ENDING THE FEAR OF CANCER
In the earliest days of treating cancer, our options were limited to slash, burn and poison - surgical excision of the tumor, radiation therapy or chemotherapy to kill the cancer.

Over the last 70 years, research has rapidly moved forward and armed us with unprecedented new ways to attack cancers. While today’s oncologist can still utilize surgery, chemotherapy and radiation, she may also employ options such as immunotherapy, anti-angiogenic agents, molecularly-targeted therapies and more. Often these can be used in combination to further treatment effectiveness.

Along with advances in treatment, we are entering an era of unprecedented success in cancer prevention. The only thing better than a cure for cancer is a strategy to prevent cancer altogether. From simple interventions such as vaccines and lifestyle changes to more advanced cutting-edge strategies involving identification of biomarkers that signal a person’s higher cancer risk, advances have helped reduce cancer incidence and morbidity, and improve health outcomes for those fighting the disease. Yet cancer remains the second leading cause of death in the world. Access to recent advances is largely limited to developed countries. And for almost all, the mere mention of the word “cancer” still strikes a high level of fear.

The next era of science will move us much closer to ending this fear. New technologies are allowing scientists and physicians to battle cancer at the molecular level. Known to most as “precision medicine,” individualization of care is transforming how we diagnose, treat and prevent cancer. It’s simple – treat the patient, not the disease. Today the majority of biopharmaceutical agents moving toward approval for clinical use have the potential to be personalized medicines.

Other fields of science are also contributing to progress in the fight against cancer. Bioinformatics (big data) has assumed a key role in our current success. Collecting and analyzing large amounts of data to profile a particular cancer allows clinicians to evaluate that cancer’s behavior and predict response to interventions, anticipate and manage toxicities, and identify the best combination of treatments that will be most successful. Genetic profiling allows those with inherited cancer risk (family history) to understand their lifetime chance of developing cancer, and with their physician decide if added screening or other clinical interventions might lower that risk. I am Principal Investigator on a national study, the BRCA Founder OutReach Study (BFOR), which focuses on cancer risk due to a BRCA1/BRCA2 mutation. Those who qualify receive free BRCA testing and genetic counseling. One other exciting area of scientific discovery may soon bring an end to some cancers you inherit. Trials are currently underway for vaccine approaches for BRCA-related cancers. While this research is young, if properly utilized it promises to dramatically improve our arsenal of options in cancer prevention.

The fear of cancer manifests in many ways – am I at risk, will I develop a familial cancer, can my cancer be treated, will the treatment be effective, will I progress or recur? Recent research has even shown that stress from fear can actually drive cancer. Today there is hope on every level that over the next 10 to 20 years the fear of cancer will wane, replaced by strategies that utilize advances in science and technology to arm each person with the ability to fight – and win – against cancer.

I am touched and honored to be part of this year’s Tower Spirit of Hope Luncheon on October 14, 2019.

Dr. Beth Y. Karlan is Vice Chair of Women’s Health Research and Professor, Department of Obstetrics and Gynecology, and Director of Population Genetics at the Jonsson Comprehensive Cancer Center, David Geffen School of Medicine at UCLA. Dr. Karlan has authored over 300 peer-reviewed publications and is an American Cancer Society Clinical Research Professor.

TO PARTICIPATE:

Register
Confirm your eligibility to participate and complete an online education module and personal and family history questionnaires.

Give consent
Provide your informed consent to enroll in the study through the BFOR website.

Get tested
Supply a blood sample at a Quest Diagnostics lab in your community for analysis. The study will inform you of the closest location.

Get your results
Receive your test results from your primary care physician or a BFOR cancer genetics specialist.

To be eligible for the pilot phase of the BFOR study, you must be: A woman or man 25 years of age or older, with at least one grandparent of Ashkenazi Jewish (Eastern European) origin. Living within the New York, Los Angeles, Philadelphia, or Boston metropolitan areas.