



## PRESS RELEASE

### **WCMC-Q Professor Explores the Value and Fragility of Eyesight**

**Doha, January 20, 2010** – About three out of four people believe that sight is the most important sense they have, according to WCMC-Q associate professor of family medicine, Dr. Mohamud Verjee, who lectured on eyesight at the college yesterday. Yet a recent survey shows that a significant percentage of people don't get their eyes checked, he said, and many people are unaware of the warning signs of eye diseases and conditions that could cause damage and blindness if not detected and treated soon enough.

“The eyes are extremely intricate organs that can not be replicated in terms of their ability to detect electromagnetic waves and transfer these signals to the brain for interpretation,” Dr. Verjee explained. “In fact, eyesight is a complex process, and there is disagreement about whether it constitutes two or three senses—perception of color and brightness are two different processes while the perception of depth can be regarded as one as well.”

It's important for people to be aware of how the eyes work and their vulnerabilities so that they can be proactive in maintaining their sense of sight, he said. Following an overview of the parts of the eye, Dr. Verjee took the audience through the various diseases that can affect this complex organ. He touched on nearsightedness, farsightedness and color blindness as well as parasites and injury, highlighting the sensitivities inherent to eyes and the need to protect them.

In addition, Dr. Verjee explained that about 45 million people worldwide are currently blind while 135 million are visually impaired, with these figures estimated to double by the year 2020. In the Eastern Mediterranean Region, around 37 million people are estimated to be visually impaired, including 5.3 million categorized as blind. Many nations, including Qatar, are thus involved in a global initiative called “Vision 2020,” which aims to eliminate avoidable blindness by that year. Sadly, 90 percent of preventable cases exist in developing countries, Dr. Verjee said, with an estimated 8 million people classified as blind who would see if they had glasses.

In cases of unavoidable blindness, new technologies are in development stages, Dr. Verjee said. He described one system that involves glasses that detect light waves and send signals to a box worn by the patient. This box transmits the signals to implants that hook to a specific layer within the retina, where the signals can travel toward the brain and be interpreted. As this technology evolves, he explained, it promises to provide a sharper image of the world to those who previously would have seen nothing.

In addition, studies on antioxidant and genetic therapies have shown promising results. Specifically, substances found in artichokes, blueberries and pecans have been shown to extend the life of cells in the eyes and stave off macular degeneration. And injection of a specific gene related to vision into a subject with a mutated version of this gene has resulted in improved eyesight in preliminary studies.

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Dr. Verjee said he hoped his lecture raised awareness throughout the local community about the function of the human eye, the value of eyesight and ways to improve the odds that people see clearly throughout their lives.

*Ends*

## NOTES TO EDITORS

**Established in partnership with Qatar Foundation, WCMC-Q** is part of Weill Cornell Medical College (WCMC) of Cornell University, the first US institution to offer its MD degree overseas. WCMC-Q shares the triple mission of WCMC: a dedication to excellence in education, patient care, and biomedical research.

WCMC-Q offers an innovative program of pre-medical and medical studies leading to the Cornell University MD degree. Teaching is by Cornell and Weill Cornell faculty, including physicians at Hamad Medical Corporation (HMC) who hold Weill Cornell appointments.

Faculty and staff of WCMC-Q and WCMC are building the research capacity of Qatar in partnership with Qatar Foundation, HMC, the Ministry of Health and other organizations, with a focus on high quality research in genetic and molecular medicine, women's and children's health, gene therapy, and vaccine development.

Website: [www.qatar-weill.cornell.edu](http://www.qatar-weill.cornell.edu)

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Founded in 1995 by decree of His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar, Qatar Foundation is a non-profit organization focusing on education, scientific research and community development. Under Qatar Foundation's umbrella are Education City, which comprises elite universities, several academic and training programmes and Qatar Science and Technology Park, which boasts more than 21 world class companies involved in scientific research and development.

Chaired by Her Highness Sheikha Mozah bint Nasser Al Missned, Qatar Foundation also aims to enhance lives through community development initiatives including Doha Debates, Reach out To Asia and Al Jazeera Childrens Channel.

Joint venture partnerships in the areas of design, ICT, telecommunications, policy studies and event management contribute to fulfilling the objectives of Qatar Foundation.

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