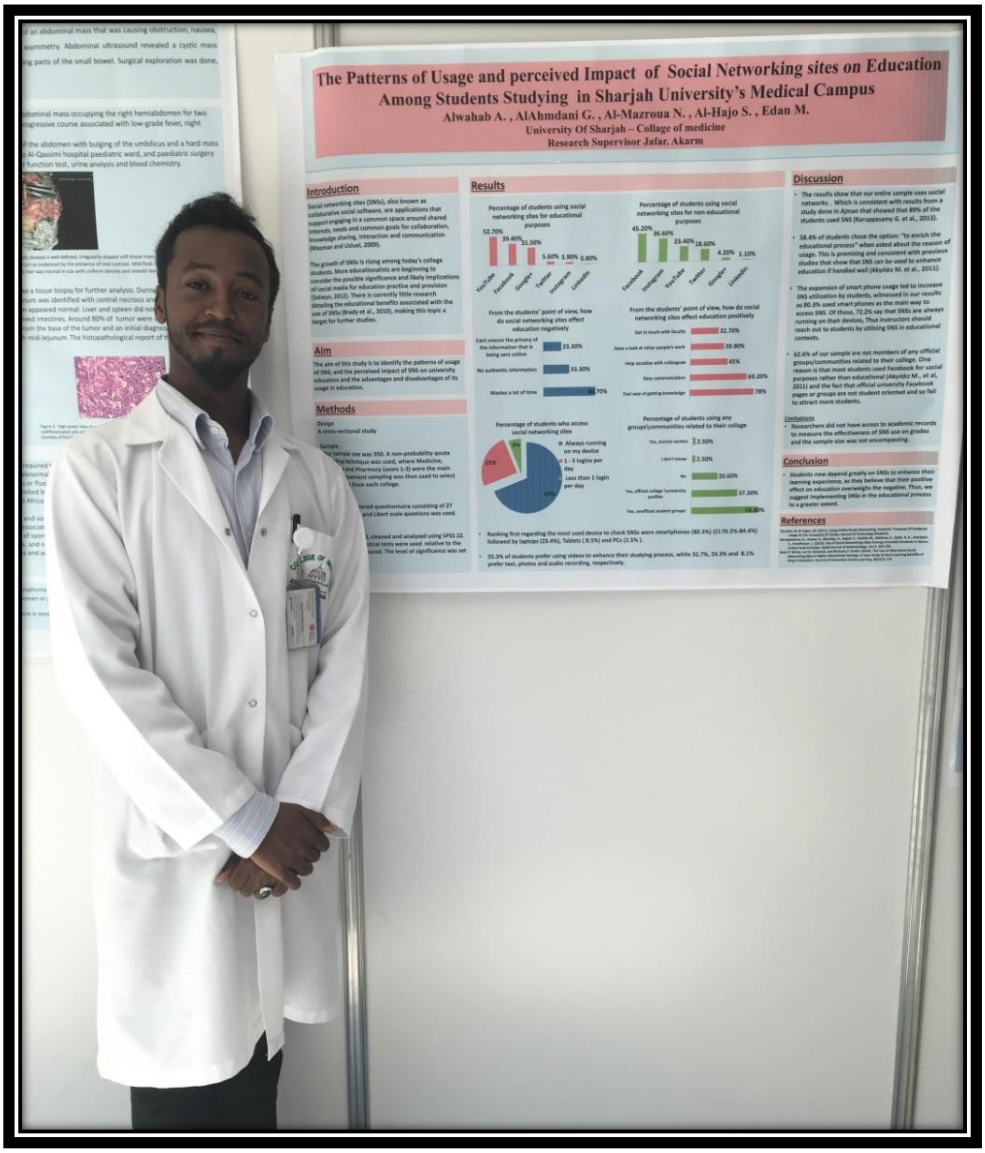
Congratulations on this remarkable achievement. All the hard work and efforts paid off in the best possible way!

Our Year 4 and 5 students **Ahmed A Nugud**, **Abdulaziz A. Galadari, El Rasheed H. El Awad** and **Leena A. Alkayyali** presented their poster: '**Potentiation of αβ T-cells and Natural Killer T-cells activation by Ascorbic Acid to target cancer cells**' at the 22nd Ain Shams Medical Student Conference in Cairo, Egypt on the 19th March 2016. This research project was funded by Boehringer Ingelheim. The main author and presenter was **Ahmed A Nugud.**

The project's main objective was to investigate the potentiation of the adaptive immune system by ascorbic acid on mice subjects. They were the only student group to be involved in animal studies in the past year at Sharjah Institute for Medical Research (SIMR).

The group of students was supervised by Drs. Ahmed El-Serafy and Farhan Cyprian.

Congratulations on this remarkable achievement. All the hard work and efforts paid off in the best possible way!



STUDENT CORNER

UOS Explore

UOS Explore was the first event of its kind for the students, by the students, and was held on the 21st of March, 2016 at Al-Razi Hall at the Medical Campus. The purpose of the event was to shine the light on students with inspiring experiences worthy of sharing. Fifteen students presented their motivating anecdotes which fell under the cultural, scientific, creative, social or voluntary categories. Four students from our college participated in this event by giving a talk and the host of the event was **Arab Hammoudeh** in Year 3.

Yaman Hukan

My talk in UOS Explore was about the field of international development and the need for young people to be involved in it. Throughout my talk, I shared one of the experiences that left a big impact on my personality and my life. This experience was my participation in the International Development Youth Forum 2015 in Tokyo, which was a forum in which young people from all over the world met and discussed the issue of hunger and tried to come up with solutions for it. Today the world is confronted with a grave challenge, as 1 billion people around the world are suffering from famine. During IDYF, my team and I developed an idea we called “farming masters” through which we aimed to simply utilize the knowledge that masters students in agricultural fields have, in order to help farmers in regions of Africa that are suffering from hunger develop their methods and eventually improve the quality and quantity of their crops. This experience has been eye opening to me as a young Arab citizen. It allowed me to explore the world and understand the challenges that it faces. After the huge impact this experience left on me, I hope to spread the lessons I was taught on wider networks and platforms. In addition, I hope to encourage and motivate my fellow Arab youth to get involved in the field of international development, in order for us to work together to reach a sustainable, safer, and more prosperous planet.

Ahmed A Nugud

My talk was about volunteering. It all started when I was thirteen years old with an old man telling me “I see something in you, but I don’t know what it is” and from that day I started volunteering. The idea of youth volunteering is very close to my heart and it had a big impact on me in my teenage life. All through my talk I focused on simple ideas that are used to raise awareness about youth volunteering, simple ways to volunteer and the importance of giving back to the community.

Noura Boush

My participation in UOS explore was through reciting one of my spoken word poems in the second intermission between speakers. I chose to share a poem that addresses the issues of body shaming and women empowerment. Spoken word is my favourite medium of expression. It is unique and different as it doesn't follow any set of rules or limitations unlike traditional poetry. Spoken word is poetry that is meant to be performed in front of an audience as opposed to being read from a piece of paper so as you can imagine voice inflection and intonation play a huge rule. I thoroughly enjoyed being part of UOS explore and positively making a difference.

Islam Alsagheer

UOS explore was the type of event I always wished I could see in my university. It was not an easy decision for me to apply for the auditions, because I did not believe a 22 year old student can have a wise story worthy of being shared with people; so I preferred not to apply. I changed my mind on the last day and I was the last person to give an audition. I was elected with 5 other colleagues out of 62 students to be the main speakers in the UOS explore event, and guess what?! I was the first speaker on the stage.

My talk was based on the importance of thinking outside the box, veering away from what we have learnt in our traditions or culture. I wanted my peers to know the importance of grasping this world in a way they have never known before by looking at it from another perspective. Then and only then can you appreciate how magnificent this universe is. Simply put, you will turn into the person content with their faith, not a traditional one. I chose philosophy as the base for my talk. I took the audience through a journey in the history of Islamic philosophy then I shared with them some statistics about science in the Arab world today and subsequently I presented my experience in “Islam & Science” Project, based on which I was chosen to attend a summer school in Paris in 2014. I concluded with two of my own philosophies, one was about “vocals and melodies” the other was about “love”. Dear reader, you only can learn by reading and travelling. So do your best in finding out the beauty of this universe.

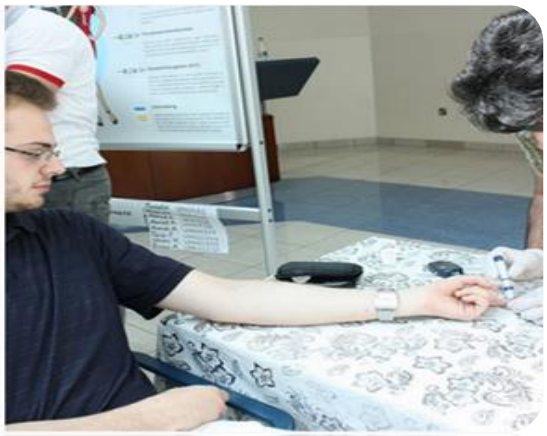
Medical Student Association (MSA) activites:

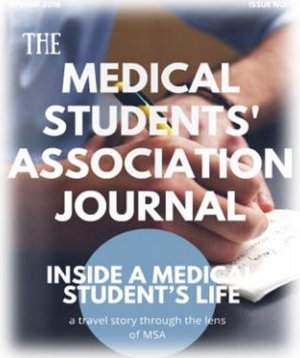
Update on Diabetes Management:

A short seminar was conducted by Year 2 students on the latest updates regarding the management of diabetes. The presenters walked the audience through the definition and the epidemiology of diabetes and then explained in short the pathophysiology of the illness followed by the latest drugs used for management of diabetes. Around 50 students attended the seminar who gave positive feedback afterwards.

Special thanks to **Omar Azrak, Anas Hashem, Rawan Majdalawi and Ola Kassem** for their efforts in the preparations and the well-conducted informative presentation.

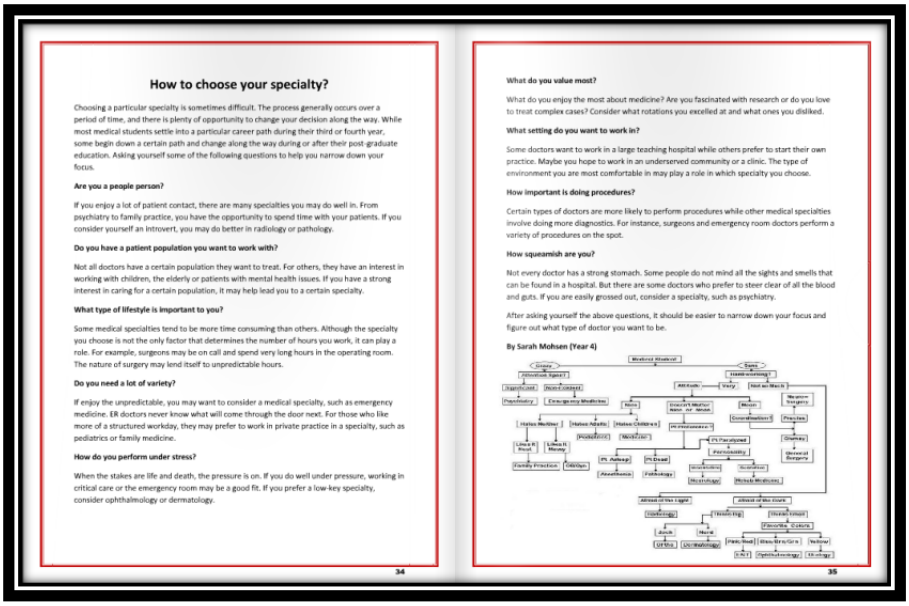
Blood glucose testing was carried out in the M27 lobby after the seminar where students explained to others the technique and the interpretation of the results of this test.





MSA Journal

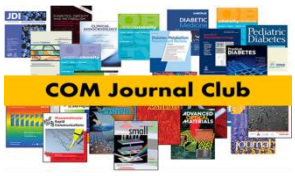
The first journal for the medical student's association was a labor of love, where members of the journal committee worked in harmony to produce something that is memorable. The journal takes you in a journey through the lens of a medical student where you get to see what they go through on an everyday bases, what interests them, their hobbies and what goes on in their minds. So go ahead grab a copy and read away, we hope you enjoy reading it as much as we enjoyed making it – **Noura Boush**, Editor-in-chief.



EVENTS

Journal Club

On Monday 4th April 2016, the College of Medicine Journal Club met again. This session was hosted by **Dr. Ahmed El-Serafy** who opened the door to discussion of the article 'Human endothelial and foetal femur- derived stem cell co-cultures modulate osteogenesis and angiogenesis' which he reviewed and discussed with the attending participants. This sparked a dialogue amongst the attendees and a debate on some of the findings.



There will be more sessions held in the next few months so keep an eye out for them.

CTC Event:

On the 25th and 26th March 2016, the 1st Hands-on course in Neonatal & Paediatric Endoscopy Surgery was held at the University of Sharjah's Clinical and Surgical Training Centre for paediatric surgeons, trainees and residents. This training program was in collaboration with the UAE Paediatric Surgery Society.

The main aim of the course was to advance training in Paediatric Minimal Invasive Surgery to ensure the safe performance of such operations. The program outcome was to provide theoretical updates on the most recent developments in neonatal endoscopy as well as engage in intensive experimental hands-on sessions, using small animals for each surgical procedure.

Historical Medicine Quiz

Submitted by **Dr. Azma Malek**
(Obtained from Medscape)

1. Who was the woman who helped to popularize the use of anaesthesia during childbirth?
   a) Florence Nightingale
   b) Queen Victoria
   c) Elizabeth Blackwell
   d) Susan B. Anthony

2. Which operation might have saved George Washington's life?
   a) Tracheotomy
   b) Herniorrhaphy
   c) Cholecystectomy
   d) Appendectomy

3. Which surgeon performed the first successful heart transplant?
   a) Norman Schumway
   b) Walter Lillehei
   c) Christiaan Barnard
   d) Michael DeBakey

4. Who was the first patient treated with Lister's new method of antisepsis?
   a) a woman with a staphylococcal infection of the arm
   b) a young boy with a compound leg fracture
   c) an elderly man with gangrene of the foot
   d) a soldier with a gunshot wound to the abdomen

5. Which famous surgeon was a life-long drug addict?
   a) William Halsted
   b) Theodor Billroth
   c) Denton Cooley
   d) Harvey Cushing

6. Which of the following caused Albert Einstein's death?
   a) Aortic aneurysm
   b) Myocardial infarction
   c) Gangrene of his leg
   d) Stroke

Famous Patients, Famous Diseases, Famous Surgeries

Q1. Queen Victoria and her husband, Prince Albert, had nine children. The Queen received open-drop chloroform anaesthesia in 1853 at the time of birth of her eighth child. She also received anaesthesia during the birth of her final child, Princess Beatrice.[1] The use of anaesthesia by the reigning monarch enhanced the popularity of anaesthesia in childbirth. In both instances, the anaesthetist was John Snow, a remarkable physician most well-known for his investigation of the 1854 cholera epidemic in London.[2]

Q2. George Washington (1732-1799) contracted a severe sore throat after inspecting his farm during a cold, wet December day. Within a day or two, he developed chills, could hardly speak, and had great difficulty breathing. His physicians carried out the accepted procedure of the day—bloodletting—in an attempt to relieve his symptoms. Altogether they removed the equivalent of about 2.4 L of blood—a truly massive amount. This heroic measure did little to improve the patient's condition and is likely to have hastened his death. Current medical opinion is that Washington suffered from acute epiglottitis, still a serious disease in adults and often requiring emergency airway management. Elisha Cullen Dick, a 37-year-old consultant called to assess Washington's condition, believed that phlebotomy was wrong and even suggested that a tracheotomy might be a life-saving, desperate measure. The older physicians did not agree; and, in retrospect, it is uncertain whether a tracheotomy under difficult conditions without any anaesthesia would have been successful.[3]

Q3. Christiaan Barnard (1922-2001), in a 9-hour operation performed at the South African Groote Schuur Hospital in 1967, performed the world's first heart transplant on a 54-year-old patient dying from end-stage heart disease.[4] This first patient survived for 18 days, but several of Barnard's subsequent patients survived for more than a year, providing the stimulus that led to the acceptance of heart transplantation for critically ill patients. In addition to helping to solve some of the technical issues involved in heart transplantation, Barnard pioneered the development of guidelines for the process of procuring suitable organ donors. Unfortunately, about a decade after this procedure, Barnard developed severe arthritis, forcing him to give up surgery.

Q4. Joseph Lister (1827-1912) first tried his new antiseptic method on James Greenlees, an 11-year-old boy who had sustained a compound fracture of the leg in 1865 when he was run over by a cart.[5] Lister had read about Pasteur's germ theory and believed that an antiseptic dressing might prevent the development of infection, which was a common, fatal complication of open fractures. Open fractures had such a high mortality rate that an amputation of the injured extremity was the preferred treatment, even though the mortality rate following amputation was at least 25%. Lister treated Greenlees' fracture in an entirely different manner: After cleaning it with soap and water, he applied a solution of carbolic acid and then covered it with a bandage. The boy survived, as did 9 of 10 similar patients treated with a carbolic acid dressing. Despite this early success, the concept of antisepsis was so novel that it took many years before being accepted by surgeons.

Q5. William Halsted (1852-1922) became addicted to cocaine in the 1880s while performing experiments on agents that might be suitable for local anaesthesia. At that time, general anaesthetics like ether had proved useful for surgical patients, but local anaesthetics were not available. In an effort to treat his cocaine addiction, physicians substituted morphine, which resulted in his lifelong problem with drug addiction. Despite his addiction problem, Halsted was a surgical pioneer who advocated the use of radical surgery for managing breast cancer and also formulated the modern training system for surgical residents.[6] Physicians are at somewhat higher risk for addiction compared with the general public, and physicians in different specialties may abuse different types of drugs.[7] For example, while alcohol is the drug of choice for most physicians with an addiction, anaesthesiologists as a group are more likely to abuse intravenous opioids.[8]

Q6. In 1948, at age 69 years, Albert Einstein (1879-1955) developed intermittent upper abdominal pain, which led to the discovery of a pulsating central abdominal mass. At exploratory laparotomy, Dr Rudolph Nissen, known for developing his eponymous oesophageal anti-reflux procedure, discovered a large abdominal aortic aneurysm. This was about a decade before the development of effective surgery for aortic resection, so in an effort to strengthen the aortic wall, Nissen wrapped the aneurysm with cellophane to stimulate a fibrotic reaction. Einstein lived for several more years after this palliative procedure before the aneurysm finally ruptured.[9]

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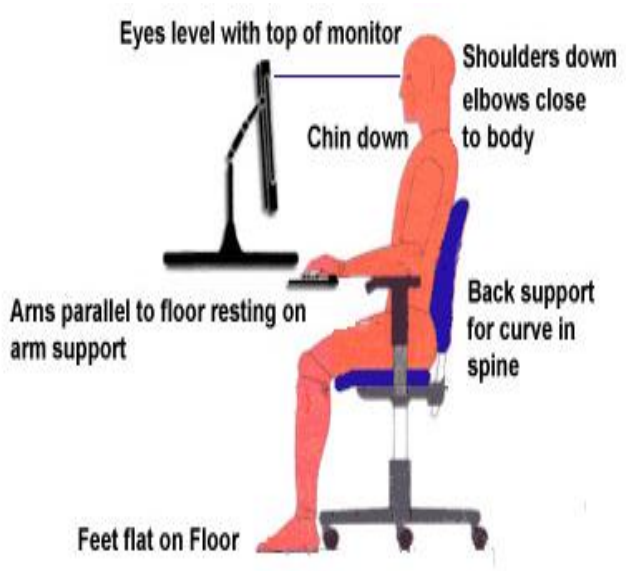
DOCTOR'S ORDERS

This Issue's "Doctor's orders" is submitted by **Dr. Sarra Shorbagi**

Good posture for healthy back

In recent years, there has been increasing prevalence of back and neck pain. Sitting for long hours especially with incorrect posture is considered as one of the top triggers of neck and back pain. Sitting causes twice as much pressure on discs of the spine as standing.

Recommended sitting position

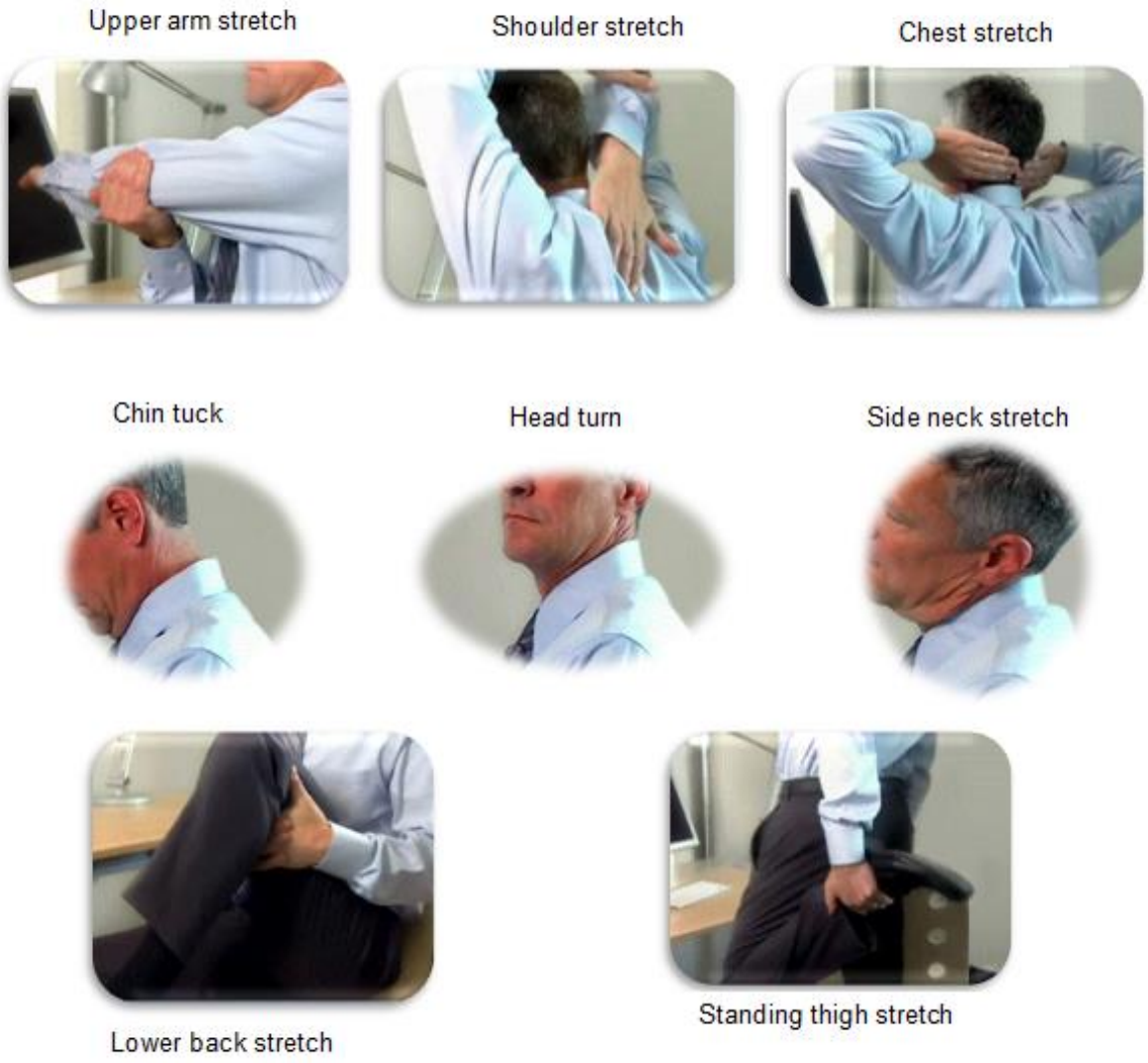


Benefits of good posture include:

- Keeps bones and joints in the correct alignment so that muscles are being used properly.
- Helps decrease the abnormal wearing of joint surfaces that could result in arthritis.
- Decreases the stress on the ligaments holding the joints of the spine together.
- Prevents the spine from becoming fixed in abnormal positions.
- Prevents fatigue because muscles are being used more efficiently, allowing the body to use less energy.
- Prevents strain or overuse problems.
- Prevents backache and muscular pain.
- Contributes to a good appearance.

Prevent back and neck pain by following a 'Good Sitting Posture' and remember to take regular breaks; every 20-30 minutes – stand up to stretch, change position and walk around a little.

Stretch exercises you could do at your desk



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For any comments regarding this newsletter or suggestions for improvement please contact the Editor **Hiba Jawdat Barqawi** on hbarqawi@sharjah.ac.ae

Ext: 7268