FOR PATIENTS AND REFERRING PHYSICIANS Cancer Genetics: Prevention and Early Detection



Powered by breakthrough cancer genetic research and unmatched expertise, our program offers patients and families a personalized approach for the prevention, screening and treatment of hereditary cancers.

> Comprehensive Cancer Center

Cancer Genetics: Prevention and Early Detection

Who we are

As one of the first clinical cancer genetics and prevention programs in the world, UCSF is home to numerous international leaders in cancer research and treatment. Physicians and researchers at UCSF have linked mutations in specific genes with more than 50 hereditary disorders that may predispose individuals to developing certain cancers.

Through our cancer genetics programs, our experts provide comprehensive care for cancer patients and survivors, their relatives, and for individuals who hope to avoid cancer.

What we do

Cancer can involve multiple gene mutations, and inherited mutations play a role in approximately 5 to 10 percent of all cases. Our services, designed for at-risk patients and their families, provide coordinated genetic screening, prevention education, and treatment. Based on family history and other risk factors, genetic counselors and physicians provide an individualized risk management program for each patient, which includes recommendations for screening and options for preventive measures.

Who should consider our services?

Our programs are for people who have:

- Concern about a personal or family history of cancer, including a history of early-onset or multiple cancers; or multiple relatives with the same or related cancers
- A personal or family history of benign tumors associated with cancer risk, such as multiple colonic polyps, especially at a young age
- An inherited genetic mutation linked to cancer risk

Patient Perspective: Doreen DeSalvo

"Have you ever seen a relative go through the cancer process?"

This is how San Francisco writer Doreen DeSalvo responds when asked whether she regrets getting tested – and testing positive – for Lynch syndrome, a hereditary condition that carries a high risk for colon, endometrial, ovarian and other cancers. Far from regretting her decision, Doreen – whose father and brother were diagnosed with colon cancer in their 40s – feels the knowledge she's gained helps her be more proactive about monitoring her health. "I always tell myself that I have a piece of information that could save my life," says Doreen. "Before, I tended to have my head in the sand, and get a colonoscopy every other year, but no more. I've determined that having a yearly screening is far more convenient than having cancer."

Cancer Genetics Programs

Cancer Genetics and Prevention Program

The Cancer Genetics and Prevention Program is the largest genetic testing center for cancer susceptibility in Northern California. Genetic counselors consult with concerned families to assess the likelihood of genetic susceptibility and help family members understand the meaning of a genetic test. Following a review of family history and discussion of results with physicians, patients receive an individualized risk-management program. All information is confidential, and patients are encouraged to share information with other family members. Some already have cancer or are cancer survivors, while others are unaffected by cancer but may be at increased risk. **Phone: 415-885-7779**

Hereditary Cancer Clinic

Part of our Center for BRCA Research, the Hereditary Cancer Clinic offers patients and families with genetic mutations linked to hereditary cancers – such as mutations of the BRCA gene – personalized care and planning for their long-term health. The clinic provides:

- Genetic counseling and testing for patients and families
- Coordination of follow-up care, including cancer prevention and surveillance, and referrals to other specialty clinics at UCSF as needed

The clinic's team of clinicians and researchers are dedicated to developing new treatment protocols, improving patient outcomes and survivorship, and providing more personalized care to families that carry mutations linked to hereditary cancers. **Phone: 415-353-9797**



Center for BRCA Research

The Center for BRCA Research is one of only two comprehensive programs in the nation – and the first on the West Coast – for individuals carrying hereditary gene mutations in BRCA1 or BRCA2. These mutations are widely recognized as inheritable causes of breast and ovarian cancers, but less well known is that they also heighten the risk for pancreas and prostate cancers, as well as melanoma.

Powered by the labs of Drs. Alan Ashworth and Pamela Munster, the Center is one of the few to focus clinical and research activities directly on BRCA mutations, concentrating on clinical care, screening and prevention – as well as education and outreach. **Phone: 415-353-9797** UCSF patients with a hereditary cancer syndrome have access to KinTalk.org, an educational and family communication portal.



Alan Ashworth, PhD, FRS, president of the UCSF Helen Diller Family Comprehensive Cancer Center and senior vice president for cancer clinical services for UCSF Health, is a renowned leader in the area of genetic cancer research. Dr. Ashworth was part of the research team that identified the BRCA2 mutation. Pamela Munster, MD, co-director of the Center for BRCA Research, is a highly regarded breast cancer oncologist with extensive experience in molecular and clinical research as well as patient care. As a survivor of breast cancer with a BRCA mutation, she is committed to finding a cure for BRCA-related cancers.

Pioneering Personalized Hereditary Cancer Care



Long-term patient follow-up

We offer long-term follow-up of all patients undergoing genetic testing so they can stay up-to-date on the latest advancements in hereditary cancer risk. Our registry fosters nationwide collaborative research, leading to advancements in identifying and managing patients with hereditary cancer risk. The Center for BRCA Research offers participation in research and clinical trials. To date, nearly 12,000 patients have received cancer risk assessment and counseling. More than half of these patients are enrolled in a long-term follow-up protocol.

UCSF500 Cancer Gene Panel

For some patients with advanced cancer, in particular when there is poor response to standard of care therapy, a new molecular diagnostic test – the UCSF500 Cancer Gene Panel test – may be appropriate. This test can identify genetic changes in the DNA of a patient's cancer, thereby helping clinicians improve a patient's cancer treatment by identifying targeted therapies, appropriate clinical trials, or in some cases the exact type of cancer a patient has. UCSF500 test results might also provide information on inherited genetic changes that increase the risk of developing cancer for a patient or his/her family.

Sequencing for the UCSF500 test is conducted at UCSF's Clinical Cancer Genomics Laboratory (CCGL). Led by Boris Bastian, MD, PhD, the CCGL is one of the few hospital facilities nationally that profiles tumor DNA and compares it with the patient's normal tissue.

A coordinated continuum of care

Experts who specialize in hereditary cancer – genetic counselors, medical geneticists, oncologists, surgeons, scientists and others – work together to provide personalized care in partnership with a patient's primary care physician. Genetic counselors consult at breast, gynecologic, gastrointestinal, endocrine, pediatric and molecular tumor boards, as well as the weekly hereditary cancer tumor board.

Locations



Comprehensive Cancer Center

www.ucsfhealth.org/cancer

Center for BRCA Research Phone: 415-353-9797

Cancer Genetics & Prevention Program Phone: 415-885-7779

Hereditary Cancer Clinic Phone: 415-353-9797

Referring Physicians: Contact our Physician Liaison Service for assistance at 800-444-2559 or referral.center@ucsf.edu



UCSF Health strives to provide equal access to our facilities and services for our patients with disabilities. For more information or assistance, please call Patient Relations at 415-353-1936 or visit www.ucsfhealth.org.

PRINTED ON POST-CONSUMER RECYCLED PAPER • 3.18-02052018