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Medical Oncologist Receives More than \$1 Million in Cancer Research Awards
CINJ Scientist, Bernardsville Resident, Receives Two Prestigious Awards for Breast Cancer Study

New Brunswick, N.J., July 1, 2008 – Vassiliki Karantza-Wadsworth, MD, PhD, a medical oncologist at The Cancer Institute of New Jersey (CINJ) and an assistant professor of medicine at UMDNJ-Robert Wood Johnson Medical School, has been selected to receive a pair of cancer research awards, which will provide her with more than \$1.3 million combined to study the role of a potential cell death process in breast cancer. CINJ is a Center of Excellence of UMDNJ-Robert Wood Johnson Medical School.

The Howard Temin Pathway to Independence in Cancer Research Award is sponsored by the National Institutes of Health (NIH), and is one of between 150 and 200 to be given each fiscal year. According to the NIH, the primary, long-term goal of this particular award program is to increase and maintain a strong cohort of new and talented NIH-supported investigators. It is designed to facilitate the transition of a mentored postdoctoral research position to a stable independent research position at a stage earlier than the current norm. Dr. Karantza-Wadsworth will be awarded \$880,000 for a grant period of four years for her work on “The Role of Autophagy in Breast Cancer.”

She also will receive \$450,000, as part of the Damon Runyon Clinical Investigator Award from the Damon Runyon Cancer Research Foundation. The grant spans over a three-year period for study on “Autophagy as a Therapeutic Target in Breast Cancer Treatment.”

According to the Foundation, which is a non-profit organization dedicated to advancing cancer research, the award supports young physician-scientists conducting patient-oriented cancer research. The goal is to increase the number of physicians capable of moving seamlessly between the laboratory and the patient's bedside in search of breakthrough treatments.

Autophagy is a biological process involving self-digestion of cellular material when cells are deprived of nutrients, in which case it acts as a cell survival mechanism. However, if autophagy proceeds to completion, it may lead to cell death. According to Karantza-Wadsworth, autophagy appears to play a role in breast cancer, as the protein level of an essential autophagy mediator, Beclin1, is low in many breast tumors. This process is also activated in cancer cells in response to chemotherapy, but how autophagy activation affects response to treatment remains to be determined.

Recent studies by Karantza-Wadsworth under the mentorship of Eileen White, PhD, associate director for basic science and program leader at CINJ; adjunct professor of surgery at UMDNJ-Robert Wood Johnson Medical School; and resident faculty member at the Center for Advanced Biotechnology and Medicine, professor of molecular biology and biochemistry at Rutgers, the State University of New Jersey, have provided insight into how autophagy defects may promote breast cancer. Karantza-Wadsworth is now setting up her own laboratory, and her work will focus on further characterizing the role autophagy plays in breast cancer and its effect on treatment responsiveness.

Karantza-Wadsworth notes she is very pleased and appreciative to have such support, “These awards will allow critical research in this area to move forward without interruption. By exploring the full process of autophagy and its impact on breast cancer progression and treatment, we may have a great opportunity to develop more targeted, and hopefully more improved, treatments for breast cancer patients in the future.”

Both award periods begin July first.

About The Cancer Institute of New Jersey

The Cancer Institute of New Jersey 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. Partner Hospital: Robert Wood Johnson University Hospital. Affiliate Hospitals: Bayshore Community Hospital, CentraState Healthcare System, Cooper University Hospital*, Jersey Shore University Medical Center, JFK Medical Center, Morristown Memorial Hospital, Overlook Hospital, Raritan Bay Medical Center, Robert Wood Johnson University Hospital at Hamilton (CINJ-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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