

Weill Cornell Medical College in Qatar



PRESS RELEASE

WCMC-Q Students Present Results Of Advanced Biomedical Research

Doha, November 11, 2008 - Cutting-edge Biomedical research conducted by students at Weill Cornell Medical College in Qatar (WCMC-Q) is on display today at the fifth annual Medical Student Research Forum.

In a series of oral and poster presentations, the student researchers will discuss their investigations into such topics as the causes of Alzheimer's disease, how tumors resist radiation therapy, whether certain proteins inhibit the spread of breast cancer cells, and other contributions to our understanding of medical science.

A total of 30 WCMC-Q students were awarded research fellowships this summer. This represents a significant increase from last year's numbers, demonstrating the growth of both the Medical College as an institution, and the reputation of its student researchers.

The majority of the awardees traveled to the US to work with leading researchers in the labs of Weill Cornell Medical College in New York (WCMC-NY) and Cornell University in Ithaca, New York State. A handful of the students performed their research at WCMC-Q, taking advantage of the expertise of the resident faculty.

Second year medical student Zahrae Sandouk worked alongside Dr. Elizabeth Ross in the Laboratory of Neurogenetics and Development at WCMC-NY. Dr. Ross' laboratory studies gene mutations associated with brain malformations and how these genes direct the construction of the brain.

"My project consisted of trying to understand how folic acid – an organic molecule found in nutrients – acts on neural cells to prevent neural tube defects," Sandouk explained. An understanding of folic acid's mechanism of action may ultimately lead to treatments for these gene mutations and the resulting birth defects.

Despite initially finding neurology courses difficult, Sandouk found her research into Alzheimer's disease during the summer of 2007 an enjoyable and rewarding experience.

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Her research this summer reinforced that impression. Now, seven weeks into the secondyear neurology course "Brain and Mind", she finds herself liking the subject even more and is considering neurology for her residency. "I believe that understanding how the brain works is the route to comprehend the whole human body," she said.

Students Mohammed Hamza Shah and Mouayyad Zaza both chose to do their summer research locally in Qatar. Their project in the laboratory of Dr. Khaled Machaca, Associate Dean for Basic Science Research at WCMC-Q, aims to better understand how calcium is regulated during oocyte maturation, which could have practical uses in invitro fertilization and the treatment of female infertility.

Even for students not considering a career in research, as is the case with Shah, this firsthand experience still does much to supplement their classroom learning.

"What I found most interesting was that we could actually tamper with DNA sequences and introduce point mutations of single nucleotides" Shah said. "I had only read about it before."

Dr. Machaca believes the critical thinking and problem solving skills students get from research projects broaden their perspective, helping them to ultimately become better physicians. "It improves their understanding of the very basic science that underlies all of medicine. I think it's essential."

WCMC-Q encourages student involvement in these kinds of research projects. "And the really exciting thing is that it doesn't seem they need that much encouragement" Machaca said. "They're very eager to do it and are working hard to be involved in it."

Dr. Javaid Sheikh, Vice Dean for Research at WCMC-Q described the Medical Student Research Forum as one example of WCMC-Q's overall research strategy to build a biomedical research culture and infrastructure in Qatar: "Our students are exposed to the research process early in their medical education, by having the opportunity to work alongside world-class researchers in Ithaca and New York, and then present their findings here."

WCMC-Q, in partnership with Qatar Foundation for Education, Science and Community Development, unveiled a major bio-medical research initiative earlier this year. It aims to form a bio-medical research infrastructure, developing a scientific and technical workforce for the benefit of the region at large. Central to this endeavor is a partnership approach, bringing together institutions that have overlapping missions in medical

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NOTES TO EDITORS

Established in partnership with Qatar Foundation, WCMC-Q is part of the Weill Medical College of Cornell University, the first American institution to offer its M.D. degree overseas. WCMC-Q offers a complete and integrated educational program, comprising the two-year Pre-medical Program, followed by the four-year Medical Program, with teaching by Cornell faculty. There are separate admission processes for each Program, guided by the standards of admission in use at Cornell University in Ithaca, and its Medical College in New York City. Website: www.qatar-med.cornell.edu

About Qatar Foundation for Education, Science and Community Development Founded in 1995 by His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar, and chaired by Her Highness Sheikha Mozah Bint Nasser Al Missned, Qatar Foundation is a private, non-profit organization committed to the principle that a nation's greatest natural resource is its people.

The headquarters of Qatar Foundation are located within its flagship project, Education City, a fourteen million square-meter campus which hosts numerous progressive learning institutions and centers of research, including branch campuses of five of the world's leading universities, plus a cutting-edge research and development center. Qatar Foundation also works to enhance the quality of life in Qatar by investing in community health and development.

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