Education isn’t confined to the classroom and lecture hall. At WCMC-Q, health education is taken out into the community.
College harnesses the power of the sun
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Professor co-edits new health journal

The 2013 edition of a new open access health journal co-edited by WCMC-Q’s Dr. Dietrich Büsselberg has been published on Qatar Foundation’s QScience platform.

The Journal of Local and Global Health Science is a peer-reviewed, international journal that publishes both basic and applied research related to health. The journal was launched in late 2012 and aims to be a vehicle for the improvement of public health in communities around the world through the promotion of evidence-based approaches.

Key to the journal’s identity is its commitment to view global issues in a local context, while simultaneously examining the implications local health practices have for global health, explained Dr. Büsselberg, professor of physiology and biophysics at WCMC-Q.

He said: “There are many journals that cover local health issues but very few that try to place them in a global context. Similarly, there are many journals that examine global issues of public health but they do not explain their effects on local healthcare.

“We felt this link between global and local health issues was missing, and this is why we created the Journal of Local and Global Health Science.”

The journal publishes articles in a wide variety of fields, such as environmental, educational and toxicological aspects that influence both human health and the health of the ecosystem. The current issue features articles on lead neurotoxicity, the effects of pollution on health outcomes, the impact of day length and artificial lighting on health in northern and southern latitudes, and the global problem of breast cancer and therapy resistance.

The Journal of Local and Global Health Science is edited in partnership with Dr. David O. Carpenter, professor of Environmental Health Science and the director of the Institute for Health and the Environment at the University at Albany in New York State. The journal is published online.

Dr. Büsselberg has contributed to several of the articles in the current edition, including a review of the effects of lead on synaptic transmission. The neurotoxic properties of lead have been an enduring area of interest to Dr. Büsselberg since he started his PhD on the subject at the Wadsworth Center in Albany, New York in 1987.

He said: “Since my PhD I have frequently revisited the subject of lead neurotoxicity. It has been a topic of great interest to me for the past 25 years because more and more mechanisms of lead interactions have been discovered.

“For example, the research was previously focused on lead poisoning in high concentrations, which used to be a common occurrence mainly because of children eating lead-based paint that was used in many homes up until the 1970s. That type of paint is no longer used and consequently the study of lead poisoning has moved on and now focuses on much lower concentrations.”

Dr. Büsselberg said that the World Health Organization sets the tolerable level of lead concentration in the blood at 10microg/dL. However, he explained that contemporary research has indicated that lead is toxic at far lower concentrations.

He said: “Over the last few years the research has shown that even concentrations lower as 2microg/dL can be harmful. Even this low concentration can impair learning and brain function.”

Dr. Büsselberg’s review article in the current edition is entitled Lead (Pb2+) neurotoxicity: Ion-mimicry with calcium (Ca2+) impairs synaptic transmission and was written in partnership with Ana-Maria Florea, Jasmin Taban, Elizabeth Varghese, Blane T. Alost and Stacy Moreno.

The article illustrates “how Pb2+ neurotoxicity is associated with its ability to partially mimic the function of Ca2+ and modifies synaptic transmission pre- and post-synaptically.” Essentially, lead molecules disrupt synaptic function by binding to sites meant for calcium molecules.

Lead enters the human body by absorption through the skin, inhalation of polluted air, and consumption of contaminated food and water. Lead poisoning can cause brain damage to the prefrontal cerebral cortex, hippocampus and cerebellum, which leads to a variety of neurologic disorders, most notably impaired learning and memory formation.

The online version of the article illustrates the chemical processes involved in lead poisoning at the synaptic level with a series of animations.

Dr. Büsselberg said: “The processes are rather complex so the animations are a far more effective way to explain them than static diagrams. The aim is to make the material comprehensible to as many people as possible.”

Crucially, the journal is open-access, which means it can be read completely free of charge by anyone, anywhere in the world. Unrestricted use, distribution and reproduction in any medium are permitted, provided the article is properly attributed.

Dr. Büsselberg said: “The fact that the journal is open-access is a great strength. It is often very expensive to access academic articles and this represents a considerable barrier to research. By removing this barrier we allow for a free flow of information and ideas among the widest possible audience.”

To view the Journal of Local and Global Health Science visit QScience.com.
Accolades for Class of 2014

The achievements of the most outstanding students of the Class of 2014 were recognized with the announcement of the annual Academic Excellence Awards.

The awards are presented to the graduating students who achieve the highest grades in each class and in the clinical clerkships over the course of the four-year medical program.

The award winners have customarily been announced at Convocation, but for the past two academic years the medical education division has selected the awardees several months early to allow them to include details of their success in their residency program applications. The awards for seven pre-clinical courses and two clinical clerkships were announced in October, with the awards for the remaining clinical courses and clerkships announced at a later date to allow all of the students to rotate through the entirety of the program.

Dr. Marcellina Mian, associate dean for medical education, applauded the efforts of the recipients.

She said: “All of these students have demonstrated a commitment and dedication to their studies that goes beyond what is required to complete the course. They have surpassed the very high standards set by the course to achieve results that are truly excellent. All of the students who won awards worked extremely hard and they are entitled to feel very proud of their achievements.”

The awards carry a significance that goes further than the pleasure of finishing at the top of their class or clerkship, explained Dr. Mian. “The award recipients are more likely to be accepted to the residencies of their choice at high-level institutions,” she said. “They may also find that the awards will open doors for them throughout their careers.”

Student Fathima Zahra Kamil Faiz was thrilled to win an award.

She said: “Honestly, I did not think I had a shot at being considered for an academic award, particularly for internal medicine (IM). Being considered for this honor means a lot to me since IM is my residency choice and I am glad that I was awarded in the field that I have chosen to pursue as a career.

“The IM clerkship was my best, not only in terms of patient management but also patients themselves, their spectrum of disease and the resulting physician-patient relationships. Personally, none of my later clerkships made me feel as intellectually stimulated and emotionally rewarded as internal medicine.

“Finally, I would like to thank God for such an honor. And of course my parents for their continued support and the amazing faculty and doctors both at Hamad General Hospital and WCMC-Q for their contribution to my success on the internal medicine clerkship.”

All of the Academic Excellence Awards will be formally conferred upon the students at the Convocation ceremony in May 2014.

By John Hayward
Trip opens students’ eyes to the developing world

Nine pre-medical students visited Tanzania during the summer recess to take part in a number of community service projects.

The students painted a newly built school, cleaned community clinics, planted trees and visited the Masai tribe during their trip to Moshi municipality, situated on the lower slopes of Kilimanjaro, an hour’s flight from the capital Dar es Salaam.

Though blessed with abundant natural resources of minerals such as gold, diamonds and natural gas, Tanzania is a developing nation with a GDP of just over $1,500 dollars per capita and the students were confronted with a way of life very different from the one they are used to in Doha.

Luma Rayyan, student health, wellness and activity coordinator, accompanied the students on the trip.

“Meeting the different people in the many places we visited and seeing how they lived was a great experience for all of our students,” she said.

“It was quite a big culture shock for them at first to see people living with relatively little compared to the way we live in Doha. Many people in Tanzania find it difficult to access health care services because there are not many clinics and they are often not well equipped. Some people must travel for hours to reach the clinic so there is a lot of reliance on local remedies.

“It really changed our students’ perspective on life and I think it will influence the type of doctors they eventually become. I am happy that they got to have this experience while they are still forming their identities as doctors because I think it has taught them to identify with and to have compassion for people from different backgrounds. Ultimately, this will make them better doctors.”

During the trip, which ran during August, the students visited two clinics, known locally as dispensaries, which had been closed down due to lack of funding. The students helped to clean the dispensaries to get them ready to be reopened and checked the condition of the medical equipment. They also traveled to the countryside to visit the Masai, where they saw the traditional huts they live in and took part in a ceremonial dance.

Farah Al-Sayyed has some fun with local children

Second year pre-medical student Sahar Mahadik found the experience extremely rewarding.

“Meeting the people was humbling and inspiring. Despite the lack of educational resources there, many of the young children spoke excellent English and were able to translate from Swahili for us so that we could speak with the adults.

“Because it’s difficult to access healthcare there we met a lot of people who had contracted serious diseases like typhoid and malaria but had not received any medical attention – instead they had to rely on traditional remedies and their own immune systems. It taught me a lot about the resilience of human nature and about the need for our generation to try to improve access to healthcare for all.”

For Khalid Al Marri, also in the second year of pre-med, the trip reinforced his desire to help improve access to healthcare in the developing world.

He said: “It is a great shame that so many people in the developing world do not have access to the medical care they need. This trip has confirmed my interest in working with Doctors Without Borders during the summer breaks once I have learned more skills so that I can help people who suffer from lack of access to healthcare.”

The students had the chance to visit a Masai village

The students had the chance to visit a Masai village
A training course in biomedical research methodologies delivered by WCMC-Q in partnership with Hamad Medical Corporation (HMC) returned for a second year by popular demand.

Entitled ‘Concepts in Biomedical Research Methodologies for Students, Research Fellows and Faculty’, the course comprised 16 lectures delivered by WCMC faculty from both the Qatar and New York campuses.

The lectures were given on weekdays during October and November at HMC’s Education Center, and addressed subjects such as fundamentals of research methodology, logic and study design; biostatistics in medical research; drug development and the role of technology transfer; fundamental aspects of discovering new research funding sources; and analysis of clinical research papers.

Last year’s course was held at WCMC-Q and attracted 166 subscribers. This year, more than 400 healthcare professionals and students applied for the 300 available places on the course. These participants came primarily from HMC, WCMC-Q and Qatar University, and included physicians, scientists, healthcare professionals and students.

The course is directed by Dr. David P. Hajjar, Rhodes professor of cardiovascular biology and genetics and dean emeritus of the Weill Cornell Graduate School of Medical Sciences in New York City. Dr. Hajjar presented five lectures himself and two in conjunction with his colleague from New York, Dr. Brian Lamon. The other lecturers from New York were Dr. Lisa Kern, Dr. Randi Silver and Dr. Curtis Cole, while WCMC-Q was represented by Dr. Ziyad Mahfoud and Dr. Amal Khidir.

Dr. Hajjar explained the purpose of the program.

“Most importantly, the course demonstrates how they, the next generation of scientific investigators in Doha, can successfully establish their imprint on the pathway of medical discoveries.”

The course, which was sponsored by HMC, will be run at the HMC Education Center once again in the fall of 2014.

Dr. Hajjar expressed his satisfaction at the continued success of the program. He said: “We are extremely pleased to have attracted so many healthcare professionals and to have received such positive feedback about the course. It is really very encouraging to see how much interest and enthusiasm there is in Qatar for information about research.

“Our aim is to augment the knowledge-base of the participants so that they are able to negotiate the many practical challenges that confront researchers trying to get projects off the ground. People want to know how to move their ideas from the bench to the bedside, and how to progress experimental drugs from the laboratory to the clinic – we aim to give them the tools they need to realize those ambitions.”
The short-term effects of a poor night’s sleep, such as feeling groggy, irritable and losing concentration easily, are familiar to most people. However, few are aware that in the long-term, lack of sleep is correlated with a range of serious chronic conditions such as obesity, diabetes and cardiovascular disease.

The link between poor sleep and these chronic conditions was explored in a presentation given by WCMC-Q’s recently appointed professor of medicine, Dr. Shahrad Taheri, an internationally recognized authority on type 2 diabetes, obesity and sleep research.

Dr. Taheri explained: “Research has shown that people who sleep less have a greater tendency to become obese, to have diabetes and to suffer from hypertension, with potential downstream cardiovascular disease and stroke. As we understand more about sleep we are discovering just how important it is to overall health. Getting too little sleep or poor-quality sleep has even been associated with higher mortality.”

Dr. Taheri, who joined WCMC-Q in August 2013, gave his presentation as part of a sleep workshop held at the college in October. The workshop also featured presentations by Dr. Margaret Altemus, associate professor in the department of psychiatry at Weill Cornell Medical College – New York, and Dr. Jerome Yesavage, professor of psychiatry and behavioral sciences at Stanford University School of Medicine.

Poor sleep has both short and long-term effects, explained Dr. Taheri.

Speaking before the presentation, he said: “We are all familiar with the short-term symptoms of lack of sleep — you feel grumpy, lethargic and drowsy. While these symptoms might seem trivial, they can have serious consequences because they make accidents far more likely. Sleep deprivation is thought to have been a contributing factor to several major disasters such as the [1989] Exxon Valdez oil spill and may have played a role in the [1986] Chernobyl disaster.”

Dr. Taheri pointed to a research experiment in which healthy men in their twenties were deprived of sleep to study the effects on their physiology, with startling results.

He said: “The study found that after just two nights of sleep deprivation these men showed levels of glucose regulation equivalent to 60-year-olds. In metabolic terms, they had aged about 40 years in just two nights without proper sleep. That is a very significant impact on health in just a very short time frame.”

In the long-term, the negative effects of poor sleeping habits manifest themselves in a variety of health problems that usually do not present until old age.

“Indeed, we believe that poor sleep is part of a cluster of things that are associated with aging,” explained Dr. Taheri. “The conditions we are talking about — hypertension, diabetes, cardiovascular disease and so on — are things we would previously have expected to see in older patients, but in recent years we have begun to see them in younger people. Studies have shown a correlation between these conditions and poor sleeping habits, so lack of sleep appears to accelerate the aging process.”
Dr. Taheri said that other symptoms and conditions usually associated with aging are also associated with poor sleep, such as poor memory, slower reaction times and sexual dysfunction.

However, judging how much sleep a person needs is not a straightforward task.

“The amount of sleep each of us needs varies a great deal between individuals,” he said. “Some people are able to get by with only five hours a night while others may need eight or nine hours. However, there are directions we can follow to give ourselves the best chance of getting good quality sleep.”

Dr. Taheri recommends keeping external stimuli to a minimum before bed. That means keeping televisions out of the bedroom, not using computers, tablets or mobile phones in bed, making sure the room is as dark as possible, avoiding caffeine after 6pm and not exercising soon before bedtime. He also recommends using vacation periods to discover how much sleep you need.

“Using a very straightforward method you can get a good idea of your sleeping needs. For the first few days of your holiday, don’t put any alarms on, just allow yourself to sleep until you feel ready to get up. This will give your body the chance to overcome any sleep deficit you have built up.

“When you feel you have overcome the sleep deficit, the following night you should go to bed at a reasonable hour. Again, don’t set any alarms. When you wake up naturally, check the time and work out how long you have been asleep – this should give you an accurate idea of the amount of sleep you should be aiming to get every night.”

Research shows that sleep must be uninterrupted for a period of at least five hours to be considered good quality, so it is unhealthy to split sleep up into several short naps. Dr. Taheri used his presentation to explain that this is because sleep progresses through a series of stages, with the sleeper moving between wakefulness, to light sleep, to deep sleep and then to rapid eye movement (REM) sleep several times during the course of a night. In REM sleep, the muscles become paralyzed and oxygen consumption by the brain reaches a level higher than during wakefulness. It takes around 90 minutes to progress through a full cycle of the phases, and, although researchers do not fully understand the importance of each phase, studies have shown that missing out on REM sleep appears to impair cognitive function during waking hours.

Dr. Taheri explained that the cyclic nature of sleep is what makes conditions such as sleep apnea so damaging to overall health. In sleep apnea, sleep is interrupted because the individual stops breathing, usually because soft tissue around the airway causes it to become narrowed or completely blocked. The sleeper reacts by partially waking and gasping for air, which prevents him or her from reaching deep sleep and, consequently, REM sleep. People who are overweight or obese are more likely to suffer from sleep apnea because they have larger amounts of soft tissue around their airway.

Dr. Taheri said: “Sleep apnea is like almost drowning several times every night. Oxygen levels in a healthy sleeper will be somewhere between 98 and 100 percent, but for sleep apnea sufferers that figure can drop as low as 70 percent.

“The result is very poor quality sleep and all the health risks that accompany that.”

In his new role at WCMC-Q, Dr. Taheri will lead the development of a research team dedicated to the investigation of type 2 diabetes and obesity, and their associated complications - including poor sleep - through clinical trials.

Welcoming Dr. Taheri to the college, Dr. Javaid Sheikh, dean of WCMC-Q, said: “Dr. Taheri is carrying out some of the most exciting and vibrant research studies into diabetes, obesity, and sleep. These studies are likely to have a major impact on patient care, public health, and advancement of science and will have a major impact on Qatar’s healthcare system.”
WCMC-Q’s new class of first-year medical students had a chance to work with standardized patients when they visited the Hamad International Training Center to learn first responder skills.

Led by Dr. Hina Ghory, instructor in medicine at WCMC-Q and attending emergency physician at Weill Cornell Medical Center in New York, the First Responder course began with a series of lectures before students had the opportunity to try out their new skills in a series of six practical workshops.

Two of the workshops involved case scenarios in which students had to determine the nature of the injury or condition of a standardized patient - an actor who simulates symptoms - before taking appropriate remedial action. A workshop on disaster medicine was a role-play scenario in which students had to coordinate a response to a large-scale emergency that had injured hundreds of people. Two further sessions taught the students to put slings and splints onto a standardized patient, and how to immobilize a patient and maneuver her safely onto a spinal board to prevent further injury. The final session taught students the techniques of providing artificial ventilations to a patient who is unable to breathe on her own, such as by using a bag-valve mask and mouth-to-mouth ventilation.

Dr. Ghory explained that the first responder course is an important milestone for first-year medical students.

“Early clinical experiences play an important role in the formation of medical students’ professional identity,” she said. “This course is their first experience of emergency medicine and the first time they have been put in a situation where they are under pressure to provide immediate care and take important decisions, albeit in a simulated environment. It gives the students a real idea of what it is like to be a doctor.”
Student Haidar Kubba agreed. “The course really makes you feel that you’re achieving something,” he said. “Of course, it’s very different to read about something than it is to actually do it. Having the chance to deal with a real person really made me feel like I was on the way to becoming a doctor.”

The day-long First Responder course is an annual event in the WCMC-Q calendar and is followed the next day by an Objective Structured Clinical Skills Evaluation (OSCE). Held at the Clinical Skills Center back at WCMC-Q, the OSCE utilized moulage, role-play, and standardized patients, and required each student to manage an ill patient as a first-responder.

Student Diala Steitieh said: “I think I got the most from one of the case scenarios where a lady had been hit by a car and suffered a fracture. She was also bleeding and we had to figure out what action to take. It was the first time that we had learned something and then immediately had to put it into practice so it was quite exciting, although a little intimidating at the same time.”

Sarah El Soukkary uses the respirator watched by Haidar Kubba

Mohammed Younes and Mohammed Subei refine their technique
Biomedical Research Training Program concludes with awards

WCMC-Q presented four outstanding Qatari research trainees with graduation awards for the annual Biomedical Research Training Program.

WCMC-Q’s associate dean for research, Dr. Khaled Machaca presented Dr. Najla Al-Haj, consultant clinical psychiatrist at Hamad Medical Corporation, Shaikha Al-Qahtani, Noor Faisal and Fatima Fakhroo with their certificates.

“This is one of the most successful programs that we run here at WCMC-Q and the reason for that is multi-fold. Part of our mission for Qatar Foundation is to build the human capacity in the long term and there is no better way to build the human capacity than with this kind of training and interactions,” Dr. Machaca said.

“The reason for the success of this program is largely due to the high quality of the candidates and the trainees who spend six months with us. The goals of the program are simple. It takes people who are interested in biomedical research no matter how small it is, and exposes them to a broad spectrum of what research is all about — from being in the lab to administering research, to doing both basic and clinical research and to learn about what compliance is, what is involved in grants and contracts and how to manage them.

“This is an opportunity for young scientists to find their niche or that particular area of research where they are comfortable in and hopefully to build a career based on that,” Dr. Machaca added.

“The program is not aimed to train a large number of trainees, the program’s goal is to train a small number of well-qualified trainees who will fit well into a research environment. The other very important goal of the program is to use it as a pipeline to be able to hire Qatari nationals within our research department who will stay with us for the long term.”

The Biomedical Research Training Program is open to talented Qatari nationals from all walks of science who, as a minimum, are recent university graduates interested in pursuing careers in biomedical research-related fields. It is a six-month training program from January to July that offers a stimulating experience to participants who seek to be actively involved in biomedical research projects in a challenging and knowledge-rewarding environment.

As one of its most recent graduates, Dr. Al-Haj was impressed by the quality of the program and the high standard of preparation. She is keen to promote the virtues of the program among her colleagues at HMC. “I found this program to be a great opportunity to acquire research experience and WCMC-Q is such a prestigious medical institution so it was really a great chance also for me to be exposed to all aspects of research.

“It is difficult to find all this kind of experience and training in one location. But we are fortunate that we can find it right here in Qatar and I can only recommend it very highly. This was really a great opportunity to obtain an introduction to the mechanics of all kinds of research. I have already recommended this program to my friends,” Dr. Al-Haj said.

The training program consists of different aspects of research including laboratory training, writing and communication for research, biostatistics, clinical research, and research administration.

It aims to produce world-class Qatari scientists to lead the research centers of excellence that are at the heart of Qatar’s vision for its future and in line with Qatar National Vision 2030. It is fully supported by the Biomedical Research Program (BMRP) funded by Qatar Foundation to WCMC-Q and in partnership with Qatar Science Leadership Program (QSLP). QSLP is a unique program that aims to help nationals build prestigious and rewarding careers in the fields of science and research, with guaranteed placements at QF and its centers. The Biomedical Research Training Program was developed by Nada Al-Balam, a QSLP intern who trained at WCMC-Q as part of her administrative rotation.

The Biomedical Research Training Program co-ordinator Yassir Hussain, a graduate of the training program, said there was growing interest from Qatari students eager to participate. The training program has in a relatively short space of time developed into a valuable resource and a desirable option for local graduates with an eye on a research career, Mr. Hussain said.

“We are pleased with the development and progress but we are also constantly seeking to improve outcomes and to raise the profile of the Biomedical Research Training Program for Nationals. Graduates are encouraged to promote the program and we also seek to encourage suitable candidates to apply for admission.”
Researchers from WCMC-Q have shown that Qatar would be near the top of the United Nation’s Human Development Index (HDI) if adjustments were made for the country’s large population of migrant workers.

The HDI was developed to measure the overall wellbeing of a nation and is often used as a means of comparing countries. It is calculated using three variables: health, wealth and education. The health component is based on life expectancy at birth and the wealth component is gross national income per capita. But since 2011 the education component has been split into two separate measures: mean schooling years for adults and expected school years for children entering the education system. It is the mean schooling years for adults that the researchers have concluded skews the results of Qatar’s HDI measurement, as a large percentage of migrant workers have had less formal education.

The study - entitled Impact of migrant workers on the Human Development Index - was conducted by Dr. Ravinder Mantani, associate dean for global and public health at WCMC-Q, Dr. Sohaila Cheema, director of global and public health at WCMC-Q, and Dr. Albert B. Lowenfels, professor of surgery at New York Medical College. The study has been published in the UK-based journal, Perspectives in Public Health.

Dr. Mantani said: “Our research study makes two important points. One, the Human Development Index must be adjusted for the migrant population because this group often has a low level of education. Failure to do so can result in a distorted HDI ranking for a nation such as Qatar with 70-80 per cent migrant workers. Two, the current HDI ranking based on unadjusted data must be interpreted with caution.”

Dr. Lowenfels said: “The study makes a valuable point, that is, if the HDI measure was appropriately adjusted for the presence of migrant workers, then Qatar would rank near Norway at the top of the United Nations Human Development list.

The researchers said the other components of the HDI – health and income – did not have a significant impact on the final measurement as generally only healthy workers were granted work permits and the wages that the workers earned were not taxed and, for the most part, transferred to their home countries.

They concluded that there are currently 14 countries with more than 30 per cent migrant workers whose ranking in the HDI list is severely impacted and the researchers said that the HDI rankings of any country with a high proportion of expatriate workers should be interpreted cautiously.

To read the HDI study in full visit http://intl-rsh.sagepub.com/content/early/2013/06/21/1757913913491350.full by Richard Harris
Greenhouse project to teach children about healthy eating

A groundbreaking initiative designed to teach children about the benefit of growing and eating healthy food was launched by the Sahtak Awalan - Your Health First campaign.

The greenhouse project was introduced by WCMC-Q and the Supreme Council of Health to encourage people to think about adopting a healthy lifestyle. Elementary schools from across Qatar were selected by the Supreme Education Council to be part of the scheme and all these schools have received a greenhouse from the Sahtak Awalan campaign. In addition they will be presented with gardening equipment and a variety of vegetable and herb seeds. The children will be given advice on how to grow the seeds and they can then watch the plants from germination through to when the vegetables develop. The students will then be able to take the produce they have grown home and eat the freshest, healthiest food there can be. A competition will be held at the end of the growing season to determine which greenhouse had the best crop. The scheme will be expanded in coming years to include more schools.

His Excellency Mr. Abdulla Bin Khalid Al-Qahtani, minister of public health, confirmed that the building of greenhouses in elementary schools in Qatar will be of great help to the Supreme Council of Health and its ongoing efforts to raise awareness of health among the young, especially in the area of healthy eating. He praised the fruitful cooperation between the Supreme Council of Health, the Supreme Education Council, Weill Cornell Medical College in Qatar, and other parties that have supported the initiative.

His Excellency said that the Your Health First campaign, through which the project was developed, serves the National Health Strategy 2011-2016, because raising awareness in people and encouraging them to follow a healthy lifestyle is a huge challenge that requires the combined efforts of everyone involved in it. The campaign is seen as very significant in that respect.

His Excellency pointed out that the spread of unhealthy eating habits has exacerbated health problems and has led to chronic diseases such as obesity and diabetes, as well as cardiovascular diseases and some types of cancer, occurring...
at an early age. Health surveys undertaken in Qatar in 2012 showed that 41% of citizens suffer from obesity and 91.1% do not eat the recommended daily allowance of five fruit and vegetables as stated by the World Health Organization. Improving this requires a new strategy to consolidate the efforts in order to create a healthy society.

His Excellency clarified that the Supreme Council of Health has adopted many projects and programs that aim to change unhealthy habits and behaviors. These programs are part of the National Working Plan for Nutrition and Physical Exercise (2011-2016), which aims to reduce the prevalence of chronic diseases and the mortality rates associated with them in accordance with the goals of the National Health Strategy, one facet of which is Preventative Healthcare. The National Health Strategy also aims to establish a comprehensive program for nutrition and physical exercise with initiatives that target all groups that would benefit so it would ultimately have an effect on the prevalence of obesity.

His Excellency emphasized that the council is keen to consolidate cooperation with all governmental and non-governmental institutions as they play a vital role in promoting the need to adopt healthy lifestyles that will contribute in creating a healthy, strong and productive society.

The greenhouse initiative was launched at Al Bayan Preparatory School for Girls by WCMA-Q and the college’s strategic partners: Qatar Foundation, the Supreme Education Council, Qatar Petroleum, ExxonMobil Qatar Inc., Occidental Petroleum of Qatar, Qatar Olympic Committee and Vodafone Qatar.

As the children began planting their seeds in the pots there was excitement and lots of chatter about how large the plants would grow and how much fruit and vegetables would be harvested. The girls were told how to take care of the plants and were helped by the representatives of all the organizations involved in the scheme.

His Excellency Dr. Mohammed bin Saleh Al-Sada the minister of energy and industry, and chairman and managing director of Qatar Petroleum, praised Sahtak Awalan as an important initiative towards a healthier new generation.

He said: “Teaching healthy eating habits is vital to building stronger and healthier bodies and minds for a whole new generation of children surrounded by junk food.

“We hope that by combining education and a fun experience, Sahtak Awalan will help children take their first steps towards healthier living.”

Dr. Javaid Sheikh, dean of WCMA-Q, said it was vitally important that young people are educated about making healthy choices when it comes to what they eat.

Dr. Sheikh said: “So many diseases that affect society today could be prevented if people adopted a healthy diet. With the greenhouse initiative we want to make sure that our children know from an early age the foods that they should be eating. We all hope that this knowledge will mean that our young people grow up fit and healthy and that diseases like obesity and diabetes become diseases of history.

“Education, however, should also be pleasurable. Lessons learned while having fun are lessons that will stay with children throughout their lives. For this reason we also wanted the greenhouse initiative to be enjoyable and judging by the reaction of the children at the launch, it will be a great success.”
His Excellency Sheikh Saoud bin Abdulrahman Al Thani, secretary general of the Qatar Olympic Committee (QOC), expressed his happiness for the practical steps taken in the frame of the Sahtak Awalan - Your Health First campaign, and in particular, the launching of the first greenhouse within the project. H.E reiterated the crucial role that sport plays in raising the health level for all community members, as part of the combined efforts exerted by the various state authorities and public and private institutions to adopt a healthy lifestyle.

In this regard, HE QOC Secretary General said: “The QOC was keen to enter into a strategic partnership with Weill Cornell Medical College in Qatar so that both institutions coordinate their efforts towards laying a solid foundation for building a healthy society in line with of the Qatar National Vision 2030 where human development represents one of the most important pillars aimed at raising a healthy generation than can actively contribute to building a prosperous future for the State of Qatar.”

H.E added: “The sports sector strategy 2011-2016 aims to raise the level of participation in sports and physical activities, thus meeting the objectives of the Sahtak Awalan - Your Health First campaign.”

Engineer Saad Al Muhannadi, president of Qatar Foundation, highlighted the significance of starting the education process early and involving children in the practice of growing healthy food, in order to build a strong foundation for healthy living in the mindset of future generations.

Engineer Al Muhannadi said: “At Qatar Foundation, we endeavor to provide all our youth with a lifelong education that will help them grow into healthy and productive adults, since this approach will positively impact their well-being for many years to come. By engaging children in the process of growing nutritious food and learning about it from an early age, we can instill a much deeper understanding of what constitutes healthy eating habits and encourage them to develop an appreciation for nature and healthy living.”

Mr. Steve Kelly, president and general manager of Oxy Qatar, said: “Oxy Qatar has been a proud supporter of the Your Health First campaign since its inception, and we are enthusiastic about this latest development in the program. As part of our commitment to the community, we want to help promote healthy lifestyles where change can be the most effective and enduring – among young people. The greenhouse initiative has the potential to make a real difference in young people’s lives by teaching them about food choices through a fun and exciting challenge.”

Bart Cahir, president & general manager of ExxonMobil Qatar Inc. highlighted the particular emphasis ExxonMobil places on health in Qatar and across its global activities.

“ExxonMobil continues to promote the importance of healthy lifestyles in Qatar through its support of the Your Health First initiative,” he said. “This nationwide program aims to increase the public’s awareness of critical health issues and educate the local community about preventive measures, including lifestyle changes, and we are pleased to be a part of this effort. ExxonMobil Qatar strongly encourages its own employees to participate in events that promote healthy lifestyles, and our community is very enthusiastic about being part of this year’s activities.”

Mohammed Al Yami, director of external affairs at Vodafone Qatar, said: “The greenhouse project is a truly commendable initiative which will certainly help to nurture our children’s understanding of the importance of leading a healthy life starting at a very young age. It also helps them become role models for their peers. Enhancing and investing in our youth’s education is strongly in line with what we, at Vodafone Qatar, continuously strive to support and grow. Therefore, we are very happy to partner with WCMC-Q to see such initiatives materialize with a tangible benefit to the community.”
WCMC-Q students who participated in a research project on medical ethics saw the work praised at a prestigious international conference held in Zaragoza, Spain.

The project, led by Dr. Pablo Rodriguez del Pozo, WCMC-Q's associate professor of public health, investigated the attitudes of patients in Qatar to the process of giving informed consent. Dr. del Pozo, who traveled to Zaragoza to present the abstract of the research project to the 8th Summer Conference on Teaching and Research in Bioethics in September, was delighted by the response it garnered. Dr. Ziyad Mahfoud, also associate professor of public health at WCMC-Q, supervised the methodological aspects and co-led the project, while Ms. Pascale Haddad, WCMC-Q's research specialist, developed the specific methodology for the project, in addition to training and supporting the students throughout its execution.

“Dr. del Pozo explained the motivation for the research. “We were trying to find more about patients’ and families’ knowledge, attitudes and behavior regarding the whole process of informed consent in Qatar,” he said.

“We asked people how they feel about the form and how they feel about having to sign to give consent. We understood the giving of consent as something that did not just involve the signing of a form but rather a broader process that involved the relationship between the patient and the doctor.”

The research took a qualitative approach because the team wanted to discover the thoughts and feelings of respondents rather than to generate large amounts of numerical data. The responses of patients revealed that the unique cultural identity of Qatar appears to have a significant impact on attitudes to informed consent.

“The culture of Qatar differs in some important respects from Western culture, on which the consent forms of modern medical practice are based,” said Dr. del Pozo. “One important difference is that Qatari culture can be characterized as a more relationship-based culture that emphasizes trust and familiarity between people. Western culture, in terms of medical practice, appears to be based more upon faith in codified forms of behavior governed by rules and laws.

“For this reason, Western patients will generally take comfort from the exhaustive text of consent forms, while a Qatari patient may find the impersonal nature of the forms distressing. Conversely, a Western patient will be skeptical if a doctor simply says ‘trust me’, while the Qatari patients in the survey were more willing to put their trust in a doctor’s judgment, providing they had built strong relationships with one another.”

The findings of the interviews posed an interesting question, said Dr. del Pozo.

He said: “The responses lead us to query what is the best way to obtain informed consent from Qatari patients. What approach to consent best serves their interests, makes them feel confident about giving informed consent and, ultimately, protects their health most effectively? The honest answer is that at the moment we don’t know, which is why this is a promising and useful area for future research.”

The abstract, which is entitled Knowledge, attitudes and behaviors of patients towards informed consent in Qatar: early results from semi-structured interviews, was presented as a poster at Qatar Foundation Annual Research Conference (QF-ARC) 2013, which was held November 24-25 at the Qatar National Convention Centre.

Paying tribute to the work of the students involved in the project, Dr. del Pozo added: “The students have done an incredible job in helping to define the design of the research project, helping with the bibliography, translating materials into Arabic for patients and carrying out the interviews.

“They really deserve a great deal of credit for all their hard work.”
Lancet Oncology highlights breast cancer findings

Middle Eastern women often present with more aggressive forms of breast cancer than Western women, a research report by WCMC-Q has found.

WCMC-Q’s assistant dean for basic science curriculum, Dr. Lotfi Chouchane, was lead author of the research report. He said that Arab populations have some particularities in terms of cancer, especially breast cancer, and also that the clinical features of breast cancer among Arab women are different from other populations.

“Inflammatory breast cancer is the most lethal form of the disease and constitutes 1-2 per cent of all breast cancer tumors in the United States,” said Dr. Chouchane. “But a higher proportion of cases are reported in Arab populations. For example in Tunisia, seven to 10 per cent of all breast cancer is inflammatory. Similarly, in a population-based study in the Gharbiah region of Egypt, inflammatory breast cancer was confirmed as more prevalent than in the United States, constituting up to 11 per cent as opposed to one to two per cent in the United States.”

Breast cancer is a major health problem in both developed and developing countries and the research was published in the latest edition of The Lancet Oncology, an internationally respected medical journal. Co-authors were Dr. Konduru Sastry, a research associate in microbiology and immunology at WCMC-Q, and Dr. Hammouda Boussen from Tunisia.

Dr. Sastry said that the report finds that the incidence of breast cancer is lower in Arabic countries than in Europe and the United States but is rising fast. While the incidence of the disease in recent years is on a downward trend in the developed countries, it is steeply rising in MENA countries, including Qatar. The report also finds breast cancers in women from Arab populations have different characteristics to those

Dr. Lotfi Chouchane said women should have annual mammograms for breast cancer from the age of 40
reported in women from the United States and Europe. At 48, the average age of presentation of breast cancer in Arab women is 10 years younger than patients in the US and Europe.

“About 70 per cent of Arab breast cancer patients have tumor size greater than two centimeters, compared to only 10 per cent of patients in the developed regions,” Dr. Sastry said. “More than 80 per cent of Arab breast cancer patients present advanced disease of clinical stage III or IV, whereas only 20 per cent of breast cancer patients in developed countries present at this stage.”

However, the reduction of the incidence in breast cancer and its mortality can be achieved with major efforts in screening and early detection, Professor Chouchane said.

“Although several awareness campaigns have been undertaken, no structured national programs exist for population mammography screening in Arab countries,” he said.

“Early mammography screening is recommended for Arab women, starting at the age of 40 years. Women over 40 should have annual examinations. Monthly breast self-examination starting at age 20 is recommended and clinical breast examinations are recommended every three years when a woman is aged between 20 and 39 years.

Further research on cancer should also be given priority in Arab countries. The report calls for new genome-wide association studies to be undertaken in Arab women to indicate new causal variants, “so we can uncover fully the genetic bases for breast cancer susceptibility in Arab populations”.

Such knowledge promises to assist not only identification of novel breast cancer-related genes but also development of new diagnostic tests and treatments aimed at early detection and prediction of an individual’s likelihood of developing breast cancer, the report states.

Dr. Chouchane added: “This report is going to be the reference for anybody who wants to undertake studies about breast cancer in Arab populations and researchers will refer to it because here we describe all the characteristics of breast cancer in Arab populations based on our own findings and based also on the literature what is found.”

The research was supported by the Biomedical Research Program fund at WCMC-Q and by grants from the Qatar National Research Fund. Cancer accounts for 10 percent of all deaths in Qatar and the leadership of Qatar has moved to improve the healthcare of patients with the Supreme Council of Health establishing the National Cancer Strategy. This scheme is supported by WCMC-Q which when it was launched was the first-ever initiative of its kind in the region to combat a disease. The cancer strategy is closely linked to the National Health Strategy (NHS). With an investment of more than QR2.2 billion, the strategy also includes a plan for refurbishment of Al Amal Hospital to establish National Center for Cancer Care and Research, and a new cancer hospital, over the next five years.

The Lancet Oncology is a peer-reviewed and edited journal that is recognized for providing a global, authoritative, and independent forum for the highest quality clinical oncology research and opinion. With an impact factor of 25.12, the journal ranks among the top three oncology journals worldwide, is the leading clinical research journal in oncology, and is in the top 0.5 per cent of all scientific journals, of any discipline, in the world.”

By John Hayward
Countess tours world-class facilities at WCMC-Q

A member of the British royal family visited WCMC-Q for a tour of the facility.

Dr. Javaid Sheikh, dean of WCMC-Q, was head of a welcoming party that received Sophie, Countess of Wessex, who was traveling with representatives of the ORBIS International Flying Eye Hospital charity. Her Royal Highness viewed a selection of the university’s world-class facilities, including the clinical skills center, a lecture hall and the science laboratories, before she met with students to discuss their experiences at WCMC-Q.

Dr. Sheikh said: “It is a great honor and privilege for us to receive Sophie, Countess of Wessex at our campus.

“The work that the countess does to promote healthcare in the developing world is incredibly valuable and chimes with our own mission to improve healthcare to people no matter where they may live.”

The visit to the college on September 24 came as the countess - who is married to Prince Edward, youngest son of the Queen - toured Qatar Foundation and other organizations in Qatar as part of her ongoing efforts to build strong partnerships in the region to tackle global healthcare challenges. HRH supports the mission of ORBIS to prevent and treat blindness and visual impairment in developing countries in Asia, Africa, the Caribbean and South America, and was in Qatar following a visit to Calcutta with the charity’s flying hospital, housed within a converted DC-10 airplane.

Dr. Robert Walters, ophthalmic surgeon and chairman of ORBIS UK, explained the mission of the charity.

“There are about 285 million people in the world who are either blind or visually impaired,” he said. “Of these people, about 80% of them have conditions that are either treatable or could have been prevented. For example, the most common cause of blindness is cataracts, which can be treated to restore a person’s sight with a procedure that takes as little as 15 minutes and costs only $50.”

Since 1982, ORBIS has provided treatment to more than 18 million people in 90 countries. The charity has also trained 300,000 ophthalmic professionals in that period.

The countess emphasized the role of education in addressing health issues in the developing world.

She said: “It has been proven all around the world that education is the way out of both poverty and ill-health. General literacy, as well as specialist training, is key because if someone can read then they will find it far easier to access the healthcare they need – information is power.”

by John Hayward
A graduate of WCMC-Q has published his first novel, entitled *A Melody of Tears: Sorrows of Syria*.

Class of 2010 alumnus Dr. Anas Abou-Ismael spent two years writing the book, which tells the story of Waleed and Sireen, a young Syrian couple whose burgeoning love for one another is threatened by the eruption of the country’s devastating civil war.

Dr. Anas, a Syrian who has spent most of his life in the Arabian Gulf, was moved to write the novel by the destruction wrought in his homeland, where it is estimated more than 100,000 people have lost their lives, while more than two million have fled the country and a further 4.25 million have been internally displaced. Many of Dr. Anas’ friends and extended family members remain in the country.

He said: “The ongoing humanitarian catastrophe in my home country truly shook my heart.

When you have more than a hundred thousand people slaughtered and millions are homeless and displaced, you have to be touched by their stories, especially as a physician. I wanted people to understand the depth of their suffering.”

Working an average of 80 hours each week on his internal medicine residency program at Vanderbilt University Medical Center in Nashville, Tennessee meant Dr. Anas had to squeeze in writing sessions during less busy rotations and at weekends. But he was determined that his busy schedule would not overwhelm his lifelong love of the written word.

“There is a common myth that medicine kills your talents,” he explained, “but I believe that if something can kill your talent then you never had it to begin with.”

Many copies of *A Melody of Tears: Sorrows of Syria* have already been sold, with several being snapped up by friends and supporters among the WCMC-Q community, including his brother, fourth-year med student Yazan Abou-Ismael.

Speaking of his brother’s achievement, Yazan said: “It makes me feel both proud and inspired. Residency training in internal medicine is truly exhausting and demanding to say the least, so seeing such a great work come to light during his training sets a great example for us aspiring doctors that with hard work and true dedication we can achieve our biggest dreams. The book sheds light on the Syrian cause with a new approach, giving readers a different perspective on the humanitarian crisis in Syria. I encourage everyone to engage with that experience through reading the novel.”

Prior to writing the novel, Dr. Anas’ poetry was featured in *Paint the Walls*, a collection of poems published by WCMC-Q. He cites Dr. Thurayya Arayssi, associate dean for medical education, and former WCMC-Q professor Dr. Peter Fortunado, as sources of inspiration for him as he developed as a physician and as a writer.

Dr. Anas said: “With regards to my medical career, I would have to say that Dr. Thuraya Arayssi inspired me the most. As far as writing is concerned, Dr. Fortunado really encouraged me to continue writing both poetry and prose. He told me that I should develop my talent in writing even as I became a doctor.”

Dr. Anas aims to take that message with him as he pushes onwards with his career. “Right now I need to study for my internal medicine boards, but after that I will probably go back to writing about Syria,” he said.

“*The world must not be allowed to forget or ignore Syria.*

*A Melody of Tears: Sorrows of Syria* is published by New Friends Publishing and is available from Amazon.com.
WCMC-Q research puts patients and families at the center of healthcare

The progress of Qatar’s efforts to incorporate principles of patient and family-centered care (PFCC) into its primary healthcare system has been examined in a paper published by Dr. Mohamud Verjee, WCMC-Q’s assistant professor of family medicine.

The paper, published in QScience.com’s Avicenna journal and entitled Patient and family-centered care in Qatar: A primary care perspective, gives a historical perspective of the development of Qatar’s healthcare system and examines recent efforts by the leadership to formalize the implementation of PFCC. Dr. Verjee and co-author Suzanne Robertson-Malt of the University of Adelaide also used the paper to discuss the emergence of PFCC as an accepted model of best practice in Qatar, in recognition of the country’s culture of strong family networks.

While the concept of patients being at the center of their healthcare sounds logical, practice in most developed countries has historically been based upon paternalistic models of care in which patients are expected to provide answers to physicians’ questions and then follow a dictated care plan. According to the paper, this approach excludes families from healthcare and undervalues the contributions they can make.

To counter this trend and reposition patients and families in Qatar at the center of care, the Primary Health Care Corporation (PHCC) and Hamad Medical Corporation (HMC), the country’s national healthcare provider, have sought to integrate PFCC into all aspects of the healthcare system. Additionally, the paper points out that the Center for Health Care Improvement (CHCI), established in 2008, supports PFCC and that HMC has adopted a Charter of Patient, Family and Children’s Rights that advocates family participation in care.

In order to realize the goal of providing PFCC in Qatar, the leadership is pursuing several practical measures, says the paper. These include providing superb access to care, encouraging patient engagement in care through education and advocacy, efficient clinical information systems, excellent coordination of care, smooth information transfer between physicians and formalized procedures for patient feedback with HMC is the national provider of healthcare.
a view to improving healthcare provision. The paper also calls for information about health practices and physicians to be made publicly available so that patients can make informed decisions when choosing their healthcare providers.

The Primary Health Care Corporation provides the majority of family medicine services in primary care in Qatar, while HMC provides tertiary care. The paper states: “Both have sought to integrate the concept of PFCC towards improving the benefits of the country’s comprehensive health service. Additionally, they want to incorporate this philosophy uniquely, by identifying and celebrating the respected and distinctive style of the Qatari way of life. The leadership in Qatar has reiterated that family units are the cornerstones of Qatari society. Recognition and respect for the significant role of the family in healing means that patients and families must become partners in designing new models of care.”

Accordingly, since its launch by HMC in 2008, the CHCI has undertaken a series of measures to more effectively engage the family with the care team, the report says. These include establishing a universal newborn screening program, the expansion of the existing comprehensive home care program, and the recognition of important community-based services that assist families, such as community midwives and early childhood development programs for children with developmental delays. In addition, the state-of-the-art Sidra Medical and Research Center, planned to open in 2014, will hold PFCC as a central principle.

In summary, Dr. Verjee and Dr. Robertson-Malt state that the basis for patient and family-centered care in Qatar lies in the sustainability of the relationships between doctors and patients. Patients must be made aware of the care facilities available to them, and given the opportunity to understand their conditions and to work in partnership with physicians to treat them. This approach, supported by efficient processing of test results, provision of appropriate prescriptions and a quality out of hours service, will contribute to the healthcare goals Qatar’s leadership has identified. The report concludes: “Qatar has made a determined start to achieve these goals.”
College welcomes Qatar’s future physicians

WCMC-Q introduced its new intake of students to the college with a week of orientation exercises.

The new students, who have joined the college’s foundation and pre-medical programs, took part in a series of sessions designed to introduce them to their classmates, faculty members and life at WCMC-Q.

The five-day program of events, which ran from 18–22 August, also included sessions to introduce students to the university’s electronic library, computer services and key study and time-management skills. The students received their new laptops and took seminars and workshops on English language skills, academic integrity and the college’s QLearn electronic learning resource.

There were plenty of breaks from the world of academia, however, as the students participated in icebreaker sessions, visited Hamad Bin Khalifa University’s Student Center and Katara cultural village, and enjoyed a murder mystery evening and an Arabian culture night.

A total of 21 students will take the foundation course in the 2013-2014 academic year, and 45 are enrolled on the first year of the pre-medical course. In total, 27 of the new students are male and 39 are female, with 15 different nationalities represented by the new cohort. Twenty of the 21 foundation students are Qatari nationals, and there are 13 Qatari students out of 45 enrolled on the first-year pre-medical course.

Dr. Javaid Sheikh, dean of WCMC-Q, welcomed the new intake to the college.

He said: “It is my great privilege to welcome our new students to WCMC-Q on behalf of everyone at the college.

“The enthusiasm, optimism and energy of the students is wonderful to see and gives us great hope that they will meet and overcome the challenges that lie ahead on the foundation and pre-medical courses. With hard work and dedication these young people can become part of the new generation of doctors that we at WCMC-Q are helping to produce here in Qatar.

“I wish the new students every success in their endeavors and I look forward to seeing...”
Students and teaching assistants enjoyed various entertainment over the week.

Successful completion of the pre-med course prepares students to take WCMC-Q’s four-year medical course, which is the only U.S. accredited M.D. degree offered outside of the U.S. The foundation course covers the basic sciences, English and mathematics, and prepares students for the pre-med course.

Indian pre-medical student Dayyan Adoora, 18, hopes his studies will eventually lead him to a career in radiology.

“Radiology is a part of medicine that’s really growing,” he said. “I know it’s going to be a long and hard journey to get there, but I love studying the sciences and I’m looking forward to the challenge of learning the difficult material on the course.”

The final day of orientation saw the students host a lunch for WCMC-Q’s catering and maintenance staff and package donated clothes and other items to be presented to Qatar Charity.
Residency program directors from elite U.S medical schools met with WCMC-Q students and faculty at the college’s annual medical education symposium.

The symposium, which this year had the theme “Current Landscape In Graduate Medical Education”, brought 20 program directors to WCMC-Q from a host of renowned medical schools and teaching hospitals, including the Johns Hopkins University, Weill Cornell Medical College in New York, George Washington University and the University of Rochester Medical Center.

Held from 22-24 September, the symposium gave the program directors the opportunity to engage with WCMC-Q students, faculty and alumni, learn about the college’s curriculum and facilities, and tour Hamad Medical Corporation, WCMC-Q’s primary clinical training partner.

Dr. Javaid Sheikh, dean of WCMC-Q, opened the symposium with a speech about the mission of the college, before keynote addresses were given by program directors Dr. Keith Armitage of Case Western Reserve University, Cleveland, Dr. Shannon Scott-Vernaglia of Massachusetts General Hospital for Children, Boston and WCMC-Q graduate Dr. Mohammed Al Hijji, now of Johns Hopkins University in Baltimore.

Dr. Sheikh said: “It is a great privilege for WCMC-Q to be able to welcome program directors from such esteemed institutions to our university. Their presence here gives us great encouragement that our ongoing mission to provide excellence in medical education and produce world-class physicians is meeting with success.”

Subsequent days of the symposium featured further keynote addresses by program directors, student presentations of clinical cases, round-table discussions between students, WCMC-Q faculty and program directors, and a presentation of academic posters by students.

Dr. Marcellina Mian, associate dean for medical education, explained the benefit of the symposium. “It’s an opportunity for the program directors to learn about our school and its qualities so that when our students apply for a residency position they will have a better chance of being chosen,” she said. “The symposium also gives our students a better idea of what program directors are looking for when they select residents, and what will be required of them when they become residents.”

Dr. Felicia Smith, director of the psychiatry residency program at Harvard Massachusetts General Hospital McLean, Boston, was visiting WCMC-Q for the first time. She said: “It is great to see such dedication to delivering a high-caliber medical education here at WCMC-Q. I am impressed by the students’ confidence and their knowledge - with these qualities they will be able to perform well during interviews for residency placements and there’s every indication they will make great residents.”

WCMC-Q’s Class of 2013 achieved a 91% match rate with residency programs in the U.S. - the best match rate in the history of the college. Class of 2013 students matched at institutions such as NewYork-Presbyterian Hospital, Cleveland Clinic and Case Western Reserve University.

Fourth year medical student Mariam Gabrial has not yet chosen a program to apply to but has decided she will specialize in pediatric medicine.

She said: “For me the symposium has been a great opportunity to learn about some of the specific programs on offer and also to find out what the program directors are looking for when they select residents. It was also very useful to find out what to expect from the application process and how to present ourselves as strong candidates for the best programs.”

Fourth year medical student Mariam Gabrial has not yet chosen a program to apply to but has decided she will specialize in pediatric medicine.

Fourth year medical student Mariam Gabrial has not yet chosen a program to apply to but has decided she will specialize in pediatric medicine.
Chef cooks up new ideas for families

An international chef specializing in healthy meals for children inspired youngsters and their parents at an innovative event organized by Weill Cornell Medical College in Qatar (WCMC-Q).

Chef Ann Cooper came to Doha as part of WCMC-Q’s Sahtak Awalan - Your Health First campaign, which is designed to educate people about how they can begin leading healthy lifestyles.

Chef Cooper, who is known in the U.S. for promoting and creating nutritious school meals, was invited by Your Health First to hold interactive cookery demonstrations. Enlisting the help of dozens of the children present, Chef Cooper cooked four quick, healthy, simple and delicious meals that were then sampled by the audience. She then demonstrated a slightly more complex recipe for the adults.

Chef Cooper said: “The future health of our children is dependent on them eating healthily, both at home and away, and parents really need to be educated so they can pass on this knowledge to their children. If his doesn’t happen we are going to have a nation of sick kids who are insulin-dependent and who are going to die at a younger age than we are.”

Chef Cooper has helped transform school meals for more than a million children across the U.S. and has helped bring salad bars into school cafeterias. She said that children have to be encouraged from an early age to eat healthy meals as otherwise they can become accustomed to foods laden with sugar and fat. Food tastes can even be influenced in the womb. Chef Cooper said that babies whose mothers eat fruit and vegetables are more likely to enjoy the same foods themselves.

At the Your Health First event, four recipes were cooked with the children: guacamole with baked tortilla chips; fruit smoothies; avocado and chicken wrap; and jelly muffins. Another family-oriented recipe – grilled, marinated chicken with yoghurt – was demonstrated to the adults present.

Cookery books containing 32 recipes suitable for breakfast, lunch, dinner, or snacks were then distributed, providing parents with plenty of ideas for nutritious, tasty meals that the whole family would enjoy. Chef Cooper also gave parents hints and tips on how to make a healthy lunch that children could take to school with them.

The aim of the Your Health First event, which was held at the Diplomatic Club in West Bay, was to get children interested in cooking healthy food and to teach parents that cooking healthy meals does not have to be time-consuming or complicated. Dieticians from Qatar Foundation were also on hand to offer advice to parents and children about planning meals, nutrition and the best things to eat.

By Richard Harris
College embraces green energy

Work has commenced to install approximately 1,750 solar panels on the roof of WCMC-Q to produce green energy for the college and Qatar’s national electricity grid.

Each of the 1m x 1.6m photovoltaic panels is capable of producing 250 watts of electrical power at peak output, giving the full rooftop array a total installed capacity of 473 kilowatts.

Allowing for factors that affect the efficiency of the panels, such as dust, humidity, air temperature, and the variable radiance and position of the sun, the installation will generate 667 megawatt-hours (MW/h) per year, according to Green Gulf, the sustainable energy firm installing the panels. That is enough power to meet the annual electricity needs of about 150 domestic homes.

Dani Wannous, senior associate at Green Gulf, said: “The amount of electricity generated by the panels depends on a number of factors. The optimum conditions are a temperature of 25°C, 1 atmosphere of pressure, radiance of 1,000W per m2 from the sun, low humidity and clear air that is free from dust. Clearly, the conditions in Qatar vary from this quite a lot, which is why we always provide clients with two figures: one that shows the total amount that will be generated under perfect conditions, and another that shows the amount we expect to be generated.”

The panels are being installed at WCMC-Q as part of Qatar Foundation’s (QF) wider Solar Smart Grid Project that will see panels placed on the roofs of several other Education City universities and the student housing blocks, as well as on top of car park shades throughout the complex. In total, the QF solar panels will have an installed capacity of 1.6MW. Any electricity generated by the QF panels in excess of the organization’s immediate needs will be diverted to Qatar’s national grid, operated by the utility company Kahramaa. The Education City universities included in the project are Texas A&M University at Qatar, Carnegie Mellon University in Qatar and Georgetown University – School of Foreign Service in Qatar.

Mr. Wannous said: “The WCMC-Q installation is the biggest rooftop installation at Education City. The panels cover about 35-40 percent of the roof and one of the technical challenges of
the project was assessing whether the roof was strong enough to hold the panels, which each weigh 21kg.

“Another challenge is keeping the panels dust-free. However, that is not as much of an issue as most people think. It is just a matter of removing the dust with a dry, soft brush every two weeks, or more often if there is a lot of dust in the air at any time.”

Mr. Wannous explained that QF will have a central control room to monitor how much electricity is being generated by each of the sites and to see where maintenance issues arise.

At the time of going to press, WCMC-Q was about to begin making its contribution to the supply of sustainable, green energy at QF, having taken delivery of the college’s consignment of photovoltaic panels on 1 November. Work began to install the panels on 8 November and Green Gulf planned to have the system up and running by mid-January.

By John Hayward
Students of the Class of 2017 took their first steps on the long road to becoming doctors at the 10th annual White Coat Ceremony of Weill Cornell Medical College in Qatar.

The 41 students entering the 2013 medical class took to the stage at Hamad Bin Khalifa University’s Student Center to receive their white coats and stethoscopes in front of their proud parents and family members.

Accepting the traditional white coat is a symbolic act that marks the induction of students to the world of medicine and healing. Having completed their largely theoretical pre-medical training, the new cadre of students will now begin to learn the hands-on practical skills and advanced material of the college’s medical program.

Dr. Javaid Sheikh, dean of WCMC-Q, said: “Donning the white coat of our profession for the very first time is a moment of great significance in the life of every young doctor-in-training. With this gesture, our students accept the historic responsibility of healing the sick and showing compassion to the vulnerable, and at the same time dedicate themselves to the pursuit of the very highest standards of excellence in the practice of medicine.”

The ceremony, held on Thursday 12 September, marked the completion of the college’s four-day orientation program in which the students met their classmates and faculty, learned about the standards of professional conduct expected of them and received training on standard medical safety procedures.

The Class of 2017 is drawn from 19 countries, and nine Qatari nationals are enrolled on the course. In total, 33 students were admitted upon completion of the WCMC-Q medical program, while four students completed the biological science’s bachelor’s degree at Carnegie Mellon University in Qatar and four completed their training at other institutions.

Geraldine Kong Wai Jin joins WCMC-Q from the National University of Singapore. She said: “Starting the medical course is like a dream come true for me, something I have been looking forward to for a very long time. I want to practice medicine because the amount of conflict and illness means that the world needs doctors and I feel compelled to help.”

Qatari national Khalid AlBuresshad completed both the foundation program and the pre-medical program at WCMC-Q.

He said: “I am very excited about wearing the white coat for the first time because it feels like I am making progress towards my goal of becoming a doctor. This is what I have wanted ever since I was a child when my mother was unwell and I wanted to help her.

“With my parents’ support I have got this far and I am looking forward to the challenge of learning more about the human body and interacting with patients. I’m ready to take the next step.”

By Hilton Kolbe
Debate team mentor promotes communication skills at conference

“Students blossom via debate in more ways than one,” WCMC-Q’s associate professor of English told participants at the second Qatar Model United Nations and Film Leadership Conference.

Dr. Rodney Sharkey was encouraging visitors to the leadership conference “to take charge of their lives with meaningful contributions to society and the advancement of humankind. And one way of doing this is by debate,” he said.

The conference was a joint effort by Georgetown University School of Foreign Service in Qatar, Northwestern University in Qatar, and THIMUN Qatar with the aim of offering one of the largest professional development conferences in the Middle East. It was held at Georgetown.

QLC has two main objectives. The first goal is to provide high school students and teachers with quality workshops designed to provide them with leadership skills and tools to run successful Model United Nations (MUN) and film studies programs. The second goal is to provide an annual meeting place for MUN and film leaders to exchange ideas and develop partnerships.

The conference program featured MUN, debate and educational leaders working with participants in the following areas: skill building, professional learning, organization, teaching, community and service, and media and film programs.

“Debating is a lot more than simply having a way with words. It also stimulates critical thinking, develops research skills and builds all-round confidence,” Dr. Sharkey said.

Many public leaders and business professionals enjoy success based on skills acquired as active youth debaters. Some of the world’s most impressive orators and political leaders were first grounded in college debating teams before graduating to the bigger stage.

School friends of U.S. President Barack Obama claim they can trace his oratory skills and later success to the time he won his first debate, more than 34 years ago, when he was a junior in a speech class at Punahou School in Hawaii, and the topic for discussion was gun control.

“Debaters are groomed to deliver viewpoints through effective speech techniques such as rhetoric, inflection and hand gestures,” Dr. Sharkey said. “As they spend more time speaking before peers, young debaters will naturally gain much confidence.

“Often debaters must gather their thoughts to argue ideas they oppose. It’s a practice that encourages detachment from personal points of view. And it’s a practice that at the same time puts the students in touch with their individual opinion as it exists in a larger context.”

Dr. Sharkey is mentor and adviser to the successful WCMC-Q debating team that continues to attract and challenge incoming freshmen and seasoned members. Debates take place throughout the academic year both between WCMC-Q members, and against teams from the various universities in Qatar.

Dr. Sharkey annually escorts WCMC-Q pre-medical students to the World University Debate Finals, held in late December every year at different venues around the globe. Additionally, he has also accompanied students to the U.S for a successful series of debates in Burlington in Vermont where they participated in the annual Huber debates, a famous debate tournament at the University of Vermont.

Currently more than 40 students are actively involved in the WCMC-Q Debate Club. In the six-year history of the Qatar National University Finals, WCMC-Q has won the title four times. Expectations are high that they can again repeat their success in 2014.
Journal editor offers top writing tips to students

Students at WCMC-Q received expert advice on writing research papers when Dr. Alwaleed Alkhaja, commissioning editor at QScience.com, delivered a workshop at the college.

QScience.com is a peer-reviewed online publishing platform developed by Bloomsbury Qatar Foundation Journals, a member of Qatar Foundation. The workshop was hosted by the department of global and public health and WCMC-Q’s writing center.

Dr. Alkhaja’s session, entitled Organizing a Scientific Research Paper for Publication, presented a step-by-step guide to writing each of the key elements of a paper, from choosing the most suitable format for a title through to the best way to present results.

The event proved popular with students, staff and faculty, and Lecture Hall 4 at the college was filled almost to capacity for the workshop on Sunday 10 November.

Dr. Alkhaja’s session, entitled Organizing a Scientific Research Paper for Publication, presented a step-by-step guide to writing each of the key elements of a paper, from choosing the most suitable format for a title through to the best way to present results.

Dr. Alkhaja outlined the differences between various types of papers, including literature reviews, case reports, editorial articles and full-length research papers. He then dissected a research paper into its constituent parts and explained each one in turn, beginning with the title and then moving on to the description of the materials and methods used, the presentation of results, the discussion and conclusion of the findings, and finally the reference list and bibliography.

He said: “You need to be aware of the difference between the reference list and the bibliography. In the reference list, you must note all of the sources you have explicitly referred to. In your bibliography, you list sources that you may not have referred to but which you have drawn upon in your background reading. This is very useful for anyone reading your paper that wants to research the subject in more depth.

“My key piece of advice for this section is to record everything you read from the beginning. Don’t leave it until the end because you will definitely forget some of the material you have read.”

Dr. Alkhaja had one final piece of advice: “Set realistic goals for yourself,” he said. “Don’t say that you’re going to write five research papers by the end of the year because you probably won’t manage it. Instead, aim to write one paper and divide your work into a series of manageable milestones.”

For pre-med 1 student Mohamed Suliman, the workshop could not have come at a better time. “I found the session really useful because I am working on a poster presentation that has to be finished in a week’s time. The information Dr. Alkhaja gave will really help to improve the poster.”

WCMC-Q writing center coordinator Adam Larson said: “In the age of evidence-based medicine, medical students and aspiring researchers need a firm understanding of how science is communicated. Dr. Alkhaja’s workshop provided an important first step.”

Dr. Sohaila Cheema, director of the department of global and public health added: “The workshop was very well received. We will endeavor to host similar workshops on various topics, aimed to enhance understanding of the science of scientific writing and publishing.”
Students complete research programs in the U.S.

Eleven students in the pre-medical program at WCMC-Q completed the 2013 Summer Student Research Program in Ithaca, while a further four of their classmates completed the same program in Doha.

The prestigious mentoring program is aimed at talented students interested in a future research career. The Student Summer Research Program (SSRP) provides a mentored 10-week biomedical experience for second-year pre-medical students. It offers students the opportunity to experience the life of a full-time scientist in an active research laboratory.

They spend the entire 10 weeks at an assigned laboratory where they work on a research project.

The students also have to present a research seminar and poster, they have to write an abstract, submit progress reports and then submit their research findings to mentors at WCMC-Q.

“This is an intensive career building program. It is aimed at high performing students who are looking towards a future career in biomedical research,” said Shaikha Al-Qahtani, coordinator for the student summer research program at WCMC-Q.

“This is a perfect introduction for students interested in scientific research. They are introduced to a functioning lab and they experience working in some of the finest scientific laboratories in the world among the most talented international scientists.”

A group of eight WCMC-Q medical students completed a similar program in New York City. The students spent eight weeks working in a laboratory, attending seminars and preparing a presentation. Four of their classmates completed the same program but remained in Doha.

The summer research program is fully funded and participants are provided with a stipend that covers travel, accommodation and incidentals.

The students had the chance to see the sights in New York
Ahmed Saleh and Lama Obeid knew what they were in for even before they left for Tanzania on a WCMC-Q global health education and research program but they were still surprised by the lack of proper healthcare and limited access to medication, not to mention the constant threat of tuberculosis and malaria infection.

Both quickly learned that life in a largely impoverished developing country in Africa was very different to life in Qatar. But, despite the difference in quality of lifestyle, health care and culture, it was still an exciting learning experience they both enjoyed and they encourage other students to also participate in this rewarding exercise.

The two students from WCMC-Q returned from a challenging global health education and research program in Tanzania determined to do more for the sick and poor in under-resourced developing nations.

Second-year medical students Ahmed and Lama spent eight weeks of their summer break in Mwanza, the second biggest city in Tanzania, where they worked at Weill Bugando Medical Center (BMC). WCMC-Q’s department of global and public health sponsors two medical students every year during the summer break for a global health education and research experience. This is the third group of WCMC-Q medical students to participate in the program.

Ahmed Saleh (far right) and Lama Obeid (second from left) with medical staff and students at Weill Bugando Medical Center

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Lama said the program offered exciting opportunities for medical students both in health care training and research as well as personal development. “You are very quickly exposed to a variety of issues and experiences and you are challenged in many ways not only with regard to medicine but also in the way that you live your own life. Most people in Tanzania are not as fortunate as we are and life can be difficult for them,” Lama said.

“I would suggest everyone, not just first-year medical students, should make it a point to gain some form of a global health experience. It will completely change their perspective on medicine and how it is practiced. On top of the immense personal development you will experience, you will also realize that no matter what your goals or interests are, there are lots of opportunities within global health to develop those interests and benefit a lot of people at the same time.”

Ahmed found significant health issues in Tanzania, as in most developing countries.

“There is a lot that can be done to enhance the limited medical services that are provided in Tanzania and elsewhere,” he said. “Health education is a key element. I believe it is our duty as medical professionals to limit the spread of infectious diseases by spreading awareness among the public.

“Being in an environment where resources are very limited challenges you in a way by limiting your options. This was a great learning opportunity as it teaches you how to look at things in different ways. You have to come up with a diagnosis based on history and physical examination without having any modern testing modalities
and this helps you to move a step higher in rationalizing your decisions and diagnoses.”

For Lama, it was both an opportunity to observe at close range the treatment and effects of infectious diseases such as malaria and TB and other rare infectious diseases and a chance to experience the African traditions and lifestyle.

She said: “Mostly we attended morning reports and then went around the wards with the doctors and the medical students, checking on patients and discussing their cases. We were exposed to a wide range of procedures, and we learned a lot of medical practice. Often it would be the sort of things you wouldn’t ever get to see because we come from a different part of the world.

“Tropical diseases were very prevalent and mostly in late stage because people cannot afford to visit the hospital often. The patients are mainly poor and unable to buy medication. They rely mostly on traditional healers and herbal medicine, which is a big challenge modern medicine faces in such communities. Resources are very limited.”

Weill Bugando Medical Centre is a large medical complex with more than 900 beds and four referral hospitals that serve the community needs of people living on the fringes of Lake Victoria and the western regions of Tanzania. It also serves as a consultant and teaching hospital for the region and draws on a catchment area of more than 13 million people.

The hospital is a partnership with the Catholic Church, the Tanzania Government through the Ministry of Health, the Touch Foundation and other partners in making sure that services at BMC are of good quality and that they are training competent health professionals.

Both students agreed that the global health program and the challenges that they faced have had a profound impact on them. “It has definitely helped me a lot in terms of studies,” Lama said. “I learned about diseases that I would probably only be able to read about in text books here and I also got to see the debilitating symptoms of serious infectious diseases first hand. It also highlighted for me the differences between how medicine is practiced in more developed countries as compared to low-resource settings.

“I never imagined diseases like diabetes and hypertension would be widespread and prevalent in Tanzania. A lot of the patients on the medical wards had very advanced forms of these diseases, mostly due to the lack of primary care,” Lama said.

After his relatively brief global health experience in Tanzania, Ahmed said it has changed his perspectives on how medicine should be practiced and it has sparked a desire to become more involved with global health issues in his future career.

“This experience has definitely taught me a lot and has added to my understanding of many concepts,” he said. “I have studied about many infectious diseases, but have never seen real cases with such illnesses, and I believe I would never see such cases in Doha or any other developed country. Being in Tanzania has exposed me to such conditions.

“This experience has changed my whole view of medicine and it has even changed my future career plans. Before I went to Tanzania, my main thought was to travel to a new country and to see how things are done in a somewhat different health system. But after being there for just two months, I became very interested in pursuing a career in global health as I realize now that there is a lot of work waiting to be done in developing countries.”

WCMC-Q’s associate dean for global and public health, Dr. Ravinder Mamtani said the program provided participants with an excellent foundation in global health and clinical research in a part of the world where health care resources and treatment options are limited.

“These are experiences that you can only gain when you have been put in those situations. This kind of experience is unique and not a substitute for experience you gain in high-income nations. Providing this opportunity affirms our commitment to enhance and augment the education experience of our students,” Dr. Mamtani said.

“You will not be able to gain this type of experience by sitting in Qatar or in the United States. It is an amazing experience for our students. It sharpens their clinical skills and diagnostic abilities.”

Dr. Sohaila Cheema, director for the department of global and public health said the program is competitive and an increasing number of applications are received from first-year medical students every year.

By Hilton Kolbe
International experts focus on spina bifida prevention and treatment

The prevention and treatment of spina bifida was the focus of a major international medical conference with the latest research data and innovative new treatment options available.

Hosted by WCMC-Q in association with HMC and Sidra Medical and Research Center, the International Conference on Spina Bifida: Genetic-Environmental Causes, Prevention and Treatment attracted acclaimed international leaders in epidemiology, genetics, fetal surgery, metabolomics and epigenetics. Faculty from WCMC-Q, HMC and Sidra who are all leading geneticists, practitioners in neurology, maternal fetal medicine and nephrology were also in attendance and delivered presentations about the condition.

In his opening address, WCMC-Q dean Dr. Javaid Sheikh welcomed the distinguished group of experts and praised the work of researchers and the developments that have been made in advancing treatment of spina bifida.

Dr. Sheikh said: “Weill Cornell Medical College in Qatar remains committed to innovative and high-quality research not only for the benefit or the development of Qatar but also for international advancement and for the benefit of all those who are in need. So it is indeed a special honor for WCMC-Q to be associated with this international spina bifida conference. It demonstrates our commitment to the international community and points to our rapidly growing legacy in promoting quality medical research and a leader of medical education in the Gulf region.”

Spina bifida, along with anencephaly, are both neural tube defects (NTDs) with prevalence worldwide of about one in 1,000 live births. Infants with spina bifida often face a life challenged by paralysis and a variety of urological and neurological complications.

The exact cause of this birth defect is not known. Experts think that genes and the environment are part of the cause. Children with severe symptoms are sometimes born with fluid build-up on the brain. They may also have this problem after birth. It can cause seizures, intellectual disability, or sight problems. Some children also develop a curve in the spine, such as scoliosis.

Dr. Elizabeth Ross, head of the laboratory of neurogenetics and development at Weill Cornell Medical College in New York and organizer of the conference, said the meeting was designed to be highly interactive, geared toward regional physicians, geneticists and healthcare providers practicing in the GCC community.

Participants had ample opportunity to discuss clinical experiences, therapeutic challenges and practical solutions in the near term as well as long-term prospects to accelerate advances in the field of spina bifida treatment and prevention.

The conference programs presented the latest information regarding the genetic and environmental factors contributing to the development of NTDs. It also provided a forum for overview and discussion of NTDs encountered in Qatar and the MENA region. In addition, an evening public forum provided an opportunity for the Doha non-medical community to hear about the latest research into prevention and treatment of spina bifida and other NTDs from experts in the field.
The future of family medicine in Qatar

Establishing doctors’ clinics led by family physicians is vital to the continued success of healthcare in Qatar a new study by researchers at WCMC-Q has said.

According to Qatar Statistics Authority, the country’s population will rise from 1.9 million people to 2.5 million by 2020. In a report published in the Journal of Healthcare Leadership, Dr. Mohamud Verjee, assistant professor of family medicine at WCMC-Q; Dr. Mariam Ali Abdulmalik, of the Primary Health Care Corporation; and Dr. Michael D. Fetters, of the University of Michigan, state that this increase will mean family medicine will be of paramount importance in the future and that given the pace of expansion, there is likely to be a “significant evolution” in the primary health care system.

But the researchers note that the Qatari authorities have previously demonstrated sound leadership in forward planning.

The report states: “Qatar is among the leaders in family medicine in the Arabian Gulf, Middle East and North Africa region.

“The challenges of building a new family physician workforce and overcoming specialty care misperceptions are much the same as any other emerging country from the 1990s. Qatar is unique due to its dedication in developing a full and modern health care system from the outset, grounded in family medicine, and its active planning for a comparatively small but growing population, currently polled at 1.9 million.”

Qatar recognized family medicine as a specialty in 1995 and as of 2011 there were 147 family physicians working in the country - 18 per cent of its total physician workforce. A four-year family medicine residency program was established in the mid-90s with the inaugural class graduating in 1999 and with the establishment of WCMC-Q in 2001, the government signaled their continued commitment to medicine and health care.

Since then, in contrast to a trend of fluctuating interest in family medicine training in many developed countries, the demand for family medicine residency slots in Qatar has been consistently high.

Despite this there is still a shortage of family physicians and a lack of academic capacity for future family doctors to be trained. These are both issues the government will need to address to provide quality health care for all in the future.
WCMC-Q’s first-year medical students visited the Qatar Cancer Society to discover how the disease affects patients and their families, and to learn about healthy lifestyle choices that can reduce the risk of developing the condition.

The students attended the Qatar Cancer Society as part of the medical student orientation program. There they watched a presentation by Mahassen Okasha, head of the health education program at the clinic, and took part in a question and answer session.

The presentation addressed the challenges Qatar faces as a society to reduce the prevalence of cancer and improve survival rates of those afflicted with the disease. The society works to promote educational initiatives that warn of the danger to health posed by smoking, poor diet and physical inactivity, which can all increase the risk of developing cancer. The society also campaigns to encourage early detection and treatment of malignant tumors through improved access to healthcare services, and provides support for cancer victims and their families.

The students also heard a moving account from breast cancer survivor Amani Halawa of her battle with the disease.

Amani, who is administrative coordinator of the Hayat Cancer Support Group, said: “When the doctor gives you the diagnosis that you have cancer, you hear nothing that he or she says after that. You are in shock. As doctors it will be very helpful for you to understand how a patient feels when they receive such a diagnosis.”

Amani explained that many cancer patients feel hopeless after receiving their diagnosis. “Your first thought is that you have received a death sentence,” she said. “Because of the tragic cases we hear about in the media, we think that everyone who has cancer dies. Of course, this is not the case and many people do survive. As doctors you need to be prepared to deal with this pessimistic attitude, which is a natural reaction for most patients.”

Amani also told the students that cancer patients need to speak to other cancer patients, particularly survivors, in order to approach their treatment positively. She said: “No matter how well-meaning you are as a doctor, you cannot relate to a cancer patient fully unless you have had the disease. That is why support networks are so important and can play such a big role. Other cancer patients can tell you that the treatment is difficult but that with a positive attitude it is bearable and can save your life. I truly believe that those patients who approach their treatment with a positive attitude have a far better chance of surviving than those who are certain it is not going to work.”

Dr. Stephen Scott, acting associate dean for student affairs, accompanied the students to the clinic.

He said: “As the students begin their medical training, we want to connect them right away with real patients who have real stories so that they can begin to learn about their roles as physicians. Visiting an organization such as this one helps them to understand that being a good doctor is not just about mastery of the subject, it’s also about understanding where they fit in with other members of the healthcare team and about relating to their patients.”

The students also learned that cancer patients can experience problems relating to their friends and families, who can be unsure how to react to news of the illness. Amani said: “Some people will not know how to treat you and will feel very uncomfortable in your presence, and may avoid you altogether. Some may overreact and treat you like you can’t do anything for yourself, and some will feel very depressed about your illness. That’s why it’s important for societies to provide support for family members, too.”

For student Mohammed Haji, a family history of cancer has prompted him to develop a special interest in the disease. He said: “A lot of my family members have suffered from cancer, so when I was young I had a strong feeling that I wanted to help to find a permanent cure for it. Coming here has shown me that a positive attitude to treatment makes a big difference – cancer does not have to mean the end of the world. With hope and belief and good treatment the disease can often be beaten.”

By John Hayward
Three Qatari high school students spent a fortnight in New York learning about the medical profession after winning WCMC-Q’s annual Healing Hands essay competition.

Kholoud Essa Abu-Holayqah, Naima Abdulrahman Alobaidli and Salah Majid Mahmoud arrived at Weill Cornell Medical College in New York on July 1 and spent two weeks conducting biomedical research and treating patients under the tutelage of Dr. Ronald Crystal, professor and chairman of genetic medicine at Weill Cornell.

The opportunity was great experience for 16-year-old Kholoud, of Al Bayan Education Complex for Girls in Doha, who has her heart set on becoming a doctor. “I enjoy learning about the human body,” she said. “It’s the portal to understanding the world.”

For Naima, 15, a student at the DeBakey High School for Health Professionals at Qatar in Doha, the trip was a chance to evaluate whether a career in medicine is the right path for her.

“This experience was valuable to me because I got to know whether I want to be a doctor or not through this,” she said. “I got to experience what people are doing, how they are working and what life will be like as a doctor. This was the key to me. This determines whether I want to be a doctor or not because I get to see how medical professionals interact with each other and what they do. And I also get to meet important people like Dr. Ronald Crystal and I get to see what’s like from his point of view and how he treats his patients. This is advice for me if I want to be a doctor.”

The students won their places on the trip by impressing the panel of expert judges of WCMC-Q with the essays they wrote for the Healing Hands competition, now in its sixth year. Writing to the theme ‘Caring Without Borders’, the students were asked to imagine how they would ensure the health of victims of an imagined humanitarian crisis. The competition aims to introduce high school students with an interest in becoming doctors to the profession, providing them with real experience of what life as a physician is like. The students are also introduced to Weill Cornell Medical College, both in Qatar and New York, where they could eventually pursue U.S. accredited M.D. degrees to become fully qualified physicians.

Kholoud and Naima were each exposed to the medical profession early in life by the doctors in their families — Kholoud through her aunt and Naima through her mother. Inspired by the ability of their family members to heal their patients when they were sick and provide continuity of care, they decided to investigate the field to see if it’s something they’d like to do for the rest of their lives.

“I enjoy helping people. That is what makes me happy,” said Naima, who attends a high school dedicated to health care education. “The way I can help people is to be a doctor.”

During the two weeks in New York the students learned basic laboratory skills such as pipetting and aseptic techniques, as well how to culture cells and monitor their growth. They also had the chance to join Dr. Crystal while he conducted his hospital rounds and to observe a bronchoscopy.

“This is the opportunity of a lifetime for these three winners,” said Dr. Javaid Sheikh, dean of Weill Cornell Medical College in Qatar. “To be so young, yet to be welcomed into a professional research laboratory is an experience they will never forget.”

Salah, 15, a student at Qatar Academy, was in full agreement.

He said: “This experience was very important to me because it taught me a lot of knowledge, which I can take back and expand through various different fields. This lab was very kind and generous to me, and everything I learned there is really going to help me in the future.”

Inspired by his science studies at school, Salah investigated ways he could contribute to the field and consequently developed an interest in medicine. With Qatar facing a shortage of physicians, training to be a doctor would also be a matter of national pride for him.

“If I wanted to be a doctor, it would be to serve my country,” he added.

The dedication of the students impressed Dr. Crystal, who added: “The families should be really proud of these students - they are really great.”

By Richard Harris
WCMC-Q experts share knowledge at major European conference.

Four WCMC-Q staff members delivered presentations at the 40th annual conference of the Association for Medical Education in Europe (AMEE) attended by more than 3,000 participants in Prague, Czech Republic.

The event was held between August 24 and 28 and saw Dr. Amal Khidir, assistant professor of pediatrics at WCMC-Q, present a paper titled “Perceptions on Professionalism in a Highly Dense Multi-cultural Institution in Arabian Gulf, Qatar: Needs Assessment of Faculty & Trainees”. The study was a collaboration between Dr. Khalid Alyafei, of the department of pediatrics at Hamad Medical Corporation (HMC), Dr. Abdul Nasser Elzouki, from the department of internal medicine at HMC, and Dr. Ara Tekian, College of Medicine, University of Illinois. It was conducted in four different departments at HMC - internal medicine, pediatrics, obstetrics and gynecology and surgery – and the paper generated enough interest that it was selected for preview in the plenary session.

The presentation by Dr. Mary Anne Baker, WCMC-Q’s director of assessment and academic achievement, entitled “Do Variations in Classroom Delivery of Lectures Affect Student Video Viewing Patterns”, was the product of a collaboration with Dr. Thurayya Arayssi, associate dean for graduate medical education, Dr. Marcellina Mian, associate dean for medical education, Dr. Ali Sultan, associate professor of microbiology and immunology, and Dr. Amal Khidir.

Dr. Mai Mahmoud presented a talk entitled “The Middle East Experience of North American Med Clerkship”. In her talk, she outlined the process of adaptation and some enhancements that were implemented in Qatar given the advantage of having a smaller number of students as compared to New York, the use of technology and excellent support from the college and HMC clinicians. One area emphasized in the presentation, was how the challenge of clinical evaluation was overcome by using the RIME framework in Qatar and how both faculty and students felt satisfied with the evaluation process. It was thought that the whole model might be of interest to any school in the region that is thinking of adopting a North-American clerkship model. The presentation was co-authored by Dr. Dora Stadler.

Deema Al-Sheikhly, manager of WCMC-Q’s graduate medical education department, gave a presentation entitled “Developing an Objective Structured Clinical Exam (OSCE) Curriculum to Assess Communication Skills of Residents.” The Development and implementation of the curriculum was a collaborative effort by faculty and staff of WCMC-Q’s graduate medical education department, which included Dr. Dora Stadler, Ms. Deema Al-Sheikhly, Dr. Mai Mahmoud and Dr. Thurayya Arayssi, the Clinical Skills Center, which included Ms. Lan Sawan; and the internal medicine department at HMC which included Dr. Ibrahim Hassan, Dr. Tasleem Raza, Dr. Hassan Mobayed, Dr. Mohsen Eledrisi, Dr. Ahmed Al-Mohammed, and Dr. Dabia Al-Mohanadi.

The AMEE is a worldwide organization with members in 90 countries on five continents. Members include educators, researchers, administrators, curriculum developers, assessors, and students in medicine and the healthcare professions. AMEE organizes an annual conference and delivers courses on teaching, assessment, simulation, computer-enhanced learning, research and leadership skills for teachers in medicine and the healthcare professions. AMEE also produces the journal Medical Teacher.
Four WCMC-Q students took part in an Inter-Professional Education (IPE) workshop alongside students from Doha’s leading medical training institutions.

The two-day workshop brought together students from WCMC-Q, Qatar University School of Pharmacy, the College of the North Atlantic – Qatar and the University of Calgary - Qatar (UC-Q), which hosted the event on 4 and 5 October.

The WCMC-Q medical students who volunteered to take part in the course were fourth-years Aicha Mahoudhi and Abdulwahed Zainel, third-year Hala Omar and second-year Sally Elgazar. All four of the students received certificates of completion, joining third-year student Tarek Elshazly who completed the course earlier this year.

The IPE workshop program is part of a three-year research project sponsored by Qatar Foundation’s National Priorities Research Program (NPRP) entitled Implementing Inter-Professional Undergraduate Health Professional Programs Health Care Education in Qatar. The project aims to foster a collaborative, patient-centered approach to healthcare in Qatar by working with future healthcare professionals while they are completing their studies. Dr. Mohamud Verjee, assistant professor of family medicine at WCMC-Q, is part of the research team along with UC-Q faculty Dr. Brad Johnson and Dr. Kim Critchley, dean of the university.

Dr. Verjee explained the background and aims of the research project.

He said: “Traditionally, the practice of medicine has followed a patriarchal, top-down management style, with the doctor at the top and each part of the care-giving team somewhat isolated from one another in his or her own area of operation.

“This model can be inefficient because if each member of the care team does not fully understand the roles of his or her fellow professionals, the risk that elements of the care package will be neglected or duplicated increases. Not only does this cause inefficiency, it is potentially very dangerous for the patient. “It is also important that doctors realize that other healthcare professionals, such as nurses, physiotherapists, pharmacists and so on, are highly trained in their specific fields and that doctors can and should draw upon their skills and knowledge to better serve the patient.”

Dr. Verjee urged all WCMC-Q students to take part in IPE workshops in the future.

The IPE workshop gave medical students the chance to meet and discover areas for collaboration.
WCMC-Q graduates offer new hope for cholesterol treatment

Two graduates of WCMC-Q are achieving distinction in the world of research having been published in the prestigious Journal of the American College of Cardiology.

Dr. Mohamed Badreldin Elshazly, who graduated in 2010, and Dr. Mohammed Al-Hijji, of the Class of 2011 have, with other researchers, co-authored a major clinical investigation of lipids – which include substances like fats, oils and certain vitamins.

Two graduates of WCMC-Q are achieving distinction in the world of research having been published in the prestigious Journal of the American College of Cardiology.

Dr. Mohamed Badreldin Elshazly, who graduated in 2010, and Dr. Mohammed Al-Hijji, of the Class of 2011 have, with other researchers, co-authored a major clinical investigation of lipids – which include substances like fats, oils and certain vitamins.

The title of the study is: Non-HDL Cholesterol, Guideline Targets, and Population Percentiles for Secondary Prevention in a Clinical Sample of 1.3 Million Adults. The Very Large Database of Lipids (VLDL-2 Study).

Their research could lead to new treatments for people with low-density lipoprotein (LDL) cholesterol. This kind of cholesterol can build up
We have witnessed an increase in other types of “bad” cholesterol such as Very Low-density lipoprotein, Intermediate density lipoprotein, cholesterol remnants and Lipoprotein[a],” Dr. Elshazly said. “All these atherogenic lipoproteins in addition to LDL-C are included in non-HDL cholesterol, which is simply calculated by subtracting HDL-C (good cholesterol) from total cholesterol and available in the standard lipid profile at no additional cost or inconvenience. “

Dr. Elshazly said that over the past two decades, numerous studies have suggested that non-HDL-C is a better marker of cardiovascular disease risk and a better target for lipid-lowering therapy than LDL-C but this has not been reflected in the most recent cholesterol guidelines. The current worldwide guidelines recommend using non-HDL-C only as a secondary treatment target in patients with triglyceride levels of at least 200 mg/dl. Therefore, physicians are potentially treating some patients only to their optimal LDL-C goal while their non-HDL-C value remains above goal.

“In our 1.3 million dataset, LDL-C cutpoints of 70, 100, 130, 160 and 190 mg/dl corresponded to the same population percentiles as non-HDL-C levels of 93, 125, 157, 190 and 223 mg/dl, respectively. We found that a significant proportion of individuals are reclassified within higher ATP III (Adult Treatment Panel III) treatment categories when non-HDL-C is used to classify them rather than LDL-C. In addition, there is significant discordance between population percentiles of LDL-C and non-HDL-C particularly when accuracy is most crucial; at LDL-C in the treatment range of high-risk patients and at high triglycerides. For example, in patients with LDL-C levels less than 70 mg/dl, 15% had a non-HDL-C value of at least 100 mg/dl, the cutpoint recommended by guidelines, while 25% had a non-HDL-C level of at least 93 mg/dl, the cutpoint based on percentile equivalence. The percentages increased to 22% and 50%, respectively, if triglycerides were 150 mg/dl to 199 mg/dl concurrently,” he said.

“We concluded that lowering conventional non–HDL-C cutpoints for high-risk patients to match percentiles of LDL-C cutpoints as well as wider adoption of non–HDL-C in clinical practice might potentially improve secondary prevention outcomes and residual risk assessment and treatment. Therefore, clinicians should be more aggressive about treating their high-risk patients to LDL-C as well as non-HDL-C goals. They should consider using lower non–HDL-C goals for secondary prevention as highlighted in our study.”

Dr. Elshazly started working with the Ciccarone Center of Prevention of the Johns Hopkins Department of Cardiology in 2011 when they published their first study from the Very Large Database of Lipids showing that the standard Friedewald formula used for decades to calculate low-density lipoprotein (LDL) cholesterol levels is often inaccurate (Martin SS. Blaha MJ. Elshazly MB. Friedewald estimated versus directly measured low-density lipoprotein cholesterol and treatment implications. J Am Coll Cardiol. 2013 Aug 20;62(8):732 9.doi:10.1016/j. jacc.2013.01.079).

“Under the guidance of my mentors Dr. Steven Jones and Dr. Seth Martin, our group presented several abstracts from this database in the American College of Cardiology meetings in 2012 and 2013, American Heart Association meetings in 2012 and 2013 and Arteriosclerosis, Thrombosis and Vascular Biology Scientific Sessions in 2013.” Dr. Elshazly said. Their research group has published a few studies from the Very Large Database of Lipids in several prestigious journals; the most recent being Dr. Elshazly’s non-HDL-C study which also featured Dr. Al-Hijji as a co-author. Both of them are currently engaged in several other studies expected to be published soon.

Dr. Elshazly was lavish in praise of his medical and research training in Doha. “WCMC-Q had a great impact on what I am doing today. There were tremendous opportunities to do research in medical school such as summer research scholarships to WCMC-NY as well as state supported funds to do research in Qatar such as UREP and QNRF and I participated in both.”

“In addition, WCMC-Q was my road to joining internal medicine residency at Johns Hopkins followed by cardiology fellowship at the Cleveland Clinic. Therefore, I will always be grateful to Qatar Foundation, WCMC-Q and Qatar’s leadership for their investment in research and the human potential and I hope I will be able to use my research expertise to help advance medicine and cardiovascular research in the Middle East in the near future,” Dr. Elshazly said.

By Hilton Kolbe
Avelin Adrian Malyango, M.D.
Assistant Professor of Anatomy in Cell and Developmental Biology

Dr. Avelin A. Malyango joined WCMC-Q in July 2013 as assistant professor of anatomy in cell and developmental biology. Prior to joining WCMC-Q, Dr. Malyango was a laboratory instructor in the department of cell and developmental biology at WCMC, an assistant professor of anatomy in the department of cell biology at New York University School of Medicine, and the director of anatomical gift program at New York University School of Medicine. In addition, he served as an adjunct faculty member at several institutions, including Sophie Davis School of Biomedical Education, City College of New York; the department of basic science and craniofacial biology, New York University College of Dentistry; the department of physical therapy, Steinhardt School of Education, New York University; and Pace University-Lenox Hill Hospital.

Dr. Malyango has experience as lecturer, laboratory instructor, and problem-based learning facilitator in gross anatomy, physiology, embryology, neuroanatomy, histology, and cell biology to medical, dental, and physician assistant students. During his academic career, he has received several teaching prizes, such as The Teaching Award, First Year Medical Students, New York University School of Medicine; the Outstanding Pre-Clinical Instructor Award of the Physician Assistants Program, Weill Cornell Graduate School of Medical Sciences; the First Year Teaching Award in recognition of his contributions to undergraduate medical education, Weill Cornell Medical College; and the Faculty Council Teacher Recognition Award, New York University College of Dentistry, in recognition of outstanding teaching and dedication to dental students.

Dr. Malyango’s research interests include comparative anatomy and functional morphology with emphasis on studying locomotor apparatus of primates. He has been a reviewer for the American Association of Clinical Anatomy Journal since 2004.

Charbel Abi Khalil, M.D., PhD
Assistant Professor of Genetic Medicine, Assistant Professor of Medicine

Dr. Abi Khalil joined WCMC-Q in March 2013 as assistant professor of genetic medicine and assistant professor of medicine. Prior to coming to WCMC-Q, he served as research fellow at Hôpital Bichat - Claude-Bernard and at INSERM U695-French Institute of Health and Medical Research in Paris (2006-2010), cardiology fellow at the Assistance Publique-Hôpitaux de Paris (2010-2012), and visiting fellow in the department of genetic medicine at WCMC (2012-2013).

Although Dr. Abi Khalil’s clinical training is cardiology-oriented, his research studies have been focused on a wide range of cardiovascular medicine specialties, particularly cardiovascular complications of diabetes, genetic and fetal origin of cardiovascular disease, obesity, hypertension, and nephropathy. His most recent clinical investigation consisted of creating a bridge between basic science and clinical application, trying to translate in-vivo and animal models into human studies and working with cohorts for testing several hypotheses.
Dr. Shahrad Taheri joined WCMC-Q in August 2013 as professor of medicine and director of the CRS core. Dr. Taheri has extensive experience of leading the multi-professional care of patients with obesity and diabetes within the UK’s National Health Service. He has also led large multidisciplinary research teams aiming to develop, implement, and evaluate clinical services for patients with diabetes and obesity.

Dr. Taheri’s research experience extends from basic laboratory to human intervention, and population studies. His research interests are increasingly focused on the development, conduct, and implementation of a range of clinical trials into diabetes and obesity, and linking these trials to investigation of disease mechanisms through laboratory studies.

Dr. Taheri has a vibrant portfolio of research studies into diabetes, obesity, and sleep. His goal at WCMC-Q is to develop and lead an internationally recognized, dedicated, collaborative research group performing clinically relevant investigation into diabetes and obesity, and their complications. This approach aims to have a major impact on public health, patient care, and advancement of medical science, making a significant contribution to Qatar’s healthcare system and Qatar’s vision to develop as a center of excellence in medical research.

Dr. Stella C. Major joined WCMC-Q in September 2013 as associate professor of clinical medicine. She is an experienced educator and physician. She came to WCMC-Q from the United Arab Emirates University (UAEU) where she served as associate professor of family medicine in the College of Medicine and Health Sciences and as director of clinical skills. At UAEU, in addition to her extensive role in clinical skill teaching, she was a family medicine clerkship supervisor and a problem-based learning tutor for year 3 and 4 students. In addition, she was very actively involved in teaching and advising graduate and post-graduate students in family medicine. Other academic positions held by Dr. Major include instructor of family medicine (1995-1998), assistant professor of family medicine (1998-2005), and associate professor of family medicine (2005-2006) at the American University of Beirut, Lebanon; and locum clinical teaching fellow (2006-2007) and senior clinical teaching fellow and deputy director of primary care education (2007-2008) at Imperial College School of Science, Technology, and Medicine, where she continues as honorary senior lecturer.

Dr. Major’s clinical care experience spans almost twenty years. She was an attending physician in family medicine at the American University Hospital, American University of Beirut Medical Centre in Beirut (1995-2006), a physician in private general practice service in London (2006-2008), and a consultant in family medicine at Al Ain Hospital, department of family medicine (2009-2013).

Her research interests focus on chronic disease management, medication utilization and patient safety in primary care, and medical education and professional training and practice.

Dr. Major has been a member of the Royal College of General Practitioners (RCGP) in the U.K. since 1995 and was awarded fellowship of the RCGP in 2011 for years of service in clinical practice, education, research, and academic leadership.
Sara Fouad won a Galaxy Note after telling how the Sahtak Awalan campaign had helped her health.

Sahar Mahadik, Inen Becetti and Nora AlFakri don mustaches for Movember.

Pegah Ghiabi, research specialist, celebrates earning her Ph.D with her colleagues.
Visitors, staff members and students were taught about healthy eating at the annual Wellness Day.

Faryal Malick has her height measured as part of her body mass index (BMI) score.

Luma Rayyan, Student Health, Wellness and Activity Coordinator, presents a prize of a bicycle to Nahel Tunio.
Fahad Al-Marri and Hamad Al-Hail test their wits at chess at ClubFest

Khalid Al-Mari, Faten Shunar, Lilian Muzame, Nasser Binmarzook and Nedda Elbedawi at ClubFest
Students could satisfy their sweet tooth with cotton candy at ClubFest.

Ali Al Jabri poses with a guitar at ClubFest.

Aljazi Al-Mana, Shaikha Abdulla and Ghoroor Ahmed at ClubFest.

الجبري يعزف على الفيكانر خلال إقبال من الطلاب على طواف القطن.