



ROBERT WOOD JOHNSON  
MEDICAL SCHOOL

University of Medicine & Dentistry of New Jersey



**Contact:** Michele Fisher  
Media Relations Specialist  
732/235-9872  
[fisherm2@umdnj.edu](mailto:fisherm2@umdnj.edu)

**Researcher Awarded \$351,000 to Investigate Hormone Treatment-Resistant Prostate Cancer**  
*Head of Urologic Oncology at The Cancer Institute of New Jersey Receives Department of Defense Grant*

**New Brunswick, N.J., July 9, 2009** – One in six men will be diagnosed with prostate cancer in his lifetime, according to the American Cancer Society. It is the most frequently diagnosed cancer in males other than skin cancer, and is expected to result in 6,000 new cases of the disease in New Jersey this year. A physician scientist at The Cancer Institute of New Jersey (CINJ) hopes to have an impact on these numbers, thanks to a \$351,000 grant awarded by the Department of Defense (DoD) to study the role of neuroendocrine cells in prostate cancer. CINJ is a Center of Excellence of UMDNJ-Robert Wood Johnson Medical School.

The DoD New Investigator Award will support the work of Isaac Yi Kim, MD, PhD, who is the director of CINJ's Urologic Oncology Program, co-director of CINJ's Dean and Betty Gallo Prostate Cancer Center, and associate professor of surgery at UMDNJ-Robert Wood Johnson Medical School. The grant (W81XWH-09-1-0450) is part of the Congressionally Directed Medical Research Program.

The research will focus on hormone refractory prostate cancer, which is resistant to the standard treatments of chemotherapy and hormone deprivation (either through medical or surgical castration). This type of cancer can develop within an 18-month period in those who have had prostate cancer recurrence or in those whose prostate cancer has spread. Approximately 30 percent of men with localized prostate cancer will develop recurrence, and while hormone deprivation treatment is initially quite effective, Dr. Kim notes hormone refractory prostate cancer inevitably emerges. Once this type of cancer develops, most patients die within five to six years.

Frequently associated with hormone refractory prostate cancer are the neuroendocrine cells. Studies have shown that these cells are associated with poor prognosis in prostate cancer. They do not respond to hormones, and thus, do not respond to the standard hormone deprivation therapy. What becomes key to understanding this type of cancer, according to Kim, is the exploration of the mechanism behind the development of neuroendocrine cells. Kim and his team will look at the human gene known as bone morphogenetic protein-6. This gene turns on the signaling molecule interleukin-6, which in turn dictates how neuroendocrine cells mature and their impact on prostate cancer.

Kim greatly appreciates the support he is receiving. "Prostate cancer is the second leading cause of cancer death in men. That is why we are pleased that the Department of Defense recognizes the potential significance of this work. By understanding the biology of neuroendocrine cells, we may be able to unlock new treatment targets for patients with end stage prostate cancer."

The three-year award period runs through June 30, 2012.

**About The Cancer Institute of New Jersey**

The Cancer Institute of New Jersey ([www.cinj.org](http://www.cinj.org)) is the state's first and only National Cancer Institute-designated Comprehensive Cancer Center, and is dedicated to improving the prevention, detection, treatment and care of patients with cancer. CINJ's physician-scientists engage in translational research,

transforming their laboratory discoveries into clinical practice, quite literally bringing research to life. The Cancer Institute of New Jersey is a Center of Excellence of UMDNJ-Robert Wood Johnson Medical School. To support CINJ, please call the Cancer Institute of New Jersey Foundation at 1-888-333-CINJ.

The Cancer Institute of New Jersey Network is comprised of hospitals throughout the state and provides a mechanism to rapidly disseminate important discoveries into the community. Flagship Hospital: Robert Wood Johnson University Hospital. Major Clinical Research Affiliate Hospitals: Carol G. Simon Cancer Center at Morristown Memorial Hospital, Carol G. Simon Cancer Center at Overlook Hospital, and Jersey Shore University Medical Center. Affiliate Hospitals: Bayshore Community Hospital, CentraState Healthcare System, Cooper University Hospital\*, JFK Medical Center, Raritan Bay Medical Center, Robert Wood Johnson University Hospital at Hamilton (CINJ at Hamilton), Saint Peter's University Hospital, Somerset Medical Center, Southern Ocean County Hospital, The University Hospital/UMDNJ-New Jersey Medical School\*, and University Medical Center at Princeton. \*Academic Affiliate

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