Breast cancer is one of the world’s biggest killers of women. WCMC-Q is determined to stop it.
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Graduation ceremony honors the Class of 2013
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Students who have made an outstanding contribution to extracurricular activities were recognized at an awards ceremony held at the Hamad Bin Khalifa University Student Center
Award for prolific WCMC-Q research team

Investigators from WCMC-Q were presented with the Best Research Team prize at the Qatar National Research Fund (QNRF) 5th Annual Forum.

The research team, led by Dr. Laith Abu Raddad, associate professor of public health, won the award for its work on a project entitled ‘Role of Biological Co-Factors in HIV Epidemiology and Impact of Biomedical HIV Prevention Interventions’. The award was presented in May at the forum, held at Qatar National Convention Centre.

The project, which was backed by QNRF’s National Priorities Research Program, involved collaboration with researchers from several high-profile institutions around the world, including the University of Washington, the Fred Hutchinson Cancer Research Center in Seattle and Imperial College London.

The team effort produced 49 publications, 23 journal papers, one online paper, one book chapter and 24 conference papers.

Dr. Abu Raddad paid tribute to everyone who contributed to the project.

He said: “It’s a great honor for us to win the award and to have this recognition. We have a rapidly growing research establishment here in Qatar and it brings much happiness to be recognized for our contribution to this drive towards a scientific renaissance of this region.

“What is special about this award is that it speaks for the accomplishment of this institution at its different levels. The award was nominally for the hard of work of our research team, but in truth, little would have been achieved if we did not have an effective research program and administration.

“This award is for all of us in this institution, because everyone in every division has contributed to this project. The hard work of everyone at the university has made WCMC-Q one of the key destinations for those aspiring to an outstanding research career in this region and beyond. We are also deeply appreciative to QNRF and Qatar Foundation for giving us the generous resources and the opportunity to convert scientific dreams into realities.”
A new mobile phone app that helps users maintain a healthy diet and encourages them to exercise as well has been launched by WCMC-Q. The application, which is available on Android and iOS devices and called Your Health First: Calorie Counter, was released as part of the college’s ongoing Sahtak Awalan: Your Health First campaign.

Users are able to easily and conveniently count the number of calories they are consuming each day and will be prompted to choose healthy, nutritious foods instead of those high in saturated fats, sugar and salt. The vision is that users will use the app to help them maintain a healthy weight and make appropriate lifestyle choices. The application is available in both Arabic and English-language versions.

The app deploys a system of traffic lights to denote how healthy or unhealthy different dietary choices are, drawing on a vast database of common foodstuffs. For example, if the user logs a meal of a burger and fries, they will be awarded a red light. If they choose a healthy salad or a dessert of fruit, they will receive a green light. Opting for too many unhealthy foods will cause the app to suggest healthy alternatives for the next meal. Even when eating within the recommended daily calorie intake, it will also notify a person as to whether they aren’t getting enough of a specific fruit or vegetable.

Dr. Javaid Sheikh, dean of WCMC-Q, welcomed the launch of the new app. “With this new application WCMC-Q is embracing the opportunities offered by mobile phone technologies to deliver our message about healthy lifestyles to an ever larger audience,” he said.

“The Sahtak Awalan: Your Health First campaign aims to encourage everyone in Qatar to adopt behaviors that will promote their long-term health, and diet is a key element of the campaign’s message. By making it very easy for people to monitor their diets, the app allows users to track exactly what they are eating and see where they are eating too many of the wrong things. Having access to this sort of information can give someone a real boost when they are trying to improve their diet.

“Ultimately, the app can help more people switch to the healthy lifestyle necessary to enable people to contribute to the goal of moving towards a knowledge-based economy, as laid out in the Qatar National Vision 2030.”

A unique feature of the app is a completely new database of typical Arabic foods, such as thureed or machboos, which until now have never featured in popular dietary databases. Furthermore, anyone who downloads the app will be able to use their phone to suggest other Arabic foods to add to the database, meaning the app will become ever more comprehensive over time.

The app has been developed and powered by the campaign’s exclusive communications partner, Vodafone Qatar, in conjunction with the college.

John Saad, chief marketing officer at Vodafone Qatar, said: “We’re proud to have created an application with the Your Health First team. Our focus was to build something simple, intuitive, and easy to understand. Users can calculate their optimum calorie intake by just sharing a few details and their personal goal. Users will be able to track their progress and even rely on it to tell them whether their choice in food is healthy or not.

“We’re committed to supporting WCMC-Q’s vision to promote a healthier Qatar and to educate people to make wiser decisions when it comes to their choice of food.”
Students celebrate completion of the pre-medical program

Family, friends, faculty and staff all gathered together to celebrate the completion ceremony of WCMC-Q’s pre-medical program.

In all, 41 students completed the rigorous two-year program that has seen them study the sciences, English and mathematics through lectures, laboratory sessions and problem-based learning exercises.

At an event on April 25, they were congratulated by faculty members and received certificates marking their achievement.

Dr. Marco Ameduri, associate dean for pre-medical education, thanked the students’ families for their continued support and spoke of the pleasure that is felt in the college at the students’ success.

He said: “To the students I say that the faculty and I are very proud of your achievements and so are your families.”

The keynote speech was given by Ian Miller, lecturer of English writing, whose eclectic speech veered from despair in the forests of Oregon to The keynote speech was given by Ian Miller, lecturer of English writing, whose eclectic speech veered from despair in the forests of Oregon, to Star Wars, to mythologist Joseph Campbell; the thread throughout being for the students to stay true to themselves and to say “yes” to life and the challenges they will face.

Student speaker Moath Abdelrehim’s tongue-in-cheek speech drew laughs from his peers as he detailed the hard work and long nights of studying that is expected from students on the premedical program.

But he added: “We’ve been given the gift of a world-class education so it is our duty to serve our community and share our assets.”

The successful students were:

Moaz Abdelrehim
Joud Abu Odeh
Ali Al-Jabri
Fatima Al-Baqali
Khalid Albureshad
Sahar Al-Kurbi
Mohammadshah Gul
Mohammed Haji
Ahmed Hammouda
Dalal Hussain
Lina Irshaid
Bilal Jaradat
Abdulaziz Al-Malki
Razan Al-Marri
Alaa Al-Naama

Ahmad Al-Shahrani
Abdulaziz Al-Thani
Haya Al-Thani
Elizabeth Boctor
Amina Bougaila
Anchalia Chandrakumaran
Saly El Hajj
Aya El Jerbi
Abdullah El Zafarany
Alaeldin Elsayed
Sarah Elsoukkary
Omar Falah
Sarah Kanbour
Ali Khairat
Ayesha Khalid
Omar Khurshid
Haidar Kubba
Alaa Kubbar
Ahmed Mushannen
Hamzah Oglat
Josia Schlogl
Fatima Sheban
Mohammed Sheriff
Diaa Steitieh
Shruthi Suresh
Khalid Taha
Day of celebration for foundation students

The goal of becoming a qualified physician moved a little closer for 16 students as they celebrated completing the university’s foundation program.

The students were presented with certificates in front of an audience of their parents and faculty members in a ceremony held at WCMC-Q in May.

The foundation program helps students improve their English and provides a solid grounding in the basic sciences, equipping them with the skills and knowledge needed to successfully undertake the university’s pre-medical program.

Dr. Marco Ameduri, associate dean for premedical education, addressed the audience to congratulate the students.

He said: “You all worked very hard while we put a lot of demands on you, so you really deserve to celebrate today. I want to thank you for your commitment, your families for supporting you and our wonderful faculty and teaching assistants for their hard work. We are honored and proud to acknowledge the support of Qatar Foundation under the visionary leadership of Her Highness Sheikha Moza Bint Nasser.

“In this course we have been dealing with the very fundamental and basic facts of nature, but these concepts are not easy to understand or to grasp – you have done a wonderful job.”

Dr. Ameduri and Dr. Kevin Smith, assistant dean for pre-medical education, then presented the completion certificates to the students.

Student Aldana Shahbik said: “It’s a relief to have completed the program, which has been really inspiring for me. We went through a lot to get here, but it has been worth it because I now feel much more confident about taking on the pre-medical program.”

Foundation Program Completion Student Roll

Hanof Ahmed
Latifa Al-Badr
Dena Al-Dabhani
Fatima Al-Mohannadi
Hamad Almuhannadi
Soud Al-Mulla
Aisha Al-Shahwani
Mohammed Alsubaie
Shaikha Al-Thani
Mohammed El-Debs
Gawaher Elkhatib
Yasser Janahi
Reem Mubarak
Maryam Own
Ramez Rawhani
Aldana Shahbik
Alumna Dr. Noor Al-Khori was featured in an environmental documentary shown at the COP18 climate change conference as part of a plea to the high profile audience.

Dr. Al-Khori is a graduate of WCMC-Q Class of 2010 and is currently doing a radiology residency at NewYork-Presbyterian Hospital.

“The documentary was screened at the opening ceremony of COP18 in November and at the end of it I appeared on stage and delivered a few lines urging the audience to take action. Honestly, I was a bit nervous delivering my lines,” Dr. Al-Khori said.

“I felt very honored to be given this opportunity, especially because the subject of climate change has always been one I have deeply cared about. Growing up, I have always felt strongly about issues like recycling, preserving natural resources, and protection of endangered forests and animals. Furthermore, as a physician and therefore a humanitarian, I felt obligated to spread awareness about such a humanitarian cause.

“When I read the script, I felt that it was true to me and how I felt about the issue. There is no doubt that climate change represents the biggest challenge we face as humanity, perhaps even bigger than war and disease. The seriousness of the matter really hit me when I witnessed first-hand the panic and chaos caused in New York by Hurricane Sandy. People’s homes were destroyed. Access to clean water and electricity was lost in many areas, and there were major interruptions in transportation.

“Entire hospitals shut down, hospital computer systems crashed, and patients suffered enormous disruptions in care. I realized how important the issue of climate was, and how important it was to mitigate its consequences. Sandy may have not been directly caused by climate change, but its effects were definitely exacerbated by climate change.”

Dr. Al-Khori was part of a group that presented a film urging people to take climate change seriously. The documentary included several inspiring stories of people in different communities around the world striving to protect the earth’s natural resources.

The film also included examples of how Qatar, under the leadership of His Highness the Emir Sheikh Hamad Bin Khalifa Al Thani and Her Highness Sheikha Moza Bint Nasser, is making great strides in the direction of sustainability by establishing the Qatar Science & Technology Park and investing in solar energy research, for example.

“There is a small personal element to my role in the film, where some parallels are drawn between the goals of medicine and those of climate change prevention,” Dr. Al-Khori said.

“However, an important point from the film was that climate change is a universal issue that affects all people of this earth, no matter what their age, country, socio-economic status, or profession. You don’t have to belong to any particular group to care about and do something about the issue. We all share one earth, and are responsible for the damage we do to it. Since harming the earth will inevitably lead to our own harm, it is imperative that all of us act before it’s too late.”

Since the United Nations Framework Convention on Climate Change (UNFCCC) came into force in 1994, the Conference of the Parties (COP) to the UNFCCC has been meeting annually to assess progress in dealing with climate change. There are now 195 parties to the convention taking part in climate change negotiations. All parties to the UNFCCC were represented at the Doha conference.
Faculty members at WCMC-Q have been presented with awards in recognition of their dedication to students.

Students voted for their favorite professors and teaching assistants in the Excellence in Education awards, which culminated in a presentation ceremony at the university in April.

The ceremony was presided over by Dr. Marcellina Mian, acting associate dean for medical education, and Dr. Marco Ameduri, associate dean for pre-medical education, who announced the award winners in each of the 15 award categories.

Dr. Ameduri told the audience: “This is a ceremony at which all of us have the chance to get together and celebrate the true teaching excellence we have within our walls.

“I don’t see the awards as just being a competition. Yes, it is based on the votes of students and there will be winners in each category, but this is really a moment for us all to rejoice in the quality of the teaching that we have here.

“Thank you all for being so deeply committed to the success of our students and to the teaching mission of our college.”

Dr. Javaid Sheikh, dean of WCMC-Q, then presented the awards.

The foundation program award went to visiting assistant professor Dr. Renee Richer, while the winners in two categories for best teaching in the first-year pre-medical program were Dr. James Roach, visiting associate professor of chemistry, and Dr. Daniel Renzi, visiting assistant professor for mathematics.

Notable winners in the medical program section included Dr. Naim Haddad, associate professor of clinical neurology, for his Brain and Mind teaching sessions, and Dr. Thurayya Arayssi, associate dean for graduate medical education, for her Basis of Disease teaching module.

Paying tribute to the faculty at WCMC-Q, Dr. Mian said: “All of our faculty are very committed to the success of our students. They make every effort to ensure that each of our students reaches his or her maximum potential.

“Because we have a high faculty to student ratio, our students are often able to receive one-to-one teaching and individual programs to motivate them and push them forward.”

Dr. Richer was delighted to win an award. “It is such an honor to be recognized by the students like this,” she said.

“The greatest pleasure for all of us as educators is when we see students both enjoy and really grasp a subject. That is what makes teaching worthwhile.”

Winners of the Excellence in Education Awards 2013

Pre-Medical Program Awards

- Foundation Program: Dr. Renee Richer
- 1st Year Pre-Medical Program: Dr. Daniel Renzi
- 1st Year Pre-Medical Program: Dr. James Roach
- English Writing Pre-Medical Program: Mr. Ian Miller
- 2nd Year Pre-Medical Program: Dr. Moncef Ladjimi
- 2nd Year Pre-Medical Program: Dr. Kevin Smith
- Teaching Assistant: Mr. Timothy Becker

Medical Program Awards

- Molecules, Genes and Cells: Dr. Khaled Machaca
- Human Structure and Function: Dr. Rachel Koshi
- Host Defenses: Dr. Ali Sultan
- Brain and Mind: Dr. Naim Haddad
- Basis of Disease: Dr. Thurayya Arayssi
- Basis of Disease: Dr. Gerardo Guiter
- Medicine, Patients and Society I: Dr. Ziyad Mahfoud
- Medicine, Patients and Society II: Dr. Naim Haddad
- Clinical Clerkship: Dr. Badreldeen Ahmed
- Clinical Clerkship: Dr. Hassen Al Amin
- Clinical Clerkship: Dr. Thurayya Arayssi
- Clinical Clerkship: Dr. Bakr Nour
- 1st Year Visiting Faculty: Dr. Estomih Mtui
- 2nd Year Visiting Faculty: Dr. Robert Kim
- 2nd Year Visiting Faculty: Dr. Estomih Mtui
The global shisha fad has the potential to cause a public health catastrophe, warns Dr. Ziyad Mahfoud, WCMC-Q’s associate professor of public health.

The myth that shisha is a safe alternative to cigarettes has led to more people picking up the habit and putting themselves at risk of developing a range of serious diseases, said Dr. Mahfoud in an address given as part of the university’s Medicine and U public lecture series.

Dr. Mahfoud said: “Shisha smoking has become extremely popular in the last 20 years or so since the introduction of new forms of flavored tobacco, and it is being smoked by a much wider range of people.

“Previously, shisha was smoked only by the older generation and only traditional tobacco was available. Now you can get flavors like apple, pineapple and chocolate, and there has been a lot of misleading advertising falsely claiming that shisha is not dangerous to health. Some advertisements even claim shisha is good for you, which is completely untrue.”

Dr. Mahfoud explained that shisha is considered more socially acceptable for women than cigarettes, especially in the Middle East and Gulf region, and that shisha is cheaper than cigarettes in many places.

He added: “These factors have radically broadened the appeal of smoking shisha, making it attractive to young people and to both men and women.

“This is dangerous because shisha smokers put themselves at risk of developing serious illnesses like lung cancer, periodontal disease, respiratory illness and heart disease.”

A large part of the problem is the misconception that shisha smoke is milder and less dangerous to health than cigarette smoke, explained Dr. Mahfoud.

He said: “Many people think that because the tobacco smells and tastes fruity, it is somehow less harmful than normal tobacco, which has a
bitter taste. This is completely wrong - shisha tobacco contains at least as many toxins and carcinogens as traditional tobacco.

There is also a widespread belief that the water in the pipe filters the harmful toxins out of the smoke. This is also false. “Research has found that the water in the pipe does not actually filter out the toxins,” said Dr. Mahfoud.

Moreover, shisha pipes tend to produce more smoke than cigarettes, exposing shisha smokers to higher levels of dangerous toxins. In addition, the charcoal used to burn the tobacco in shisha pipes produces very high levels of harmful carbon monoxide, which is inhaled by the smoker.

“Because of the charcoal, shisha smokers can be exposed to 20 to 30 times more carbon monoxide than cigarette smokers,” added Dr. Mahfoud.

Another problem is the aluminum foil on which the charcoal is burned. The foil releases poisonous heavy metals, which are inhaled by the smoker.

The cooling effect of the pipe is misleading, said Dr. Mahfoud. “People think that the smoke is less harmful because it is cooled by the water, but this is not true. The smoke still contains toxins, and it is the toxins that are harmful, not the heat.

“Shisha smokers need to know that the myths surrounding shisha are untrue, and to be aware that they are putting themselves at greater risk of developing serious, even fatal, diseases. People must also be aware that women who smoke while pregnant risk their babies being born with low birth weights.”

Dr. Mahfoud believes the enthusiasm for shisha smoking is a global phenomenon and that it will cause a public health crisis in the next 10 to 20 years, unless action is taken soon.

He said: “While shisha smoking is usually associated with the Middle East and North Africa, it is also very popular in the United States and Canada, the UK, right across Europe, and in India and parts of Asia.

“Although there have been no long-term studies on the effects of shisha smoking because of its relatively recent surge in popularity, we can infer that its long-term effects will be similar to those of cigarette smoking.

“For this reason, shisha smoking should be subject to the same legal restrictions as cigarettes are, and governments have an obligation to warn the public about the dangers of shisha smoking. If action is not taken, I believe we will see a significant rise in the number of smoking-related illnesses and deaths all over the world, which will put a great deal of pressure on both national and private healthcare providers.

“If we are not prepared for this, we will struggle to cope. But the best option would be to prevent these illnesses occurring in the first place.”

Dr. Mahfoud advocates public health campaigns that dispel the myths surrounding shisha and replace them with facts about the real health risks it poses. He says tobacco control laws must be widened to include shisha and enforced more rigorously. And he believes healthcare providers should offer smoking cessation services tailored specifically to shisha smokers.

He said: “We should not wait until this crisis is upon us, we should act now to prevent people from getting ill in the future.”

By John Hayward
The goal of WCMC-Q’s biomedical research program is to focus on the most pressing medical needs of the region. These include diabetes, metabolic syndrome and cancer. For women, breast cancer is the big killer but a study conducted earlier in the year by Hamad Medical Corporation, University of Calgary - Qatar, and Primary Health Care, found that less than a third of Arab women living in Qatar participated in screening for the disease.

At WCMC-Q, two separate research teams are working to improve our understanding of the disease and the methods with which it can be treated.

Breast cancer ranks among the most pernicious diseases affecting women, with one in eight at risk by the age of 70.

The World Health Organization (WHO) rates breast cancer as the most common cancer in women worldwide and the main cause of death from cancer among women globally. Despite the high incidence rates in Western countries, 89 percent of women diagnosed with breast cancer are still alive five years after their diagnosis. This is due to early detection and treatment.

Research figures from the National Cancer Institute in the U.S. estimated that in early 2013 there were already 232,340 women and 2,240 men who presented with new cases of breast cancer in the country and a staggering 39,620 women and 410 men had already died this year from breast cancer.

Breast cancer is defined as cancer that forms in tissues of the breast, usually the ducts (tubes that carry milk to the nipple) and lobules (glands that make milk). It occurs in both men and women, although male breast cancer is rare.

It comes then as no surprise that researchers, laboratories and health academics around the globe have turned the focus of attention on this problem by seeking to provide improved treatment, greater knowledge, better diagnostics and, dare to even suggest; a solution to the disease. At WCMC-Q the Tabrizi stem cell and

Researchers tackle scourge of breast cancer

Ghiabi is studying tumor microenvironment effect on breast cancer progression, stemness and metastasis
The incidence of breast cancer is increasing in the developing world due to increased urbanization and adoption of Western lifestyles.
we are capable of coming up with more effective therapy approaches to combat cancer.”

Ghiabi said another aspect of her work focuses on how breast cancer cells induce endothelial cells to undergo phenotypic changes that make them more potent in supporting tumor progression. “My initial observations support our hypothesis on the involvement of breast cancer cells in deriving endothelial cells into fibroblasts that can actually help cancer cells grow better.”

Ghiabi’s work on the reciprocal interaction between endothelial and breast cancer cells is being conducted in the stem cell and microenvironment laboratory at WCMC-Q and at Paris XI University, France, and will be published in the near future.

“Focusing on breast and ovarian cancer is quite logical as these are the most frequent and the most deadly cancers affecting women. When we consider the role of women in our societies (often being the core of the family) a cancer is not only tragic for the patient but also devastating at the family level.

“We are therefore trying to have a group of solid scientists that unite their effort to find new solutions today and maybe the cure one day to this terrible disease,” said Dr. Tabrizi.

By Hilton Kolbe

The abstract

The work determines a role for tumor microenvironment (niche) in cancer progression that has been recently indicated. Several components reside in the niche that is partly responsible for the survival advantages acquired by tumor cells. Among them, endothelial cells - the building blocks of tumor vasculature - have been shown to have additional benefits than merely a conduit for supplying oxygen and nutrients. The research intends to show the critical role of the Akt-activated endothelial cells (E4ORF1) on breast cancer development, survival and invasiveness. Breast cancer cell (BCC) and cancer stem cell (BCSC) proliferation was measured by co-cultivating E4ORF1 with BCCs under adherent and non-adherent conditions.

Furthermore, BCSC enrichment by E4ORF1 was evaluated by analyzing the CD44+/CD24Low- population of BCCs by FACS and by assessing the expression of pluripotency markers using RT-PCR. BCSCs resistance to drugs was investigated by addition of metformin drug in the presence/absence of E4ORF1.

The involvement of E4ORF1 in BCC metastasis was shown by scratch and adhesion assays with/out E4ORF1 cells.

The results demonstrated that E4ORF1 was capable of conferring survival advantages to tumor cells including a 5-fold increase in the self-renewal capacity of BCCs and BCSCs; 4-fold increase in CD44+/CD24Low- population; up-regulation of pluripotency markers; a 2.5-fold increase in survival rate of BCSCs; and enhanced invasion/adhesion property of BCCs.

The data suggest a major role for E4ORF1 in BC progression, stemness, resistance and metastasis. This characteristic of E4ORF1 cells can be exploited in developing novel therapy approaches to combat BC more effectively.
Qatari interns join research program

Five new Qatari interns were welcomed on to the Biomedical Research Training Program for Nationals.

The six-month research training program is a unique opportunity for Qatari college graduates with an interest in biomedical research to gain hands-on experience in world-class research laboratories at WCMC-Q. The aim is to help build the sustainable scientific human capital in the country in line with Qatar National Vision 2030.

Dr. Khaled Machaca, associate dean for research at WCMC-Q, said the program demonstrates the commitment that the college has to developing human capacity and research opportunities in Qatar.

Dr. Machaca said: “The Biomedical Research Training Program for Nationals is now in its third year and we have seen some exceptional young Qatari graduates come through our doors, some of whom are still working with us in the research division.

“Part of the mission of Weill Cornell Medical College in Qatar is to conduct research at the cutting edge of knowledge and to train the next generation of Qatari researchers.”

One of those graduates is Najla Al-Haj, who majored in psychiatry and is now working with WCMC-Q’s Dr. Hassen Al-Amin, associate professor of psychiatry and a consultant at Hamad Medical Corporation.

Another of the new interns is Amna Al-Thani, who graduated in biomedical science from Qatar University. She is now working in the laboratory of Dr. Moncef Ladjimi, professor of biochemistry at WCMC-Q, and is studying proteins associated with Parkinson’s disease.

Amna said: “I saw the advert for the Biomedical Research Training Program and I was interested in joining WCMC-Q as it’s a leader in the science field and it would mean that I would gain more laboratory experience.”

Another intern, Fatima Fakhroo, graduated from Qatar University with a degree in statistics. She said the chance to work at WCMC-Q was something “she could not miss”.

“It’s an opportunity for me to start work and it’s an opportunity for me to combine what I’ve learned in my degree with what I’m interested in, which is biomedical science,” Fatima added.

She is now working with Dr. Karsten Suhre and his team on the best statistical methods to apply to metabolomics data.

Although the program is aimed at recent graduates who are interested in pursuing a career as a bench scientist, clinician or biomedical researcher, graduates are also accepted who have non-science degrees that can be used in the field of research administration.

By Richard Harris
A study conducted by researchers at WCMC-Q has identified a previously unknown genetic pathway that determines the aggressiveness of breast cancer tumors.

The study, authored by Dr. Lotfi Chouchane, professor of genetic medicine and immunology and assistant dean for basic sciences at WCMC-Q, and Dr. Jingxuan Shan, a postdoctoral research associate, could lead to the development of new treatments to combat the disease.

Dr. Chouchane and Dr. Shan focused their research on a gene known as TNRC9 and the way in which it interacts with another gene, labeled BRCA1. While both genes have long been known to be involved in the development of breast cancer, their precise functions and the ways in which they interact with each other to cause the disease were not understood. Through analysis of data from breast cancer patients and experiments on mice and tumor tissue, the study was able to identify a relationship between the two genes that gives rise to the proliferation of malignant tumor cells.

The study, entitled ‘TNRC9 downregulates BRCA1 expression and promotes breast cancer aggressiveness’ has now been published in the peer-reviewed Cancer Research, the journal of the American Association for Cancer Research.

Dr. Chouchane explained the findings of the study.

“It is known that mutations of BRCA1 causes the disease and people with the TNRC9 gene are known to be susceptible to breast cancer. While we are quite familiar with BRCA1, the role of TNRC9 is less well understood. The question we asked when we began the study was ‘what is the role of TNRC9 in breast cancer?’”

“Through our study of TNRC9 we discovered that the two genes have a direct relationship and we were able to show this with our experiments.”

In order to understand how TNRC9 leads to breast cancer, it is first necessary to know the role of the BRCA1 gene, said Dr. Chouchane.

“BRCA1 plays a role in suppressing tumors within cells. In fact, we consider BRCA1 to be the ‘guardian’ of other tumor-suppressing genes.
So, dysfunction or reduced expression of BRCA1 means that tumor-suppressing functions are inhibited, which causes tumors to grow.”

The study found that the TNRC9 gene is often amplified and overexpressed in breast cancer patients, particularly in advanced cases of the disease.

Dr. Chouchane said: “Where TNRC9 is over-expressed, we find that BRCA1 expression is diminished. The experiments that we carried out and the datasets we analyzed suggest that the expression of TNRC9 and BRCA1 are inversely correlated.”

The findings led Dr. Chouchane and Dr. Shan to surmise that a high level of TNRC9 expression causes low expression or ‘downregulation’ of BRCA1, leading to breast cancer.

In order to determine if this was the case, the researchers carried out in vitro tests on tumor tissue in the laboratories at WCMC-Q. They also performed in vivo tests on mice injected with human breast cancer cells.

In one group, the mice were injected with both breast cancer cells and so-called TNRC9 ‘knock-down’ genes, which prevent TNRC9 from functioning. In a second group, the mice received no TNRC9 knock-down genes. The results showed that the mice in the group with inhibited TNRC9 function did not develop tumors, while the mice in the control group did.

Dr. Chouchane said: “We assessed the behavior of the tumor cells in both groups of mice and we found that the average tumor size was considerably smaller in mice injected with the TNRC9 knock-down cells. In fact, the mice in this group had barely palpable tumor cells.”

The study also analyzed data from a group of breast cancer patients in Tunisia and found a strong relationship between mortality and high TNRC9 levels.

Dr. Chouchane added: “We concluded that there is a very clear correlation between the level of TNRC9 expression and the aggressiveness of tumor cells.

“This opens up new avenues because it presents a very attractive target for cancer treatment research. There is potential for future research to find molecules that disrupt the function of TNRC9, which could reduce the aggressiveness of tumors.

“The findings have unveiled new pathways involved in cancer pathologies, which could lead to the development of new therapeutic targets.”

By John Hayward
In their spare time, students have shifted their focus of attention to improving the lives of campus assistants and cleaners by providing computer training and basic English language tuition classes as part of the Reach out to Asia (ROTA) program.

The turnout has been impressive with large numbers of workers turning up for the free tuition, which has been overseen by the college’s associate professor of English, Dr. Rodney Sharkey. “We have been a bit overwhelmed by the response,” Dr. Sharkey said. “But we have managed to accommodate all the people who were interested in learning IT and improving their English skills. Next semester we are hoping to make even more places available for those interested and we will also be starting classes for the cleaners who work in the Student Center.

“For many of these migrant workers, it is a major battle to improve their English skills. They are keen to learn because it is a great asset in their daily lives,” he added.

The group of IT and English students gathered on campus in May for the end-of-program celebrations where lunch was served and certificates of completion awarded. Prizes were also awarded for enthusiasm and outstanding performance in the program. Participants voted for Inesh Kumar, from Sri Lanka, who works as a cleaner in the WCMC-Q storeroom. Inesh won the main prize for putting in the most effort and he was delighted with his new iPad.

Pre-medical student Aisha Khalid is president of the WCMC-Q ROTA Teaching Club and she handed out the certificates and prizes. “This has been such a wonderful opportunity for all of us as students to do something meaningful and helpful for others,” Aisha said. “Together with my fellow students, we were all very happy to be involved in this program. It means so much to the workers and it will increase not only their work skills and job opportunities but it will also contribute to the improvement of their lives.”

Gita Bhandari, a cleaner at WCMC-Q, who left Nepal for a better life in Qatar more than two years ago but with a limited grasp of English language skills, said she was very happy that she could benefit from the program and improve her English. “It is very important to be able to speak English properly. It makes my life easier and I can now express myself a lot better,” she said. Gita was awarded a certificate of completion and hopes to continue with the program next semester.

Gary Rabang, from the Philippines, who has been working as an office assistant at WCMC-Q for nearly two years, completed a course in Photoshop and is now looking forward to attempting the advanced course next year. “This was such a good idea. It gives us an extra skill and it is all for free,” he said.

Dr. Sharkey said the programs benefited both the students, who learned new communication skills through their interaction with the workers, and the workers, who improved their life skills and English language proficiency by working with and learning from the students.

“There are winners on both sides,” he said, “and we are all very happy that our ROTA program has had such great impact so far. We are looking to build on this success by offering the programs to more people who may be interested in self-improvement and there are also plans to include a few more subjects.

“Thanks also go to Thomas Rooney in Facilities for helping us set up the running of the program.”
Prestigious initiative in global medical education

WCMC-Q has joined an elite group of prestigious universities promoting global dialogue and international exchange in medical education that aims to connect educators and students around the world.

The United States Educational Commission for Foreign Medical Graduates (ECFMG) has launched the Global Education Medicine (GEMx) initiative.

This will allow medical schools from around the world to establish strong relationships with other schools to provide students with a wide range of high-quality educational opportunities.

ECFMG has formed an advisory committee that includes representatives of medical schools from countries including Australia, India, Ireland, Mexico, and Qatar, as well as representatives from ECFMG’s non-profit foundation, the Foundation for Advancement of International Medical Education and Research.

WCMC-Q’s associate dean for global and public health, Dr. Ravinder Mamtani, has been selected to serve as a member of the GEMx advisory committee.

“Inclusion in this prestigious program means that we will now be able to provide even greater opportunities to our medical students,” said Dr. Mamtani.

“Through this mechanism that has been established, it will allow our students to apply for electives almost anywhere in the world in schools of their preference. It is a great opportunity. It is also a great opportunity for students of other accredited medical schools to come to WCMC-Q.

“This exchange between students is a step in the right direction. It will add to the experience of students. Health is a shared responsibility and for that we have medical education.”

Dr. Mamtani said Qatar became involved in this program because of the growing reputation of WCMC-Q as a provider of quality medical education and an active research program.

“Professional institutions and other leading medical education institutions are aware that Cornell has a branch campus in Qatar and that this campus provides high quality education comparable to the medical education program in New York and that our graduates are placed in very prestigious residency positions in the U.S.,” he said.

“Also, a wide range of presentations at international forums by our faculty is bringing WCMC-Q into the limelight. Indeed, this is a tribute to the high-quality work being done on our campus; the performance by our students who are doing as well as the U.S. and Canadian students; a very strong research program; high caliber faculty and clinical program; global health initiatives; dedicated staff and also community outreach efforts. That is how we came to be invited to participate in this program.”

WCMC-Q dean Dr. Javaid Sheikh welcomed the association with GEMx. “This is a facility that will be of significant benefit to our students and faculty. It is a tribute to the hard work and academic leadership shown and we are delighted to be associated with the Global Education Medicine initiative,” Dr. Sheikh said.

GEMx is an exciting new service that will facilitate and promote international exchange in medical education, providing medical schools and students with access to the two most essential components of effective exchange programs: information and community.

It will allow medical schools to promote their electives to students around the world, and to establish strong relationships with other schools to provide students with a wide range of high-quality international educational opportunities. Students will have access to accurate, comprehensive information on available electives, including languages of instruction, program dates, prerequisites, curriculum, and fees.

They will be able to evaluate and compare electives to find the opportunity that best fits their career objectives and interests, and apply directly to these electives using the GEMx application system.

Development of the web-based GEMx application system is underway and ECFMG expects to launch a pilot of the new service in late 2013.

The Philadelphia-based ECFMG is a world leader in promoting quality health care to physicians, members of the medical education and regulatory communities, health care consumers, and those researching issues in medical education and health workforce planning. ECFMG also evaluates whether international medical graduates are ready to enter U.S. graduate medical education programs and offers a variety of other programs for international medical graduates and the entities worldwide that educate, train, register/license, and employ them.

ECFMG’s organizational members are the American Board of Medical Specialties; American Medical Association; Association of American Medical Colleges; Association for Hospital Medical Education; Federation of State Medical Boards of the United States, Inc.; and the National Medical Association.
Students’ work immortalized in print

A diverse collection of artworks created by students was released with the publication of the third edition of Between Seminar Rooms.

The compendium is released each spring and comprises poetry, short stories, autobiographical literature, photographs, paintings and drawings, among other works.

The book was launched on April 1 at an event held in the college’s student lounge, which featured musical performances by students and readings by contributors.

Second-year pre-medical student Ayesha Khalid began with a reading of her piece The Other Home, which was followed by excerpts from works penned by fourth-year medical student Moath Hamed, third-year medical student Navid Iqbal and third-year medical student Afaf Osman, among others. All of the readings were received with wild applause from the audience and words of encouragement from event coordinator Dr. Adam Larson, visiting lecturer in English as a second language.

Dr. Larson explained the ethos of Between Seminar Rooms.

“The book is a place where we can showcase the talents of our students beyond the classroom,” he said. “We appreciate that our students enjoy expressing themselves in a very wide variety of ways, so we accept submissions of nearly anything, from stories, comic strips and poems to photographs and even recipes.

“There are some excellent pieces of work in this book and there is a great sense of humor running all the way through it.”

Dr. Larson paid tribute to the sponsors of Between Seminar Rooms - Dr. Marco Ameduri, associate dean for pre-medical education, and his department - for their continued support for the book.

Students were also keen to register their appreciation. Moath Hamed, who contributed a literary piece entitled Rapid Eye Movement, said: “This is the third time I have contributed to Between Seminar Rooms - I really enjoy the process of writing and the opportunity to be published. I enjoy writing for its own sake but I think it is also a useful exercise for developing the ability to communicate effectively, which is helpful because in the future I will need to give patients a narrative about their condition and their treatment that they can understand and engage with.”

Copies of Between Seminar Rooms are available free from WCMC-Q’s Writing Center.

By John Hayward
The three best book reviews written by foundation students were announced at the culmination of WCMC-Q’s foundation extensive reading program.

Participating students, all of whom were Qatari nationals, gathered in the university’s DeLib Reading Room to see Shaikha Al Thani, Hamad Al Muhannadi and Hanof Ahmed awarded certificates in recognition of the quality of their reviews.

Dr. Rachid Bendriss, visiting lecturer of English as a second language, introduced the winners and explained the purpose of the program.

He said: “The quality of the book reviews has been very impressive and it was extremely difficult to choose the top three, so Shaikha, Hamad and Hanof truly deserve our congratulations. The aim of the program is not only to help foundation students improve their English language skills but also to encourage them to develop a love for literature and reading.

“From the insights you have given in your reviews it is clear that many of you have done just that.”

Shaikha, who reviewed As I Lay Dying by Nobel and Pulitzer Prize-winning author William Faulkner, said: “At the beginning I found Faulkner’s writing style difficult and the story hard to follow because it jumps between characters and scenes a great deal. But once I acclimatized to his style I loved the book and found it had incredible depth and subtlety.”

Hamad reviewed J.D. Salinger’s A Catcher in the Rye. He said: “The book really makes you identify with Holden Caulfield and I just couldn’t put it down. I’m really encouraged to read more and I notice in class that my English skills have improved dramatically.”

In Fall 2012, Dr. Bendriss launched the foundation extensive reading program. Foundation students chose three books to read and gave their thoughts on them to their peers in class presentations, weekly reading circles and by contributing to writingmajlis.com, an online blog. The final stage of the course saw students write reviews of their third book for publication on the official WCMC-Q Distributed eLibrary website.

Dr. Bendriss explained the approach.

“Studies have proven that extensive reading is one of the most effective methods of language acquisition,” he said.

“Students see marked improvements in their vocabulary, grammar and the way they structure sentences, and the ideas they put forward become more sophisticated. These are clearly skills that will help them to study the complex material of the pre-medical and medical courses more effectively.”

Reviews written by students for the reading program can be viewed via http://qatar-weill.cornell.edu/elibrary/
Thirty-five of the world’s newest doctors received their M.D. degrees in a ceremony held at Qatar National Convention Centre.

The students of the Class of 2013 took to the stage to receive their U.S. accredited medical degrees in front of an audience of proud family members, friends and WCMC-Q faculty who had come to cheer them on.

Dr. Javaid Sheikh, dean of WCMC-Q, was in attendance to read the Hippocratic Oath and pay tribute to the achievements of the university’s largest ever graduating class.

Dr. Sheikh said: “It gives all of us at Weill Cornell Medical College in Qatar great pleasure to be here to formally acknowledge our graduates as doctors for the first time.

“The members of the Class of 2013 have earned the right to enter the medical profession through their great commitment to their studies, their compassion for people in need of care and their unfailing intellectual curiosity.

“These talented young physicians will now go on to take their places in the international medical community, contributing the skills and knowledge they have learned here in Qatar to the goal of improving human lives in this region and across the globe.

“We have no doubt that they will be wonderful ambassadors for Qatar and for WCMC-Q, contributing to the growing international reputation that both have for pursuing excellence in higher education.”

The event heard an address from student speaker and graduate of the Class of 2013, Dr. Zaid Tafesh.

Dr. Tafesh said: “A physician is someone who strives to master the art of medicine, and thus a physician must be someone that values a human life on all levels. So to my classmates and dear friends, always maintain your dedication, reliability and companionship that define you so well.

“For it is these very qualities that will allow you to value the life of your patients and to practice medicine as the great physicians you are all destined to be.”

Including the 35 new graduates, WCMC-Q has now produced a total of 147 doctors since the university was inaugurated in 2002. This year’s graduating class comprises 15 men and 20 women, representing 19 different countries.

Graduates of WCMC-Q receive their qualification from Cornell University, the first and only U.S institution to offer its M.D. degree overseas.

Also in attendance was Dr. Laurie Glimcher, dean of Weill Cornell Medical College in New York.

Dr. Glimcher said: “I am delighted to have the opportunity to witness the Class of 2013...”
receiving their medical degrees and to offer them my warmest congratulations.

“The success of the Class of 2013 is testament not only to their own hard work and dedication, but also to the ongoing progress of Weill Cornell Medical College in Qatar and its goal of advancing excellence in medical practice throughout the Middle East.

“We look forward to building on this success in collaboration with our partners here in Qatar.”

Dr. David Skorton, president of Cornell University, addressed the audience via a recorded video message.

He said: “It is my great pleasure to celebrate the commencement of the Weill Cornell Medical College in Qatar Class of 2013. Members of this graduating class have worked with great commitment toward their medical degrees, and along with successful completion they have earned our warm congratulations and good wishes.

“At this important moment in the life of the medical school, we gratefully acknowledge the leadership and support of His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar and Her Highness Sheikha Moza bint Nasser, chair of Qatar Foundation. They have been visionary in their aspirations for their people, and most generous in their commitment to this medical college.”

Top students scoop awards at Convocation 2013

The most talented graduating students of WCMC-Q’s Class of 2013 were handed awards recognizing their academic achievements at the university’s Senior Honors Convocation ceremony.

The event was attended by Dr. Laurie Glimcher and Dr. Antonio Gotto, co-chair of the WCMC-Q Joint Advisory Board.

Awards were also presented to faculty members, including the Senior List award, which honored eight WCMC-Q and two WCMC-NY faculty members for their commitment to excellence in teaching.

Senior Honors Convocation Class of 2013: Awards Winners in Full

**Student Awards- Pre-Clinical Courses**

- Excellence in the Molecules, Genes and Cells Course: Khawla Ali
- Excellence in the Human Structure and Function Course: Khawla Ali
- Excellence in the Host Defenses Course: Ladan Davallow Ghajar
- Excellence in the Medicine, Patients and Society I Course: Ladan Davallow Ghajar
- Excellence in the Brain and Mind Course: Khawla Ali
- Excellence in the Basis of Disease Course: Co-awarded to Ladan Davallow Ghajar and Khawla Ali
- Excellence in the Medicine, Patients and Society II Course: Khawla Ali
- Excellence in the Pre-Clinical Curriculum: Khawla Ali

**Student Awards - Clinical Courses**

- Excellence in Internal Medicine: Co-awarded to Sadeer Al Kindi and Fadwa Ali
Excellence in the Medicine, Patients and Society III Course: Rana Emam
Excellence in Neurology: Setareh Salehi Omran
Excellence in Obstetrics and Gynecology: Sundus Mari
Excellence in Pediatrics: Ladan Davallow Ghajar
Excellence in Primary Care: Co-awarded to Ladan Davallow Ghajar and Iqbal El Assaad
Excellence in Surgery: Tarrek Hegab

Student Awards - Senior Awards
- Leadership in Medicine Award: Ladan Davallow Ghajar
- Biomedical Research Award: Co-awarded to Sadeer Al-Kindi and Fadwa Ali
- Outstanding Community Service Award: Co-awarded to Abdullah Firoze Ahmed and Jowhara Al-Qahtani
- The Good Physician Award: Zaid Tafesh
- Student Leadership Award: Rana Emam
- Outstanding Public Health and Community Medicine Research Award: Ladan Davallow Ghajar
- Global and Public Health Award of Merit: Maryam Ayaz

Faculty and House Officer Awards
- House Staff Teaching Award: Dr. Mohammed Yousif, Department of Surgery, Hamad Medical Corporation
- The Senior List: WCMC-Q Faculty: Dr. Hassen Al Amin, Dr. Thurayya Arayssi, Dr. Gerardo Gutier, Dr. Wafir Hamad Ibrahim, Dr. Bakr Nour, Dr. Pablo Rodriguez del Pozo, Dr. Dora Stadler, Dr. Basim Uthman. WCMC-NY Faculty: Dr. Mark Pecker, Dr. Joseph Safdieh
- Humanism in Medicine Award: Faculty: Dr. Mohamud Verjee. Student: Rana Emam
- Excellence in Pre-Clinical Teaching Award: Co-awarded to Dr. Gerardo Gutier and Dr. Rachel Koshi
- Excellence in Clinical Teaching Award: Dr. Bakr Nour

Khawla Ali takes the Hippocratic Oath
Sadeer Al Kindi and Zaid Tafesh check their appearances
Haya Ahram listens intently
WCMC-Q congratulates youngest medical school graduate

At just 20 years old, Iqbal El-Assaad is the youngest student to ever graduate from WCMC-Q.

Iqbal, who is Palestinian but born and raised in Lebanon, arrived at WCMC-Q to start her pre-medical studies aged just 14. Six years later she successfully completed the challenging M.D. course to become probably one of the youngest doctors in the world.

She said her inspiration has been Palestinian refugees, particularly children, who are often desperately short of medical care.

"Those children and the upcoming generations need a doctor to heal their wounds and someone to be by their side as an advocate to guide them and light their path during their most difficult stages," she said.

To begin her medical education at such a young age, Iqbal graduated from high school at 12 years old and with the assistance of a scholarship from Qatar Foundation secured a place in the medical program at WCMC-Q.

"My dad tells me that when I was really younger, like two and a half years old, I used to learn from my other siblings," she said. "I learned how to count from one to 10 just by myself and listening to my brothers and sisters who were reciting homework tasks."

From kindergarten - where teachers saw that she was advanced for her age - Iqbal went straight to year 2 and it has been a steady progression of jumping classes through primary and high school since then. She also has an older brother who finished high school when he was 14 and is now into his second year of a PhD in physics at Lyon University.

Currently Iqbal’s interest is in pediatrics and she is also thinking about taking a pediatric cardiology fellowship in the future. She was drawn to pediatrics because she grew up hearing stories about Palestinian parents and their children suffering because they could not afford treatment. Soon she will be leaving for residency at the Cleveland Clinic for Pediatrics, in Cleveland, Ohio but hopes to return to the Middle East to work.
Another milestone was celebrated in the 10-year history of WCMC-Q when 29 high achieving pre-medical students were named on the Dean’s Honors List at a ceremony on the Hamad Bin Khalifa University campus.

Students who successfully earned a 3.75 GPA or higher in the fall 2012 term were inducted to the Dean’s Honors List. The event is now an annual fixture of the college’s academic calendar.

WCMC-Q’s dean, Dr. Javaid Sheikh presented the awards and congratulated the students on their impressive academic achievements. He also encouraged the students to continue to strive for excellence.

“I am delighted to applaud the exceptional performance of these students as they are recognized for this significant academic honor,” said Dr. Sheikh.

“The Dean’s Honors List reflects the high caliber of WCMC-Q’s student body and it is a tradition that is becoming firmly entrenched in the college.

“These young men and women have demonstrated an outstanding level of work to achieve this honor and their commitment and talent is inspiring to all at WCMC-Q. We are proud to support them and help them achieve their undoubtedly remarkable potential.”

Dr. Dietrich Büsselberg, professor of physiology and biophysics and assistant dean for student affairs gave the opening speech while WCMC-Q’s assistant professor of writing, Dr. Rodney Sharkey, delivered the keynote address.

Dr. Sharkey said: “As these excellent students continue to excel, they confirm for us the value of hard work, determination, self-belief and the value of a commitment to improving the lives of others. They are to be commended for their sterling efforts.”

**Dean’s Honors List**

A career in emergency medicine

Emergency medicine is the ultimate team sport where specialists, physicians and paramedics work together under extreme pressures in any number of life-threatening events, students at WCMC-Q were told.

The analogy was made by Dr. Peter Cameron at a forum of the college’s Emergency Medicine Interest Group.

Dr. Cameron is the chairman and head of the emergency department at HMC and president of the International Federation for Emergency Medicine. He leads a new multi-disciplinary team that is tasked with transforming emergency services across all of HMC’s hospitals. It was his first visit to WCMC-Q, where he addressed medical students and staff and encouraged current students to consider a career in emergency medicine at HMC after graduation.

“Hamad is currently undergoing an extensive program of redevelopment and construction that will place it at the forefront of emergency medical services of a similar standard to the best hospitals in the world,” Dr. Cameron said.

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A comprehensive review of Hamad’s emergency department practices has led to improvement recommendations based on international best practices that have been implemented rapidly by a globally recognized multi-professional team.

“We now have an exceptionally strong team of local and international experts to lead the continuing transformation of our emergency medical services. Our recruitment strategy is designed to attract even more new emergency specialists and retain the best of our trainee emergency doctors. Our objective is to transform our emergency department into a world leading emergency center, ensuring improved patient care and satisfaction.”

Hamad General Hospital (HGH) has one of the busiest emergency departments in the world, treating between 1,200 and 1,500 patients on an average day. The emergency department is supplemented by services provided at Al Khor and Al Wakra with the most serious cases handled at HGH.

Qatar is in a unique position, and with a thriving economic base, among very few countries capable of large scale implementation of quality healthcare facilities, said Dr. Cameron.

He added: “Under the visionary leadership of the Emir, His Highness Sheikh Hamad Bin Khalifa Al Thani and Her Highness Sheikha Moza Bint Nasser there is a desire and willingness to transform the health system in Qatar.”

Dr. Cameron said the emergency department at HMC provided both a stimulating and challenging environment where young physicians can develop and be exposed to a wide range of useful and often rare medical experiences. This was largely because of the diverse population and the influx of temporary migrant laborers from mainly underdeveloped countries who present with a range of uncommon diseases.

In a country where nearly half the population is obese and half of the population aged over 40 suffers from diabetes that will invariably lead to further serious health problems including heart disease and renal failure, there will be an increasing need for young physicians to consider a career in emergency medicine in Qatar, Dr. Cameron said.

“It is not a career suited to everyone,” he warned but he encouraged students with an interest in emergency medicine to seriously consider the opportunities available at HMC.
A yellow fever epidemic in Sudan

The worst outbreak of yellow fever seen for 20 years and the prospect of the virus taking hold on the Arabian Peninsula was the focus of a talk organized by WCMC-Q’s department for global and public health.

The lecture was held in January and delivered by Aly Verjee, a senior researcher with the Rift Valley Institute based in Kenya.

Mr Verjee’s talk was based on the recent epidemic of yellow fever in Darfur in Sudan that began in September 2012, peaked in October and November and tailed off in January 2013. This followed a sustained immunization campaign by the Sudanese government, the World Health Organization (WHO) and non-governmental organizations (NGOs). It was the WHO that described the outbreak as the worst for 20 years.

In the 1930s it was not believed that yellow fever, which has a mortality rate of 20 per cent, was found in Sudan. But with the advent of air travel the country became a major transit post and the disease arrived. A spraying campaign against the Aedes aegypti mosquito that transmits the virus, along with a vaccination program, brought the disease under control. But by the 1980s yellow fever had re-emerged and has remained in the region ever since due to re-infestations of the Aedes mosquito and a drop in vaccinations. Currently the disease is endemic in a huge swathe of sub-Saharan Africa from the east to west coastline and it is also found in South America.

Until recently, however, the virus was not considered to be a major problem in Sudan but Mr Verjee suggested that the current socio-political situation in Darfur may have been a contributing factor as conflict and human displacement always have a negative effect on public health. There have also been no sustained vaccination programs.

He said: “Public health has clearly taken a back seat in Darfur and that is linked to trust. Trust has been eroded between local populations and the government which may have led to people in certain areas not seeking treatment until it was too late.”

But he added that the Sudanese government, with aid agencies, has reacted quickly to the outbreak of the epidemic and three million people have since been vaccinated with a further two million to follow. Reported cases of the virus have reached around 1,000 and there have been
about 200 deaths although there may well be unreported outbreaks.

Mr Verjee also raised the prospect that the disease could one day reach the Arabian Peninsula, particularly the western coast of Saudi Arabia. The Aedes aegypti mosquito is already found in Jeddah and carries dengue fever but for some unknown reason no Aedes mosquitoes in Asia have been found carrying the yellow fever virus, despite dengue fever being rampant on the Indian subcontinent. However, with the mosquitoes now found in southern Egypt the potential remains for the disease to spread east.

Symptoms and pathology

Yellow fever is a viral, hemorrhagic fever of the same category as ebola although the disease is most closely related to dengue fever—the latter, however, has a mortality rate of only five per cent.

The incubation period for yellow fever after being bitten by an infected mosquito is between three and six days with sufferers then experiencing a high fever, myalgia and vomiting. Most patients then recover but some — after a period of apparent remission — may then suffer jaundice, vomiting, general hemorrhaging, hepatic fever and death.

The disease is maintained in nature by monkeys, which are believed to be the reservoir of the virus. Although more naturally found in forests, where deforestation occurs the mosquitos are well adapted for life in an urban environment, laying their eggs just above the water line in all manner of containers—, bottles, barrels, discarded tires, plant pots and the like. The eggs can hatch in as little as two days and traditional preventive measures like mosquito nets are not always effective as the insect is active during the day.

In the 1930s the disease was found as far north as southern Europe, the U.S. as well as India and Asia. Historically, too, it has been geographically widespread; the population of Philadelphia in 1793 was decimated by 20 per cent as a result of the virus.

FACT FILE

- Vaccine developed by Max Theiler who won the 1951 Nobel Prize in Physiology or Medicine for his discovery;
- In Africa, an estimated 508 million people living in 32 countries are at risk;
- The first written evidence of a yellow fever epidemic occurred in the Yucatan in Mexico in 1648;
- Worldwide there are 300,000 annual cases resulting in 60,000 deaths;
- There is no specific cure for the disease.
Students excel at Match Day

Weill Cornell Medical College in Qatar is celebrating after 31 students were offered residency places at hospitals for after they graduate.

The annual Match Day event, on March 15, was held at the WCMC-Q campus in the presence of family, friends, faculty and staff members where the students learned in which hospital they would be doing their residency training for the next two to seven years of their medical careers.

Eight WCMC-Q graduates will now be going to the internationally respected NewYork-Presbyterian Hospital, two to Hamad Medical Corporation (HMC) and the 21 others are heading off to equally impressive hospitals in the U.S.

WCMC-Q dean, Dr. Javaid Sheikh congratulated all the students and wished them well for the rest of their careers.

Dr. Sheikh said: “This is a fantastic achievement by our students. These impressive results are a wonderful tribute to their hard work and effort as well as a clear demonstration of the quality of education they have received at WCMC-Q. Our faculty and staff are very proud of each and every one of them.”

For Mason Al Nouri, HMC was the place of choice for his residency in orthopedic surgery. Mason said his time at WCMC-Q had been great preparation for the future.

He said: “It’s been six years and it’s been a great experience. From the start it’s been a whole rollercoaster of adapting to new information and medical knowledge and it prepares you well for residency as you need to learn a lot in a short space of time.”

Mason added that he applied for HMC because of its reputation.

“Orthopedic surgery is a growing field that I really wanted to pursue,” he said, “and I wanted to pursue it at an institute that is well known and good and HMC is the best place in the region.”

While Mason is at HMC, Haya Ahram will be taking a three-year residency in family medicine at University of Connecticut School of Medicine in the U.S.

Of her time at WCMC-Q, she said: “It’s been wonderful. Education-wise it’s been excellent, help was always there and the environment was always warm and friendly.”

Haya said she chose family medicine as it will allow her to treat a wide range of ages, conditions and pathogens and allow her to provide continuity of care to the whole family. In the future she said she might pursue a fellowship in palliative care and possibly even enter the world of academia – although she would always want to continue practicing as a clinician.

Match Day is an intensely competitive experience that can shape budding medical careers. It is the culmination of a four-year journey for graduating medical students, one of the final hurdles before graduation but equally important in their emerging careers in medicine.

More than 40,000 graduating medical students around the world competed for approximately 25,000 residency positions in the largest match in the National Resident Matching Program’s history. More than half of U.S. seniors matched to their first choice and graduating students from WCMC-Q showed similar results.
A summer of research for essay winners

Three Qatari high school students will be jetting off to New York on summer research scholarships after winning WCMC-Q’s annual Healing Hands essay contest.

The competition is now in its sixth year and gives local high school students the chance to spend time in the research laboratory of Dr. Ronald G. Crystal at Weill Cornell Medical College in New York. This year’s essay theme was Caring Without Borders with the question asking the entrants to write about how they would ensure the health of the victims of an imagined humanitarian crisis.

The essays were judged by a panel of experts from WCMC-Q and the eventual winners chosen. These were Kholoud Essa Abu-Holayqah of Al Bayan Education Complex for Girls, Naima Abdulrahman Aloobaidli from Debakey High School for Health Professionals at Qatar, and Salah Majid Mahmoud from Qatar Academy.

Dr. Javed Sheikh, dean of WCMC-Q, said the Healing Hands competition was a chance for the college to get young people excited about medicine and interested in studying at WCMC-Q.

He said: “This is the opportunity of a lifetime for these three winners. To be so young yet to be welcomed into a professional research laboratory is an experience they will never forget. Under the care of Dr. Crystal, they will learn exactly what the research process involves, the care and precision needed, and the dedication of the researchers.

“It will be an unforgettable intellectual journey for them.”

Noha Saleh, director of student recruitment, said the Healing Hands contest is a wonderful way to introduce potential students to WCMC-Q. She said that as part of its community outreach program, WCMC-Q encourages Qatari nationals who are considering a career in medicine to learn more about WCMC-Q and take an active interest in college life and healthcare issues.

For Naima Abdulrahman Aloobaidli the prize means she can experience the career she hopes to one day pursue. She said: “I’m looking forward to learning more about the medical field. I’m extremely interested in a career in medicine and I would just like to thank everyone.”

Kholoud Essa Abu-Holayqah said she hoped to study at WCMC-Q and thought that being chosen as one of the three winners would now help her application.

She added: “I’m interested in becoming a surgeon in later life but I never thought I would win.”

Fifteen-year-old Salah Majid Mahmoud has his father to thank for bringing the essay contest to his attention.

Salah said: “My dad brought me the application papers and I thought it was a really good question. Medicine is important to me and I’d like to be a physician when I grow up. I am proud of my country and I’d like to help it by being a doctor.”

The three winners and their nominated guardians will now spend two weeks in New York, hosted by Dr. Crystal, the chairman of genetic medicine at WCMC.

Everyone who entered the Healing Hands contest also received a certificate of appreciation and three received an honorable mention – Dana Mohammed Alyafei of Al Kawthar Secondary School for Girls; Fahad Saad Al-Suwaidi, of Nasser Al Atteya Secondary Independent School for Boys; and Sarah Jassim Al-Kuwari, from Debakey High School for Health Professionals at Qatar.
A leader of the future

Nationals Training Program coordinator Yassir Hussain was among a dynamic group of young high-achievers invited to attend the prestigious Georgetown Young Leaders Seminar.

Yassir, who works in WCMC-Q’s research division, was one of 18 young achievers from the MENA region who were invited to the seminar, which was held at Georgetown University School of Foreign Service in Qatar (SFS-Q) during April.

The two-day annual forum is organized by SFS-Q and the Institute for the Study of Diplomacy. It is modeled on the Georgetown Leadership Seminar held in Washington, D.C., and is described as a premier executive education and networking program focused on international affairs for senior leaders from the public, private, and non-profit sectors all over the world.

For Yassir, a Qatari national, it was an opportunity to meet and network with some of the sharpest young minds in the region.

“It was an interesting exercise,” he said, “because the people who attended are all talented and gifted in some kind of activity like politics, the environment and education and they were all selected to attend this seminar because they are most likely to play an important leadership role in society in the future.”

Yasser himself holds a bachelor of science degree with a focus on neurobiology from Cornell University in Ithaca, where he also worked as an undergraduate teaching assistant in organic chemistry for life sciences.

He said: “For me it was an honor to be selected and it was also a useful opportunity to make new friends and contacts both here in Qatar and across the Middle East.”

The seminar brings together a group of emerging leaders from the region to examine the most pressing global trends and international issues affecting them. The participants are chosen from many different communities including political/social activists, religious figures, journalists, scholars, government officials, NGO representatives, and corporate/financial executives.

Major themes explored at this year’s seminar included:

- The challenges and opportunities of the Arab Spring.
- Building sustainable, competitive economies.
- Global issues (e.g. environment, health, food security, and population).
- The influence of new and traditional media on international affairs.
- The rise of new economic powers and their impact on the global economy, international development, and worldwide energy resources.
Success for new lecture series

A training course in biomedical research methodologies run by faculty from New York and Qatar has proved a hit with graduate students, postdoctoral fellows and junior faculty.

The course - entitled Concepts in Biomedical Research Methodologies - attracted 166 subscribers, paving the way for the program to be repeated in the near future. Attendees, the majority of whom were Hamad Medical Corporation (HMC) physicians and clinical staff, heard 15 lectures over the course of two weeks on topics such as ethics in research, how to design clinical studies, how to write a scientific paper, the benefits of collaborative research and how to secure funding from the private sector.

Dr. David Hajjar, professor of biochemistry at Weill Cornell Medical College in New York, directed the course, while WCMC-Q faculty members Dr. Ziyad Mahfoud, associate professor of public health, and Dr. Amal Khidir, assistant professor of pediatrics, both delivered lectures. Lectures were also given by Dr. Hajjar and his New York colleagues Dr. Brian Lamon, Dr. Randi Silver, Dr. Curtis Cole and Dr. Lisa Kern.

Dr. Hajjar was encouraged by the level of support for the course.

He said: “I was extremely pleased with the reaction we got to the program. We started out with around 20 trainees from the medical school enrolled on the course, but when more people heard about it, enrollment blossomed to more than 165.

“We plan to offer the course again and to open it up to even more participants, including faculty and students at Qatar University. We want the course to be as inclusive as possible.”

Dr. Hajjar explained that many of the skills taught on the course are essential for ensuring success in research but are generally not addressed by medical degree programs.

“We are teaching skills and imparting knowledge that medical professionals are expected to pick up through experience outside of their formal medical training,” he said. “A medical degree is excellent at teaching the science of our discipline, but it will generally not explain something like how to discover new funding sources for research projects, a skill that can be extremely beneficial to a researcher’s career.”

The first of the course’s three phases began with a lecture entitled Fundamentals of Research Methodology and was followed by four further lectures addressing design of scientific studies, the use of biostatistics in medical research, information technology in research and translational informatics.

Participants then joined a tutorial session to review case studies related to the first five lectures. Lectures six to nine addressed community-based research, foundations of clinical research and trials, and ethical conduct of research in relation to both humans and animals, before a second tutorial session to review the material.

The final phase of the course consisted of six lectures, covering an analysis of a model scientific paper, the roles of the biotech and pharmaceutical industries in research, a guide to presenting research proposals, how to discover funding sources and the emergence of collaborative science, with the final lecture devoted to a summary of all of the concepts addressed by the program.

Dr. Khaled Machaca, associate dean for research, said: “We are extremely encouraged by the success of the methodologies course, both in terms of its popularity and the value that participants have gained from the subject matter that was taught. Not only does the course strengthen the healthy working relationship that WCMC-Q has with HMC, but it also serves to enhance the rapidly developing biomedical research culture here in Qatar.

“This success gives us the green light to go ahead and develop the course further and spread the benefits to even more medical professionals in Qatar.”
The Challenge: a day of exercise, education and enjoyment

Fifteen middle schools united when they took part in The Challenge – WCMC-Q’s health and physical fitness contest for schools.

The Challenge was part of WCMC-Q’s Sahtak Awalan: Your Health First campaign, which was launched in June 2012 and aims to interact with Qatar’s community and inspire them to lead healthy lives.

The participating schools, which were selected by the Supreme Education Council, each fielded a team of 10 students who then participated in a series of fun and educational games in front of an audience of their friends, families and high-profile guests. The students also held an exhibition in which posters they had created on the theme of healthy lifestyles were displayed. Topics included smoking, healthy eating and road safety.

In all, nearly 200 posters were on display at the exhibition and were judged by members of WCMC-Q’s faculty and the Supreme Council of Health. Hamada Al Sayed Ghazi, of Hamza Bin Abdul Muttalib School, was awarded first place and an iPad for his poster on the dangers of smoking. Dana Hassan Badar, of Al Bayan Girls Preparatory School, came second and Jihad Al Idriessi, of English Modern School, third. They both received iPad Minis.

The goal of The Challenge was to inspire young people and their families to embrace the opportunity to learn more about living a healthy lifestyle, so building a strong and healthy future generation.

His Excellency Abdullah Bin Khalid Al-Qtantani, Minister of Public Health and Secretary General of the Supreme Council of Health (SCH), said that the SCH has fully and actively supported the Your Health First (YHF) awareness campaign since it was first launched as it significantly contributes to achieving Qatar’s National Health Strategy (NHS) 2011-2016, which aims to enhance the wellness of the people of Qatar and includes amongst its several goals healthier lifestyles.

“The five-year YHF campaign primarily aims to educate both the Qatari and expatriate communities about healthy lifestyles, especially among the generation of the future. The Challenge, WCMC-Q’s health and sports contest for schools, basically aims to encourage school children and youth to opt for healthy lifestyles, and this is extremely important for the sustainable development of this nation” H.E. added.

H.E. also applauded the partnership and cooperation between private and public sectors in Qatar, as embodied in the YHF initiative for the benefit of the community.
“We are confident that the well-rounded YHF
campaign will eventually contribute to promoting
health awareness among Qataris and expatriates,
in line with the SCH’s strategy to build
a healthy and well-educated generation that
advances sustainable development in Qatar, in
keeping with Qatar National Vision 2030 which
rests on several pillars, one of which is the
pursuit of human development for a sustainable,
prosperous society,” H.E. concluded.

Dr. Javaid Sheikh, dean of WCMC-Q, said:
“This has truly been an inspiring event. The
Challenge has always been about educating our
young people and their families about the facts
pertaining to a healthy lifestyle, but doing so
in an enjoyable way. Today there has been lots
of laughter, lots of fun and lots of exercise but
I believe that every one of the students taking
part has also learned a little more about the
importance of staying healthy. I hope very much
that this message will spread across Qatar so
we can help create a healthy population able to
contribute in the future to a knowledge-based
economy.

“We would also like to take this opportunity to
thank all of our strategic partners. From the very
outset they have shown huge faith in the Sahtak
Awalan campaign and their support and contribu-
tions have been invaluable to its success.”

The Challenge was held at the Aspire Dome
on March 16. The physical fitness event saw lots
of competitive action as the teams raced against
each other in a series of activities. Many of these
involved dressing up in costumes that are related
to science and healthy lifestyles.

The schools taking part in The Challenge were:
Omar Bin Khattab Preparatory, Lebanese School,
English Modern School, International School
of Choueifat, Al Yarmouk School, Cambridge
School, Qatar Academy, Al Jazeera Academy,
Lycee Bonaparte, Doha British School, AbuBakr
Assedeeq Boys Preparatory, Al Bayan Girls
Preparatory, Hamza Bin Abdul Muttalib School,
Abu Obaida School and Amna Bint Wahab
Preparatory School for Girls.

The eventual winners in the boys’ event were
AbuBakr Assedeeq Preparatory School while
International School of Choueifat were crowned
champions in the girls’ class. Each member of the
winning teams received iPad Minis courtesy of
Vodafone Qatar who provided all the prizes for
The Challenge.

Lycee Bonaparte and Abu Obaida School came
second and third in the boys’ event while Lycee
Bonaparte and Cambridge School came second
and third in the girls’ category.

Dana Inaty, of the International School of
Choueifat, said: “In the rehearsals we didn’t
think we were going to win but we always had
our hopes up and in the end we came as a team
and won as a team.”

Ahmad Rimi and Nabil Kordy, the coaches for
AbuBakr Assedeeq Preparatory School, said: “It
was a very exciting day and we hope it will be the
same next year. Everything has been wonderful
and all of our students played really well to take
first place.”

Members of the winning teams received
medals while all participants received a certifi-
cate of appreciation. As well as the activities on
the field, there were various high-tech attrac-
tions for the audience during the intervals.
Parents and other spectators were able to test
their own fitness with equipment designed to
show them how fast they can run or how far they
can kick a football. The aim was to encourage
them to take measures to improve their lifestyles.

The Challenge will now become an annual
event in Qatar’s academic calendar and next
year it is expected that even more schools will
participate.

The Your Health First campaign aims to
educate both the Qatari and expatriate communi-
ties so that they can make informed, healthy,
lifestyle choices. The goal is to help create a
healthy population able to contribute to Qatar’s
knowledge-based society in line with the objec-
tives of Qatar National Vision 2030.
Life through a lens: filmmaker screens movies at WCMC-Q

Budding director Dr. Suzannah Mirghani treated students and faculty of WCMC-Q to a screening of two of her short films.

Dr. Mirghani presented her independently made films, *Hamour* and *Eddie*, at WCMC-Q as part of the college’s Literary Lecture Series, hoping to both entertain the members of her audience and inspire them to join Doha’s fledgling amateur film scene.

Dr. Ian Miller, visiting lecturer of English writing at WCMC-Q, also encouraged students to experiment with film as an art form. He said: “From our writing workshops we know that our students here at WCMC-Q have a great appetite for artistic storytelling. Making films is an excellent outlet for that creative drive.”

*Hamour* tells a fictional story from Doha’s fishing community, exploring the disparity between the lifestyles of the fishermen who bring in the catch and the customers who buy their produce. At once an entertaining tale about a group of fishermen who land a gigantic hamour and a biting social commentary, the film reveals the unseen lives of Doha’s working people, whose day-to-day struggles contrast markedly with the city’s conspicuous prosperity.

Discussing *Hamour*, which was shown at the Doha Tribeca Film Festival 2011, Dr. Mirghani explained how the medium of film allows directors to express themselves in a unique way through the juxtaposition of images, sound and storyline.

Speaking at the event in March, she said: “The beauty of film is that you can influence the mood of the audience by contrasting different images against each other and through music. For instance, the lives of the fishermen revolve around their fishing dhow, which probably looks much like fishing dhows did 1,000 years ago, but in the background we can see the modern skyline of Doha. The contrast draws you in and makes you think of the lives of the fishermen as somehow distinct from the identity of the city that most of us are familiar with.”

Dr. Mirghani, who is manager and editor of publications at the Center for International and Regional Studies of Georgetown University – School of Foreign Service in Qatar, used local people with no acting experience for both of her films, which were self-financed. In *Eddie*, starring Arnel Salim as the film’s eponymous hero, she tells the tragicomic story of a lonely street sweeper who borrows a jacket and tie in the hope of wooing a girl to have dinner with him. The film also stars Uday Rosario and WCMC-Q’s assistant professor of English, Dr. Rodney Sharkey.

Dr. Mirghani said: “Both films draw on the multicultural character of Doha and the interesting encounters between people of different cultures that are thrown up. There is a real wealth of untold stories to be dug up in Doha, offering lots of opportunities and inspiration for amateur filmmakers.”
Students walk the red carpet at Golden Stethoscopes awards ceremony

Students who have made an outstanding contribution to extracurricular activities were recognized at an awards ceremony held at the Hamad Bin Khalifa University (HBKU) Student Center.

The Golden Stethoscope Awards were presented to WCMC-Q students on 8 April at a glitzy event modeled on high-profile awards ceremonies like the Golden Globes and the Grammys.

Students entered the building along a red carpet and took part in a photoshoot, before settling down to a three-course meal and watching the awards being presented. The evening, which was organized by the Medical Student Executive Council, also featured musical performances by WCMC-Q students and a demonstration of the Palestinian dabke dance, given by students from across HBKU.

The awards acknowledge the efforts of students who organize or excel at extracurricular activities including sports, the arts and community building, which help to develop and enhance civil society at WCMC-Q. The winners of all the awards were decided by a popular vote among the WCMC-Q student body.

The outstanding student leader award was won by first-year medical student Rebal Turjoman, president of the WCMC-Q student government, while the outstanding club award went to the Student Research Association. First-year medical student Ahmed Saleh won the outstanding community developer award for the medical program, with first-year pre-medical student Sahar Mahadik clinching the same title for the pre-medical program.

Other notable winners included second-year medical student Min Kyung Choi for outstanding musical performance and Abdullah El Zafarany, also a second-year medical student, who won the Big Red Award for attracting large audiences to student events. Donney Moroney, director of student affairs and academic counseling, won the outstanding student advocate award, the only honor presented to a non-student.

Third-year medical student Yazan Abou-Ismail, one of the organizers of the event, was enthused by the positive reaction to the ceremony by students, many of whom took time out of their busy exam schedules to attend.

Yazan said: “In spite of the curricular pressures exerted on our students, these awards have highlighted our best leaders, athletes and talents. I hope the effort that has gone into creating this annual ceremony encourages more and more students to be involved and proactive at building the student community at WCMC-Q.”

Winners of the Golden Stethoscope Awards

- Outstanding Club Award: The Student Research Association
- Outstanding Student Leader: Rebal Turjoman
- The Big Red Award: Abdullah El Zafarany
- Outstanding Community Developer (Medical): Ahmed Saleh
- Outstanding Community Developer (Pre-medical): Sahar Mahadik
- Outstanding WCMC-Q Representation in Education City: Ahmed Hamed
- Outstanding Music Performance: Min Kyung Choi
- Outstanding Dance Performance: The Palestinian Dabke
- The Artistic Award: Fatima Al Baqali
- Most Valuable Players: Mohamad Abdulhai, AlHasan Sedeeq, Leen AlHafez
- Person of the Year: Yazan Abou-Ismail
- Outstanding Student Advocate: Donney Moroney
- Class of the Year: Class of 2018
Poor diet, unhealthy lifestyles a deadly choice

Qatar has overtaken the U.S. in the obesity stakes and people must do more to ensure a healthy future, free of diabetes and associated illnesses, for themselves and their children.

That was the message that came from a high-level symposium organized by WCMC-Q’s department of global and public health.

The event, which was co-sponsored by the Supreme Council of Health (SCH), was entitled “Emerging Trends in Health Care and Lifestyle Diseases: A Special Focus on Qatar”, and featured speakers from around the world. It was also an opportunity for the department of global and public health to launch the Journal of Local and Global Health Perspectives. This is an international peer-reviewed, open access journal from QScience.com. Dr. Ravinder Mamtani, WCMC-Q’s associate dean for global and public health and Dr. Albert Lowenfels from New York Medical College are the joint editors-in-chief and the aim is to provide a global perspective on health issues and to publish research into the application of public health strategies in diverse regions and environments.

The new journal was welcomed by Dr. Faleh Mohamed Hussain Ali, assistant secretary general for policy affairs at the SCH, who delivered the keynote remarks and welcomed the publication as a much needed and timely arrival for researchers, physicians and medical students.

“We are missing such journals and it is a welcome addition to the medical publications landscape and will also be a great contribution towards the health of our nation as a whole,” Dr. Faleh said. “This is something that shows perspective, both in local and international dimensions. Having something that looks at the scientific issues from a local and international perspective is a great benefit to us all.”

Dr. Javaid Sheikh, dean of WCMC-Q delivered a speech on “Optimizing Health Care through Education, Research and Clinical Programs”, while Dr. Mamtani spoke on the topic “Chronic Disease Risk Factors in Qatar: Recent Findings”.

Dr. Mamtani said recent research had shown that lifestyle diseases are of concern in Qatar. Obesity is an important risk factor and the number of people living in Qatar who are overweight is increasing. Obesity increases the risk of chronic diseases such as heart disease, hypertension and diabetes.

“Globally, 63 per cent of people die from noncommunicable diseases. In these illnesses the top four are cardiovascular conditions, cancer, respiratory diseases and diabetes and they constitute about 80 per cent of mortalities,” Dr. Mamtani said.

Prevalence of these diseases and risk factors are also widespread in Qatar. About 70 per cent of people in Qatar are overweight and 41 per cent are obese in recent data provided by the SCH.

“These diseases, as science has shown, kill prematurely, they compromise quality of life and we also know they are influenced by behavior,” Dr. Mamtani added. “Even though genetics is an important component, these issues can be prevented or their onset delayed.

“Often we think that we need to do a lot to prevent these illnesses. That is not the case. Often simply making some marginal changes will help. In the case of obesity, for example, as little
as eight to 10 pounds reduction in weight will contribute to improved health. Equally important, simple self-care approaches such as a healthy diet, regular physical activity and maintaining a normal body weight are immensely helpful in reducing the incidents of diseases such as diabetes."

That message was echoed by Dr. David Katz, the director of Yale University’s Prevention Research Center, and an internationally renowned expert on nutrition, weight management and chronic disease prevention.

Dr. Katz added that the problems Qatar faced were mirrored across the world.

He said: “Obesity threatens the U.S. future as much as it threatens the future of Qatar. These problems are global. Obesity is a major problem that leads to many illnesses and diseases.”

The symposium was told that 42 per cent of Americans are expected to be obese by 2030 and one third of all American adults will face problems caused by diabetes by 2050.

Dr. Katz blamed lack of physical activity, tobacco and poor diet as the main causes of early death by illness and it is something that we can all control in our daily lives. What is needed is a return to basic lifestyle choices, he said, stressing that personal motivation remains a crucial element in changing dietary habits, raising activity levels and adopting healthier options to ward off the possibility of illnesses such as cardiovascular disease, diabetes, obesity and cancer which have the highest mortality rates across the globe.

The symposium also heard speeches from Professor Stephanie Abbuhl, a leading women’s advocacy speaker from Pennsylvania University where she is the executive director of focus on health and leadership for women. Professor Abbuhl provided a perspective on advancing women in medicine and science.

Finally, Dr. Albert Lowenfels’ talk focused on health, disease and the intestinal microbiome. In his discussion he explained about the possible relationship between the gut bacteria and chronic disease such as obesity and diabetes. Further research is currently underway regarding the possible health effects of changing the intestinal microbes.

By Hilton Kolbe
Diabetes prevention campaigns critical to risk of heart attacks and strokes

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<th>Condition</th>
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<th>Stroke (%)</th>
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<td>History of diabetes</td>
<td>250%</td>
<td>200%</td>
</tr>
<tr>
<td>History of hypertension</td>
<td>150%</td>
<td>100%</td>
</tr>
<tr>
<td>History of high cholesterol</td>
<td>100%</td>
<td>50%</td>
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<tr>
<td>Smoking</td>
<td>100%</td>
<td>50%</td>
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<tr>
<td>No physical activity ≥10 min last month</td>
<td>50%</td>
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Diabetes tops the list of preventable conditions and risk factors associated with heart attack and stroke in Qatar, according to a study that appeared in the inaugural issue of the *Journal of Local and Global Health Perspectives*.

The article, “Prevention during the epidemiologic shift to chronic illness: a case control study of risk factors associated with cardiovascular disease in Qatar”, presents the results of a study conducted at Hamad Medical Corporation (HMC) in Qatar from June 2006 to June 2008. The study was led by public health researchers at Weill Cornell Medical College in Qatar and New York as well as physicians at HMC. It was supported by Qatar Foundation, the Weill Cornell Clinical and Translational Science Center, and the biostatistics, epidemiology and biomathematics research core of WCMC-Q.

“Diabetes is a very expensive disease that carries multiple risk factors for other serious health problems, and a considerable fraction of people with diabetes may not be aware of their diagnosis,” said study co-author Dr. Laith J. Abu-Raddad, associate professor of public health at WCMC-Q and director of the biostatistics, epidemiology and biomathematics research core.

“We need to understand the precise scale and nature of the problem. Our study indicates a need for preventive measures as well as a large-scale, nationally representative epidemiologic study on levels of diabetes and pre-diabetes in the population.”

Principal investigator and senior author of the study, Dr. Alvin I. Mushlin, professor and chairman of the department of public health at WCMC-NY, added: “Cardiovascular diseases have for some time been the leading cause of death worldwide.

“But high income countries in the Arabian Gulf region, such as Qatar, have experienced an especially dramatic increase in cardiovascular disease and other non-communicable and chronic
diseases, driven in part by major changes in population and lifestyle factors in recent years. Our study tried to estimate the association between five preventable risk factors and the development of heart attack and stroke.”

The five risk factors studied were diabetes, hypertension, dyslipidemia (high levels of cholesterol and other blood fats), smoking, and obesity.

The study recruited patients admitted to HMC with heart attack or stroke. Cases included both Qatari nationals and non-Qatari expatriates. Controls were randomly selected from unrelated inpatient and outpatient departments. Data collected included socio-demographic information, medical and family history, lifestyle characteristics, and depression assessments.

In Qatar today, expatriates and migrant workers account for more than 70 percent of the population. Thus, the Qatari nationals in the study were also studied as a sub-group, to determine if they have characteristics related to the development of cardiovascular disease that may distinguish them from others living in the country.

“Our study had some interesting findings,” said lead author Dr. Paul J. Christos, lecturer in public health in the division of biostatistics and epidemiology at WCMC-NY. “More than two thirds of the heart attack patients and half of the stroke patients were younger than 55 years; some were younger than 40. Men made up the majority of cases. Approximately 40 percent of participants were overweight and an additional 30 percent were obese.

“We found that diabetes increased the risk by more than four fold and was the strongest preventable risk factor for both heart attack and stroke. High blood pressure was the second major preventable risk factor for stroke and an important factor for heart attack. Low amounts of physical activity increased the risk of both heart attack and stroke by approximately 80 percent, while smoking increased the risk of heart attack two-fold.

“For the sub-group of Qatari nationals who took part in the study, diabetes, high blood pressure, high cholesterol, and smoking were also identified as potential preventable risk factors for cardiovascular disease. Additionally, these factors seemed to increase heart attack and stroke risk to a greater extent among the Qatari natives as compared to other groups.”

Dr. Mushlin added: “While the risk factors for heart attack and stroke are the same in Qatar as in the rest of the world, the magnitude of these factors in Qatar suggests that the effectiveness of altering these largely preventable risk factors is even more likely to have a significant impact.

“Designing population-level prevention interventions with awareness campaigns and supporting a culture of preventive health are critical for both Qatari nationals and the expatriate population.”

He explained that the study also reinforces the likelihood that special genetic factors may be increasing the severity of diabetes among Qatars. In collaboration with Dr. Ronald Crystal, he and other investigators at WCMC-Q and WCMC-NY have begun two grant projects sponsored by the Qatar National Research Fund to study genetic variability and susceptibility to type 2 diabetes in the Qatari population and the genetics of risk for retinopathy among Qatars with type 2 diabetes.

Additional study co-authors include Hiam Chemaitelly of the infectious disease epidemiology group at WCMC-Q, and Dr. Abdul Razak Gehani and Dr. Dirk Deleu of HMC.
Students get a taste of life at college

Students from high schools across Qatar sampled university life for two weeks during the Qatar Medical Explorer Winter Program.

Taking advantage of the winter holidays enjoyed by Qatari high schools, 26 male and female students from grades 10, 11 and 12 joined the program run by WCMC-Q during February.

Students were welcomed and introduced to the courses on offer at WCMC-Q in a session given by Noha Saleh, director of student recruitment. They then spent the first week taking lectures and laboratory sessions in chemistry, physics and biology, learning presentation skills and discovering the history of medicine in a lecture given by Dr. Hekmat Al Rouh, project coordinator in the global public health division. A highlight of first week was a visit to the Clinical Skills Center, when students had the chance to examine standardized patients and work with the center’s learning aids, including Harvey, the university’s hi-tech robotic dummy.

In the second week, the program was held at the Hamad Bin Khalifa University Student Center and saw students learn study skills, tips for passing tests and how to write effective personal statements. Dr. Pablo del Pozo, associate professor of public health, led a study session on medical ethics, while Dr. Amal Khidir, assistant professor of pediatrics, spoke about adolescent health. Dr. Chris Triggle, professor of pharmacology and assistant dean for admissions, presented an introduction to pharmacology.

During week one, students were divided into groups, assigned topics to research and tasked with presenting their findings to their peers on the final day of the program. Topics focused on some of the most pressing contemporary public health issues such as obesity, hypertension, diabetes, smoking, cancer, and road traffic accidents and trauma.

To demonstrate the holistic approach to learning at the university, Dr. Rodney Sharkey, assistant English professor, ran three workshops on poetry, understanding narratives and dramatic techniques. Paul Mussleman, information services librarian, introduced the students to the Distributed e-Library.

Throughout the two-week program, students received guidance about how to make their applications to WCMC-Q as strong as possible. The purpose of the program is to give high school students a taste of life at WCMC-Q, allowing them to make an informed choice about whether they are well suited to a career in medicine, as well as helping them through the admissions process, explained Syed Hasnain, student recruitment programs manager.

“We also give them plenty of guidance on how to get their application to the university in good order.”

Grade 11 student Abdulrahman Janahi, aged 16, was visiting from Omar Bin Khattab School for Boys.

He said: “I would love to become a doctor and I hope to be able to study at WCMC-Q. “Coming to the university is very inspiring because of the professional attitude of the faculty here - they make you feel like you can learn a lot from them. As students, we know that it is hard to get into WCMC-Q because the standards are very high, so it is useful to visit and see if we are able to follow the material.”

At a closing ceremony, Noha Saleh and Dr. Triggle presented participating students with certificates for completing the program.

Participating schools:

- Al Bayan Educational Complex for Girls
- Al Doha Independent School for Boys
- Al Maha Academy
- Al Wakra Independent Secondary School for Boys
- Omar Bin Khattab School for Boys
- Qatar Academy
- Qatar International School
- Qatar International School of Choueifat
- Rabiaa Aladawya Secondary School for Girls

The high school students learned about medical techniques using a mannequin
Top student essayists unveiled at book launch

The best essays written by students at WCMC-Q have been unveiled with the launch of Qira’at, a compendium of literary works published by the university.

The book, published biennially and now in its third volume, was officially presented to the public at a ceremony held at the university that also saw the three best student essayists awarded prizes for the quality of their work.

First place in the Best Essay awards was clinched by third-year medical student Abdelaziz Farhat for his exploration of medical ethics, entitled “The Right to Know: Informing Terminally Ill Patients”. Second prize went to second-year pre-medical student Josia Schlögl for an essay penned as part of a writing seminar on Islamic medicine, entitled “Compatibility of Anthropological Views with Islamic Teachings about the Evil Eye”. Both Josia and Abdelaziz gave presentations at the launch event in March to set their essays in context.

Abdelaziz, whose essay was supervised by Dr. Pablo Rodríguez del Pozo, associate professor of public health, told the audience: “The purpose of my essay was to dispute the idea that there can be a justification for withholding the truth from terminally ill patients. I argued that patients must always be told the truth, no matter how difficult the circumstances might be.

“Reasons for withholding the truth generally benefit the physician and not the patient. Avoiding telling a patient the truth may save him or her some pain, but it will also deprive the patient of their autonomy, prevent them from making informed decisions regarding their treatment and deprive them of the opportunity to say goodbye to their family and friends, among other important considerations.”

A total of 43 essays are included in Qira’at, which means ‘Readings’ in English, tackling subjects from healthcare provision in India and the challenges facing brain-dead patients, to themes of violence and revenge in Shakespeare.

First-year medical student Risheek Kaul’s Marxist critique of a Hollywood blockbuster, entitled “The Misrepresentation of ‘Reality’ in The Kingdom”, won third place in the contest, which was judged by two Ithaca faculty members, Dr. Katherine Gottschalk, the Walter C. Teagle director of first-year writing seminars, and Dr. Paul Sawyer, director of the Knight Institute for Writing in the Disciplines.

Dr. Gottschalk, visiting from the U.S., addressed the launch event: “When we sat down to select winners, Paul and I were in the happy position of being confronted with a collection of excellent essays,” she said.

“When you read these essays, you will notice how aware the writers are of the need to analyze the complexity of a situation before coming to conclusions; you will notice their awareness of various perspectives. You will find that they critically analyze ‘facts’ to see if they are indeed facts. And you will find that they share a gift for clarity and strength of expression.

“The qualities that we looked for in the essays are, of course, qualities that one hopes to find in a medical practitioner.”

Dr. Gottschalk also paid tribute to the editorial team of Qira’at, which comprised Dr. Alan Weber, Dr. Krystyna Golkowska, Dr. Ian Miller, Dr. Mary Ann Rishel, and Dr. Rodney Sharkey. Lead editor Dr. Weber, assistant professor of English, explained the purpose of Qira’at.

He said: “Qira’at was created because we wanted somewhere to showcase the talents of our students. Qira’at is also very effective from a teaching perspective because we can use it to give students in our writing classes examples of the standard they should be aiming for.

“Through Qira’at, and the process of reflective writing in general, our students learn critical communication skills that will make them better physicians. They also learn to identify and empathize with the experiences of patients, and to appreciate that they must understand the audience they are writing for in order to communicate effectively.

“Because Qira’at offers the possibility of being published, we find that it inspires the students to write and to write well, and I’m very impressed with the standard of the essays.”

Ian Miller with Josia Schlögl who took the second prize for his essay on the “Compatibility of Anthropological Views with Islamic Teachings about the Evil Eye”
Breakthrough in diabetes research project

A study by researchers at WCMC-Q has made discoveries that could lead to the development of a non-invasive test for diabetes.

The groundbreaking study has also established many new processes that will facilitate future clinical research projects at the university.

The project, entitled QMDiab: The Qatar Metabolomics Study on Diabetes, gathered samples of blood, urine and saliva from patients at Hamad Medical Corporation (HMC) to be sent for analysis at laboratories in Germany, the US and Canada. Patients, who represented a broad range of ages, social and ethnic backgrounds, and education levels, also completed questionnaires to help researchers discover correlations between personal characteristics and diabetes.

Among other research goals, the study is searching for biomarkers – telltale molecules present in samples of blood, urine or saliva that are associated with the metabolic processes known to cause diabetes.

Although the results of the study are still being interpreted, the research team has already identified a biomarker that could be used for determining glycemic control levels in patients through analysis of saliva samples. The test could be used for determining whether a patient is at risk of developing diabetes, the risk of suffering complications associated with the disease, and how well a diabetes sufferer is managing his or her condition. Crucially, the test would be non-invasive, minimizing the pain and inconvenience caused to patients.

New ground was broken during the study in that it is believed to be the first time researchers have analyzed the metabolomics of saliva – but what exactly is meant by the term metabolomics?

Dr. Karsten Suhre is professor of physiology and biophysics in WCMC-Q’s research division and the principal investigator of the study, which is funded by Qatar Foundation’s Biomedical Research Program (BMRP).

He explained: “Metabolomics is the study of metabolic processes at cellular level in a holistic fashion.

“Just as genomics is the study of the entire genome and proteomics is the study of all of the proteins created by that genome, metabolomics seeks to understand all of the chemical processes that those proteins then give rise to in order for an organism to function.”
The study recruited 374 patients from HMC’s dermatology clinic, approximately half of whom suffer from diabetes, explained Dr. Suhre.

“Many patients with diabetes have skin disorders so you can easily find many diabetes patients in the dermatology clinic,” he said. “Sourcing patients from the dermatology clinic also meant we were able to find non-diabetes patients, who provided us with control samples.”

The study drew together the expertise and facilities of several departments at WCMC-Q, prompting new working relationships to emerge and establishing new capabilities, much to the satisfaction of Dr. Suhre.

He said: “This study has really been a team effort and it was very encouraging to see so many people from different departments at WCMC-Q and HMC working together towards a common goal.

“The project is really the first to be carried out at WCMC-Q under the university’s clinical research core and it involved research both in the lab and in the clinic. This involved bringing many different departments into the project and also our partners at HMC.”

At WCMC-Q, the study received a boost in its early stages from Dr. Kip Kantelo, director of research compliance, who reviewed the project’s application to the Institutional Review Board (IRB), the committee responsible for upholding standards of patient safety and ethical conduct in medical research projects. Tom Doyle, director of environmental health and safety, developed protocols for laboratory safety and security, as well as devising a system for ensuring samples posted overseas remained chilled to prevent them from spoiling. This involved packaging the samples with dry ice and finding a specialist shipping firm able to monitor the temperature of the parcels.

A new system for storing samples was also deployed for the first time, with hundreds of vials exhaustively catalogued and preserved at -80°C in the clinical research department’s robotic freezer. The programmable freezer allows researchers to retrieve scores of samples for analysis at the touch of a button. Records of samples and analytical results were logged on a database created by members of WCMC-Q’s IT department, overseen by research applications engineer Jillian Rowe.

A key member of the research team was Dr. Dennis Mook, a research associate who visited WCMC-Q for a year and was tasked with co-ordinating the practical side of the project.

At HMC, the key contact for the research team was senior consultant in the dermatology clinic, Dr. Mohamed Mohy El Din Selim. Aged 85, Dr. Selim was at the center of the project at HMC, overseeing his team of five doctors, all of whom contributed their patients to the study.

Dr. Selim said: “The ongoing collaboration between HMC and WCMC-Q in this combined research project has been very successful and has benefited our Department of Dermatology immensely. We look forward to working with WCMC-Q’s researchers on future projects related to other important diseases – there is a lot we can do together.”

Dr. Suhre said: “The energy and enthusiasm of Dr. Selim and his entire clinic was wonderful and contributed a great deal to making the study a success. We are very grateful for their help.”

The upshot of the study is that the research division at WCMC-Q now has a blueprint for clinical research that can be adapted and is already being used in new projects. Dr. Suhre explained that large parts of the IRB protocol could be reused whenever studies require patients to contribute samples or complete questionnaires. New procedures for managing questionnaire results have been set up and can be used again, and the prototype database created for the study has established a robust method for ensuring the connection between patients and their samples is never lost.

Dr. Suhre added: “We are really pleased to have developed a new non-invasive test for diabetes, which is a great breakthrough for us. But we are equally pleased that the study has set up new working relationships and procedures for clinical research at WCMC-Q. This gives the university the potential to explore many new research pathways and to link the laboratory to the clinic, so that our research has real, tangible benefits for patients.”
WCMC-Q and QOC join forces for Your Health First

Qatar Olympic Committee (QOC) has become a strategic partner in Sahtak Awalan: Your Health First, Weill Cornell Medical College in Qatar’s health campaign.

Sahtak Awalan’s goals are to encourage people to make positive lifestyle choices. The college’s campaign already has several high-profile partners, but the inclusion of QOC will bring sporting expertise of an international level. For QOC, the campaign is an opportunity to widen the outreach work it already does in encouraging people to lead active lives.

H.E. Sheikh Saoud Bin Abdulrahman Al-Thani, secretary general of QOC, said: “Through this strategic partnership with WCMC-Q, QOC will be able to contribute to building a healthy society. In fact, QOC and the Sahtak Awalan campaign have similar goals in that we both seek to promote the physical well-being of the individuals upon whom the future of our nation rests.

“We are totally confident that by working together we can reach more people in Qatar, paving the road to healthy individuals who can contribute to Qatar National vision 2030,” H.E. added.

As part of the new agreement, QOC will provide Sahtak Awalan with access to sports facilities and will collaborate with community activities, helping to inspire the nation – and future generations – to participate in sport and exercise. It is hoped top athletes will be ambassadors for Sahtak Awalan events, motivating others to follow in their footsteps.

Dr. Javaid Sheikh, dean of WCMC-Q, welcomed the partnership between the college and QOC.

“This is tremendous news and can only have a positive impact on the health of the population,” said Dr. Sheikh. “When two organizations come together for a common purpose the whole is always greater than the sum of the parts and I am confident that through working together we can do even more to create a healthy society able to contribute to a knowledge-based economy.”

Through partnering with QOC, WCMC-Q hopes to be able to instill some of the Olympic spirit into its campaign and encourage participants in Sahtak Awalan to embrace that same spirit. QOC will provide support for the campaign at sports events and will allow Sahtak Awalan to reach more people, not just in Qatar but the wider GCC.

Sahtak Awalan was launched in June 2012 with the aim of educating the population of Qatar about unhealthy lifestyle choices and encouraging them to take positive action. The five-year campaign is targeted at all nationalities living in the country but has a special focus on youth.

QOC will join our strategic partners: The Supreme Council of Health, The Supreme Education Council, Qatar Petroleum, Occidental Qatar, ExxonMobil, and Vodafone Qatar.
Faculty, students and staff of WCMC-Q joined a conference exploring innovations in the way technology is used in higher education.

The annual Technology in Higher Education (THE) Conference focuses on identifying the shifts, challenges and opportunities for educators and IT professionals, and aims to encourage innovation in the sector. The conference is jointly organized by Qatar Foundation and the nine colleges of Hamad Bin Khalifa University (HBKU).

Stephen Kenney, chief administrative officer at WCMC-Q gave the opening remarks at the conference, held at Qatar National Convention Centre in April. Kenney recounted his experience in the early 1980s of working with one of the first personal computers to become widely available.

He said: “The machine changed the way people approached their work and it made me ask myself some serious questions. Would this machine make my job irrelevant? Was this machine sitting on my desk going to take my job away? These were things people were concerned about at the time.

“Technology is often talked about today as being ‘disruptive’, but it is important that we must take advantage of the many great opportunities they offer us. This conference aims to encourage people in higher education to embrace change and to share their technical expertise with their colleagues and students.”

Delegates heard a keynote speech given by Philip Long, retired chief information officer at Yale University. Long explained that new technologies have the potential to radically alter the way education is delivered, citing the example of MOOCs (Massive Open Online Courses), which allow educators to reach hundreds of thousands of students via the Internet.

Day one of the event also saw a presentation given by two members of WCMC-Q’s advanced computing division, associate director Hanif Khalak and systems administrator Greg Smith. Entitled High Performance Computing and Academic Research, the session discussed the ways in which scientific research has driven advances in computing.

On day two, a workshop entitled Presentation Tools: Back to Basics was given by Gloria Peay, applications trainer in WCMC-Q’s IT services division and Reya Saliba, information services specialist in the university’s Distributed eLibrary.

Sharon Hollinsworth, WCMC-Q’s director of education computing Peay gave attendees advice on creating successful presentations using Microsoft PowerPoint. “The key to effective communication in a presentation is to achieve a complementary balance between images and text,” she said.

The conference concluded with a plenary session in which the Chief Information Officers of HBKU colleges shared their visions for the future of technology in higher education.

THE 2013 strategic partners

- Qatar Foundation
- Weill Cornell Medical College in Qatar
- Texas A&M University at Qatar
- Georgetown University – School of Foreign Service at Qatar
- Northwestern University in Qatar
- UCL Qatar
- HEC Paris in Qatar
- Virginia Commonwealth University in Qatar
- Qatar Faculty of Islamic Studies
- Carnegie Mellon University in Qatar
The benefits that improved teaching can bring to healthcare were discussed at this year’s Educators Across the Health Care Spectrum (EAHCSS) event held at Weill Cornell Medical College in Qatar (WCMC-Q) and Hamad Medical Corporation.

The annual three-day event, which was held from January 21 to 23, featured speeches and various workshops in which educators discussed how teaching methods could be improved.

This year the keynote speech, entitled “Improving Patient Care Through Improved Teaching,” was given by Professor Scott Richardson, an international expert on teaching evidence-based healthcare. He shared his views with healthcare professionals from across Doha at the event, which was hosted by WCMC-Q’s Graduate Medical Education (GME) division in association with Hamad Medical Corporation (HMC) and introduced by Dr. Amal Khidir, chair of the EAHCSS organizing committee. Medical staff and academics in the Hajar Auditorium at HMC also received a live transmission of the keynote address.

In addition, a series of workshops on a variety of topics were conducted over three days. Topics included teaching evidence-based medicine (EBM) and clinical reasoning in clinical settings; enhancing our learners’ clinical reasoning skills; and incorporating EBM into our teaching.

Dr. Khidir said the interest and energy during discussion and evaluations of the Educators Across the Health Care Spectrum to EAHCSS, as well as their interest in actually incorporating evidence-based teaching.

She said: “The discussion and interactions in these workshops emphasized the movement in Qatar towards inter-professional education. I see this activity, and more to come, as an opportunity to continue the collaborative spirit and exchange of expertise across the healthcare spectrum.”

WCMC-Q’s manager for GME, Deema Al-Sheikhly, said the educational series highlighted the need for continuing education at the highest levels and proved popular with academics and staff.

“IT is an important cross-disciplinary educational program that will bring two world-class scholars to WCMC-Q each year to speak on key topics in health education,” she said. “This collaborative effort between WCMC-Q’s GME department provided a great opportunity for networking and building a sustainable local capacity in the field of health education.”
QF support for health campaign

Qatar Foundation for Education, Science and Community Development is seeking to promote a wider understanding of critical health issues by extending its support to the Sahtak Awalan; Your Health First campaign, and to ensure maximum community outreach.

In keeping with its mission to develop a culture of medical research and knowledge, Qatar Foundation is committed to supporting Weill Cornell Medical College in Qatar’s (WCMC-Q) ongoing campaign by communicating preventive measures that can effectively reduce the number of people suffering from debilitating diseases. The five-year educational campaign targets all segments of society, with a particular focus on influencing young people between 10 and 25 years of age to make healthy lifestyle choices. With the shared objective of enhancing the quality of healthcare across the population, Qatar Foundation is eager to reinforce and facilitate WCMC-Q efforts by encouraging youth to take positive action to get fit and stay healthy.

Rashed Al-Qurese, Qatar Foundation’s Deputy deputy director of communication, said: “Both Qatar Foundation and WCMC-Q aim to create widespread awareness by educating and inspiring the community to make positive lifestyle choices that can go a long way towards preventing many of our modern-day ailments. This objective is perfectly aligned with our mission to support youth and to provide them with the highest standards of education and healthcare.”

WCMC-Q consistently strives to implement quality healthcare concepts that can enhance the public’s understanding of modern-day diseases. Dr. Javaid Sheikh, dean of Weill Cornell Medical College in Qatar, welcomed the support provided by Qatar Foundation and underlined the importance of sharing the campaign’s focal message with a wider audience.

“Qatar Foundation is a natural partner for the college’s Sahtak Awalan campaign, as we are already partners in so many other ways,” he said. “WCMC-Q is passionate about fulfilling its commitment to the public to improve healthcare both now and for future generations and I know that Qatar Foundation is equally committed to improving the lives of everyone in Qatar. Together we can have a huge impact and help propel Qatar forward to the goals of Qatar National Vision 2030.”

The initiative, which was launched in June of last year by His Excellency Abdulla Bin Khalid Al Qahtani, minister of public health and secretary general of the Supreme Council of Health, comprises several stages. In the first phase, the community is introduced to issues related to public health, particularly healthy practices and the importance of physical activity and diet. Subsequent phases will address a number of medical issues such as diabetes and cardiovascular disease, osteoporosis, bone diseases, rheumatism, anxiety, and sleep disorders.

The initiative is being run in conjunction with several strategic partners including the Supreme Council of Health, the Supreme Education Council, Qatar Petroleum, Occidental Petroleum of Qatar Ltd., ExxonMobil, Vodafone Qatar and Qatar Olympic Committee. The Your Health First campaign is expected to conclude with the completion of the National Health Strategy in 2016.
Showcasing the work of the research division

The Annual Research Retreat was held in January providing an opportunity for the college to showcase the achievements of both faculty and students involved in establishing WCMC-Q as a center of excellence for biomedical research in the region.

The event, which is now in its third year, was opened with a speech by Dr. Javaid Sheikh, dean of WCMC-Q, while the keynote address was given by Dr. Thomas Zacharia, executive vice president of research and development at Qatar Foundation. His speech was entitled “Building a World Leading Research and Innovation Enterprise”. Dr. Khaled Machaca, associate dean of research at WCMC-Q, gave an overview of the college’s research program and highlighted some of the notable achievements. He also talked about how the program was designed to complement Qatar’s own vision for its future.

Dr. Machaca said: “We have a simple goal that’s quite challenging – to create a center of excellence in basic, translational, biomedical and clinical research. Our goal is to come up with novel discoveries at the bench, apply them to the bedside and eventually in the community and keep assessing and improving the healthcare at the public health level of the population in Qatar and the region.”

Dr. Machaca also spoke of the college’s work in increasing human capacity, telling the audience that 50 research specialists and clinical coordinators have been recruited and trained locally, seven Qatari nationals have been trained in various aspects of biomedical research and that the WCMC-Q student body has been actively involved in laboratory internships over the past three years.

He said: “A major goal of the research program is not only to publish papers and come up with novel discoveries but also importantly to build human capacity and technical capacity in Qatar so that whatever is being accomplished is not going to end when a scientist leaves but actually has a continuum and is self-sustained with the know-how that is in the country.”
### 3rd Annual Research Retreat 2013 - Award Winners

#### Category 1 - Students - Short term

<table>
<thead>
<tr>
<th>Prize</th>
<th>Presenter Name</th>
<th>Board No.</th>
<th>Abstract Title</th>
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<tbody>
<tr>
<td>1st</td>
<td>Mohammed Premje</td>
<td>12</td>
<td>Predicting ventricular heart rhythms using a novel Dominant Frequency method</td>
</tr>
<tr>
<td>2nd</td>
<td>Fathima S. Amerudeen</td>
<td>19</td>
<td>Analysis of Mating Plug Components in Drosophila melanogaster</td>
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<tr>
<td>3rd(a)</td>
<td>Rishek Kaul</td>
<td>17</td>
<td>New &quot;Dominant Frequency&quot; Methods for use in the Improved Treatment of Cardiac Arrhythmias</td>
</tr>
<tr>
<td>3rd(b)</td>
<td>Sarah Saleh Al Khawaga</td>
<td>1</td>
<td>Noninvasive Detection of Acute Rejection of Kidney Allografts</td>
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#### Category 2 - Students - Long term

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<tr>
<td>1st</td>
<td>Vignesh Shanmugam</td>
<td>28</td>
<td>Comparative Gene Expression Profiling of Placental and Diffuse astrocytomas</td>
</tr>
<tr>
<td>2nd</td>
<td>Hala Omar</td>
<td>24</td>
<td>Targeting microRNAs 221 and 222 offers a new therapeutic approach for the treatment of diabetes-relate cardiovascular disease.</td>
</tr>
<tr>
<td>3rd</td>
<td>Mohammed Al Hajaji</td>
<td>26</td>
<td>Isolation and Characterization of the Olfactory Receptor Gene Family of Arabian Camel</td>
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#### Category 3 - Post Doc

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<tr>
<td>1st</td>
<td>Ishmail Abdus-Saboor</td>
<td>39</td>
<td>Evidence for a Cell Fate Refinement Mechanism in Sensory Neurons</td>
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<tr>
<td>2nd</td>
<td>Pegah Ghiabi</td>
<td>45</td>
<td>Akt-activated Endothelial Cells Enhance Self-renewal, Stemness, Drug Resistance, and Metastasis in Breast Cancer</td>
</tr>
<tr>
<td>3rd</td>
<td>Rashmi P. Kulkarni</td>
<td>48</td>
<td>microRNA mediated regulation of Stim and Orai expression</td>
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#### Category 4 - Research Specialist

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<tr>
<td>1st</td>
<td>Silvia Kovynjyan</td>
<td>48</td>
<td>The epidemiology of HIV infection in Morocco: Systematic review and data synthesis</td>
</tr>
<tr>
<td>2nd</td>
<td>Elisabeth Verghe</td>
<td>55</td>
<td>Auramin, an anti-rheumatic gold compound, modulates apoptosis by elevating the intracellular calcium concentration ([Ca2+]i) in MCF-7 breast cancer cells</td>
</tr>
<tr>
<td>3rd</td>
<td>Sara Kader</td>
<td>51</td>
<td>Ethnic and gender differences in skin auto-fluorescence</td>
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#### People’s Choice Award

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<tr>
<td>1st</td>
<td>Ahmed El-Meer</td>
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<td>Novel pyridinium-based cationic lipids as gene delivery vectors</td>
</tr>
<tr>
<td>2nd</td>
<td>Satanay Z. Hubrack</td>
<td>57</td>
<td>Properties of the Xenopus TRPV6 channel and its regulation by TRPC1.</td>
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<tr>
<td>3rd</td>
<td>Vignesh Shanmugam</td>
<td>28</td>
<td>Comparative Gene Expression Profiling of Placental and Diffuse astrocytomas</td>
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The retreat was also a chance for all members of Qatar’s research community to network and discuss possible future collaborations. The highlights of the retreat were the poster presentations by students, postdoctoral fellows and research specialist and the faculty talks. The retreat featured dozens of poster presentations with topics including breast cancer, genetics and epidemiology. Lectures were given by various WCMC-Q faculty on subjects, including olfaction, lipid metabolism, gene delivery, the epidemiology of HIV, depression, menopause and the role of the endothelium in tumor progression.

The event closed with awards for the best poster presentations.
International health experts continue to be attracted to the Medicine & U outreach program to provide advice on a variety of common illnesses prevalent in Qatar.

The program was started by WCMC-Q in March 2009 as a series of lectures that were open and accessible to the general public.

The initiative has focused on health issues widespread in Qatar such as diabetes, cardiovascular diseases, obesity, hypertension and a range of other common diseases and illnesses. Running annually from September through to June, the monthly talks have been well received by locals and expats alike with ever-increasing numbers attending the sessions at WCMC-Q.

The aim is to provide the public with basic health education in a simple, easy to understand format in a friendly atmosphere that promotes good health and healthy living.

Dr. Marcellina Mian, the acting associate dean for medical education, designed the Medicine & U program to introduce the general public to the world of medicine with topics important to the community. Subjects have included breast cancer, emergency care and nutritional supplements.

Dr. Mian continues to be an active participant in the activities.

At a recent lecture, she advised families and child carers to be alert to the dangers of accidents in the home in keeping with their child’s developmental age.

“Children are vulnerable to a wide variety of injuries and accidents around the home, in playgrounds and in any number of situations that may pose danger. Parents need to be vigilant to prevent these injuries and also know some basic first-aid techniques that can be life saving,” Dr. Mian told the audience.

The Medicine & U public lecture series is an integral component of the mission of WCMC-Q to provide quality education, research and patient care and to provide the highest quality of care to the community. The vice-chair and professor of neurology and director of neurology clerkship at WCMC-Q, Dr. Basim Uthman, has
The need for emergency first aid training was the focus of Dr. Ghory’s lecture.

Dr. Uthman began the lecture series in April 2009 with a discussion of a common neurological disorder, epilepsy. During the lecture he summarized the scope of the problem and its impact on society. Various presentations of seizures and their causes were addressed and myths and facts in regards to public opinions of epilepsy and patients with epilepsy were discussed.

In working closely with speakers, a fact sheet and a press release is generated, in Arabic and English, with highlights of practical information that attendees and the audience at large can take home. Following each lecture, Dr. Uthman moderates a question-and-answer session that addresses general concerns of the audience. A certified translator provides real-time Arabic translations of the lecture and Q&A sessions. Dr. Mary Anne Baker, WCMC-Q’s director of assessment and academic achievement coordinates the Medicine & U series.

There have been sessions that focused on stroke in pregnancy, particularly in older women, the prevalence of heartburn, the role of the pathologist when diagnosis is uncertain, and schizophrenia.

During Medicine & U 2013, Dr. Hina Ghory focused on the need for emergency services in Qatar. Dr. Ghory is an assistant attending physician at NewYork-Presbyterian Hospital and holds two separate academic appointments as clinical instructor in medicine, one at Weill Cornell Medical College in New York in the division of emergency medicine and the other at WCMC-Q in the medical education department.

“Medical emergencies such as skin wounds and amputations, burns, strokes and seizures, medication overdoses, choking, allergic reactions and heart attacks are among the more common events that may require initial out-of-hospital management. This is where basic training in first aid is very helpful and is something that should be encouraged here in Qatar,” Dr. Ghory said. Dr. Mark Pecker discussed problems with high blood pressure and he warned that it posed among the greatest health risks because most people remain unaware that they have this condition until it is too late.

Uncomplicated high blood pressure often causes no symptoms for many years, even decades, until it finally damages certain critical organs, Dr. Pecker said. He advised greater public awareness and urged regular screening for hypertension, especially for pregnant women and the obese. Poorly controlled high blood pressure ultimately can cause damage to blood vessels in the eye, thickening of the heart muscle and heart attacks, hardening of the arteries, kidney failure, and strokes, all with severe consequences.

Dr. Pecker is attending physician at NewYork-Presbyterian Hospital, professor of clinical medicine and professor of clinical medicine in physiology and biophysics at Weill Cornell Medical College in New York.

“Tobacco use and tobacco smoke produced during shisha smoking contain similar toxic substances and known carcinogens, generally in stronger concentrations than found in cigarette smoking. The charcoal and aluminium foil used in burning the tobacco produce high levels of carbon monoxide and heavy metals that are also dangerous to health,” Dr. Mahfoud said.

With growing public interest in the lecture series and the commitment of WCMC-Q to supporting the vision of the Qatari leadership and partnering with other health care institutions of the country, the college plans to continue providing Medicine & U lectures to the public. Dr. Uthman said: “We hope that the knowledge gained will boost public awareness of common medical conditions relevant to the society of Qatar and empower the residents of this nation to seek appropriate and timely medical advice and lead healthier life styles.”

By Hilton Kolbe
Creating a masterpiece for Paint Your Healthy Future is a messy business

Children had the opportunity to get creative with the Paint Your Healthy Future initiative, part of WCMC-Q’s Sahtak Awalan campaign.

Concentration is everything when coloring in Paint Your Healthy Future gave children the chance to be creative on a huge scale.
Lamya Mubayed launches a kite outside the college during April's basant event

Fadwa Ali and Abdullah Firoze, both of the Class of 2013, take part in basant

Sian Pearson, HR generalist, talks with clinical research coordinator Wafaa Gherbi at an HR Open House session in January

Noha Saleh, director of student recruitment, at Qatar Career Fair

Fadwa Ali and Abdullah Firoze, both of the Class of 2013, take part in basant

Basant gave the future doctors a chance to relax
Dr. Javaid Sheikh at the farewell reception of outgoing acting chief administrative officer Bruce Montgomery

Distinguished faculty members Dr. Lyuba Konopasek, associate dean for medical education, and Dr. Nithila Isaac, assistant professor of anatomy, were bid fond farewells in May

Paul Mussleman, information services librarian, with two visitors to the deLib Open House

Dr. Mohamud Verjee, assistant professor of family medicine, introduces high school students to ‘Harvey’, the college’s robotic learning aid, in the Clinical Skills Center

Clockwise from left: Alice Burnett, Hitomi Nakashima, Sudha Karthikeyan, Rochelle Gatdula, Rita Vaz and Wumi Akinade in the Distributed eLibrary

Dr. lyuba Konopasek, associate dean for medical education, and Dr. Nithila Isaac, assistant professor of anatomy, were bid fond farewells in May

Mr. Mussleman, information services librarian, with two visitors to the delib Open House

Dr. Mohamud Verjee, assistant professor of family medicine, introduces high school students to ‘Harvey’, the college’s robotic learning aid, in the Clinical Skills Center
Mohammed El-Debs performing at Coffee House 2013

Min Kyung Choi plays the piano for the crowd

The event was well-attended as always

Dr. Sohaila Cheema, Faten Shunnar and Donney Moroney enjoy the performances at Coffee House 2013 in April

Coffee House saw the usual mix of eclectic acts entertain the audience

Dr. Sohaila Cheema, Faten Shunnar and Donney Moroney enjoy the performances at Coffee House 2013 in April

Mohammed El-Debs performing at Coffee House 2013