

Your Dollars at Work

The Cedars-Sinai Women's Cancer Program (WCP) at the Samuel Oschin Comprehensive Cancer Institute is a national leader in gynecologic cancer research and care. Under the direction of Beth Y. Karlan, MD, the program offers a multidisciplinary, comprehensive response to women's cancers, earning recognition as one of the top 10 gynecologic oncology programs in the United States.

Through a focus on groundbreaking research in inherited cancer risk, early detection and prevention, cancer biology, and personalized therapeutic approaches to care, WCP is making significant strides in scientific studies related to tumor biology, inherited susceptibility, and environmental risk for women's cancer, including ovarian cancer. A critical factor in WCP's ongoing progress is Run for Her, a 5K Run and Friendship Walk that supports ovarian cancer research and awareness – one of the largest such events in the country.



More than 230,000 women are diagnosed with ovarian cancer worldwide each year, and approximately 140,000 of these women will die from the disease. In partnership with Run for Her, WCP is seeking to change the calculus. The work of WCP has already helped identify HE4, the first FDA-approved biomarker for ovarian cancer monitoring since CA125. Since its launch in 2005, Run for Her has raised over \$6 million for WCP, bolstering the program's research and care for women who are fighting ovarian and other women's cancers, improving early detection, and increasing access to expert and individualized treatments.

Collaborating with Run for Her, the Women's Cancer Program has achieved a remarkable track record of success:

- WCP's participation in the discovery of HE4, the first FDA-approved biomarker that can be used in conjunction with CA125 to detect the presence of recurrent ovarian cancer or triage a pelvic mass based on its likelihood of malignancy.
- The Novel Markers Trial, funded in part by the National Cancer Institute, which is an ovarian cancer screening trial for patients at elevated risk for ovarian cancer based on family history of cancer, personal history of breast cancer, or age and other epidemiologic factors.
- A comprehensive body of translational research in ovarian cancer biology and genetics, which has contributed to understanding ovarian cancer etiology and helped identify the fallopian tubes as a "cell of origin" for ovarian cancer. It's also revealed possible therapeutic interventions and novel strategies toward cancer prevention.

- Collaboration between Dr. Karlan's team and the Regenerative Medicine Institute on exciting new research focused on reprogramming stem cells to make fallopian tube, ovarian, and breast tissues so that we can better define factors that lead to cancer, understand how to modify or target them for prevention, and discover new therapies.
- Laboratory-based translational research that has revealed molecular signatures of ovarian cancer, which provide prognostic, diagnostic, treatment, and molecular subtype classifications of ovarian cancer. A patent application for this biomarker signature is now pending approval.
- The Gilda Radner Hereditary Cancer Program, an internationally recognized long-term study involving women and men with BRCA mutations, focused on all aspects of BRCA influence, including cancer risk, early detection, epidemiologic factors and stress, biologic behavior of the tumors, and novel therapeutics (including PARP inhibitors). Other studies include gene-gene and gene-environment interactions. The Gilda Radner Program is also a leader in studies on non-cancer risks associated with BRCA mutations, such as premature ovarian failure and other BRCA-associated health factors, including increases in heart disease and diabetes.
- WCP's Biorepository, a tissue bank initiated in 1990 that currently holds over 100,000 malignant, benign, and normal tissues for research. Each tissue is linked with comprehensive clinical data creating one of the world's preeminent collections that continues to be a backbone of our studies to unravel the genetics and epigenetics underlying cancers in women.
- Research For Her, a nationally recognized effort established by WCP that's focused on reducing the gender differences in clinical research between men and women by increasing the participation of women – both with and without cancer – in research.
- Advocacy that led to Johanna's Law, signed by President Bush in 2007, as the first federal support for a nationwide campaign to increase awareness of gynecologic cancers.
- Thousands of hours invested in mentorship and training of the next generation of physicians, scientists, and nurses working in the field of women's cancers.

