

Your link to the latest news on research, treatment, prevention and education from the state's only National Cancer Institute - designated Comprehensive Cancer Center

## **Exploring HER2 in Breast Cancer Treatment Responsiveness**

Research from The Cancer Institute of New Jersey (CINJ) on biological pathways that govern progression and treatment responsiveness of HER2 positive breast cancer was recently presented at the 102nd Annual Meeting of the American Association for Cancer Research. The focus of this poster presentation was the protein known as Human Epidermal growth factor Receptor 2 (HER2/neu) and the role it plays in breast cancer aggressiveness, poor clinical outcome and chemotherapy resistance. About thirty percent of breast cancers have high levels of the HER2 protein. This research by lead investigator Fred Lozy, a member of the Dr. Vassiliki Karantza laboratory at CINJ, finds that under stressful conditions, the presence of too much HER2 causes a decrease in autophagy. Autophagy is an energy recycling process that helps cells to survive, but under certain conditions can also go awry and result in tumor formation. Normally, a decrease in this process would hinder a cell's ability to survive; however, in this case, utilizing laboratory models and gene expression profiling, Lozy and colleagues found that these cells alter other cellular processes to compensate for the lack of autophagy. Consequently, changes in these cellular processes may increase breast cancer growth, metastasis, and/or enable the disease to become resistant to chemotherapy.

## Live, Laugh, Learn: CINJ's Celebration of National Cancer Survivors Day

There are close to 12 million cancer survivors living in the United States today with an estimated 335,000 living here in New Jersey. CINJ will celebrate these survivors on Sunday, June 12th at CINJ with a special event entitled, "Live, Laugh, Learn: CINJ's Celebration of National Cancer Survivors Day." Attendees will enjoy a morning of uplifting educational sessions followed by lunch and keynote speaker, New York Times bestselling author of The Council of Dads, Bruce Feiler. Educational sessions include: Under the Hood: A Tour of CINJ Laboratories; The Truth Behind SPF: Being Safe in the Summer Sun; Relax to the Max: Letting the Stress Go; Vitamin D and Calcium: Not for Women Only; Bringing Purpose and Passion to Your Life with Life Coach Carole Heaton; How Cancer Develops & Why Clinical Trials are the Path to Better Outcomes; and Vitamins, Minerals and Herbs: What's the Right Dose. There is no cost to attend but registration is required. For more information visit <a href="https://www.cinj.org">www.cinj.org</a> or call 732-235-8614.

## CINJ Oncology Nurse Shares Expertise on Breast Cancer at International Meeting

During the recent Oncology Nursing Society's 36th Annual Congress, CINJ Advanced Practice Nurse Jacquelyn Lauria, RN, MS, APN, AOCNP, chaired a symposium on the "Top 10 Questions of Women with Metastatic Breast Cancer Following First Line Therapy." The presentation explored therapeutic options, side-effect management, and health-literate patient education strategies. The goal of the discussion was to strengthen the knowledge of oncology nurses involved in the care of patients with pretreated breast cancer. As an APN with expertise in breast cancer, Lauria is involved in treatment, research and education at CINJ. She also participates in the training of oncology nurses at CINJ's Network hospitals.

## CINJ to go Tobacco-free and Smoke-free Beginning June 1st

While CINJ has been tobacco-free and smoke-free on the interior for many years, soon it will also be tobacco-free and smoke-free on the exterior, prohibiting individuals from smoking on its sidewalks and driveways. This includes the elimination of designated smoking areas

around the building. As the only NCI-designated Comprehensive Cancer Center in New Jersey and an organization that cares about promoting good health and cancer prevention, CINJ's goal is to create a healthy and safe environment for its employees, patients, their families, and visitors to its campus.





195 Little Albany Street • New Brunswick, NJ • Office of Communications 732/235-9891 • www.cinj.org