Weill Cornell Medical College in Qatar was jointly established by Qatar Foundation for Education, Science and Community Development and Cornell University.

Photography: John Samples

Her Highness Sheikha Mozah Bint Nasser Al-Missned, chairperson of Qatar Foundation, congratulates the graduates of Education City universities at the second annual senior convocation ceremony.
As interim dean of Weill Cornell Medical College in Qatar, it is my pleasure to introduce this annual report in a year that has seen great progress as we advance our mission of excellence in education, research and patient care.

We are part of an ambitious enterprise, the renaissance of science and education in the Middle East, and I highlight our achievements with pride.

In education, we continue to build on the remarkable growth of our formative years, graduating our second class of physicians and bringing our total number of alumni to 32. Members of the Class of 2009, like their predecessors, achieved great success matching with excellent residency programs in the US and Qatar where they are now continuing their medical training.

In research, milestones continue to be achieved, from unlocking the genetic secrets of the date palm to the establishment of fully functioning core laboratories in genomics and imaging to support our vibrant biomedical research program.

In patient care, our growing collaboration with Hamad Medical Corporation (HMC) remains a key priority. Over 150 HMC physicians have now received Weill Cornell appointments and there are numerous examples of great clinical work by our
faculty licensed to practice in HMC hospitals and clinics around the country. This firm partnership underpins everything we do.

Our outreach to the community also continues to develop from our medical lecture series, Medicine and U, to our day of interactive activities for the public, Medicine Unlimited, where people can learn first hand about the world of medicine. Through the numerous school visits and the outstanding work by faculty, staff and students in local schools and charities, the college is a permanent feature of the local landscape in more ways than one.

As WCMC-Q continues to make progress in its mission, we continue our determination to be an inspiration to:

- the next generation of doctors
- the next generation of researchers
- the future leaders of medical education
- others in Qatar as the country strives to create a knowledge-based economy for the long term.

I would like to personally thank Dr. Daniel R. Alonso for his immense contribution in building WCMC-Q. At the same time, I would also like to note the contributions of faculty, staff and students and the widespread support we have received from our partners led by Qatar Foundation in making my initial tenure so rewarding and stimulating.

And of course, we are indebted to the long term vision of His Highness Sheikh Hamad Bin Khalifa Al-Thani, Emir of Qatar, and Her Highness Sheikha Mozah Bint Nasser Al-Missned, chairperson of Qatar Foundation, for their leadership and commitment to the historic establishment of a world-class medical college in Qatar.

Dr. Alonso discussed the voyage that WCMC-Q has embarked upon in the last annual report. The voyage continues, and we are confident that we have the people we need on board as we navigate the challenges and opportunities that lie ahead.

Javaid I. Sheikh, MD, MBA
Interim Dean
Weill Cornell Medical College in Qatar
Research assistants Yasmeen Salameh, left, and Eman Al-Azwani in the genomics laboratory.
Joint Advisory Board 2008 – 2009

The Joint Advisory Board of WCMC-Q comprises four members appointed by Cornell University, four members appointed by Qatar Foundation and three additional external members jointly appointed by Cornell and Qatar Foundation. Mr. Sanford I. Weill, Chairman of the Board of Overseers of Weill Cornell Medical College, the dean and vice dean of WCMC-Q, and Dr. Abdulla A. Al-Thani are non-voting ex officio members.

Qatar Foundation Representatives:

H.E. Ghalia Bint Mohammed Al-Thani, MD
Co-Chair, WCMC-Q Joint Advisory Board
Supreme Health Council
State of Qatar

Mohammad Fathy Saoud, PhD
President
Qatar Foundation for Education, Science & Community Development

Hassan Ali S.A. Al-Thani, MB Bch, FRCS(Ire), CABS
Head of Vascular Surgery,
General and Vascular Surgery
Board Member, Hamad Medical Corporation
Director, Arab Board Program of Surgery in Qatar

Jassim Al Suwaidi, MB ChB BAO
Consultant Cardiologist
Hamad Medical Corporation

Cornell University Representatives:

Antonio M. Gotto, Jr., MD, DPhil
Co-Chair, WCMC-Q Joint Advisory Board
Provost for Medical Affairs and Dean
Weill Cornell Medical College

Ambassador Hushang Ansary
Vice-Chair, Board of Overseers
Weill Cornell Medical College

Sir Christopher Paine, DM, FRCP
Former President
British Medical Association

Mrs. Barbara B. Friedman
Vice Chair, Board of Overseers
Weill Cornell Medical College

Jordan J. Cohen, MD
President Emeritus
Association of American Medical Colleges

James J. Mingle, Esq
University Counsel
and Secretary of the Corporation
Cornell University

Independent Representatives:

Ms. Havva S. Idriss
Vice Dean, Administration
Weill Cornell Medical College in Qatar

Mr. Sanford I. Weill
Chairman, Board of Overseers
Weill Cornell Medical College

Ex Officio Members:

Javaid I. Sheikh, MD, MBA
Interim Dean
Weill Cornell Medical College in Qatar

Abdulla A. Al-Thani, PhD
Vice President – Education
Qatar Foundation for Education, Science & Community Development

Absent from the picture:
James J. Mingle, Esq
With its second commencement in May, Weill Cornell Medical College in Qatar graduated 17 new physicians, bringing to 32 the number of young men and women to receive a US medical degree overseas.

That milestone followed on the heels of another important event—a very successful Match Day in March. WCMC-Q medical students demonstrated the quality of their education by competing favorably with graduates of US medical schools for acceptance into high caliber residencies. They joined training programs in internal medicine, obstetrics-gynecology, neurology, pediatrics, psychiatry, and surgery at excellent institutions such as NewYork-Presbyterian Hospital, Cleveland Clinic Foundation, Virginia Commonwealth University Health System, Methodist Hospital in Houston, and the University of Michigan Hospital.

Three graduates chose residency programs at Hamad Medical Corporation, Qatar’s premier non-profit health care provider, and a major clinical partner of Weill Cornell Medical College in Qatar.

Selecting HMC for residency training demonstrates its growing role in the education of our students who each spend more than 2000 hours at its 10 affiliated hospitals and health centers through their clerkships during the third and fourth years of the medical program. The students’ time and effort is guided by more than 150 HMC physicians who received faculty appointments from Weill Cornell Medical College in New York.

Growing Collaboration with HMC

Dialogue between HMC program directors for residency education and WCMC-Q clerkship directors continued to enhance feedback to and from students, strengthen faculty development and broaden collaboration in departmental activities.

The success of these efforts was highlighted at Medical Education Day in April as Drs. Abdullatif Al-Khal, Mohamed El Tawil and Ismail Helmi were recognized for outstanding leadership in HMC’s Education Department. Other faculty and residents also were singled out for individual awards by WCMC-Q students. The contribution of HMC to the success of our students was highlighted again during graduation ceremonies as dozens of HMC faculty donned robes and joined the procession celebrating the Class of 2009.

Enhancing Delivery of the Curriculum

Faculty members continued to enhance their delivery of the WCMC curriculum. Thanks to a significant contribution by visiting faculty members,
Below, left, Dr. Javaid Sheikh addresses the graduating class of 2009.

Below, right, graduates Manisha Deb Roy, Jinan Chaarani and Zineb Ammous recite the Hippocratic oath.
live lectures increased substantially in the basic science courses. They made up 55 percent of the Brain and Mind course and 75 percent of the Basis of Disease course, compared to 32 percent and 42 percent, respectively, when the medical program began. Live streaming video conferencing continued to play an important role linking the two programs.

Powers Peterson, MD, acting associate dean for basic science curriculum and associate professor of pathology and laboratory medicine, and other faculty members created a supplemental histology manual as an additional learning resource for the basic science curriculum. The manual consists of faculty-annotated jpeg images of the actual virtual microscopy digital images used by students in laboratory sessions. The annotated images are available in the printed manual and online for simultaneous comparison with the original, unlabeled digital image.

Another unique learning resource created during the year was a study guide to help students sharpen their clinical skills in all areas, ranging from interviewing for a physical history and specific physical exam techniques to appropriate professional interpersonal and communication skills. The 60-page manual, meticulously developed by Mohamud Verjee, MBChB, assistant professor of family medicine, and director of the Clinical Skills Center, provides detailed guidelines for self study as well as self-assessment exercises. “With the manual, students can come into the Clinical Skills Center for an hour or for 20 minutes. They can study by themselves, in pairs or small groups and really practice and improve their skills,” says Dr. Verjee. To date, all WCMC-Q students have successfully passed the clinical skills portion of the USMLE.
Helping Navigate the Cultural Divide

WCMC-Q launched Qatar’s first cultural competence training program during the year. Maha Elnashar and Huda Abdelrahim in WCMC-Q’s medical interpretation program developed the training module for fourth-year medical students. The pilot program helped medical students understand how variations in culture and background affect health care delivery and outcome. Cultural competence has become an important component of medical education not only in Qatar but also in the US and around the world.

Faculty members fine-tuned their student performance assessment skills during two days of workshops held on campus by staff members of the National Board of Medical Examiners. As the source of the US Medical Licensing Examination, the NBME helps design high quality exams to assess physicians’ ability to apply knowledge, concepts and principles and to demonstrate fundamental patient-centered skills. Success on the USMLE is a requirement for WCMC-Q students who wish to join residency programs in the US.

Premedical Education Students Move Up in Record Numbers

It was a good year for premedical students, as record numbers moved on to the next phase of their education. Of the 52 students completing the program, a record 37 were accepted into the Medical Program.

Students benefited from the establishment of a new peer-tutoring program. High achieving second year premedical and first year medical students were available afternoons and evenings to answer questions and provide educational support for students who wanted assistance. “We all knew each
Marco Ameduri, PhD, assistant dean for premedical education, counsels every premedical student at least once during the term.

other, so it was a very friendly congenial atmosphere. And if one of the tutors wasn’t sure how to respond to a question, the others would help out,” says second year premed student Nour Barakat, who used the service during the year and is now working as one of the tutors.

More formal counseling was provided by Marco Ameduri, PhD, assistant dean for premedical education, who met with every student at least once during each term to discuss everything from the student’s latest grades to the adjustment to college life. The counseling sessions ranked high by students in terms of satisfaction with and success in the program. “Our goal is to provide the kind of counseling and support that helps us create an environment conducive to learning,” says Ravinder Mamtani, MD, acting associate dean of admissions and student affairs.

The quality of the students and the educational program was demonstrated by Maen Abou Ziki who became the first WCMC-Q student to win a Cornell Prize. Abou Ziki’s essay, Consanguinity and Genetic Disorders, was one in a sequence of assignments in the First Year Writing Seminar taught by Alan Weber, PhD, assistant professor of English. It received the Adelphic Award from Cornell’s John S. Knight Institute for Writing in the Disciplines.

Foundation Program Provides Solid Support

Small classes and a strong focus on core skills in English, math, physics, biology and chemistry helped students in the Foundation Program improve their skills with an eye towards success in the Premedical Program.

The Foundation Program continues to provide academic support to Qatari students interested in medicine as a career. Together, these very motivated students build a strong sense of community as they work to master the challenging curriculum. Most of the Foundation Program students who were accepted into the Premedical Program spent six weeks of the summer taking courses on Cornell University’s Ithaca campus. Besides the adventure of an overseas journey, the summer classes provide them with helpful exposure to the challenging college culture they will experience upon their return to WCMC-Q.
Bakr Nour, MD (above) is credentialed to practice at Hamad Medical Corporation facilities and holds regular clinics, treating patients of all ages. Aspetar Orthopedic and Sports Medicine Hospital (below) joins the clinical training facilities available to WCMC-Q students through a clinical education training agreement with WCMC.
Clinical Care

CMC-Q’s contribution to quality clinical care in Qatar grew significantly during the year as four new physicians joined the clinical faculty team, bringing to 14 the total number of WCMC-Q physicians credentialed to practice at the medical facilities of Hamad Medical Corporation, the state’s premier health care provider.

Dr. Arash Rafii Tabrizi, assistant professor of genetic medicine, added his expertise in gynecological oncology to HMC’s ob/gyn care, joining colleague Nady Mohamed-Nady, assistant professor of ob/gyn, who has been providing care at HMC for two years. Both surgeons see patients in regular clinics and perform a wide variety of surgeries, including a broad range of minimally invasive laproscopic techniques.

Dr. Basim Uthman joined WCMC-Q as professor of neurology and began exploring possibilities for establishing a clinic to treat epilepsy and other neurological services. Dr. Thurayya Arayssi, associate professor of medicine, brought her expertise in geriatric medicine and rheumatology to Qatar and has been working closely with HMC in its efforts to realign its residency training programs with the internationally recognized standard of the American Council on Graduate Medical Education.

Dr. Hassan Al-Amin joined the faculty as associate professor of psychiatry. He and Dr. Javaid Sheikh, interim dean and professor of psychiatry, bring formidable psychiatric expertise to the medical college and to Qatar medical facilities.

Greater Access to World Class Clinical Facilities

WCMC-Q’s students gained greater access to world-class clinical facilities thanks to a clinical training and education agreement signed in March with Aspetar Orthopedic and Sports Medicine Hospital. Students will gain valuable education in musculoskeletal and soft tissue injury and rehabilitation as Dr. Arash Rafii Tabrizi brings expertise in gynecological oncology and stem cell research to WCMC-Q and HMC.
well as exposure to the fast growing specialty of sports medicine. Aspetar’s medical staff includes recognized orthopedic and sports medicine experts from around the world. Already work has begun to make Aspetar the site of WCMC-Q clinics, student clerkships and elective course work.

Sharing their Knowledge

Dr. Bakr Nour, professor of surgery and chief of clinical affairs, successfully introduced to Qatar the use of radiofrequency ablation to destroy a malignant liver tumor in a young child. The technique uses energy to produce heat that destroys tissue. An expert in liver transplantation, which is not yet available in Qatar, Dr. Nour used radiofrequency ablation with good results. At his regular HMC clinic, he sees patients in all age groups with liver and pancreas tumors that he treats either surgically or with radiofrequency ablation. He provides follow up treatment for patients who received liver transplantation surgery elsewhere and has successfully eradicated Hepatitis C virus after transplant. He also is working with HMC to establish a regional multi-organ transplantation institute.

Dr. Mohamud Verjee, director of primary care and assistant professor of family medicine, is sharing the concept of family centered care with HMC staff. The model, which encourages the traditional role of Qatari families in the recuperation and support of loved ones, treats the primary care physician as first contact and “medical home” for a patient, providing continuity and integration of health care, yet involves the family as members of the care team. “The concept, which is being embraced in Western medicine, helps
alleviate one consequence of modern medicine,” says Dr. Verjee, “which is the feeling that families are shut out of medical choices presented to their loved ones.”

In December, Dr. Ronald Crystal, professor and chair of Genetic Medicine at Weill Cornell Medical College in New York, helped spotlight Qatar’s diabetes epidemic at a Life Sciences Symposium organized by Qatar University. Using his research into chronic obstructive pulmonary disease as a model, Dr. Crystal highlighted his collaboration with WCMC-Q on research to identify genes implicated in diabetes. “As we begin to identify these genes in different populations, we can use the information to promote specific lifestyle changes, which is the foundation for personalized medicine,” says Crystal.

Also in December, Dr. Stephen Paget, professor of medicine and attending physician at NewYork-Presbyterian/Weill Cornell Medical Center, visited Doha as a speaker for the 8th Pan Arab Rheumatology Society Conference. While here, he participated in discussions of challenging patient cases with HMC health care teams, sharing his own treatment strategies and research on the conditions.

**Planning for the Future**

During the spring, WCMC-Q clinical faculty worked closely with planners for the Sidra Medical and Research Center to evaluate vendors for the clinical information system for the new facility scheduled to open in 2012. During several week-long sessions, Dr. Nour and other WCMC-Q physicians examined each product in depth, examining the proposed functionality, ease of use and availability of patient data in all hospital settings, inpatient, and outpatient. The system will serve as crucial infrastructure for Sidra, supporting innovation and generation, dissemination and application of new knowledge for the region’s only academic medical center.
Research

Biomedical research took a dramatic step from grand vision to reality during the year as WCMC-Q shifted into high gear recruiting more eminent researchers, expanding the shared core facilities and equipping more laboratories to build a sustainable research enterprise.

Applying Advanced Technologies

The development of the research program was underscored by the successful sequencing of the date palm genome by researchers in the WCMC-Q genomics laboratory. Joel Malek, director of the genomics laboratory, and his assistants successfully used a next generation sequencing approach, which proved faster than conventional sequencing and more detailed than the expressed sequence tag method. Because the date palm plays a significant role in agriculture throughout the Middle East, genetic information is extremely valuable to researchers working to improve fruit yield and quality. Even more significantly, the successful project validates the capabilities of the WCMC-Q genomics lab and its ability to apply the most advanced technologies in Qatar. It is a true milestone in establishing Qatar and WCMC-Q as a research center of excellence in the Gulf Region.

In the fall, the fifth annual Medical Student Research Forum featured work by 30 WCMC-Q students who participated in the Summer Research Program. While most of the students travelled to Cornell campuses in New York City or Ithaca for their research projects, several stayed in WCMC-Q, taking advantage of the resident faculty and the sophisticated work taking place here. Students’ posters and presentations covered their investigations into areas such as the causes of Alzheimer’s disease, ways certain tumors resist radiation therapy, and whether some proteins inhibit the spread of breast cancer cells, among other topics. In the spring, 19 more students were selected by the Summer Research Program to participate in another round of research projects with Cornell faculty members here or in New York State.

Joining the International Research Arena

In March, Nobel Laureates, renowned scientists, diplomats and researchers from around the globe gathered in Doha as Qatar Foundation hosted the Gulf state’s first international conference on stem cell science and policy. Stem cell research is an integral part of the WCMC-Q research program and a fully functional lab became operational during the year with the arrival of new faculty member Arash Rafii Tabrizi, MD, PhD, from the French National Institute for Health and Medical Research (INSERM).

Collaboration began quickly between Rafii Tabrizi, assistant professor of genetic medicine, and Shahin Rafii, MD, director of the Ansary Center for Stem Cell Therapeutics at WCMC in New York. Their work...
With strong support from Qatar Foundation, WCMC-Q’s biomedical research program takes a giant step forward, recruiting more researchers, expanding the core facilities and equipping more laboratories.
will focus on the molecular mechanism of the differentiation and expansion of human embryonic stem cells into functioning and transplantable hematopoietic stem cells. The research could have therapeutic potential for many hematological, immunological, vascular and genetic disorders.

Khaled Machaca, PhD, associate dean for basic science research, got his lab fully operational during the year. Focusing on calcium signalling and cellular biology to explore the molecular mechanisms behind oocyte maturation in preparation for fertilization, he leads projects that may develop therapies for infertility as well as advance our understanding of physiological and pathological processes.

Fayez Safadi, PhD, director of the histology and microscopy core facility, brought to Doha his study of a gene, osteoactivin, which he patented for its function in the stimulation of bone production. Besides his research into the workings of the gene and its potential for treating osteoporosis and bone trauma, he is collaborating with Rafii Tabrizi on stem cell research to explore mechanisms of cancer metastasis into bones.

Laith Abu Raddad, PhD, assistant professor of public health and physics, joined WCMC-Q during the year from Fred Hutchinson Cancer Research Center in the US. A theoretical epidemiologist, Abu-Raddad’s research interests focus on the epidemiology and ecology of infectious diseases using analytical and computational approaches. Two of his research studies were accepted for publication in prestigious scientific journals during the year. One, funded by the Bill and Melinda Gates Foundation and accepted in the Proceedings of the National Academy of Sciences, assessed the impact of the foundation’s funded interventions designed to eliminate tuberculosis by the year 2050. The other, accepted in PLoS Medicine, assessed the epidemiological impact and cost of male circumcision for HIV prevention.

In June, Lotfi Chouchane, PhD, professor of genetic medicine and microbiology and immunology, was one of 20 scientists from around the world invited to Jordan to participate in the World Economic Forum in the Middle East. There he joined a panel discussion on privatizing science in the Middle East and the need for cooperation between non-profit universities and businesses to build a robust research infrastructure that can move research findings into application.
Broadening Research Collaborations

As the fiscal year drew to a close, about $18 million from Qatar Foundation’s National Priorities Research Program provided strong financial support for individual researchers and 18 separate research projects on topics ranging from investigation of potential molecular markers for diseases like cancer and diabetes to genomic studies of the complex role of human biology and diseases in specific population groups. The ten-fold growth in funding places the research program on solid footing and helps build significant collaborations between WCMC-Q investigators and scientists at universities and research centers around the world.

Student research activities continued apace through participation in a wide variety of projects funded by Qatar Foundation’s Undergraduate Research Experience Program. Working with faculty members as mentors, 25 students were awarded $10,000 grants each for more than a dozen different projects focusing on diverse topics such as folic acid supplementation, the epidemiology of traffic accidents and injuries, Down syndrome, and severe maternal morbidity in Qatar. UREP is designed to expand students’ skills and bolster Qatar’s reputation for research by promoting hands-on research activities for undergraduate students.

The program yielded a research paper by a WCMC-Q student during the year. Amila Husic, MD, a member of the Class of 2008, published her UREP-funded research on the episiotomy rate in a Qatari women’s hospital in the *International Journal of Gynecology and Obstetrics*.

WCMC-Q faculty and students are positioned well to take advantage of the strong financial support for research in Qatar. With 2.8 percent of the country’s gross domestic product allocated for research, Qatar Foundation has created the National Priorities Research Program and the Undergraduate Research Experience Program to provide ongoing support for research that will benefit Qatar and the Gulf Region and raise the country’s profile in the international community.
Adam Shurbaji makes a point during the Qatar National Universities Debate which was won by WCMC-Q debaters for the second year in a row.
Weill Cornell Medical College in Qatar

Student Life

CMC-Q students continued to build a vibrant, thriving community focused on academic excellence and community involvement throughout the year.

As their numbers have grown — from 25 students in 2002 to 239 in 2008 — so too have the organizations and clubs that allow them to enrich the lives of the people of Qatar and their own social life and sense of community.

During the year, students logged thousands of hours of community service through participation in organizations such as Path of Humanity, which links students with patients in need of help and support at the local hospitals, and Qatar Foundation’s Reach Out to Asia which, among other things, supports educational programs for primary and secondary students on the Asian continent. They helped organize a blood donation clinic for students, faculty and staff to contribute to the Blood Bank at Hamad Medical Corporation. The drive has become an annual event.

Debating Champions

For the second year in a row, students on the WCMC-Q debate team won the Qatar National Universities Debate Championship held in March with teams from other Education City universities. That victory followed on the heels of their January participation in the 29th World Universities Debating Championships in Ireland. It was the first appear-

Bowling is one of the many ice breaking activities pre-med students enjoy during orientation week.
Events such as Coffee House and International Night allow students to entertain themselves and others with music, poetry and dancing.

ance by Middle Eastern universities in the rigorous competition. “It was an honor to be among the very first Arab teams to participate in the event,” says Anas Abou-Ismail, a third year medical student. “Debating sharpens the mind and stimulates a more plural view of the world, where people talk about things rather than fight about them,” says Rodney Sharkey, PhD, assistant professor of writing who accompanied and coached the students.

Foundation students took top prize for a public awareness program at the Qatar Today Green Awards. The class created a variety of displays and demonstrations to educate faculty, visitors and fellow students about threats facing the global environment and ways to make a difference. Students’ inspiration came from viewing the documentary “An Inconvenient Truth” in the class of Krystyna Golkowska, senior lecturer in English.
Teamwork on the Fields and Off

Sports were popular and successful throughout the year as the cricket team rose to the top of the Education City Cricket League for the third consecutive year. Second year medical student Shidin Balakrishnan, who remained unbeaten with 48 runs, was declared “Man of the Match” for his overall performance, while fourth-year medical student Imran Farooq, playing his last match for the team, was declared “Man of the Series.”

WCMC-Q’s soccer team was victorious during the year, winning the championship game and taking home the trophy for the 2009 Education City Soccer League.

Students managed to find time to entertain themselves and others in the community with activities like the Coffee House, an evening of solo and group musical acts, original poetry and dancing. Working together, the students provided an evening of entertainment that showcased their extraordinary talents. The same kind of talent and teamwork is highlighted at International Night, an annual event where students share their traditional dress, food and other customs and provide a forum for exploring and appreciating the diverse cultures that make up the WCMC-Q community.
WCNC-Q sponsors a wide variety of community events from the workshop for high school physics teachers (above), to the Medicine Unlimited program of experiments and demonstrations for high school students and their parents (below).
As the only medical college in the country, WCMC-Q embraces its responsibility to provide a wide range of health and wellness programs and activities to engage and support the residents of Qatar. Reaching out to young and old, students and working people, WCMC-Q strives to cement its relationship with the community.

During the summer, WCMC-Q inaugurated its Summer Enrichment Program, welcoming dozens of academically accomplished high school students onto the campus for a variety of classes and presentations. The summer programs not only offered the eager young scholars a glimpse of college life but also introduced them to the challenging and exciting world of science and medicine.

In the fall, WCMC-Q joined other Education City universities to showcase their educational programs at exhibitions in Qatar, Oman, the United Arab Emirates and Egypt. The displays and presentations, or “Road Shows,” informed hundreds of high school counselors throughout the Gulf Region about the curriculum, admissions requirements and test preparations so they, in turn, can guide their students to the classes and career possibilities within their reach.

Largest Ever Local Outreach

Working with Hamad Medical Corporation and Qatar Diabetes Association, WCMC-Q launched Medicine Unlimited in November, its largest local outreach program. More than 540 students—and 200 of their parents—took advantage of the event in the spacious ballroom of the Intercontinental Hotel. Thanks to demonstrations by faculty and staff, students were treated to a variety of activities that explored the complex relationship between their bodies and the world around them, including live...
experiments, hand-on simulations and quizzes. For the students, it was an opportunity to gauge their skills as potential doctors and scientists and to weigh the possibilities of a career in health care.

During the mid-year break, WCMC-Q hosted 150 students from independent schools across Doha as part of the HMC Qatar Future Doctors Program. The students visited the Clinical Skills Center and interacted with medical students for a taste of college life.

In the spring, more than 70 students participated in WCMC-Q’s second annual competition, “Healing Hands: Making a Difference.” Using essays or videos, students were asked to share their views about how they, as future doctors, might make a difference in Qatar’s health care system. For the winners, Chantelle D’mello and Nadia Hussain, the prize was a trip to Weill Cornell Medical College in New York City to work in a research laboratory and participate in clinical rounds and lectures. “I was most surprised by the great attention to detail shown by our mentors,” said Hussain on her return to Doha. “Though working with large amounts of clinical information, they showed us even the smallest piece of information is of huge importance. Like finishing a complicated jigsaw puzzle, every piece matters.”

Engaging Students through Their Teachers

In May, WCMC-Q hosted a three-day workshop for local high school physics teachers. Members of Cornell University’s CNS Institute for Physics Teachers shared an overview of the emerging field of nanotechnology along with proven techniques for improving learning in the classroom. The 17 local physics teachers received a mix of theoretical lectures and hands-on experiments. “We don’t get many opportunities to conduct experiments outside our own classrooms,” said Kemal Keman, physics instructor from the Omar bin Al-Khattab school, who

The Literary Lecture Series lets faculty members such as writing lecturer Autumn Watts, left, share their enthusiasm for literature with the public.
was looking forward to sharing new techniques with his own students.

**Sharing a Love of Literature …**

Weekly throughout April, members of the Writing Faculty for the Premedical Program invited members of the community to hear them speak about their passion for words and ideas. Programs included a presentation by Alan Weber, PhD, entitled, “In the Shadow of Shakespeare: the Minor Elizabethans” on the works of Sir Walter Raleigh, Michael Drayton and John Dowland; an exploration of themes of distance, fixation, anxiety, isolation and instability by Autumn Watts, MFA, entitled “Is It Dark Where You’re Sitting?” and a discussion by Rodney Sharkey, PhD entitled “Excited, Passionate, Fantastical Imagination: W.B. Yeats and the Personal Political.”

**And a Concern for Wellness**

Clinical faculty shared their interest in wellness and preventive care with the community during a monthly lecture series entitled “Medicine and U.” Using plain language, the physicians discussed a variety of medical conditions and procedures of broad interest to the lay population. Neurologist Basim Uthman talked about epilepsy, a brain disorder characterized by two or more seizures. Liver surgeon Bakr Nour discussed the advances in transplantation surgery and the importance of organ donation. Rheumatologist Thurayya Arrayssi talked about arthritis and other musculoskeletal disorders and psychiatrist Ziad Kronfol discussed the disabling causes of depression and its treatment.

WCMC-Q physicians accepted an invitation from Qatar Foundation to participate in its community lecture program. In April, pediatrician Marcellina Mian talked about fever in children; and in June, family practice physician Mohamud Verjee shared information about common eye problems and measures for treatment and prevention.
Statistics

Faculty and Staff Numbers, 2001-2009 Figures for faculty include all those on the WCMC-Q payroll considered active within the 2008-2009 academic year. Figures for staff are as of June 30, 2009, and include those residing in New York. A new category, academic non-faculty, became active during the year and includes postdoctoral positions in the research program.

Total Number of Students, 2002-2008 Figures are as of September 21, and reflect any attrition from incoming classes in subsequent years.
Profile of classes entering the Pre-medical Program, 2002-2008

Total enrollment and applicants

Gender profile

Entering profile: SAT 1 Math score
Profile of classes entering the Medical Program, 2004-2008

Total enrollment and applicants

Gender profile

Profile of entering medical students, September 2008

Enrolled students ................................................................. 27
Male ......................................................................................... 20
Female ....................................................................................... 7
Previous education:  
WCMC-Q ............................................................................. 24
McMaster University .......................................................... 1
University of Colorado Boulder ........................................... 1
University of Toronto Scarborough ................................. 1

Average science GPA .............................................................. 3.5

Average age (Sept 1st, 2008) .................................................. 20

Citizenship of Student Body

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## National Priorities Research Program Grants  
### Second Cycle, 2009

<table>
<thead>
<tr>
<th>Investigators</th>
<th>Title</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shahin Rafii, Lead PI (WCMC); Arash Rafii Tabrizi (WCMC-Q)</td>
<td>Differentiation of Hematopoietic Stem Cells into Functional Adult Blood Cells</td>
<td>$1,037,986</td>
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<tr>
<td>Ziad Kronfol, Lead PI (WCMC-Q) Elie Karam (Institute for Development, Research, Advocacy and Applied Care); Melvin McInnis (Univ. of Michigan); Abdulbari Benner (HMC); Lotfi Chouchane (WCMC-Q)</td>
<td>Genomic Assays of Qatari Patients with Bipolar Affective Disorders</td>
<td>$953,740</td>
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<td>Ziad Kronfol, Lead PI (WCMC-Q); Elie Karan (Institute for Development, Research, Advocacy and Applied Care); Melvin McInnis (Univ. of Michigan)</td>
<td>Adaptation of the Diagnostic Interview for Genetics Studies to a Qatari Population</td>
<td>$575,670</td>
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<td>Anthony Brown, Lead PI (WCMC); Faye Safadi (WCMC-Q); Bakr Nour (WCMC-Q)</td>
<td>Oncogene-specific Targeting of Liver Cancer</td>
<td>$1,045,402</td>
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<tr>
<td>Manikkam Suthanthiran, Lead PI (WCMC); Bakr Nour (WCMC-Q); Awad Rashid (HMC); Surya Seshan (WCMC); Ruchuang Ding (WCMC); Joseph Schwartz (Univ. of NY Stony Brook); Darshana Dadhania (WCMC-Q); David Leeser (WCMC-Q); Joel Malek (WCMC-Q)</td>
<td>Biomedical Markers for Kidney Transplant Status</td>
<td>$1,050,000</td>
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<tr>
<td>Lotfi Chouchane, Lead PI (WCMC-Q); Sami Khatib, (Arab Medical Association Against Cancer); Sheng Zhang (Cornell University); Karim Chahed (Faculty of Medicine, University of Monastir); Issam Al-Bozom (HMC); Khaled Al Remaihi (HMC); Sami Al Said (HMC); Mohammed Al Otaibi (King Faisal Specialist Hospital Research Center); Andre Megarbane (St. Joseph University)</td>
<td>Prostate Cancer in MENA Populations</td>
<td>$1,042,425</td>
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<tr>
<td>Hussni Mohammed, Lead PI (Cornell University College of Veterinary Medicine); Ali Sultan (WCMC-Q); Merghani Ibrahim (Department of Animal Resources-Qatar); Gerald Duhamel and Yung-Fu Chang (Cornell University College of Veterinary Medicine)</td>
<td>Ensuring Food Safety in Qatar</td>
<td>$1,019,414</td>
</tr>
<tr>
<td>Laith Abu-Raddad, Lead PI (WCMC-Q); Ruanne Barnabas (Fred Hutchinson Cancer Research Center); James Kublin (Fred Hutchinson Cancer Research Center); Ira Longini, Jr. (Fred Hutchinson Cancer Research Center); Timothy Hallett, Geoffrey Garnett, and Azra Ghan (Imperial College London); Connie Celum (Univ. of Washington); Judy Wasserheit (Univ. of Washington)</td>
<td>HIV Epidemiology and Prevention</td>
<td>$1,049,877</td>
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<td>Christopher Triggle, Lead PI (WCMC-Q) Morely Hollenberg (Univ. of Calgary); Dr. Barbara Hempstead (WCMC); Hong Ding (WCMC-Q)</td>
<td>Diabetes and Cardiovascular Disease</td>
<td>$1,049,936</td>
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<td>Khaled Machaca, Lead PI (WCMC-Q); Roger Gosden (WCMC)</td>
<td>Calcium Signaling Mechanisms in Oocyte Development</td>
<td>$1,049,709</td>
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<td>Olga Boudker, Lead PI (WCMC) Khaled Machaca (WCMC-Q)</td>
<td>Structure and Mechanism of Adenosine Transporter Within Cells</td>
<td>$1,043,512</td>
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<td>Nancy Rusch, Lead PI (Univ. of Arkansas); Khaled Machaca (WCMC-Q); Hamda Al-Naemi (Qatar Univ.)</td>
<td>Vascular Smooth Muscle Calcium Signalling in Hypertension</td>
<td>$1,001,965</td>
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<td>Michael Fetters, Lead PI (Univ. of Michigan); Abdulatiff Alkhali (HMC); Aasim Padela (Univ. of Michigan); Sara Alrawi (Univ. of Michigan); Amal Khidir (WCMC-Q); M Ussama Al Hamzi (HMC); Sonia Abdelhak (Pasteur Institute); Andre Megarbane (St. Joseph University); Joel Malek (WCMC-Q)</td>
<td>Providing Culturally Appropriate Health Care in Qatar</td>
<td>$1,050,000</td>
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<td>Linda Gerber, Lead PI (WCMC); Mohamud Verjee, (WCMC-Q); Ravinder Mamtani (WCMC-Q); Abdulbari Benner (WCMC-Q); Madhuvanti Murphy (WCMC); Heejung Bang (WCMC)</td>
<td>Health of Women in their Middle Years</td>
<td>$1,014,266</td>
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<tr>
<td>Michael Pungente, Lead PI (WCMC-Q); Vassilia Partalia (Norwegian University of Science and Technology); Philip Leopold (Stevens Institute of Technology)</td>
<td>Novel MicroRNA Delivery Vectors</td>
<td>$943,325</td>
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<tr>
<td>David Putnam, Lead PI (Cornell University); Michael Pungente (WCMC-Q)</td>
<td>Synthetic Nanovectors for Breast Cancer Treatment</td>
<td>$943,325</td>
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<tr>
<td>Khaled Machaca (WCMC-Q)</td>
<td>Cellular Ion Homeostasis: The role of TRP Channel</td>
<td>$1,049,260</td>
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</tbody>
</table>

**TOTAL NPRP GRANTS**  
$18,074,486
Faculty Publications for 2008–2009

Laith J. Abu-Raddad, PhD


Laith J. Abu-Raddad, PhD

Hassan Al-Amin, MD
Sibai AM, Chouayha A, Touma Z, Thurayya Arayssi, MD

Tharayya Arayssi, MD
Arayssi T, Hamdan A, Touma Z, Thurayya Arayssi, MD

Ziad Kronfol, MD

Khalef Machaca, PhD
Machaca, K. Mechanisms Controlling the Remodeling of Ca2+ Signaling Pathways During Xerosperm Oocyte Maturation in Preparation for Fertilization (Book


Krystyna Golkowska, PhD

Gerardo Guijer, MD

Nithila Isaac, PhD

Michael Johnson, PhD

*Denotes Senior Author

Lotfi Chouane, PhD, DSc
Nasr HB, Chahed K, Bouaouina N, Chouache L. Functional Vascular Endothelial Growth Factor -2578
Leadership

Cornell University
Peter C. Meinig, Chairman, Board of Trustees
David J. Skorton, MD, President

Weill Medical College of Cornell University
Sanford I. Weill, Chairman, Board of Overseers
Hushang Ansary, Vice Chair
Barbara B. Friedman, Vice Chair
Arthur J. Mahon, Vice Chair
Antonio M. Gotto, Jr., MD, DPhil, Provost for Medical Affairs and the Stephen and Suzanne Weiss Dean of the Medical College

Weill Cornell Medical College in Qatar
Daniel R. Alonso, MD, Dean (until January 2009) and Dean Emeritus (from January 2009)
Javaid I. Sheikh, MD, MBA, Deputy Dean and Vice Dean, Research (until December 2008) and Interim Dean (from January 2009)
Havva S. Idriss, Vice Dean, Administration
Bruce L. Davidson, MD, MPH, Senior Associate Dean, Clinical Affairs
Maya Hammoud, MD, Senior Associate Dean, Education
Michael D. Johnson, PhD, Associate Dean, Pre-medical Education
Marcellina Mian, MDCM, MHPE, Associate Dean, Clinical Curriculum
Imad Makki, PhD, Assistant Dean for Research Administration
Khaled Machaca, PhD, Associate Dean, Basic Science Research
Bakr Nour, MD, Acting Chief of Clinical Affairs
Powers Peterson, MD, Acting Associate Dean, Basic Science Curriculum
Marco Ameduri, PhD, Assistant Dean, Pre-Medical Education
Ravinder Mamtani, MD, Acting Associate Dean, Admissions & Student Affairs
Mohamud Verjee, MD, Director, Clinical Skills Center
Susan E. Lacey, Assistant Dean, Administration
Susan S. Lukesh, PhD, Assistant Dean, Academic Planning & Development
Sharon Hynes, Director, WCMC-Q New York Office
Shahzad Jafri, Chief Information Officer
Farida Lada, Director, Research Compliance
Ellen Sayed, Director, Distributed eLibrary
Anton Josephson, Director, Human Resources
Pim Thukral, Director, Finance and Acting Director, Human Resources
Michael Vertigans, Director, Public Affairs
Jack Butler, Director, Facilities Management (until November 2008)
John Doig, Director, Facilities Management (from January 2009)
Thomas Doyle, Director, Environmental Health & Safety
Siraj Halil, Director, Information Technology and Telecommunications
Eric Fry, Director, Student Affairs
Adrienne Gibbons, Director, Admissions
Badar Khan, Director, IT Operations
Joan Lanning, PhD, LPC, Director, Employee Assistance Program
Noha Saleh, Director, Student Recruitment
WCMC-Q Milestones from 2008-2009

1. September 2008  Students and faculty gather to celebrate the beginning of the premedical program.

2. September 2008  First year medical students pose proudly in their new white coats.


10. June 2009  Healing Hands essay writers Chantelle D’mello, left, and Nadia Hussain with Dr. Sheikh.

8. April 2009  Students commemorate the completion of the Foundation Program.
WCMC-Q Milestones from 2008-2009

3. November 2008  Hundreds of students attend Medicine Unlimited to learn about medical careers.

4. November 2008  Research over the summer culminates in the annual Medical Student Research Forum.

5. February 2009  Javaid Sheikh (left), Antonio Gotto and Mohammed GA Al Maaheed celebrate the Aspetar agreement.

6. March 2009  The Class of 2009 celebrates Match Day and the news about their residency programs.