The first-ever White Coat Ceremony at WCMC-Q marked the transition of the Inaugural Class from pre-medical students to doctors-in-training. With medical faculty assisting them to put on their new white coats, the Class of 2008 were the center of attention at this momentous ceremony on October 11th.

Read more about it on pages 16 and 17
Affiliation Agreement Opens Door for Clinical Education

An Affiliation Agreement among Weill Cornell Medical College (WCMC), New York-Presbyterian Hospital (NYPH – the University Hospital for WCMC-NY) and the Hamad Medical Corporation (HMC), signed on October 11th, opened the door for medical students at WCMC-Q to receive their clinical education in HMC facilities.

Shortly afterwards, first-year students began to go out to HMC clinics and observe how physicians care for patients in the community, as part of the Medicine, Patients and Society I course.

October’s ceremony followed the signing last May of a Memorandum of Understanding, and set the seal on the partnership between the institutions, which is intended to advance and promote medical education, clinical care and research in Qatar.

The Agreement was signed for WCMC by Antonio M. Gotto, Jr, M.D., D.Phil., Dean of Weill Cornell Medical College in New York, and by Daniel R. Alonso, M.D., Dean of WCMC-Q. For NYPH, the signatory was Steven J. Corwin, M.D., Senior Vice President and Chief Medical Officer. The signatories for HMC were Latifa Al-Houty, Ph.D., Chairperson of the Board of Directors, and H.E Turki Al-Khater, Managing Director.

Present at the ceremony were Cornell University President, Jeffrey S. Lehman, Deputy Director of the HMC Board, Sheikh Hamad Bin Jabor Al-Thani, and members of the Joint Advisory Board of WCMC-Q.

Describing the signing of the Agreement as “a very great and important milestone,” Dean Gotto said that the partnership between WCMC and HMC would bring significant benefits to the region in terms of training students, introducing new knowledge and raising standards of clinical care. “Without it, we will not be able to succeed in the mission which we jointly laid out with the Qatar Foundation,” he added.

For the HMC, Dr. Latifa Al-Houty looked forward to the “vast opportunities” that the Agreement offered. “We are all excited,” she commented, “we grasp these opportunities with our souls and hearts.” The facilities of HMC would be open not only to WCMC-Q students, but also to students, faculty and staff from New York; for their part, HMC personnel were keen to work alongside scientists and physicians from the U.S.

New York-Presbyterian Hospital was “very committed to the partnership with HMC and WCMC-Q,” Dr. Corwin said. With extensive experience in building partnerships that further research, education and healthcare, the Hospital would bring the same level of commitment to this new partnership in Qatar.

In response to a question from the press, Dean Alonso said that HMC physicians who teach WCMC-Q students are appointed as faculty at the Medical College following “careful, comprehensive and rigorous appraisal” by the academic departments in New York. Their role is very important from the outset, since observing the doctor-patient relationship at an early stage is “inspirational” for the students.

Interviewed later, Dean Gotto clarified the importance of the Affiliation Agreement for WCMC-Q. “HMC is the major site where our students will obtain their clinical experience. The first year students are getting their initial clinical exposure to... (Continued on page 6)
**TALKING TO:**

Dr. Elizabeth Alger,
Senior Associate Dean for Education

Appointed in July to the post of Senior Associate Dean for Education at WCMC-Q, Elizabeth Alger, M.D., F.A.C.P. brings a wealth of experience to her new position.

Dr. Alger is also the first of several women to hold a faculty appointment at WCMC-Q, so one might be tempted to argue that she is among the pioneering role models for female students at the Medical College.

In a career spanning over 30 years as both faculty member and administrator at the University of Medicine and Dentistry of New Jersey–New Jersey Medical School, Dr. Alger was at the forefront of reforming the medical curriculum at her alma mater.

As Associate Dean for Education, she spearheaded the introduction of a range of new pedagogical techniques, including problem-based learning (PBL), early patient care experiences, objective structured clinical examinations and the use of educational technology.

Intrigued that Dr. Alger uprooted herself at this stage of her career to come and work in the Middle East, we set out to discover what attracted her to WCMC-Q.

Widely traveled, Dr. Alger had some idea of the Middle East from previous consultancies, and she identifies Qatar as notable in the region for its promotion of education.

The relevance of this to women is another important consideration. “I had looked up Qatar, and its role in higher education. Qatar has the highest proportion of women in tertiary education of any Arab country. That says a lot about the values of the country, and its interest in promoting equity and allowing women to become educated and to have leadership positions.”

— Dr. Elizabeth Alger

The medical education offered at WCMC-Q was a key factor in her decision. Dr. Alger explains: “Weill Cornell’s curriculum was very appealing to me. It was a step beyond what we were able to do in New Jersey, and I had admired it for a long time. So the fact that it was a curriculum I understood and admired, and it was an effort on the part of Cornell to transport American medical education to this part of the world, was compelling.”

**An innovative medical educator**

A graduate of Drew University in Madison, New Jersey, Dr. Alger obtained her M.D. degree from what was then Seton Hall College of Medicine in Jersey City, and proceeded to a residency in internal medicine. She went on to combine clinical teaching with research in the field of endocrinology before concentrating on educational administration.

As an innovative medical educator, Dr. Alger pioneered the move away from a rigid and lecture-dominated approach in the early years of medical school, towards the introduction of a

(Continued on page 4)
hybrid curriculum that was more motivational for medical students.

Up until then, the curriculum was “almost demoralizing” for them, she says. “We needed to spread throughout the four years a whole new approach to clinical problemsolving: analyzing problems, using resources, and generating hypotheses.”

Starting in the early 1990s, two new learning experiences were brought into the first year curriculum: PBL and preceptorships with sessions in physicians’ offices. Scheduled once a week respectively, they were complementary. “I do see that both are really necessary,” Dr. Alger comments, “they are introducing students to clinical medicine from the beginning, both the concepts of the approach to clinical problems and the relationship with actual patients.”

She is clear that they are effective: “There are several very good outcome studies as to how students mature in their professional identity. They have four years in which to develop these approaches under careful guidance. The foundations for the approach to clinical medicine are much better established in students than if we waited until the clerkship years.”

New approaches to teaching clinical skills

To add to medical students’ difficulties in the past, the observation and assessment of their clinical skills in the third and fourth years, usually by senior faculty, was both daunting and full of variables. While the method of conducting a physical examination was assessed, skill in communicating with patients was not usually evaluated.

Dr. Alger was instrumental in introducing clinical simulations – known as objective structured clinical examinations or OSCEs – at New Jersey in the mid-1990s. She went on to oversee the building of a clinical skills center at the University at a time when such facilities were rare.

The purpose of OSCEs is to improve training in clinical skills and to exclude the variables inherent in the old system. This is achieved by creating a range of situations that might not be encountered in the ordinary clinical setting, and by standardizing the encounters with patients in such a way that everyone gets the same educational experience. Without the uncertainties of the previous system, it is a fairer way to assess students.

The approach depends on training volunteers to act as standardized patients, capable of portraying a clinical condition, appraising students’ skills in assessing the problem, and then giving them feedback.

With medical students at WCMC-Q set to encounter them for the first time next semester, will it be possible to train standardized patients here?

“Absolutely,” she answers: this is already in hand. Indeed, Dr. Alger envisages that OSCEs will become an integral part of the learning experience at the Medical College, beginning with simple steps, such as taking a medical history, and going on through scored OSCEs at the end of each clerkship in the third year, to a final, comprehensive graduation OSCE at the end of the fourth year.

The approach has transformed the way in which clinical and communication skills are taught and assessed, and it has a vital part in training the physicians of the future, Dr. Alger believes.

“There are many encounters where a trainee faces a real patient and is too conscious of not making mistakes. Just as in PBL, where the words ‘I don’t know’ are the best ones you could use, the same prevails with the standardized patient encounter. You really want the students to make a mistake – to ask the wrong question, or not to ask a question – to teach them how to ask the questions and how to interact with the patients. This is their opportunity to practice, to make mistakes, and to learn from them.”

An emphasis on research

Dr. Alger’s experience as a medical educator has led to numerous contributions to books and journals, on subjects as varied as the use of standardized patients, educational technology and the evaluation of student summer research programs.

In the early stage of her career, Dr. Alger also published a number of papers resulting from her lab-based research in the field of endocrinology.

She believes that early research experience, when still a medical student, had a formative effect on her own career; as she says, “I wouldn’t be in academic medicine if it wasn’t for that.”

Now, Dr. Alger is keen to extend the research opportunities for WCMC-Q students, and she has begun discussions with Dr. Olaf Andersen, director of the MD-PhD program at WCMC-NY, who visited WCMC-Q this semester.

Selected WCMC-Q students have already had a taste of research at
Meet the Medical Faculty

The Medical Program at WCMC-Q is taught in different ways. While some lectures are brought in by streaming video from Weill Cornell in New York, and faculty from WCMC-NY visit once they have finished teaching their part of a course in New York, there is a core group of faculty, resident in Doha, who play a central part in delivering lectures and the 60% of the curriculum that is taught in small groups.

We feature here a brief introduction to the initial group of medical faculty resident in Doha:

Wendy Terry, M.D., (above) is assistant professor of medicine and course director for the Medicine, Patients and Society I course. From Australia, Dr. Terry was previously a palliative care physician at Newcastle Mater Hospital and lecturer in medicine at Newcastle University, in New South Wales.

Her interests are in the fields of palliative medicine, medical education, and narrative and literature in medicine. Dr. Terry is currently carrying out research into the experiences of patients as they near the end of life.

Suresh Tate, Ph.D., (pictured on page 13) is professor of biochemistry at both WCMC-Q and WCMC-NY, and course director for the molecules, genes and cells course at WCMC-Q, the first core basic science course in the Medical Program.

Dr. Tate was born, and received his Master's degree in biochemistry, in India. He obtained his Ph.D. from University College, London. His research interests include the structure and function relations of membrane enzymes and transporters.

Active also in teaching biochemistry to pre-medical students, Dr. Tate has been a member of the faculty at WCMC-Q from its first year of operation.

Powers Peterson, M.D., (above) is associate professor of pathology. She received her M.D. degree from The Medical College of Georgia, and went on to Weill Cornell Medical College in New York, where she divided her time among diagnostic work in anatomic and clinical pathology, research in hematopathology, and teaching. She was appointed director of the Laboratory of Clinical Hematology in 1990.

While at WCMC-NY, Dr. Peterson pioneered the use of problem-based learning in the pathology course, and made a major contribution to a computer-based pathology teaching lab.

Following appointments at medical schools elsewhere in the U.S., Dr. Peterson returned to Weill Cornell, but this time to its new Medical College in Qatar, where she has pioneered the creation of a virtual microscope system.

Nithila Isaac, Ph.D., (above) is assistant professor of anatomy. From India, Dr. Isaac obtained an M.Sc. in human anatomy, followed by a Ph.D. in neuroanatomy at All India Institute of Medical Sciences in New Delhi. She held posts in India and Nigeria, before moving to the U.S.

Dr. Isaac taught courses in clinical anatomy, histology, kinesiology, embryology and neuroanatomy over a 19-year period at Albert Einstein College of Medicine in New York; during the last 5 years, she also held an adjunct position at WCMC-NY.

As lead anatomist at WCMC-Q, she is now closely involved in setting up the lab and teaching medical students.

Nurru Lameck, M.D., Ph.D., (below, left) is assistant professor of anatomy. From Tanzania, she obtained her M.D. degree from the University of Dar Es Salaam, and went on to teach in the department of anatomy there.

Dr. Lameck won a scholarship from the government of Japan to pursue graduate studies at Kyoto University, where she earned her Ph.D. in neurobiology in 2002. Her area of research was in peripheral and central nervous system regeneration.

More recently, Dr. Lameck taught anatomy to medical and dental students as well as to physicians studying for graduate degrees at Dar Es Salaam.

(Continued on page 6)
New Hospital Planned for Education City

The Qatar Foundation for Education, Science, and Community Development announced last June that it will build a 350-bed, $900 million, all-digital Specialty Teaching Hospital next to Education City in Doha, Qatar, complete with an $8 billion endowment—the largest endowment of a hospital and research center in the world.

WCMC-Q will partner with the Qatar Foundation in the planning and governance of the new facility and will direct the Hospital’s academic and research programs. Together with state-of-the-art clinical programs focused on women’s and children’s conditions, this will result in an American-style academic medical center of the highest quality. In this respect, it is expected that the medical staff to be recruited will “wear two hats” namely, attending (or consultant) physicians at the hospital and, simultaneously, professors at the medical school.

When completed in 2008, the academic medical center will join the Hamad Medical Corporation as teaching sites of WCMC-Q, and will offer the young graduates residency-training opportunities designed with the standards of the American Council for Graduate Medical Education (ACGME).

The new medical center planned for Education City will feature a significant research program focused on women’s and children’s medical issues, including diabetes, cardiovascular disease, fertility, and neonatal and inherited childhood diseases. Its translational research and clinical trials will allow early, bench-to-bedside application of the latest discoveries resulting from the epidemiological and genomics research program being planned by WCMC-Q.

A distinguished hospital administrator, Mr. Kenneth D. Bloem, has been appointed interim CEO, while the search for the permanent CEO is proceeding very well. The executive architect is expected to be chosen in the near future.

Taken together, stellar clinical services, outstanding academic programs and cutting-edge translational and clinical research will make this specialty and research hospital a unique institution with no peer in the Middle East region.

Affiliation Agreement (Continued from page 2)

There may be further opportunities for cooperation among the partners, he added. “We envisage there will be some collaboration through research projects between their doctors and our doctors at Weill Cornell in New York and Doha; and we will work together on standards of clinical care, because in order to give the students comparable training, the levels of clinical care have to be comparable.”

Meet the Medical Faculty (Continued from page 5)

Pablo Rodriguez del Pozo, M.D., Ph.D., J.D., (pictured on page 13) is assistant professor in the division of medical ethics, department of public health. From Argentina, Dr. Rodriguez del Pozo has graduate degrees in medicine and law; he received a Ph.D. in the field of bioethics from Carlos III University in Madrid.

Dr. Rodriguez del Pozo has taught courses on biomedical ethics in Spain and Latin America, and he has published numerous articles on medicine, bioethics and the law. He has also worked as a consultant on health-related projects, with agencies that have included the World Bank.

Ali Sultan, M.D., Ph.D., (above) is assistant professor of microbiology and immunology. Born in Sudan, he received his M.D. degree from the University of Khartoum, and his Ph.D from Edinburgh University in the U.K. Before his appointment to WCMC-Q, Dr. Sultan was assistant professor in the department of immunology and infectious diseases at Harvard School of Public Health.

Dr. Sultan’s main area of research is in the field of malaria, focussing on the molecular mechanisms of the invasion of host cells and sexual differentiation of malaria parasites.

Senior faculty who also hold academic appointments in the Medical Program include Gary Schneider, Ph.D., Senior Associate Dean for Research and David Robertshaw, Ph.D., professor of physiology and Associate Dean for Pre-medical Education.

For related reports, see Notes from Medical Faculty, page 13; Keeping Pace with a Scientific Revolution, page 21.
Medical Students Adjust to Demands of Curriculum

“Intrinsic Motivation” in Medical Program

T
he two-year Pre-medical Program at WCMC-Q equips students with a solid foundation for their medical studies; but some important adjustments are necessary as they begin the medical curriculum.

This was the feeling of a group of students from the Inaugural Class just a few weeks into medical school. Tired, yet excited; intellectually stretched, yet not stressed, they agreed that this was what they had been preparing for, and that they had felt ready to move on to the Medical Program by the time they completed pre-medical studies last May.

Asked what they were looking forward to in the next stage, they responded uniformly: gross anatomy. Why? Vildana Omerovic put it this way: “It will be a completely new field, and I think it’ll be very exciting.”

Although it was still early in the academic year when the students talked to the Weill Cornell Qatar Chronicle, initial encounters with patients in the office preceptorships at primary health care centers and the Hamad Hospital had already given them insights into the challenges of doctor-patient communications.

“The preceptorships have made me realize that doctors have to think in parallel lines,” said Michelle Al-Khulaifi, “one line is about the science of the matter, the other is actually dealing with the patient as a person… Patients are not as we read about them in our books – for example, they can have emotional outbreaks. You have to learn about office medicine, as opposed to science.”

Omerovic had quickly seen that what she termed “medical jargon”

We feel really close to each other

You could say that the Class of 2008 have been through a lot together. As the Inaugural Class, they have pioneered the way in Qatar. No need to recap here the various ‘firsts’ that they have notched up. There are just sixteen in the group, of whom fourteen completed the Pre-medical Program. So they must be close?

“We went through these past two years together. We’ve been there for each other most of the time. As there aren’t so many of us, we feel really close to each other,” said Vildana Omerovic.

The closeness can work both ways. On the one hand, they know one another so well that it’s easy to deal with small group situations. “We know exactly when someone is showing off, and we also know how to encourage someone – many people feel more comfortable in a group of people they know.”

Against this, maybe they know each other too well, observed Michelle Al-Khulaifi. She suggested that it might be an advantage to learn how to work with new teams and face new challenges. “At WCMC-NY, there’s a greater number of students, so, as they work together, they learn the basics of how to deal with other people they don’t know well.”

Predictably with the Class of 2008, this started a new debate…

“We’ve been there for each other most of the time”
– Ayobami Omosola, Kunali Dalal, Vildana Omerovic, Maryam Shafaee.
Medical students adjust to demands of curriculum  
(Continued from page 7)

could give rise to unnecessary fears in patients when they did not understand the meaning of the language. “With patients, you have to switch into their state of mind, how they’re feeling,” she observed.

The direct relevance of the curriculum to the practice of clinical medicine was identified as one of its key strengths. Of problem-based learning (PBL), Dino Terzic said: “We get real patient cases, and it’s all about diagnosing a disease. The main point is to learn the science behind the disease. However, there’s also a feeling of being really involved in a case, and that makes it so interesting.”

There are three PBL sessions every week. The Class is divided into two groups of eight students, and given a case to investigate. They have to identify the research that needs to be done, apportion investigative tasks, do the research, and then meet again to discuss their findings, before making a presentation.

Doing the research is challenging and, on occasion, frustrating: “You have to research so many things on your own, because the readings that are assigned don’t tell the whole story,” said Omerovic. “You try to search, and sometimes you don’t get the right information, or any information at all – we are still not experienced about where to search for it.”

However, as Al-Khulaifi pointed out, sometimes the information is not available because the field is still the subject of research: “Many mechanisms in biochemistry haven’t been elucidated yet.”

In general, she felt well prepared for the medical curriculum: “The second year of the Pre-medical Program is very similar. We had medically-oriented science classes, like the neuroscience course, which had a lot of pathology in it, medical ethics, and clinical correlates – which is pretty comparable to PBL. You get used to the more frequent PBL sessions as you go along – and they’re very enjoyable.”

Another positive aspect of this approach is how well you remember the subject matter, said Terzic. “When you analyze your work during the (Continued on page 13)

Experiencing “a different culture”

Interested to know why two of our medical students, graduates of American universities, came to WCMC-Q, we caught up with them and asked: What made them choose to study medicine at Weill Cornell in Qatar, so far from home?

Ali Farooki, raised partly in Riyadh and partly in New Jersey, was keen to return to a region of the world he knew, and to which his family had already returned – so Doha was fairly familiar territory. By contrast, Sharon King was inspired by a sense of adventure, eager to discover lands beyond Oregon, her home State, and Pennsylvania, where she went to university.

For both of them, it was very important to find an equivalent standard of medical education to that offered in the U.S., and WCMC-Q has the tradition of an Ivy League university behind it, said Farooki.

The international atmosphere was also attractive. “The education can only be enhanced by the experience of being in a different culture, and learning with people who have different ideas about life. The Class is very diverse, with people from many different places and backgrounds,” King explained.

Farooki seemed to relish the idea of being a pioneer: he accepted that this meant an element of risk – we take risks every day, he pointed out – and he saw it as a positive factor. “By pioneering, I mean that you have opportunities here that other students don’t get in America.”

He identified some of the advantages, from his perspective, of studying at WCMC-Q: the facilities (“a lot better than in most universities in the U.S. – there are basically no space constraints,”) the advantageous ratio of faculty to students, and the attention that students would receive. For King, it was important to find a medical school with “the right kind of curriculum” – one that placed problem-based learning (PBL) at the center of the learning experience.
INSIGHT:

Class of 2008: Original Thinkers
“Take Nothing for Granted”

The pioneering spirit among the members of the Class of 2008 sets them apart from students more usually encountered in medical school, and suggests that they have a bright future as researchers and scholars in the biomedical field.

This was the view of Olaf Sparre Andersen, M.D., professor of physiology and biophysics, director of the MD-PhD Program, and Thomas H. Meikle, Jr., Professor of Medical Education at WCMC-NY. Dr. Andersen visited Doha in September to teach a module in the molecules, genes and cells course.

“The students are so curious and so interactive. Not all of them might become investigators, but they are all going to be people who push the envelope. By being willing to come here, to a new Medical College, they are in many important ways iconoclasts,” he said.

During his week-long visit, Dr. Andersen delivered six lectures and led small group conferences. In addition, he was able to meet the students more informally to discuss a range of issues, including career options.

Dr. Andersen was impressed by both the quality and the quantity of the questions he was asked, and by the work ethic of the group: “The students are sponges for information. They really want to know, so they have lots of questions. As a group, they come well prepared for the lectures, and all of them have worked on the problems before we go to the small group conferences. They sometimes ask deep questions, and they are original in their thinking—they take nothing for granted.”

He felt that the experience of the Class of 2008 is likely to be unique, by virtue of the fact that there are no medical students ahead of them at the Medical College branch in Qatar.

“They have nobody to ask ‘what should we expect next week?’ At least, they may ask faculty, but that’s a different kind of interaction; there are no second year students to guide them, they really are on their own.”

As a consequence of this, Dr. Andersen noted an unusual and refreshing mindset among the Class, and he identified this as vital to the future careers they might opt for: “They know that problems will arise, and they might be difficult to solve. They know that very little is certain. That’s a mindset that you would love to have in a medical school, because this is the way you make sure that you really get changes made and you get new information, break new ground.”

Dr. Andersen is keen for them to have more opportunities for research experience. He noted that about 50% of the medical students at WCMC-NY spend some time in a research lab. This may be as part of summer research programs, or during the academic year. In addition, about 25% take a year off during their medical studies to do research or outreach activities.

“It’s a great thing,” he commented, “I think one should encourage the same thing among the students in Qatar because, in the long run, one of the purposes of WCMC-Q is to have a research-intensive medical school here.”

For related reports, see Talking to: Dr. Elizabeth Alger, page 3; Getting the Big Picture, page 18.
Calling on the Class of 2008 to approach the challenges of the years ahead in the spirit of intellectual enquiry, Senior Associate Dean for Education, Elizabeth Alger, M.D., F.A.C.P., drew on the words of Plutarch – and invoked Opening Exercises at Weill Cornell in New York a fortnight earlier as a point of reference for a similar ceremony in Doha on September 8th.

The ceremony at WCMC-Q brought to a close four days of Orientation for the Inaugural Class members. It also celebrated the achievement of “a remarkable group of young men and women” in gaining admission to the Medical Program, said Dean of WCMC-Q, Daniel R. Alonso, M.D.

Dr. Alger previewed the White Coat Ceremony, which was to take place on October 11th, the day before the medical students went out to physicians’ clinics in Doha for the first time, as part of the Medicine, Patients and Society I (MPS I) course. She reflected on the many qualities that a physician must develop, beyond the acquisition of knowledge and skills.

In his Opening Exercise Address, Dr. Alonso outlined the curriculum at Weill Cornell, highlighting the advantages of this hybrid approach to learning, with its variety of educational experiences and integration of biomedical sciences and clinical practice. He also examined the importance of the Hippocratic Oath “as a moral force conditioning medical practice.”

**Setting the Scene: Orientation 2004**

Earlier, in his welcome to the students on the first day of Orientation, Dr. Alonso highlighted the uniqueness of this pioneering Class: “You are such a special group that you deserve a special kind of welcome,” he said.

Of the sixteen students in the Class of 2008, fourteen successfully completed the Pre-medical Program at WCMC-Q and two are graduates of universities in the U.S.

Dr. Alonso looked forward to the challenges ahead as they entered a new phase: “It’s going to be a very busy year, and a year of tremendous learning and growth for you.”

Orientation was designed to ease the students into this phase. Commencing with a fortifying breakfast each day, and usually ending with a fun activity (and more food) in the evening, it introduced the Class members to some of the realities of medical school.

Group identity – already strong – was reaffirmed with the issue of “Class of 2008” t-shirts in Cornell red.

Suresh Tate, Ph.D., professor of biochemistry and course director for molecules, genes and cells gave an overview of the course, and explained the different ways in which students would work.

The Class was introduced to virtual microscopy by Nithila Isaac, Ph.D., assistant professor of anatomy. The slides used by medical students at WCMC-NY have been scanned in under the supervision of Powers Peterson, M.D., associate professor of pathology, and are now accessible by computer to WCMC-Q students.
Fundamental to the study of basic tissues, the images can be manipulated and magnified with ease, Dr. Isaac said.

The spotlight was turned on evidence-based medicine in a session led by Wendy Terry, M.D., course director for MPS I; in addition, library staff conducted a hands-on introduction to the personal digital assistants (PDAs), introducing the students to a new technology that will allow them to access a wealth of medical knowledge when they are working in physicians’ offices as part of MPS I.

Dr. Terry also examined the issue of professionalism, provoking lively discussion of the importance of a professional appearance and approach.

In a parents’ Orientation, Dr. Alger explained the many demands that medical school will make on the students. The meeting provided an important opportunity for relatives to understand more about the commitment that studying medicine at WCMC-Q requires, and to put their questions to faculty and staff from the Office of Student Affairs.

As an antidote to the serious talk about studying, evaluation, safety procedures, grading and transcripts, there were outings and fun evenings. On one occasion, a caravan of 4 x 4s whisked faculty and students off over the sand dunes to an evening by the Inland Sea in southern Qatar. On another, there was bowling and pizzas at a local shopping mall.

Getting to the Inland Sea was quite an experience, said Dino Terzic: “The ride was very interesting – when you go over those huge dunes, it’s like driving neither on earth nor in the sky.”

A huge inlet that opens into the Gulf to the east, the Inland Sea was lovely, said Maryam Shafae: “It was extremely beautiful: the horizon stretched forever. It was a great peace-time before we started our classes!”
TALKING TO: Dr. Elizabeth Alger  (Continued from page 4)

Cornell University in Ithaca and at WCMC-NY, and future opportunities are likely to be offered both after completion of the Pre-medical Program and in the summer vacation between the first and second years of the Medical Program.

Dr. Alger also plans to introduce a fortnightly Research Seminar Series, at which pre-medical and medical faculty meet with students for brief, informal talks. “This way, research becomes part of the culture here, even though our laboratories are not yet active.”

Developing such a culture would bring several benefits, Dr. Alger believes. Her published research includes analysis of outcome studies from student summer research, and it is clear that those who have taken part in such programs are more likely to go into academic careers.

There are wider benefits: “Even if it doesn’t influence career choices, a student has a much better sense for where the information in the biomedical literature comes from. You’ve participated in it, you’ve generated new knowledge, you’ve shared that information. You become part of the intellectual community, rather than just a consumer of it, and I think it changes the orientation.”

Intellectual engagement an “emerging aspect” of WCMC-Q

Dr. Alger suggests that the Medical College in Qatar is already preparing students for a future of active participation in academic medicine. She notes the “scholarly and intellectual engagement” among students and faculty, and she pays tribute to both the pre-medical faculty and the students for creating such an atmosphere.

“There’s already a culture here of openness between the students and the faculty. It certainly doesn’t happen on a college campus, and it doesn’t always happen in a medical school where there’s a large number of students. The students here are full of questions – they never hesitate to ask – and the questions are really very good. Part of it has to be the curriculum, certainly, with PBL and the whole philosophy of questioning. But it’s one of the emerging aspects of the culture of this school that is going to be very important in the future, and for this I credit the pre-medical faculty and the students.”

Administrative duties aside, Dr. Alger has found time to teach several labs, and to assist in some of the PBL sessions, but she regrets the lack of time for teaching. Nevertheless, she has formed a very positive impression of the students. “The Class is wonderful!” she exclaims, “they are the greatest group of people, and I am thoroughly enjoying working with them.”

A role model for women?

An interesting point about the Class of 2008 is the high proportion of women students: 62%. At WCMC-NY, the figure is close to 50%. While it is too early to arrive at a settled figure for the branch in Qatar, in all three classes admitted to the Pre-medical Program since 2002, the proportion of women has been above 50%.

It happens that Dr. Alger’s career has coincided with a seismic shift in the balance between the sexes in medical education and practice in the west. When she entered medical school, 10% of her class were women, and that figure was unusually high.

After graduation, Dr. Alger’s career path was, to some extent, influenced by the scarcity of women in the medical profession at the time. While she wanted to be a cardiothoracic surgeon, she chose internal medicine as her clinical specialty.

Asked why she gave up on surgery, Dr. Alger laughs and explains that, along with factors such as the long training period, it was the lack of female role models that deterred her, even though this had never previously been a concern.

So does she now see herself as a role model for the young women among the medical students in Qatar?

Dr. Alger replies that this is not part of her agenda: “If I am a role model, I am grateful for it. I try to be conscious some of the time, of some of the things I do and say, but this certainly doesn’t govern what I do by any means.”

Of her chosen career path in academic medicine, Dr. Alger says she has no regrets: “This path has been fine!”

See also related reports, Class of 2008: Original Thinkers “Take Nothing for Granted,” page 9; Getting the Big Picture, page 18.
Notes from Medical Faculty

Suresh Tate, Ph.D. received an Excellence in Teaching Award from Weill Cornell Medical College in New York last June. The prize, awarded in recognition of Dr. Tate’s outstanding effort on behalf of the Medical College, was presented at the annual Celebration of Teaching dinner in The Cornell Club-New York, hosted by Dean of WCMC-NY, Antonio M. Gotto, Jr., M.D., D.Phil.

Dr. Tate is professor of biochemistry at WCMC-NY and WCMC-Q, and course director for the first year molecules, genes and cells course at WCMC-Q.

Pablo Rodriguez del Pozo, M.D., Ph.D., J.D., has been chosen, along with co-authors Osvaldo Giordano and Jorge Colina, to receive the 2004 Fulvio Pagani Award for a paper on the healthcare system in Argentina.

Presented annually by Argentina’s Arcor Foundation, the Award was established to support research and policy proposals in the field of human development in Latin America.

In their paper, entitled “The Argentine Healthcare Failure: Diagnosis and Proposals,” the authors examine the inefficiencies and inequalities in Argentina’s healthcare system, and suggest possible solutions that would ensure the system is efficient, universal and just. The paper appeared in book form in October 2004.

Medical students adjust to demands of curriculum

(Continued from page 8)

week, you find you’ve read a huge amount, and you retain so much of it. All the things you learn in basic science and so on are related to the specific case and I think that’s why you remember it better.”

He described the process as remarkably stress-free. There’s an “intrinsic motivation” driving you on to solve a clinical problem, rather than a need to prove yourself or to achieve a certain grade: “There’s no competition, and that’s one of the major reasons for the release from stress. You are not trying to prove that you are better than others.”

Although skeptical at first, Maryam Shafaei felt that group discussions are an effective way to learn. She also drew attention to the role played by faculty: “our professors don’t treat us like students. We are like physicians – we talk about the disease, each of us contributes something to the discussion, and nobody tells us ‘what you’re saying is right or wrong.’”

Other experiences, such as the first responder course, gave students a taste of very different skills. Organized by Dr. Wendy Terry, course director for Medicine, Patients and Society I (MPS I) in conjunction with the Hamad International Training Center, this day-long event introduced the students to disaster management, and revisited basic life support skills learned at a workshop early in 2003.

“It was really cool,” said Omerovic, “it taught us how to act in real-life challenges. Sometimes, there isn’t much you can do as a doctor, but still you can do a lot to help. We learned how to prioritize, how to allocate resources, and how to deal with the stress and not to panic.”

Asked if they were prepared for the next semester, and particularly for the anatomical dissection work in gross anatomy, both Al-Khulaifi and Omerovic sounded upbeat. The ground had already been prepared during a previous visit by Dr. Estonih Mtui, associate professor of clinical anatomy at WCMC-NY, said Omerovic. “He gave us a pretty nice lecture on what anatomy is like and what the students in New York do – and that was really exciting.”
During his third visit to WCMC-Q since fall 2003, Cornell University president, Jeffrey S. Lehman made a particular point – as he had done before – of meeting the students, and even attending classes.

“I don’t like coming without having the opportunity to see the students,” he told members of the press, “it’s part of what keeps me going.”

President Lehman met Doha- and U.S.-based journalists for a round table discussion October 10th, at which he explained how Cornell is adapting to rapid changes on a global scale, in order to prepare its students to live in a world where there is more contact between people of different nations than ever before.

“A well-trained student today needs to be comfortable moving freely from one country to another country, from one culture to another culture – and needs to be sophisticated about cultural differences and about what it is that unites all of us as people,” he said.

He went on to brief the media on new developments affecting WCMC-Q, including the signing of an Affiliation Agreement with the Hamad Medical Corporation, and plans to build a Specialty Teaching Hospital in Education City.

WCMC-Q had attracted larger numbers of students than ever into the Pre-medical Program this year, Lehman said. In addition, a number of students from Iraq were likely to apply to the Medical College after a year’s preparation as Qatar Foundation scholars at the Academic Bridge Program in Education City.

Seeking new partnerships

In his introductory talk, Lehman said that the establishment of Cornell University’s third campus, in Qatar, was a signal of how far Cornell had changed over the past 140 years. For decades, the University had encouraged international students to study at its campuses in the U.S, and about 20% of the students in Ithaca come from outside the U.S. At the same time, some 5% of Cornell’s American students spend at least one semester overseas, while its faculty cooperate with professors across the world on a range of research projects.

However, a new pattern was now emerging as the University sought partnerships with world-class institutions overseas. “The most dramatic forms of engagement with the world come when we have a larger institutional presence outside the U.S.,” said Lehman, who also paid tribute to the Cornell Board of Trustees for supporting bold new ventures.

Cornell – prepared to set new trends right from its earliest days – was becoming a truly transnational institution, focussing on regions that are vital economic, cultural and
political centers of activity, and selecting partners “whom we look to as colleagues and peers,” he explained.

“When we find both of these conditions are met, we then see that we have the possibility of becoming better as a university, because we can then show all of our students what it means to have a transnational character.”

Closer contacts, changing outlook

This was having a direct effect on students’ experiences, Lehman said. During a previous visit to Doha, he had encountered an eagerness among WCMC-Q students to get to know their counterparts at Cornell’s campuses in Ithaca and New York.

As contacts developed, so the outlook of the students in Qatar was changing: “What you see emerging is a wonderful layered consciousness: our students here see themselves as part of a Qatar intellectual community, part of Education City and part of Cornell University…I think that kind of layered consciousness is what every well-educated person in the twenty-first century will be seeking to develop, and I am very excited to see it happen.”

The signs were that such an outlook was growing among Cornell students on the other campuses. Lehman noted that WCMC-NY students had expressed interest in spending up to one semester at the Medical College in Qatar, in the future. While there is a long-established tradition of medical students at Weill Cornell in New York opting for an overseas elective in the Fourth Year, extending this to a whole semester would be unprecedented.

More broadly, the Qatar campus could become a focal point where people from both cultures meet: “My observation is that, as people become more comfortable about moving about the world… this campus would be a wonderful intermediate spot in both directions for both cultures… We can be a bridge in the world.”

“What you see emerging is a wonderful layered consciousness: our students here see themselves as part of a Qatar intellectual community, part of Education City and part of Cornell University…I think that kind of layered consciousness is what every well-educated person in the twenty-first century will be seeking to develop, and I am very excited to see it happen.”
In a lecture hall packed with students, faculty, staff and guests, the Class of 2008 marked their entry to the Medical Program at a special ceremony held on October 11th.

They were “crossing a threshold in their education and career,” said Dean of WCMC-NY, Antonio M. Gotto, Jr., M.D., D. Phil., in his speech on the occasion. He congratulated them on their achievement, and remarked that they were entering medicine at a wonderful time.

“You will be able to do so much for your patients,” he said.

In an interview before the event, Dean Gotto explained the significance of the White Coat Ceremony for Qatar: “This is the first medical class and the first such ceremony in Qatar, so it has a historic significance – they’ve never had a medical school here before.”

The Ceremony was held in the presence of Minister of Finance, H.E. Yousef Hussein Kamel, leaders from Cornell University in Ithaca, WCMC-NY, the Qatar Foundation for Education, Science and Community Development, and the Hamad Medical Corporation (HMC.)

For many of those present, including the Chairman of the Board of Overseers at WCMC-NY, Sanford I. Weill, this was the first time that they had witnessed such an event. “I’ve been to graduations in New York, but this is my first White Coat Ceremony. I think seeing the young people and watching them put on their white coats, tears have to come into your eyes,” Mr. Weill said afterwards.

In his speech, Dean Gotto looked back to the establishment, in 2001, of the new Medical College in Qatar by Cornell University and the Qatar Foundation. He noted that it was the aim of the Medical College to train students to the highest standards in biomedical sciences and humanistic principles, giving equal weight to both.

In his keynote address, Jordan J. Cohen, M.D., President of the Association of American Medical Colleges, and a member of the Joint Advisory Board of WCMC-Q since 2001, said that the medical students were privileged to be entering the profession at a truly unique point in history.

“We are at the confluence of no less than three scientific and technological torrents, any one of which is capable of fundamentally
Crosses a Threshold
Ceremony at WCMC-Q

“Reading the Oath is important because it symbolizes how humanism in medicine developed. It shows that the ideals that go along with medicine have very deep roots. We are part of that lineage, and I find that very uplifting.” — Michelle Al-Khulaifi

transforming the way medicine is practiced and, in so doing, extending the length and quality of human life.”

He identified these as: major developments in information technology, giving the medical profession unprecedented access to information; the revolution in genetics, with the prospect that risk of a disease may be identified before it is manifest, leading the way to the practice of truly preventive medicine; and the development of stem cell research, “which promises to usher in an unimaginable era of so-called regenerative medicine……offering real hope to millions who presently face hopelessly degenerative processes.”

Dr. Cohen went on to highlight the humanistic aspect of medicine. More than just a healer, the physician is a professional who subscribes to a “finely-tuned value system” with its roots in the civilization of ancient Greece. He urged the students to honor that value system: “Our fervent hope is that all of you will stay in touch with that wellspring of idealism that you have today.”

Following the speeches, and amid an atmosphere of hushed expectation and excitement, Dean of WCMC-Q, Daniel R. Alonso, M.D., read out the Hippocratic Oath.

Members of the Class of 2008 felt the significance of the moment, and were moved. As Michelle Al-Khulaifi said afterwards: “Reading the Oath is important because it symbolizes how humanism in medicine developed. It shows that the ideals that go along with medicine have very deep roots. We are part of that lineage, and I find that very uplifting.”

Elizabeth Alger, M.D., F.A.C.P., Senior Associate Dean for Education, then presented the sixteen young men and women in the Class of 2008 to medical faculty, including senior physicians from HMC. The faculty helped them to put on their white coats with the distinctive WCMC-Q patch on one sleeve; shorter than the full-length coats worn by fully qualified physicians, the coats show that the students are doctors-in-training.

Dr. Cohen also presented the medical students with pins from the Arnold P. Gold Foundation, established in the U.S. in 1988 to promote humanism in medicine.

Reflecting on the symbolism of the event, Vildana Omerovic felt that it was a true rite of passage: “It was the culmination of the past two years, and all the hard work and effort to get into the Medical Program. So it was a rewarding and satisfying experience.”

Al-Khulaifi commented that it was also an inspiration: “I’m waiting now for the graduation day. I think when we actually have to say the Hippocratic Oath and we get our M.D. degrees, that will be the ‘ultimate White Coat Ceremony.’ I can’t wait for that day!”

On the cover: Senior Associate Dean for Research, Dr. Gary Schneider, and assistant professor of microbiology and immunology, Dr. Ali Sultan, assist Sharon King and Ibrahim Sultan as they don their white coats.
A group of WCMC-Q students from the Class of 2008 flew to the U.S. in June to spend the summer on-campus in Ithaca and New York City, where they joined teams of researchers in Cornell University and Weill Cornell Medical College labs.

The four men and three women, who completed the Pre-medical Program last May, stayed for 10 weeks, living the life of ordinary Cornell students and finding their feet in a country that some of them had never visited before.

The chance to experience university research is very important, even at this early stage, says Associate Dean for Pre-medical Education and professor of physiology, Dr. David Robertshaw. “I would like as many as possible of our students to be exposed to the campus of a research university, and to the potential opportunities that exist in medical research; the experience may change their lives, in terms of which way they want to go in their careers.”

It is a chance that WCMC-Q students do not yet have in Qatar. Khalid Al-Khelaifi, back from Ithaca where he worked with the neuropsychology team led by Dr. Tim DeVoogd, professor of psychology and of neurobiology and behavior, explains: “Here in Qatar, we don’t have (research) labs. When I went to Ithaca, I met students with a great and wide vision. For example, one graduate student was working in two labs during the summer – in our lab, and in a genetics lab. He has a wide vision, and that will help him choose his career path.”

Al-Khelaifi believes that the experience may influence his own decision on which of the “many pathways” in medicine he will follow.

So – what was this taste of research like, and how do the students from the Qatar branch look back on an experience that Dr. Robertshaw describes as “maturing, in different ways, for all of them”? The feedback is positive. If the start was a little slow – not surprisingly, the visitors had to read and observe before they could begin to make a contribution to the experimental side of the work – then excitement began to build as time went on.

Jehan Al-Rayahi joined the team of Dr. Shahin Rafii, the Belfer Professor of Genetic Medicine and a professor of medicine and hematology-oncology at WCMC-NY. The team was large, comprising about 30 people, and included both graduate and undergraduate students.

For one WCMC-Q student, going to WCMC-NY this summer was a return trip – not only to New York City, but also to the same lab as in 2003.

Kunali Dalal made her own arrangements to return to the lab of Dr. Manikkam Suthanthiran, Stanton Griffis Distinguished Professor of Medicine, and professor of biochemistry and of medicine in surgery. This time, she joined a different group of researchers to gain a new perspective on the team’s work on renal disease.

Dalal was drawn back by the excitement of working in a field where truly innovative technology has transformed the outlook for kidney transplant patients.

She explains that in the past, it was necessary to do a biopsy to predict organ rejection in a transplant patient; nowadays, the first step can be done non-invasively, by measuring levels of chemokines in the urine.

Now, there is the potential to develop new applications of the technique, including mapping sub-clinical rejection, by studying how levels of chemokines in the body change.

“I could see the power of research in improving clinical medicine,” Dalal comments, “and I have a feeling it has encouraged me to do better in the clinical side because, in order to do research, you have to be a good clinician.”
“I expected that the professor would give me a simple part of his daily work, and he would ask me to repeat it every day,” she recalls. “However, I learned about the ‘big picture’ and every day, I was learning more and more.”

After a while, she was able to work with samples of a precursor of leukemia, to determine whether the stroma was different from normal and would more readily support the growth of leukemic cells. This meant forming an hypothesis, growing cultures in different media to see what would happen, and gathering data to test her hypothesis.

Al-Rayahi frequently sought advice from team members, and went on to work with a fellow student to develop an hypothesis for the next stage of the research, although there was not sufficient time to test it.

She comments on the collaborative nature of research: “I expected there to be one leader telling everybody what to do. However, everybody has his own work, and his own hypothesis to test, and they help each other through the regular lab meetings.”

At these meetings, researchers presented their data, “and then the other scientists would join in and say ‘yes, I’m doing this, and I can give you some of my samples, and you can perhaps help me with this.”

Gathering data was also a cornerstone of the research experience for Subhi Al-Aref, who joined a multi-disciplinary team of biologists, engineers and physicists carrying out research into cardiac disease in the lab of Dr. Robert Gilmour, professor of physiology in the department of bio-medical science at Cornell’s College of Veterinary Medicine in Ithaca.

Working with other students, he conducted experiments using canine hearts, as part of investigations into ventricular fibrillation.

“I found out what real research is,” he says, “it’s continuous work, repeating the same thing over and over again to collect data. Afterwards, it gets exciting, with the analytical part, the studies you have to make, and the interaction with people.”

Al-Aref is clear that this research on non-human subjects can make a significant contribution to clinical medicine. “Ventricular fibrillation is the leading cause of death in the U.S. Around 300,000 individuals die in the United States each year from these sudden, chaotic heartbeats. We can’t experiment on live human hearts, so we were experimenting on dogs’ hearts – they can be used as models for human hearts.”

He notes that Dr. Gilmour’s lab is part of a network linking labs in other departments on the Ithaca campus and at WCMC-NY.

Al-Khelaifi, who worked with birds to find the volume of certain sites in the brain that are linked to their song, is in agreement. Such research can lead to a better understanding of the human brain he says, and, later on, to therapies for patients with head injuries.

“Every lab is doing its part. All research is useful, even when it seems far removed,” he comments.

Undoubtedly, the overseas experience has left its mark. In some

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Dr. DiSalvo in Doha

Dr. Frank DiSalvo’s first visit to WCMC-Q came during the fall semester. It was an opportunity to review the facilities, observe classroom teaching, and talk to faculty and students.

He also gave a lecture on fuel cells to an audience that included faculty from Texas A&M at Qatar (a sister institution in Education City) and Qatar University.

Describing the facilities at WCMC-Q as “excellent,” Dr. DiSalvo identified the laboratories as particularly well equipped.

He noted that the chemistry courses were very close – if not quite identical – in content to the relevant chemistry courses offered at Cornell in Ithaca, and that the performance of WCMC-Q pre-medical students in the exams was also comparable.

Unusually for an American undergraduate program, all of the students entering WCMC-Q intend to study medicine. The pre-medical curriculum is both shorter and more focused on the sciences basic to medicine than is usual in the U.S.

However, Dr. DiSalvo felt that changes would gradually be introduced, to tailor the courses even more closely to this main purpose.

“I think there’s going to be an evolution of the Pre-medical Program over the next years” – Dr. Frank DiSalvo, seen here lecturing at WCMC-Q.

Course Directors Appointed

Course directors, recently appointed from among senior faculty at Cornell University in Ithaca, have begun to pay twice-yearly visits to WCMC-Q as part of the process of monitoring the Pre-medical Program curriculum. The aim is to ensure that pre-medical education at the Medical College in Qatar remains consistent with the general standards required at Cornell.

The course directors meet with faculty and students to hear views on the ground in Doha. Proposals for changes in the curriculum may then be referred by them to the relevant department in Ithaca, while they also relay to faculty in Doha any changes that are to be implemented in the curriculum at Cornell.

The directors are:

**Biology:** Antonie Blackler, Ph.D., professor emeritus of zoology in the department of molecular biology and genetics.

**Chemistry:** Francis DiSalvo, Ph.D., John A. Newman Professor of Physical Science and director of the Cornell Center for Materials Research.

**Mathematics:** Kenneth S. Brown, Ph.D., professor and chair of the department of mathematics.

**Physics:** Robert Thorne, Ph.D., professor of physics.

Dr. Blackler has taught three courses in the Pre-medical Program at WCMC-Q over the past two years, and he has come to know the Medical College well, while Dr. Thorne has been a visiting lecturer in physics.

(Continued on page 27)
Writing Seminar Hones Students’ Skills

A new course introduced this fall encourages pre-medical students at WCMC-Q to step outside the basic sciences and into the humanities, while honing their analytical and writing skills from the outset.

The core of the first-year writing seminar is a selection of literature chosen by Professor Mary Ann Rishel, who teaches the course with lecturer Deena Shehata. All the texts are in English, although the selection includes works by writers from the Middle East region, in a move to bring the seminar closer to the experience of many of the students at the Medical College.

As a two-year program designed to prepare students for medical school, the Pre-medical Program has, until now, offered just one humanities-related seminar (medical ethics) in the second year. This is unusual in the context of undergraduate studies at an American university, where science majors normally have some exposure to the humanities each year.

Dr. David Robertshaw explains: “The traditional boundaries between the subjects are becoming less clearly marked... There is an enormous change in the biological sciences, and in the amount of knowledge that really...”

“Transformation in the biological sciences

The need to reconsider the established approach to pre-medical education, examined in an article published last summer in the AAMC Reporter*, stems from a transformation in biology in recent years, says Associate Dean for Pre-medical Education and professor of physiology, Dr. David Robertshaw.


(Continued on page 22)
Keeping pace with a scientific revolution (Continued from page 21)

does pull in the physical sciences such as the chemical sciences and physics. It’s an obvious change, and we don’t need to identify disciplines quite as rigorously as we did before.”

It follows that, in order to understand concepts and research activities in the biological sciences, students increasingly need to have expertise in what were formerly regarded as non-biological disciplines; and an understanding of the interrelations between the basic sciences will underpin the work they do in medical school.

Managing curriculum change

Dr. Robertshaw believes that what makes the adaptation to change particularly manageable – and exciting – at WCMC-Q, is the compact nature of the institution, and a situation where faculty are almost entirely dedicated to teaching.

“We are able to, and we do, attend each other’s lectures and look for links, so that we can cross-reference to the students the fact that information in one area has applications to another area.”

Up until fall 2004, curriculum review was the province of an ad hoc committee set up by Dr. Robertshaw; the changes implemented this semester have been made on the recommendation of this committee.

For example, the increase in credit hours for second year seminar courses was introduced following consultations among faculty, and in response to the report on a survey of student opinion carried out by the Medical Student Executive Council (MSEC). As a result, more weight is given to areas of the curriculum that are closest to the Medical Program, such as immunology, medical ethics, and neuroscience.

“The view both of the students and of the ad hoc committee was that we needed to change the credit hours awarded in these courses, so that they would be more effective, generate more discussion, and enable students to go into more depth,” Dr. Robertshaw explains.

The ad hoc committee has now been replaced by a new standing committee, appointed by Dean of WCMC-Q, Dr. Daniel R. Alonso, and tasked with carrying on the work of monitoring the curriculum with respect to content, credit hours and the performance of the students in the MCAT exam.

It is very important that pre-medical education at WCMC-Q continues to provide students with the best possible preparation for the next stage of their education in medical school, Dr. Robertshaw says, and this means close coordination with colleagues among the medical faculty.

“One of the challenges for a pre-medical curriculum where all our students are planning to become doctors, is that we do not duplicate the material that is taught in the medical curriculum. Therefore, we will need constant feedback from the professors teaching in the Medical Program as to whether or not our students have been well-prepared academically and whether there are any deficiencies in terms of curriculum content.”
Joining WCMC-Q this fall as professor of biology is Michael Smith, Ph.D., professor emeritus of molecular biology and of biochemistry at Simon Fraser University, British Columbia, Canada. Dr. Smith describes himself as a marine zoologist at heart: “I have worked almost exclusively with marine or aquatic organisms – seals, sturgeon, sea stars, sea urchins, squid and octopus.” Coming to Qatar provides him with opportunities to discover a new marine ecosystem: “the fauna here is completely different. It’s a Gulf of Arabia, quasi-coral reef situation.”

Visiting WCMC-Q as lecturer in neuroscience this semester was Ben Arthur, Ph.D. With a doctoral degree in computation and neural respects, it was habit– (if not life–) changing: for one thing, Al-Khelaifi has given up eating lunch. His rather surprising explanation is the difficulty of finding kosher (halal) meat on-campus, which led him to take the drastic step of cutting out one meal a day. Now back in Doha, he remains abstemious.

More seriously, it was also a chance to find out more about a country that some members of the group had never visited. For Al-Aref, from Jerusalem, the lasting impression is very positive: “I found it a great place. We saw people of various cultures – Far Eastern, Arab, ‘pure’ American. It was fun and the people were very nice. We hear a lot about the war in Iraq, and other wars, and I was expecting quite an aggressive reaction but – on the contrary – the people were a model for others.”

If the WCMC-Q students felt a little initial trepidation about living in the U.S., they soon revised their preconceptions. “The first day, I was thinking: ‘what am I doing here?’” says Al-Rayahi, “but after the second day, I loved New York. It gives you self-confidence, you can do your own work, and it’s pretty easy to find your way. Of course, you have to be careful, but it really gave us a feeling of independence.”

Members of the Class of 2008 who took part in the summer research project were:

**At WCMC-NY**
- Jehan Al-Rayahi
- Ayobami Omosola
- Kunali Dalal

**At Cornell University in Ithaca**
- Subhi Al-Aref
- Khalid Al-Khelaifi
- Osama Al-Saied
- Ibrahim Sultan
The number of students entering the Pre-medical Program increased significantly once again this year, with 48 in the Class of 2010, an increase of 50% over last year. The Class profile is also approaching parity between the sexes, with 52% women: 48% men, against 69% women in the Class of 2009 on entry to WCMC-Q.

A notable feature of this year’s entering Class, and a feature of the student community in general at the Medical College, is the extraordinary breadth of nationalities it comprises – a truly international community. Nearly one-third of the Class of 2010 are Gulf Cooperation Council (G.C.C.) nationals from Qatar and Bahrain, while others are citizens of Canada, Egypt, France, India, Jordan, Lebanon, Mauritania, Sudan, Syria, the U.K. and the U.S.

As Director of Admissions, Lee Askin, remarked to the assembled students at the roll call on the first day of Orientation, their linguistic ability is impressive: “almost all speak two or more languages fluently.”

Orientation provided an opportunity for the Class to get to know one another, to find their way around the Medical College, and to understand more about the curriculum, rules, regulations and student life. “Buddies” from among the Upper Class took them around and joined in a variety of activities, from a panel discussion on the Cornell University Reading Project (see opposite) to a typical Qatari meal at a restaurant on the Corniche and a treasure hunt in Qatar’s biggest shopping mall.
A truly international community… the Class of 2010 are citizens of Qatar, Bahrain, Canada, Egypt, France, India, Jordan, Lebanon, Mauritania, Sudan, Syria, the U.K. and the U.S.

The four-day event culminated in Opening Exercises on September 1st. Dean of WCMC-Q, Daniel R. Alonso, M.D. and Associate Dean for Pre-medical Education, David Robertshaw, Ph.D. welcomed the incoming Class. The Opening Exercise Address was given by Senior Associate Dean for Education, Elizabeth Alger, M.D., F.A.C.P. Every student received a Cornell University Pre-medical Program pin, and tote bag with essential equipment for the years ahead – lab coat and goggles – from pre-medical faculty.

At a reception afterwards, WCMC-Q leaders, faculty and staff met students, their parents, and guests.

Cornell University Reading Project Opens up Lively Debate

Senior lecturer in physics, Marco Ameduri, Ph.D., looks back at the Summer Reading Project at WCMC-Q and reflects on the start of a tradition on the campus.

Several weeks before the beginning of the semester, all the students of the entering Class received in the mail a copy of Franz Kafka’s celebrated novel The Trial – perhaps not quite what they expected as they prepared to embark on their pre-medical education.*

Exactly as for their freshman colleagues in Ithaca, the Reading Project was an important feature of their Orientation activities. The students began by attending a panel debate moderated by Professor Mary Ann Rishel, where four panellists – Caleb Covell and Rob Cronin, Teaching Assistants now in their second year in Doha, Haya Al Ghanim, pre-medical student, and Maryam Shafaee, medical student – shared their views on the rather complex novel and some of its possible interpretations.

This opened the way for the discussions that followed. Students and participating faculty convened in small groups to puzzle over Kafka’s text, and thrash out its meaning – or layers of meaning – and its relevance in the contemporary world.

The Reading Project is an essential component of the Orientation week, for it provides the entering students with the opportunity to engage right away in a fruitful intellectual exchange, in a relaxed and welcoming atmosphere, before the pressure of the semester kicks in.

It also represents one more point in common between the Doha and the Ithaca campuses, and this strengthens the students’ sense of belonging, right at the start of their experience, to the whole of the Cornell academic community. The impassioned enthusiasm with which the students engaged in the discussions makes me confident that, although only in its second year, the Reading Project is already a well-established tradition at WCMC-Q.

*Note, however, that a writing seminar is now part of the first year pre-medical curriculum – see report, page 21.
Notes from Pre-medical Faculty: Fall 2004

Assistant professor of chemistry, Michael Pungente, Ph.D., reviews recent developments in his research activities, and a summer workshop for Teaching Assistants at WCMC-Q:

Advances in Research

Gene therapy is a novel approach to treat, cure, or ultimately prevent disease by changing the expression of a person’s genes. New genetic material is introduced into the cells of a person to replace non-existing or defective genes. This can be achieved by either physical or chemical means. My research involves the synthesis and application of new lipid-based compounds for the purpose of gene therapy. This past July, I spent two weeks with scientists in the laboratory of my collaborator, Dr. Marcel Bally (senior scientist and department head, department of advanced therapeutics at the British Columbia Cancer Research Centre, Vancouver, BC), running a series of in vitro experiments to test the ability of a novel class of cationic lipids (which I prepared in collaboration with Professor Tadashi Eguchi of the department of chemistry, Tokyo Institute of Technology, Tokyo, Japan) as gene therapy reagents. We received very encouraging results, and we are in the process of writing up our findings for publication.

Skills Workshop for Teaching Assistants (TAs)

I facilitated a three-day Instructional Skills Workshop (ISW) August 24 – 26, that was attended by three of our new TAs, and two faculty members in the Pre-medical Program. The ISW is designed to allow participants to try new approaches, and to sharpen existing skills in teaching and learning. The workshop consists of teaching practice, theory application and topic workshops and discussion groups. We felt our new TAs would gain confidence through this three-day intensive workshop, to prepare them for their important role in the Pre-medical Program; feedback from participants in the workshop was very positive. While these workshops have been run in Canada, the U.S. and the U.A.E. for a number of years, this was, to my knowledge, the first ISW offered at WCMC-Q – and hopefully, the first of many more to come!

Professor of mathematics, Thomas Rishel, Ph.D., summarizes recent papers he has published, and speeches he delivered at meetings in the U.S. earlier this year:

This year, I published two papers. The first, “Discovery and Active Learning,” in the Proceedings of the Second International Conference on Trends in Mathematics Education, is about what discovery methodology is, and how it is being used in the mathematics classroom. The second, “Assessment of a New Program in the Middle East,” can be found on the Web at the Mathematical Association of America website: http://www.maa.org/saum/new_case.html.

I was asked to give a Mathematical Association keynote address at their sectional convention, on “Confronting Higher Dimensions in Mathematics,” at the Seaway Section meeting in Cortland, New York. The talk is very interactive; I get the audience to help me make tables of facts related to what cubes would look like in higher and higher dimensions, and then we discuss the mathematico-philosophical implications of what we have done.

In two talks at Lehigh University in Bethlehem, Pennsylvania, I spoke on teaching issues for graduate students, and on the theme of finding a job in academia, also geared to future Ph.D.-holders in the sciences. Some of this information can be accessed on the American Mathematical Society Website, www.ams.org under the heading “employment.”
Bogomil Gerganov, Ph.D., looks at a joint project between faculty at Cornell University in Ithaca and WCMC-Q to develop demonstrations for the Physics 207 and 208 courses:

With senior lab assistant, Ahmed Syed Hasnain, I joined up with the lab and demonstration development team at the department of physics of Cornell University in Ithaca during summer 2004. Under the guidance of Dr. Robert Thorne, professor of physics at Cornell in Ithaca and course director for Physics 207/208 at the Medical College in Qatar, and in collaboration with Dr. Phil Krasicky, Carl Steckler and Vince Kotmel from the department in Ithaca, we designed a number of new demonstrations to be used in the Physics 207 and 208 courses on both Ithaca and Qatar campuses. More than 10 new demo setups based on these designs were built by Hasnain.

The courses form the calculus-based Fundamentals of Physics sequence taken by most pre-medical students in Ithaca. Thanks to the dedication and the continuing support of the department of physics of Cornell in Ithaca, the leadership of WCMC-Q, and the Qatar Foundation, the Physics 207-208 laboratory in Qatar has been equipped with the same state-of-the-art equipment as the physics teaching laboratories in Ithaca. Last summer’s visit marked the beginning of a two-way cooperation. From now on, new pedagogical ideas involving laboratory experiments or demonstrations will be developed and implemented jointly by the physics teaching teams in Qatar and Ithaca.

Dr. DiSalvo in Doha (Continued from page 20)

Research Center, Dr. DiSalvo heads an interdisciplinary team of 94 faculty members from 10 different departments in Ithaca. He emphasized the benefits of exchange between academics from a range of specializations: “They bring completely different perspectives, and something new comes out of that. If we only talk to each other in our own closed group, it gets stale.”

Following his lecture at WCMC-Q, Dr. DiSalvo met faculty from Qatar University and Texas A&M at Qatar. He is keen to see such contacts develop further, believing that they can only be beneficial. “The medical people can have lots of potential advances from interacting with engineers, especially when one thinks about new tools, techniques and instrumentation. The communication with engineers about such needs often leads to advances.”
Wireless Wonders at WCMC-Q

Ever looked at the back of your computer? Count the cables—four, eight, twenty? If you are like most computer users you’ve probably got more cables than you can count—a mass of spaghetti like wires leading everywhere and nowhere.

Imagine a world without all that mess, a wireless world where there are no cables to unravel, testing your ingenuity. Imagine being able to move around a building, work on the couch, on your porch or wherever in the workplace or at home is more convenient.

That world is now part of modern living and you don’t have to be a computer geek to enjoy the benefits. Wireless networks have been around for some time and the technology first became available during the 1960’s. They use radio waves or microwaves to maintain communication channels between computers and provide a more modern alternative to wire that relies on copper or fibre optic cabling between network devices.

A wireless network allows computers to share printers, files or an Internet connection without any wires between them. The current popular standard is 802.11b that supports around 11 megabits/second data rates. Typical range through open air is about 200-1000 meters, although in confined spaces the effective range is lower depending on the materials used in floors, walls and ceilings.

Access points allow wireless networks to join existing wired networks. In home networking, a single access point possesses sufficient range to span most homes but in large buildings, multiple access points are deployed.

Abraham Kololli, Director of Information Technology, adds: “Wireless networks bring the benefits of computer mobility and flexibility in working practices. At work, they allow you to act on an idea and research information immediately without wasting time going back to the office. They can also be installed in the home. Information can be accessed from anywhere in the house with no wires getting in the way as the user moves from room to room. Wireless is the future of networking.”

—Abraham Kololli, Director of Information Technology

Personal Digital Assistants (PDAs) offer a wide variety of information services anywhere there is a wireless network, giving medical students rapid and easy access to the information they need.
environment, the first organization to do so in Qatar.

IT and Distributed eLibrary staff have joined forces to deliver the hardware, software and training needed to enable faculty and students to work from anywhere in the building without having to return to their workstation.

The wireless network went live in May 2004. Some thirty-six access points in the building broadcast a signal using the wireless 802.11B standard with some 2.4 GH (Giga Hertz) to ensure the signal is constant and can penetrate the physical surroundings.

Faculty and students have been equipped with the latest hand-held Tungsten Palm PDAs (Personal Digital Assistant) that come with a variety of features from checking e-mails to browsing the web for research. Although one of the down sides is the small screen with the need to scroll across the menu page, as the IT develops in the future they will become more usable.

In addition, they come with other useful tools.

WCMC-Q’s PDAs connect to the Distributed eLibrary and can be used to access medical and research information sites such as PUB-MED which are loaded onto the screen. Other features include AvantGo, providing capability to view news channels, medical journals and newspapers of choice.

One-on-one training has already been delivered in how to use the PDAs, customized to suit the tastes and needs of each individual.

Carole Thompson, Associate Director, Strategic Planning and Digital Initiatives for the Distributed eLibrary, explains the background:

“One of the reasons for installing the technology was to get students to embed evidence-based medicine in their working practices. This technology enables the user to research data at any time of the day while they are here, wherever they are in the building. They can look something up during a lecture or over lunch without having to use a workstation. Faculty have the same benefits without having to return to their office to look up some specific information.

Our training recognizes that everyone is different. Some people are technology friendly, others take longer to get comfortable using the technology. What I call early adopters in technology enjoy the discovery process and push the envelope, finding out what is available and using everything. They embrace the change in their working practices. Others need more encouragement but that’s a fact in all walks of life. Whatever an individual’s preference or experience, we will help them through the process so they understand the benefits they have at their fingertips.”

WEB WATCH

In our regular feature on websites of interest, we turn the spotlight on evidence-based medicine, with reviews of two websites dedicated to the subject of immunization.

National Network for Immunization Information
http://www.immunizationinfo.org/

This site provides a broad range of high-quality immunization information including: synopses of, and links to, current scientific articles; overviews and recent developments of current issues/topics; a vaccine/disease section with “information ranging from history of the vaccine, to who should and should not receive it,” with links to key references for each. Check out the influenza section for an example of what is available.

The National Network for Immunization Information is an affiliation of several associations/societies with an interest in immunization e.g. Infectious Diseases Society of America, American Academy of Pediatrics, American Academy of Family Physicians. The organization prides itself on delivering science-based information, and all of the information on the site is reviewed by an editorial board of immunization experts to ensure that it is scientifically accurate and up-to-date.

Contributor: Dianne Cmor, reference librarian

The Group on Immunization Education of the Society of Teachers of Family Medicine
http://www.immunizationed.org

This website updates physicians, students and residents on immunization schedules for children and adults. Being on-line, the immunization schedule is available for the Palm OS and Pocket PC.

Two of the most valuable features of this website are the photographs of vaccine-related diseases and the audio of a pertussis cough. The photographs are accompanied by a short paragraph about the disease with links to more detailed information. Details are included on each vaccine name. Since immunization has an important place in protecting the community, this is a useful website to use.

Contributor: Paula Craig, MLS, e-Learning coordinator
“Magical Night” Conjures Ramadan Traditions

The lawn outside WCMC-Q was brightly lit, the air throbbed with the rhythm of the tabla (drum,) incense wafted through the air – and the kids were having a blast. Welcome to the Magical Night at WCMC-Q in mid-Ramadan. For many there, it was their first glimpse of how the Holy Month was traditionally celebrated in the Gulf.

Inspired by an idea from second-year pre-medical student Jowhara Al-Qahtani, the MSEC and a team of volunteers conjured up the setting of an outdoor majlis (reception area) with carpets, cushions and strings of overhead lights forming the shape of a tent. Beneath the glittering canopy, the team played host, offering members of the WCMC-Q community coffee in tiny cups, sweets and dates, touches of perfume and fragrant incense in succession, just as a Qatari family would welcome guests.

Casting aside their more usual shirts and trousers, the girls were gorgeously dressed and be-jewelled (though not quite in the ‘real thing,’ they confessed) to show how women dressed in the old days.

There was henna decoration in one corner, with lady faculty members, students and lots of children keen to extend a hand – and proud to show off the designs once done.

To keep the young ones occupied, another corner was set up with drawing activities and copious amounts of glitter provided. Little cones of nuts and sweets were distributed to capture the spirit of Garangao, the night in mid-Ramadan when children still go from door-to-door asking for treats from the families in their neighborhood. We heard from Al-Qahtani that the custom is a Gulf tradition, unconnected with the religious aspect of the month of Ramadan.

Food was part of the festivities, of course – the tastes of Ramadan in the majlis included everything from traditional Qatari hares and majboos (dishes in which meat is served with wheat and with rice, respectively,) to the Syrian or Turkish kebabs.

The surprise of the evening turned out to be – a quiz! The chances are that no one was really surprised: this is a Medical College, after all. The evening’s variation on the theme was ‘guess the faculty member’ (mimicry by Jinan Al-Shaarani), among old chestnuts that turned out to be a bit different, like ‘guess the number of dates in a basket.’

Interestingly, the evening served to highlight for some the variety of Ramadan traditions in the Islamic world. Medical student Amila Husic, a member of the organising committee, and dressed for the evening in Qatari costume, commented: “In Bosnia most of our Islamic traditions were inherited from Turkish people who came from central Asia, rather than from the Middle East. We have different dress, different sweets – it’s a different environment.”

The last word to Fouad Otaki: “The aim of the evening was to have a social event, have great interaction between the family, feel the spirit of a larger family all together.”
Visits by Kofi Annan and U.S. Ambassador

During a visit to Qatar last summer, U.N. Secretary General Kofi Annan was welcomed to WCMC-Q by Dr. Daniel R. Alonso, Dean of the Medical College. Mr. Annan was guest of honor at a presentation by the Qatar Foundation on its work and future plans for Education City. With Mr. Annan and Dean Alonso in the picture are senior officials from Qatar Foundation, from left to right: director of public relations and marketing, Robert Baxter; Vice Chairperson, Dr. Saif Ali Al-Hajari; and Education Committee members, Dr. Sheikha Al-Misnad and Dr. Mohammad Fathy Saoud.

More recent visitors to the Medical College, U.S. Ambassador to Qatar, Chase Untermeyer and his wife, Diana, were given a tour of the building by Dean Alonso and Ms. Idriss, Vice Dean. During the visit, they saw medical students in action as part of a first responder course conducted by the Hamad International Training Center. Pictured at the entrance to the clinical skills assessment center are from left to right: Dr. Wendy Terry, course director for Medicine, Patients and Society I; Patricia Kabra, Consul for press and cultural affairs at the U.S. Embassy; Dean Alonso; Ms. Idriss; Ambassador and Mrs. Untermeyer.

Groundbreaking ‘Doha Debate’ Sparks Lively Discussion

The BBC’s HARDtalk met youthful enthusiasm in the first of a planned series of ‘Doha Debates’ on the central issues of the day, held at the Qatar Foundation’s (QF) headquarters, October 13th.

The motion under discussion, “This House believes that Arab governments are not interested in genuine reform,” generated four contrasting speeches – and considerable interest from the floor. Based on the model of the Oxford Union, the debate was intended primarily to test the validity of the arguments through intellectual discussion, with the audience giving the final verdict by a vote at the end.

With the observation that “participation in a free society is not only a right, but a duty,” BBC interviewer and journalist, Tim Sebastian, set the ball rolling by emphasizing both the constructive role of effective communication in avoiding conflict and the need for informed participation.

Not without irony, however, he also noted that the first debate was scheduled at the same time as an important football match. Perhaps this was why young women were overwhelmingly in the majority among the students present.

The invited speakers, all from outside Qatar, were academic and human rights activist, Saad Eddin Ibrahim, writer and analyst Rime Allaf, researcher and commentator Hussein Shobokshi, and author and journalist Adel Darwish. Their approach differed widely. While Allaf constructed an evidence-based case using the UN Development Program’s Arab Development Report to speak in support of the motion, Darwish unravelled the motion itself and declared that it was flawed in logic.

An audience that included faculty, staff and students from the universities and high school in Education City, listened with interest. Several joined in the debate once it was opened up to the floor. Education and access to information emerged as important themes for the young. By show of hands, the motion was passed.

“We were delighted with the first debate,” said QF public relations & marketing director, Robert Baxter. “We were a little worried that people would be reluctant to speak up from the floor, but we were proved quite wrong – the discussion could have gone on all night! It was fantastic to be among a group of people that included ambassadors as well as students, where everyone’s opinion was of equal value. We hope that open and frank exchanges on the issues that really matter to people become part of everyday life at Education City and in Qatar.”
News Roundup

Walk Highlights Breast Cancer

Taking part in a walk organized to highlight breast cancer mid-October were Dr. Gary Schneider, Senior Associate Dean for Research, and his wife Barbara, e-Learning coordinator Paula Craig, and course director for Medicine, Patients and Society I, Dr. Wendy Terry (pictured right).

They joined a large number of walkers on a bright and sunny day for a 3-kilometer walk along part of Doha’s Corniche. The activity was organized by a group of breast cancer survivors in association with Qatar National Cancer Society to raise awareness of the disease, which is reportedly on the increase in Qatar.

HSBC Funding for Scholarship

HSBC has donated $70,000 over seven years to assist financially disadvantaged students at WCMC-Q. At a ceremony in October, Chief Executive Officer of HSBC Qatar, Kevin Smorthwaite, presented a cheque for the first annual payment of $10,000 to Dean of the Medical College, Dr. Daniel R. Alonso. Also in the photograph (at left) is President of Qatar Foundation, Dr. Charles E. Young.

WCMC-Q Campus Notes

Welcome to WCMC-Q

Since the Weill Cornell Qatar Chronicle last appeared, many new members of staff have joined the team. A warm welcome to them all!

The new staff members are:
- Michael Vertigans, director of public affairs; John Hughes, associate director of human resources; Claudio LoCicero, senior network manager; Kai Wong, software development manager; Thomas Hodge, reference librarian; Vincent Winters, technical services supervisor; Russell Clarke, applications trainer; Julian Shaw, web developer; Christopher Rennie, building services coordinator; Houssam Hammoud, web developer; Sally Birch, information and reference technician; Hussein Jaber, procurement assistant; Martin Marion, photographer; Kylie Sykes, Raya Alirani, and Amani Maayah, administrative secretaries; Alna Al-Sok, information library assistant; Nada Hassen, executive assistant; Silke Hagemann, housing assistant; and Sarah El-Nashar, receptionist/secretary.

Wherever you are in the world, whatever the time of day or night —remember you can visit our Website and check out the latest news from WCMC-Q:
www.qatar-med.cornell.edu