Historic Day for Cornell University

October 12 was a day of unique events in the history of Cornell University. Not only was the new building of its first branch overseas, the Weill Cornell Medical College in Qatar officially opened, but the initial celebration in the inauguration week of Jeffrey S. Lehman as eleventh president of the University took place there as well.

Read all about it on the following pages
President Lehman: pride in Cornell’s role in Education City, praise for WCMC-Q students

While Cornell University President Jeffrey S. Lehman had certain expectations of what he would find when he came to Weill Cornell Medical College in Qatar (WCMC-Q) – after all, he had previously heard much about it – still he was not quite prepared for what he encountered.

In Doha for the October 12 celebrations to mark the official opening of the new building of WCMC-Q, and the start of his inauguration week as president of Cornell, Mr. Lehman also spoke at the official launch of Education City, hosted by the Emir of Qatar and his wife, Sheikha Mozah, at WCMC-Q on October 13. He took time during a very busy schedule to share with us some of his thoughts and impressions.

“What I was not expecting, and what has really been quite overwhelming for me, is the sense that we are here participating in a project of extraordinary courage and promise for the region and for the world,” he said. “It wasn’t until I got here that I really understood just how bold and ambitious the vision of the Emir and Sheikha Mozah are, and how important Cornell’s participation in Education City has been to their efforts to realize their dreams.”

President Lehman chose to begin his inauguration week at Weill Cornell in Qatar to affirm the University’s commitment to an open and engaged role in the world. As the third, and most recently established branch of Cornell University, situated thousands of miles from the United States, he felt that WCMC-Q was the ideal setting for the ceremony:

“I had heard that this is a very exciting project, and I do believe that Cornell’s commitment to a transnational perspective on the human condition is essential to our future. I felt that it would be a wonderful opportunity to symbolize that commitment through beginning my inauguration week here.”

He defined this perspective with precision, to mean recognition that all human beings share universal ideals and values, accompanied by a respect for the different ways in which such ideals and values are interpreted in different places.

President Lehman went on to say that meeting the students at Weill Cornell in Qatar had truly brought home to him the importance of the project to young people in the region:

“Talking with the students gave me a chance to really feel what this kind of endeavor means to young people who have grown up in Qatar or in other countries in the Gulf region. I felt a great sense of pride that Cornell had shown the leadership to be an early partner in the project.”

Of the students, President Lehman said: “in many ways they were exactly like students I’ve known in Ithaca: the same kind of intelligence, energy and commitment, but what was added – which I found quite moving – was a sense that they understand that they are part of a truly historic enterprise. They feel a sense of personal responsibility, gratitude and commitment to the success of the venture that is remarkable and somewhat humbling.”

Turning to the building, President Lehman commented that his first response was one of astonishment: “I had in my mind imagined something that was probably about half the size that it is in fact. It was really startling to come around the traffic circle and see it... I quickly had to adjust in my mind all my preconceptions about what I was seeing.”

With a bachelor’s degree in mathematics, the Cornell alumnus was also very interested to see the four lecture halls.

“I had read about the auditorium spaces reflecting these three-dimensional geometric shapes, and I had thought that that kind of a shape would feel cold, just because one imagines a sort of Platonic ideal. Instead, when one walked into those spaces, they felt quite warm, I think because of the use of wood.”

Returning to the U.S. after his three-day visit, President Lehman took with him a keen sense of the extraordinary pace of change in Qatar.

“I feel a sense of dynamism here that is truly breathtaking, and it exists in every aspect of society. There is an economic dynamism associated with the development of new industries, a political dynamism associated with an extension of the franchise and work on movement towards constitutional democracy; and there is educational dynamism of a kind that I suspect has rarely happened on this scale.”
The day dawned sunny and calm; the air was clear and bright. Freshly watered, the lawns outside the west end of Weill Cornell Medical College in Qatar (WCMC-Q) formed an oasis of green, with palm trees standing sentinel in rows. Meanwhile, brilliant sunshine filled the east courtyard and flooded across the ovoid lecture halls, where all was quiet.

At first glance, this could have been the start of a normal day at the Medical College; but October 12, 2003 was truly special.

From the moment that the first members of staff entered the new building, there was a sense of expectation and excitement in the air.

Next, the students arrived. Smartly dressed for the occasion, they put on red sashes with the Cornell seal and took up position in the halls, ready to act as ushers.

This was an historic day for Cornell University, a day of unique events. Not only was the new building of its first branch overseas, the Weill Cornell Medical College in Qatar, to be officially opened, but the initial celebration in the inauguration week of Jeffrey S. Lehman as the new president of the University would take place there as well.

Sheikha Mozah dedicates new building

Among the guests who gathered at WCMC-Q for the ceremonies were leading figures from Cornell University and its Weill Cornell Medical College in New York (WCMC-NY); members of the Joint Advisory Board for WCMC-Q; the leadership of the Qatar Foundation for Education, Science and Community Development, our partners in the project; and Congresswoman Carolyn Maloney, who helped initiate contacts between the Qatar Foundation and Cornell, following a visit to Qatar in 1999.

They were joined by ministers of the government of Qatar, senior figures from the medical and educational professions, diplomats and prominent members of the community.

Also present was renowned Japanese architect Arata Isozaki, who led the team that designed the new building.

The first part of the opening ceremony took place at the northeast entrance. Her Highness Sheikha Mozah bint Nasser Al-Missned, wife of the Emir of Qatar and chairperson of the Qatar Foundation, accompanied by President Lehman and Sanford I. Weill, chairman of the Board of Overseers of WCMC-NY, unveiled a plaque commemorating the dedication of the new building of WCMC-Q.

Sheikha Mozah, President Lehman, Mr. Weill and Dean Goto applaud the unveiling of the commemorative glass plaque, which shines brightly in the morning sunlight

Technology Featured at the Opening Ceremonies

One of the most outstanding features of the new building of WCMC-Q is the technology that brings lectures and resources from Cornell in the United States into the classroom at Weill Cornell in Qatar.

The opening ceremony and inauguration of President Lehman were carefully planned to make use of these innovative facilities. While the ceremonies unfolded in one of the ovoid lecture halls, guests seated in the other three auditoria were able to enjoy the proceedings by following them simulcast on huge screens. Technology brought each and every detail into the halls simultaneously – just as it enables WCMC-Q students to take part in lectures and interactive conferences by streaming video from Cornell in the U.S.

Film features WCMC-Q students

Dr. Daniel Alonso, Dean of WCMC-Q, opened the next stage of the ceremony, held inside one of the ovoid lecture halls, by welcoming guests...
Historic Day for Cornell University

“I have every confidence that our partnership will succeed and will lead to a generation of superb physicians, medical advances and better health care for the people of Qatar and this region.”

Antonio M. Gotto Jr., M.D., D. Phil.,
Dean of WCMC-NY

and paying tribute to the inspirational plan of His Highness the Emir of Qatar and Her Highness Sheikha Mozah to bring a medical school to Qatar.

He went on to introduce a film specially made for the occasion. Entitled “A Groundbreaking Partnership,” it featured a group of WCMC-Q pre-medical students discussing life at the College and beyond. It was a warm and candid portrait that won widespread praise.

Seated informally on the steps of the student lounge, they gave their perspective on what it is like to be students at Weill Cornell in Qatar, the opportunities the College has opened up in the region, the importance placed in Islam on educating girls as well as boys, and why they chose medicine as a career, among other topics.

They paid tribute to Sheikha Mozah’s vision in founding Education City, and drew a parallel between this far-sighted project in Qatar and Ezra Cornell’s pioneering achievement in founding Cornell University some 138 years ago.

Sheikha Mozah praised the dedication of faculty, staff and students at WCMC-Q during its first year of operation. She affirmed: “Cornell’s place in the heart of Education City is indeed a central one as it stands as an embodiment of excellence in medical education, research and community involvement.”

She congratulated Mr. Lehman on becoming president of Cornell University and, looking ahead, said: “we anticipate that Cornell will continue to play a leading role in realizing the vision of Education City by applying sound research to community-related problems.”

In his speech, Sanford I. Weill spoke of the importance of providing educational opportunities for young people, and of the significance of education as a bridge between nations. He congratulated the young people of the region “for whom this great venture has been undertaken.”

Looking back to the inauguration in October 2002, which he described as a “defining moment in the history of our institutions, and of the relationship between our institutions,” Dr. Antonio M. Gotto Jr., Dean of Weill Cornell in New York, reflected on both the ambitious scope of the project to found WCMC-Q and the “extraordinary teamwork” that enabled it to take shape so rapidly.

He paid tribute to the generosity and commitment underlying this “great educational enterprise.”

The opening of the new building of Weill Cornell Medical College in Qatar was completed, at the end of the morning’s program of events, by the formal cutting of a ribbon at the northeast entrance by President Lehman and Mr. Weill.

Unique inaugural ceremony

The second part of the morning’s program, the inaugural ceremony for President Lehman, was the first such ceremony ever held by Cornell outside the U.S. It was followed later in the week by a second ceremony in New York and culminated with his official installation in Ithaca on October 17.

Without the panoply of academic procession or insignia, the celebration was simple, yet warm: inspirational speeches were followed by presentation of the class of 2008 and the class of 2009.

Introducing the new president, Peter C. Meinig, chairman of the Cornell Board of Trustees highlighted the qualities that the position required: “a little more than a year ago, we embarked on a search for a president who would embrace Cornell’s founding vision and have the strength and skill to evaluate, adjust, and extend that mission to meet the needs of a global world in a new millennium. In Jeffrey Lehman we have found such a leader.”

President Lehman began his inaugural address by explaining the reasons for choosing to begin his inauguration week at WCMC-Q: “the first (reason) is to signal the importance of this extraordinary campus to our University. The second is more generally to signal

Cornell to play “a leading role” in Education City

Speakers at the ceremony focused on the partnership between Cornell University and the Qatar Foundation, and looked forward to the future with optimism.

“Two weeks ago, I was an invited speaker at the U.S.-Arab Economic Forum in Detroit, Michigan, a conference designed to examine the theme “One world, two cultures, endless possibilities.” I spoke about this campus, here in Doha, as a shining and hopeful example of the future of higher education worldwide.”

Jeffrey S. Lehman, J.D.,
President of Cornell University
Cornell’s unique role in the world.”
In a wide-ranging speech that touched on aspects of history, culture, philosophy, religion and scientific and technical advance, President Lehman described the breadth of vision that inspired the founding of the University and examined its long record in promoting international exchange, both by welcoming overseas students to its campuses and by establishing programs that have taken Cornell’s presence to all corners of the globe.

He argued for the development of a transnational perspective that places our shared identity as members of the human species above our identities as members of national or community groups, yet respects the pluralism of the world’s “radically varied texture.” This transnational perspective, at once open and engaged, welcomes “new ideas, new ways of thinking, new ways of feeling,” he said, identifying a key role for the University in promoting it:

“Cornell – birthplace of the integration of theory and application within American higher education, champion of the equal dignity of humanism and science, exemplar of openness to all peoples and to the critical examination of ideas – has a special duty to nurture a transnational perspective on the human condition.”

President Lehman said that WCMC-Q can play a role not only in the fight against disease, but also in the promotion of “a different kind of healing.” Describing universities as “powerful engines of human transformation,” he suggested that,

Extracts from the speeches...
“This is an extraordinarily important project. I am truly privileged to be able to begin my inaugural week here, on our newest campus, in Qatar.”
Jeffrey S. Lehman, J.D., President of Cornell University

“It is fitting that we begin the inaugural ceremonies for Cornell’s eleventh president, Jeffrey Sean Lehman, here in Qatar. There is no better way to remember and renew Cornell’s commitment to global outreach and to education as the necessary condition for peace, justice, prosperity and progress for all people.”
Peter C. Meinig, Chairman of Cornell’s Board of Trustees

After the events...
“I thought one of the great things was the video, where we got to see a lot of the students and hear them talk about the program. There’s nothing more important than how the students themselves feel.”
Sanford I. Weill, chairman of the Board of Overseers of WCMC-NY

“A year ago, when we dedicated the Medical College, there was just the frame of the building. Now, a year later, we are in a completed building. …It’s unlike any other medical school I’ve ever been in, and I’ve been in medical schools all over the world.”
Antonio M. Gotto Jr., M.D., D. Phil., Dean of WCMC-NY

“It was a very festive way to kick off both the opening of the Medical College and the inauguration of our new president. It was very smoothly done, and it actually demonstrated a lot of the technology in the auditoria here.”
Carol Storey-Johnson, M.D., Senior Associate Dean for Education, WCMC-NY

For additional reports and photographs of the October events in Doha, please visit our Website at www.med.cornell.edu/qatar
A series of events organized during their stay in Doha gave Cornell guests a glimpse of past traditions in Qatar and the region, and valuable insights into how fast the country is changing at the turn of the twenty-first century.

The curtain raiser was a dinner with a “Thousand and One Nights” theme on the evening of October 11. Guests tried a range of Middle Eastern and Gulf cuisine, explored the art of henna decoration, discovered the beauty of traditional clothes and silk carpets, and came face to face with a falcon, traditionally used for hunting in the region – all to the delicate sounds of Arabic music.

In the past, pearl diving was a mainstay of Gulf economies; putting out to sea in wooden “dhow” during the hottest months of the year, pearl divers risked their lives to retrieve oysters from the seabed, in the hope that they would contain the lustrous gems that were – and still are – prized across the world. Cornell guests were able to see a wonderful show of pearls during a visit to the collection of prominent Qatari citizen Mr. Hussein Al-Fardan.

In contrast, touring the Emir-i Diwan offered an insight into present-day Qatar. Situated on Doha’s Corniche, this imposing building is the official government house of the State of Qatar. Constructed in the late twentieth century, it houses a fine collection of local art that portrays different aspects of the country’s heritage.

The Office of Public Affairs organized a women’s discussion panel on the final morning, where Dr. Ghalia bint Mohammed bin Hamad Al-Thani and Dr. Hessa Al-Jaber gave brief presentations and then answered a wide range of questions on the position of women in Qatar, educational and career opportunities open to them, and the social effects of rapid change, among other topics. The discussion aroused considerable interest, and gave the audience real insights into how women in Qatar have met the challenges of modernization and how the government plans to create an “information society” by 2010.*

There was a chance also to glimpse some of the achievements of Arab artists in a show organized by Bissan Gallery in cooperation with the Office of Public Affairs. Held in a foyer of the Ritz Carlton Hotel, the exhibition featured paintings, ceramics and sculpture by artists from across the Middle East.

Finally, the Qatar Foundation sponsored the premiere of a new opera, “Avicenna,” with libretto by Qatari poet Dr. Ahmed Al-Dosari and music by Michiel Borstlap of the Netherlands. Staged in the open air, the performance was held at night beneath a starry sky on the Education City site.

* For more on this, visit the WCMC-Q Website at www.med.cornell.edu/qatar.
"BREATHTAKING"

WCMC-Q Building Wows Visitors

A centerpiece of Qatar Foundation’s Education City, the new building of WCMC-Q is a remarkable achievement, not only for its size and design, but also for the outstanding facilities that it houses.

This is a vast building; at 218 yards long, it measures the length of two football fields laid end-to-end. Both North and South Halls extend the full height of the two-story building across part of their width.

The impact is astonishing. As Dean of WCMC-NY, Dr. Antonio M. Gatto remarked on seeing the finished building, “my first impression is that it’s really breathtaking. It’s so gigantic and spectacular in its architectural design and its structure that it’s impossible to appreciate it from the photographs I’ve seen.”

The central courtyards are dominated by four lecture halls in three-dimensional geometric shapes, and by wind towers that rise above the central linking bridges. More than 80 feet high, the towers both give the building added height and recall the badgirs* constructed in the past to cool houses in the Gulf.

Major factors that influenced the design were the climatic conditions in the region, where summers are long and hot, and the aim to capture in concrete form the ‘feel’ of an American medical school situated in the Arabian Gulf, yet designed by Japanese architects, said Shin Watanabe, one of the architects who worked on the project.

The building was designed by world-famous architect Arata Isozaki and members of his iNet team, including Shin and his wife Yoko Kinoshita. The team had previously worked on projects as varied as the Museum of Contemporary Art in Los Angeles and the Team Disney building in Orlando, Florida.

With just two and a half years to complete the building from first design drafts to finished structure, time was a “key factor.” Meeting the tight deadline to complete the design was made possible largely thanks to the detailed program for the project provided by Cornell’s architects, Moed, de Armas & Shannon, said Shin.

It is also notable that construction continued 24 hours a day, six days a week, as the building went up.

To meet the challenge of climate the architects drew on both traditional Gulf practice, using few, and quite small, windows on outside walls, and principles of eco-architecture developed in the U.S. and Europe. For example, there are double walls on the south side of the building, with an inner, insulated wall separated by a three-foot gap from an outer “skin” of glass fiber reinforced concrete (gfrc) panels.

The roof also has two layers, with aluminum louvers positioned 15 feet above the concrete slabs, allowing space both for air conditioning plant and for air to circulate around it.

The louvers serve another purpose: to filter the sunlight before it enters the main hallways through skylights in the roof. A layer of fabric across the ceilings further diffuses the light inside.

Indeed, the way that light comes into the building is very carefully controlled. In addition to the

*Badgirs or wind towers were a feature of traditional buildings in the Gulf region. They were designed to direct cooling breezes down inside the buildings.
skylights, there are small glass port holes arranged in geometric patterns along the inner, courtyard walls of the main halls.

The effect is attractive. Limited sunlight is directed inside, in a pattern of pleasing regularity by day; after dark, electric light escapes from inside the building and illuminates the external walls in a similar pattern.

Yet, inside the building, the impression is one of light and space. “There’s something very airy and uplifting about it,” said Dr. Carol Storey-Johnson, Senior Associate Dean for Education at WCMC-NY, “it has to do with the height of the ceilings, the light that filters through the walls and the glass work, and the artistry and texture of the walls. It’s very soothing and calming, and I think very helpful to academic enquiry.”

The surface treatments and the screens that are used to break up interior spaces are based on modern interpretations of Arab-Islamic geometrical patterns. But it is in the spectacular lecture halls that the influence of Arab mathematics is most strongly felt. Up to 54 feet in height, they are truly an architectural tour de force, with one auditorium in the form of a dodecahedron (with 12 sides), one an icosahedron (with 20 sides) and two in the shape of ovoids.

Shin explained the process of designing the lecture halls: “it took a long time, and much effort to settle on the final shapes. We wanted to find a bridge between the notion of a Cornell school and this local culture. We went back to the harmony and geometry in which Islamic science was very strong in the past.”

President Lehman identified this choice of shapes as particularly appropriate: “all mathematicians know how much we owe to Arab mathematicians throughout history, and there is a sense of appropriateness and a lovely reminder here of the way in which cultures and civilizations contribute to one another over time.” Furthermore, the lecture halls are excellent spaces in which to teach. The layout, superb acoustics and state-of-the-art technology help make the auditoria “paradise” for faculty, according to Dr. Robert Thorne, professor of physics at Cornell in Ithaca.

Of the twelve-sided lecture hall he commented: “aside from being absolutely beautiful, it is also incredibly functional, with a back projection screen for computer presentations, everything integrated into the podium, and a student response system. This is clearly the classroom of the future.”

For President Lehman, the twenty-sided auditorium was an amazing space: “I was astounded that 162 people fit in such a relatively intimate space.”

“When I entered the space, the thing that struck me the most was a great sense of light and openness. There was a sense of an ability to breathe easily. There’s a certain kind of inspiration that comes from being in a space that is so open.”—President Jeffrey Lehman
setting," he commented, "and with
the gradient, one gets the benefit of
being able to envelop so many people
into a relatively small three-
dimensional space."

The laboratories won the
admiration of visitors, with Dean
Gotto describing them as "very well
thought out and very well put
together." Modeled on labs at
Cornell in Ithaca, they are spacious
and equipped to the highest standards.
They are also extremely well lit, said
Dr. Thorne: "I really like the up-
lighting, so you don't get direct glare
from the lights."

Several visitors also commended
the smaller classrooms. These flexible
spaces feature seating arranged for
group work, with all-around
whiteboards; they are ideal for
teaching small groups.

Dr. Storey-Johnson was very
enthusiastic: "the educational facilities
are really outstanding. We had a
chance to see the labs and classrooms,
and to see the different flavor that
each lecture hall has. It's a really
remarkable feat. In fact, I'm quite
jealous! Even though we have

Entry of light into the WCMC-Q building is very carefully controlled by a system of
skylights and fabric covering the ceiling, while screens are used to break up interior spaces.
Souvenirs of Doha—Images of the October Celebrations

Clockwise from above: Cornell leaders with Congresswomen Sheila Jackson Lee and Carolyn Maloney (center) at the official launch of Education City on October 13. Architect Arata Isozaki (center) with Dean Alonso, Dean Gotto, Dr. Powers Peterson and Ms. Kimiko Cho. H.H. Sheikha Mozah speaking at the opening ceremony for the new building. Mrs. Anita Gotto admiring a falcon at the “One Thousand and One Nights” dinner. President Lehman greeting Mr. and Mrs. Samuel Berger following his inauguration. Luncheon in the North Hall on October 12. Professor Antonie Blackler (center) in conversation with Professor Frank Smith and Professor Terrance Murphy. Dean Alonso (right) and Vice Dean Idriss exchange notes with guests at the luncheon on October 12. President Lehman with first year pre-medical students Noor Al-Khori (left) and Saud Al-Shamari (right). Center photograph: Steven P. Rosalie, Executive Vice Dean and Associate Provost of WCMC-NY, (left) talking to Professor Terrance Murphy (right) at the “One Thousand and One Nights” dinner.
of the October Celebrations
Psych. 101 Spans 7,000 Miles – in Seconds!

Sophisticated facilities for distance learning installed in the new building of WCMC-Q, and high bandwidth connectivity between the U.S. and Education City, have made it possible for students at Weill Cornell in Doha to share lectures with their peers at Cornell University in the U.S., and to take part in discussions with faculty thousands of miles away.

This has been demonstrated throughout the fall semester by the regular broadcasting at WCMC-Q of lectures in the Psychology 101 course taught by Dr. James B. Maas, professor of psychology at Cornell in Ithaca. The lectures are recorded at Cornell, for delivery in Doha later.

They are supplemented by weekly interactive question and answer sessions. Using the latest generation in videoconferencing technology, iPower from Polycom, it is possible to span 7,000 miles in a matter of seconds.

The success of the course is amply demonstrated by the reaction of WCMC-Q’s second year students. Attending lectures where the lecturer is not physically present is not a problem, says Kunali Dalal: “it never really makes any difference, because the professor is very clear in what he’s presenting.” If questions arise, then they can be asked during a subsequent videoconference with Dr. Maas, and she believes that this gives WCMC-Q students quite privileged access to him.

When we spoke to Dr. Maas after one of these interactive conferences, it was clear that he is as enthusiastic as the students. Although he was skeptical when the idea of broadcasting his lectures was first suggested, he is “thrilled” by its success in practice. In nearly 40 years at Cornell University, this has been “the most exciting semester” of all, he said.

A proposal is now under discussion to reverse the process and broadcast some lectures in the course from Doha to Ithaca next fall semester. The suggestion was put forward by students during Dr. Maas’s visit to Doha in October.

The visit gave him the chance to meet the WCMC-Q students in person, a step that he considers essential if the distance learning project is really to succeed, and he commented that he now feels “much closer” to the students when he discusses points with them during the weekly question and answer sessions.

Looking at the technology required to capture broadcasts coming from the U.S. to Doha, it is essential to have huge bandwidth capacity, particularly if images and sound of sufficiently high quality are to be obtained. At the start of the semester, this was provided by two E-1 links point-to-point with the U.S., giving 4 megabits per second (mbps) of connectivity.

However, during the semester, two STM-1 links totaling 310 mbps point-to-point were brought on stream for Education City as a whole. Astonishingly, this gives institutions on the campus access to a capacity that exceeds the total bandwidth coming to the rest of Qatar, and to many other countries across the world.

It also means that the future distance learning bandwidth requirements of WCMC-Q are provided for, says chief information (continued on page 17)
In the news:

Unlocking the Secrets of Memory

A recent discovery made by researchers in the field of neuroscience at Cornell University has shown that one particular drug may enhance long-term memory.

The discovery, made in the course of experiments on birds, could ultimately lead to a better understanding of memory loss in human beings, and to the development of a treatment for it, said Dr. Tim DeVoogd, professor of psychology, and neurobiology and behavior.

He explained that the drug, from the U.S. National Institutes of Health, is experimental; indeed, it is known not by name, but by its serial number: SR.141716.

Dr. DeVoogd, who is based at Cornell University in Ithaca, spent seven weeks at WCMC-Q during the fall semester teaching the neuroscience seminar course to second year pre-medical students.

The course was relatively intensive, with two lectures a week over the seven-week period, in order to cover all the required material during his stay in Doha. As with the courses he teaches in Ithaca, where most students are biology majors intending to go on to medical school, he highlighted connections between the areas covered in the seminars and conditions in human beings, wherever possible.

The purpose, he said, is to give students an “adequate survey” of the field, “so that they are able to deal with areas like what changes in the brain of a human with learning; or what kind of changes in the brain lead to a disease like Parkinson’s disease, or what sorts of things affect a person who has Alzheimer’s.”

Experiments with birds that store food for the winter, and remember where they have hidden it, show that there seems to be a natural balance in the part of the brain called the hippocampus between remembering useful information, and discarding what is no longer needed. Once the food has been eaten, there is no need (continued on page 16)
Registrar Betty Monfort looks back to Orientation 2003:

First Steps in the Journey

On Sunday, August 30th, thirty-one bright young people stood at the doorstep of the spectacular new building of Weill Cornell Medical College in Qatar. They were the Class of 2009, and this was their first day of Orientation. Their eager faces were alive with expectations.

Following breakfast in the North Hall the freshmen gathered, along with faculty and many second year students, in the spectacular 20-sided lecture hall. Lee Askin, Director of Admissions, read the Roll Call and officially handed the Class over to me as the Registrar, and to Charles Paragg, the Director of Student Affairs. Dr. Daniel R. Alonso, Dean of WCMC-Q, welcomed the Class of 2009 to WCMC-Q – and then they were taken on an official tour of the building that would be their home for the next 6 years.

Orientation is a special time of year: here at WCMC-Q, students take their first steps on the journey to become medical doctors. It is a time for us to welcome them, and for them to address expectations of success, meet faculty and staff, and make new friends. It is a time to make a commitment to hard work, study and the challenges of choosing a career in medicine. The reward at the end of the rainbow is to become a Cornellian M.D.

The first day of Orientation 2003 ended with an indoor Treasure Hunt. Second year students, newly arrived TAs and freshmen got together in teams and invaded the beautiful City Center Mall in Doha’s West Bay area.

Each team was given money, a list of clues, and two hours to complete the task. It was quite a revelation for passers-by to see teams of “future doctors” roam the Mall, some with giant 3-foot sunflowers (an item on their list) in tow. The evening ended with a dinner at the Diplomatic Club where winners of the Treasure Hunt were announced and prizes were awarded. It was truly a bonding experience.

Although Orientation activities are fun (intra-cultural games, bowling competitions and food, food, food), the main emphasis is actually quite serious: preparation for the road ahead. Considerable time was spent working on study skills, with visiting lecturer Professor Mary Ann Rishel leading a series of workshops designed to help the freshmen develop the skills that they will need to succeed at WCMC-Q. She addressed a wide range of issues, including verbal reasoning, critical thinking, writing skills, note taking, preparing for tests and coping with the pressures of university study.

Another “first” in this year’s program was the reading and subsequent discussion of the classical tragedy Antigone. This was especially rewarding since the WCMC-Q students were sharing in the experience of their counterparts in Ithaca, who took part in the summer reading project at almost the same time. 7000 miles bridged by the written word!

WCMC-Q understands the importance of the parents’ role in education. To that end we held a “Parents’ Orientation”. A luncheon attended by all the faculty, students and parents was held in the North Hall followed by a session where parents were informed of the rigors and demands of medical school, and reassured that they were leaving their children in the best of hands.
Opening Exercises 2003

CMC-Q students, their parents, and faculty gathered together for Opening Exercises on September 2; the celebration brought Orientation to a close and marked the official start of the new academic year.

The keynote address at this year’s ceremony was given by the Minister of Education, H.E. Sheikha Ahmad Al-Mahmoud, the first woman to be appointed as a Minister in the State of Qatar.

In his welcome address, Dr. Daniel R. Alonso, Dean of WCMC-Q, reviewed the progress of the Medical College since its founding in April 2001, and noted that Opening Exercises were being held in the new building for the first time. He paid tribute to the achievements of the inaugural Class, and went on to explain the purpose of the two-year Pre-medical Program on which the freshmen were about to embark.

Dr. David Robertshaw, Associate Dean for Pre-medical Education and professor of physiology, delivered a speech on the importance of science and research in medicine. He explored how scientific knowledge developed separately from medicine until approximately 150 years ago, when pioneers such as Pasteur and Jenner began to bring experimental science and medicine together.

Addressing the students in particular, he went on to note that the discovery of DNA in the twentieth century signalled a revolution in the field of biology: “you live now, clearly, in the ‘age of biology.’ There has been an enormous revolution,” he said.

Dr. Robertshaw emphasized the continuing importance of scientific research in the medical field, and spoke of the challenges that remain to be met, among them deciphering how the brain works.

In a formal ceremony, each student was then presented with a Cornell Pre-medical Program Pin and a tote bag containing lab coat, goggles and Cornell mug. This was the equivalent for the pre-medical students of the “white coat ceremony” traditionally held for medical students as they enter Weill Cornell Medical College in New York.

Following a speech to the assembly by H.E. Sheikha Al-Mahmoud, in which she outlined the importance of education in Qatar and of developing international cooperation at university level, a reception in the North Hall completed the evening.

First Year Student Ali Saad Gives a Student’s Eye View of Orientation 2003

Great fear and excitement are the two conflicting emotions that seem to be associated with starting college, but such words would be an understatement for what WCMC-Q’s Class of 2009 felt during Orientation.

The event kicked off with a sumptuous breakfast buffet in the North Commons, not something a fledgling pre-med student would usually expect. These breakfasts continued throughout the four-day event, easing us into the new surroundings and allowing us to get to know the faculty over a meal.

The College’s aim to impress was, in my opinion, a great success both in terms of the ceremony and the intimidating size of the building. If this sounds like a public relations release, I would say that it was the general consensus among the students. However, the feasting was not without charge, technically. Several presentations were given introducing the College and faculty, the Qatar Foundation and Cornell University’s main campus at Ithaca.

It was not all pomp and panegyrics. Workshops focusing on study skills and time-management were given by Professor Mary Ann Rishel, to give us an idea of what to expect in terms of our workload. It was not until a lecture by Dr. Mohammed Salem of Hamad Hospital that what we had been shown was put into the context of the specially designed Pre-medical Program. Our hearts raced both with the great pride we felt for having such a unique opportunity and the accompanying fear that we might not succeed. But to quote Professor Tom Rishel, “(…) you weren’t accepted at Cornell so we could watch you fail, but because we have faith that with our guidance you can succeed (…)”.

Outside the College, we had the opportunity to meet our professors and teaching assistants at a scavenger hunt at the City Center mall and at a traditional Qatari dinner at Balhambar restaurant on the Corniche. All in all, it was a well-rounded Orientation, both enlightening and entertaining.
Secrets of memory (continued from page 13)

to remember where it was hidden, so the brain discards the information.

Put simply, the bird forgets. The excitement about the drug SR141716 is that it appears to prevent this information from being forgotten, most likely by interfering with the cannabinoid receptors that normally sift out information deemed no longer useful.

Students might be tempted to think that a comprehensive memory would be a wonderful tool, particularly when faced with mountains of material to memorize and exams on the horizon.

However, Dr. DeVoogd cautioned: “many students think life would be so much nicer if you could remember everything. It’s really not true. We need the ability to synthesize and to sift.”

If memory loss is the more common condition, nevertheless he points out that a few people suffer from the opposite and very rare condition – an inability to forget. “They make so many memories that they can’t sift out the good from the bad, and they can’t – in the most extreme cases – hold a job or maintain relationships, because they can’t get rid of anything.”

Another area of Dr. DeVoogd’s research also has relevance to human beings. Studying how birds acquire song, he has concluded that the process is, in some important respects, similar to how we learn language: “there are lots of ways in which the steps by which a bird learns song are parallel to the steps by which a person learns language.”

While still very young, a bird learns to reproduce the song it hears from other birds around it. In humans, there is also a very important “sensitive period” in the first two and a half years of life during which they acquire language with amazing speed and precision. This facility in learning is very difficult to recapture later in life; as Dr. DeVoogd said, “it takes a whole lot of work to ever come close to that level of fluency later on.”

S

even TAs, recent graduates from Cornell and Johns Hopkins Universities, joined faculty at WCMC-Q at the beginning of the fall semester. Pictured above between a rock and a hard place are six of the group: Johns Hopkins graduate Amy Abdullah (TA for biology), with Cornell graduates Simon Tanksley (physics), Caleb Kovell (chemistry), Matt McRae (psychology), Fahad Hassan (organic chemistry) and Robert Cronin (mathematics and biochemistry.)

Being a TA is hard work, says Caleb, but the results are tangible: “you feel you are having a direct role in people’s lives and education, and you can really see the difference you are making.”

So it’s rewarding? “I think teaching is a great experience. I really enjoy it,” replies Robert. The consensus about the pre-medical students at WCMC-Q is that they are “quite comparable with the Cornell kids in a lot of ways.”

The TAs also are in agreement that this is a good opportunity to spend time after graduating “doing something different and being in a different mindset” before moving on to the next stage of their education, as Caleb puts it.

Is it fair to say that being a TA in Doha is all about trying something new, broadening horizons, tasting life in a different environment? Certainly, the unusual setting of the College is a plus factor. “The differences are probably what attracted us here in the first place. It really is a whole new experience,” says Matt, “it took us a while to get used to the different pace, not so much inside the College, but in our interactions with the students and outside the College.”

By contrast, Amy lived in Qatar for some time and attended the American School of Doha before going on to University in the U.S. No doubt she had a good idea of what to expect? While broadly in agreement, she adds that Doha is very different now: “It’s changed a lot! It’s definitely a better place to be than it was five years ago.”

Between them, the TAs pack in enough activities in their free time to wear you out just listening to them: diving, golf, sailing, squash, swimming, tennis, windsurfing and, they add with enthusiasm, eating. Oh, and that still leaves time for basketball and volleyball with the students, says Fahad.

Broadening horizons encompasses travel, of course – to Dubai (“pretty similar to any big western city” in Simon’s opinion) a few weeks back, with Cairo and Istanbul next on the agenda.

Being in Qatar, they wisely say, is “what you make of it.” Opportunities are there, if you care to make good use of them.

And the future? All six plan to go on to medical school. Some intend to take another year out; others, like Fahad, have been called for interview in the U.S. during the fall semester. For the time being, however, the world is their oyster – and they are having a whale of a time.
Admissions Update:
Recruitment of High Caliber Students a Top Priority

Attracting high caliber students to WCMC-Q is a top priority for the Medical College, and work proceeds apace to find funding for scholarships for students coming to WCMC-Q from across the Middle East.

This was the message of Dr. Antonio M. Gotto Jr., Dean of Weill Cornell Medical College in New York during his visit to Doha in October.

In an interview after the opening ceremony, he said: “we are assigning a very high priority to the recruitment of students for the program. We need good, qualified students both from Qatar and the Gulf area, and from the region. We are committed to aggressively support a recruitment program as well as work with the Qatar Foundation for fund-raising, so that we have the amount of financial aid that students need.”

Among the projected activities in this area of operation, Dr. Gotto envisaged a more active program of visiting high schools in Qatar and elsewhere in the region.

He also said there is now a commitment to fund scholarships for students from Lebanon and Syria from former patients in New York:

“We have a commitment from two patients, who are friends as well, who have agreed to support two scholarships a year for students from Lebanon, and one scholarship a year for a student from Syria.”

He added that the Medical College would like to obtain more scholarships targeting potential students from a wider range of Middle Eastern countries.

7,000 miles – in seconds
(continued from page 12)

officer at WCMC-Q, Adam Momani: “we will always have sufficient bandwidth for us to deliver a successful distance learning program to our students.”

One obvious difficulty in sharing educational activities between Cornell in Ithaca and WCMC-Q is the time difference. This can be 7 or 8 hours, depending on the season; so in winter, a 10:10 a.m. psychology lecture in Ithaca would be seen in Doha at 6:10 p.m., if it were broadcast live. For this reason, Dr. Maas’s lectures are recorded and then sent electronically to Doha. Once they have been pulled from the server at WCMC-Q, they are checked and then installed in the lecture hall computer for delivery as part of the normal class schedule, three times a week.

By contrast, the interactive videoconferences must be organized at a time that is mutually convenient, so they are scheduled for early morning in Ithaca, which is equal to mid-afternoon in Doha. This way, Dr. Maas can enjoy his morning coffee while discussing the issues of the moment with students who have finished their lectures for the day at WCMC-Q.

With a friendly atmosphere, and not a little banter between the professor and the students, these live discussions are definitely helpful, the students say. Michelle Al-Khulaifi comments on the interest shown by Dr. Maas in different cultures: “it’s very good, because he shows he’s interested in knowing the other side, and he’s very open in his thinking.”

Supporting delivery of the course at the Doha end is teaching assistant Matt McRae ’03, from Canada, a Cornell graduate in biology and society. He believes that, given the technological back up for the course, his role is not so different from that of any other TA:

“In terms of the amount of contact I have with my professor in Ithaca, it’s very comparable with what the other TAs do. I’m in contact every day either by e-mail or by telephone, so the distance is not such a big obstacle.”

In addition, he usually talks to Dr. Maas for several minutes after each videoconference, so there is a regular opportunity to discuss any issues of concern.

Taking the course with this renowned expert on sleep, and sleep disorders, seems to have been a life-changing experience for some of the students. Kunali explains: “we’ve cut down on coffee breaks. I’ve given up coffee and tea completely, and I sleep eight and a half hours a night. It has made a lot of difference in my academic performance, and it has built my confidence.”

Michelle is in agreement: “I’m very thankful for having this course. I’m more enlightened on practical issues.” She quips that it will also influence her future medical practice: “one of my first questions to a patient will be ‘do you sleep enough?’”

Walking tall: second year students learn about perception during a psychology 101 class brought to WCMC-Q from Ithaca by streaming video.
INSIGHT: Making Connections Through the Web

A willingness to go beyond the science that is covered in textbooks, and an informed approach to using the Internet, could lead students to a deeper understanding of topics that interest them, and to identify potential areas for research.

Speaking to second year students on the medical applications of physics, Dr. Robert Thorne, professor of physics at Cornell University said: “everything’s on the Web – just use your searching skills.” Dr. Thorne was in Doha for the October celebrations, and stayed on for a few days afterwards to work with faculty and students, and deliver a lecture in the Seminar Series.

We attended his talk, and then spoke to him afterwards for extra insight into the art of Web-searching. He began his talk to the students by outlining a wide range of techniques in medicine where physics plays a significant role. Some, such as magnetic resonance imaging (MRI) and the use of lasers in surgery, are already well established. Others, such as artificial eye implants, are still at the development stage, he said.

Many of them are related to areas that are covered in the Physics 207 course, and using the Internet and e-library to explore these areas may reveal a wide variety of interesting applications with relevance to the medical field.

“I really think that becoming good at technical Web searching is an incredibly important skill to learn,” Dr. Thorne said.

But what advice did he have to help students navigate their way around without foundering on the rocks of scientific research that is beyond their grasp?

Dr. Thorne suggested that the best approach is to use a good search engine such as Google and key in a word or topic name to find basic information. It is worth looking at sites of commercial companies that manufacture devices used in the techniques, since the application notes for the equipment can be very informative.

The Web pages of research groups working in the particular field may also be a useful resource. Dr. Thorne said that the Website for his own group is written for prospective graduate students, funding agencies, and others who do not have a specialist interest in the subject. “So we try to keep it basic, we minimize the jargon and we explain any jargon that we use.”

From there, you can look through the group’s publications list, making a note of any that could be relevant, and do a search for the published papers.

One excellent source of information is the Web of Science, which has “revolutionized scientific research,” according to Dr. Thorne. By using this site, you can find publications by professors in the field that you are interested in, and then go one step further and find the papers that are cited in the articles.

It is also a valuable exercise to look at all the papers that have cited the first article since it was published, to see if any of them fits what you are looking for.

It is not necessary to read the whole paper each time: looking through the abstract is the most efficient way to get an idea of the relevance of each article, he added.

**ISI Web of Science**, from the Thomson Corporation, can be accessed via the e-library and consists of several user-friendly databases including Science Citation Index Expanded, Index Chemicus and Current Chemical Reactions, among others.

Cornell libraries offer Science Citation Index Expanded, an index to some 5,900 major journals covering over 150 scientific disciplines, including biology, chemistry, mathematics, medicine, neuroscience, physics, zoology and many others. The unique feature is the inclusion of cited (quoted) references from the authors of the journal articles they cover. This permits comprehensive searches, navigating back in the scientific literature to 1945. Among the advantages: finding related articles, research articles that have influenced an author’s work, and/or hidden subject relationships. In addition to author, title, and source information, most abstracts are available since 1991.

**http://www.arXiv.org**

ArXiv (pronounced like “archive”) is a database containing preprints of full text research papers in physics and related fields from 1991 onwards. Originally published by Los Alamos National Laboratory, it is now owned and operated by Cornell University. It is a very useful resource for current awareness, as well as for searching retrospectively. Preprints are articles that have not yet been published; however ArXiv can include several versions of a paper from its initial submission right up to the final published version. Initial submissions often contain more detailed data than the final published papers.

**WEB WATCH**

Continuing our look at useful Websites, Paula Craig, coordinator for e-learning and continuing education, reviews the Web of Science, and reference librarian Jan Weaver looks at ArXiv:
“U
usually, when we celebrate the
opening of a new project in
Qatar, people tend to think
that it is related to energy or industry.
Today, however, we are celebrating an
event that surpasses in its significance
any economic or industrial project,
however large it might be.”

With these words at the official
launch of Education City on
October 13, His Highness Sheikh
Hamad bin Khalifa Al-Thani, Emir of
the State of Qatar, signaled the
profound importance of this
ambitious development for the
leadership of Qatar.

The multi-institutional campus, of
which WCMC-Q is part, is set to
encompass a wide range of programs
from pre-school education through
higher education to research and
development in a forthcoming
Science and Technology Park.

The main thrusts of the huge
1,700-acre (7 million square meter)
development will be in the triple fields
of education, research and technology.

In her presentation at the launch, Her
Highness Sheikha Mozah bint Nasser
Al-Missned, wife of the Emir and
chairperson of the Qatar Foundation,
noted that Arab countries spend only
0.2% of their gross domestic product
on research and development, against
2.5% for the U.S. and 2.3% for Japan.

“Qatar will take a leading role in
transforming this picture by
dedicating a competitive and
significant portion of its gross
domestic product to research and
development,” she stated.

Among the speakers and guests
who gathered for the event, which
took place at the WCMC-Q building,
were leaders of Cornell University and
its Weill Cornell Medical Colleges in
New York and Qatar; the leadership of
the Qatar Foundation, including
Nobel prize-winner Professor Ahmed
Zwail, Ph.D., and Vartan Gregorian,
Ph.D.; and leaders of Texas A&M
University and RAND. Branches of
both these institutions were also
officially launched during the three-
day celebrations in October.

Speaking during the ceremony,
Cornell University President, Jeffrey S.
Lehman extended congratulations on
the launch of Education City and
noted: “It bears witness to the
wisdom of Qatari leaders in
recognizing that superbly educated
young people are a source of national
and international strength.”

In an editorial the following day,
the English language daily Gulf Times
reflected on the significance of the
project, founded some eight years ago:
“This unique project, establishing a
partnership between the State of
Qatar and numerous prestigious
universities, meets a sorely felt need in
this region which has not had
sufficient time in the post-colonial era
to establish world-class educational
institutions of its own.”

Queen Sofia Visits WCMC-Q

WCMC-Q students were amazed
and delighted when Queen Sofia of
Spain took time during a visit to
WCMC-Q to talk to them, and even
to give them her autograph!

The Queen, who was the guest of
H.H. Sheikha Mozah bint Nasser
Al-Missned, wife of the Emir and
cosponsor of the Qatar Foundation,
noted that Arab countries spend only
0.2% of their gross domestic product
on research and development, against
2.5% for the U.S. and 2.3% for Japan.

“Qatar will take a leading role in

transforming this picture by
dedicating a competitive and
significant portion of its gross
domestic product to research and
development,” she stated.

Among the speakers and guests
who gathered for the event, which
took place at the WCMC-Q building,
were leaders of Cornell University and
its Weill Cornell Medical Colleges in
New York and Qatar; the leadership of
the Qatar Foundation, including
Nobel prize-winner Professor Ahmed
Zwail, Ph.D., and Vartan Gregorian,
Ph.D.; and leaders of Texas A&M
University and RAND. Branches of
both these institutions were also
officially launched during the three-
day celebrations in October.

Speaking during the ceremony,
Cornell University President, Jeffrey S.
Lehman extended congratulations on
the launch of Education City and
noted: “It bears witness to the
wisdom of Qatari leaders in
recognizing that superbly educated
young people are a source of national
and international strength.”

In an editorial the following day,
the English language daily Gulf Times
reflected on the significance of the
project, founded some eight years ago:
“This unique project, establishing a
partnership between the State of
Qatar and numerous prestigious
universities, meets a sorely felt need in
this region which has not had
sufficient time in the post-colonial era
to establish world-class educational
institutions of its own.”

Queen Sofia Visits WCMC-Q

WCMC-Q students were amazed
and delighted when Queen Sofia of
Spain took time during a visit to
WCMC-Q to talk to them, and even
to give them her autograph!

The Queen, who was the guest of
H.H. Sheikha Mozah bint Nasser
Al-Missned, wife of the Emir and
cosponsor of the Qatar Foundation,
noted that Arab countries spend only
0.2% of their gross domestic product
on research and development, against
2.5% for the U.S. and 2.3% for Japan.

“Qatar will take a leading role in

transforming this picture by
dedicating a competitive and
significant portion of its gross
domestic product to research and
development,” she stated.

Among the speakers and guests
who gathered for the event, which
took place at the WCMC-Q building,
were leaders of Cornell University and
its Weill Cornell Medical Colleges in
New York and Qatar; the leadership of
the Qatar Foundation, including
Nobel prize-winner Professor Ahmed
Zwail, Ph.D., and Vartan Gregorian,
Ph.D.; and leaders of Texas A&M
University and RAND. Branches of
both these institutions were also
officially launched during the three-
day celebrations in October.

Speaking during the ceremony,
Cornell University President, Jeffrey S.
Lehman extended congratulations on
the launch of Education City and
noted: “It bears witness to the
wisdom of Qatari leaders in
recognizing that superbly educated
young people are a source of national
and international strength.”

In an editorial the following day,
the English language daily Gulf Times
reflected on the significance of the
project, founded some eight years ago:
“This unique project, establishing a
partnership between the State of
Qatar and numerous prestigious
universities, meets a sorely felt need in
this region which has not had
sufficient time in the post-colonial era
to establish world-class educational
institutions of its own.”

“Earth from Above”

Web Developer Zahara Volji reviews a stunning exhibition of photographs
brought to Doha by the Qatar Foundation

After inspiring more than 30 million visitors worldwide, the acclaimed
Earth From Above exhibit by renowned photojournalist Yann Arthus-Bertrand
landed on Doha’s Corniche (October 5, 2003 to December 5, 2003).
This stunning collection of aerial photographs, assembled to mark the
new millennium, is a selected sample from more than 10,000 still images
shot from altitudes ranging from 30 to 3,000 metres above the ground.
It is the culmination of more than 10 years of research by the
photographer, during which he had more than 3,000 hours of flight time
aboard a helicopter on a journalistic mission that took him to 85 countries
on five continents.

The exhibition is an astonishing photographic record of the state of the
planet, featuring exceptionally rich and colorful images that reveal a vast array
of natural habitats, earthly treasures – and man’s impact on the earth’s surface.
The aerial photography adds a new dimension to our awareness of the planet’s
evolutionary journey.

For more information, please visit the photographer’s Website at
http://www.yannarthusbertrand.com/
On October 20, WCMC-Q pre-medical students accompanied by faculty visited the Ras Abu Funtas ‘B’ power generation and water desalination plant owned and operated by Qatar Electricity & Water Co. (QEWC), report first year students Muhamed Baljevic and Suehyb Al-Khatib.

The trip was organized for students in both first and second years to enable them to see one of the most important elements in Qatar’s infrastructure, and to support the electricity and magnetism part of the physics course.

“We were welcomed to the Ras Abu Funtas industrial site, situated in Al Wakra, south of Doha. The production manager at QEWC, Mr. Abdul Sattar Al-Rashid, gave a really excellent and well-organized presentation about all the major processes that accompany the production of water and electricity at the plant. Interactive discussion among lecturers and students was conducted through a series of questions and answers.

At the end of the 45-minute presentation, we had acquired a good general knowledge of the major steps in production of water and electricity, the approximate amounts produced, rate of their production, optimum conditions for processes, and general demand for the products in Doha city. We also heard about past results and the extensive plans for the future.”

Following the presentation, the group was given a tour through some areas of the water-electricity complex. They saw the massive turbines and flash-evaporation units from close up and were impressed by the cleanliness and modernity of the whole operation.