Our Mission Statement
At the UCSF Center for BRCA Research, we strive to end BRCA-related cancers in our children’s lifetimes. Our team is leading diverse, ambitious efforts in the research lab, our Hereditary Cancer Clinic and in our community to determine cancer risk, prevent, intercept and cure BRCA-related cancers.

How do BRCA genes affect health and which types of cancer are increased with a BRCA mutation?
BRCA1 and BRCA2 are normal genes that protect everyone from cancer by repairing damaged DNA and preventing cells from growing and multiplying in an uncontrolled way. Two copies of BRCA1 and BRCA2 are found in every cell. Some people are born with a mutation in one of the copies of a BRCA gene, meaning the gene does not work properly, increasing the risk for certain cancers. BRCA1 and BRCA2 mutations increase the risk for female breast cancer, ovarian cancer (including tubal and primary peritoneal cancers), prostate cancer, male breast cancer, and pancreatic cancer. Women and men with a BRCA mutation are recommended to have cancer screenings more often due to their higher risk for these cancers. The UCSF Hereditary Cancer Clinic provides genetic testing services to identify individuals with a BRCA and other cancer risk mutations, and has clinicians who create individualized care plans for patients with hereditary cancer risk. For individuals with cancer, knowing about a BRCA mutation can help in planning your cancer treatment. There are now targeted drugs that work better on some types of BRCA-related cancers. We recommend asking your oncologist if genetic testing may be right for you.

What specialized resources are available at UCSF for BRCA-positive patients?
The UCSF Center for BRCA Research is a specialized and dedicated Center for families with BRCA and other mutations linked to cancer risk. Our Hereditary Cancer Clinic (HCC) is where patients with BRCA and other mutations receive personalized care for their long-term health & well-being. The HCC helps individuals navigate their diagnosis and maintains relationships with other UCSF oncology specialty areas like breast surgery or urologic surgery. Our team includes genetic counselors, a nurse practitioner, oncologists and other disease specialists. Our genetic counselors can help patients with BRCA and other mutations think about what, when and how to talk to their family members. Psychologists in the UCSF Psycho-Oncology practice are available to help patients cope with the emotional and psychological aspects of a BRCA mutation or other hereditary cancer syndrome.
What imaging or other tests are recommended for screening for someone with a BRCA mutation?
Screening recommendations vary based on your gene mutation, the organ at risk for cancer, and your personal and family medical history. For example:

- Screening for female breast cancer includes breast MRI without and with contrast once a year starting at age 25. At age 30, screening with breast MRI and with mammogram, each once a year, is recommended. It is ideal to stagger breast MRI and mammogram by 6 months.

- Screening for ovarian cancer includes transvaginal ultrasound and serum CA 125, considered beginning at age 35 with regular surveillance until risk-reducing salpingo-oophorectomy. The benefits of ovarian cancer screening are limited, so women should discuss the benefits and risks of ovarian cancer screening with a health care provider knowledgeable on ovarian cancer.

- Screening for prostate cancer includes digital rectal exam and serum PSA beginning at age 40 once a year, and referral to genitourinary oncologist when Prostate-specific antigen (PSA) tests greater than 2.0.

- Screening for pancreatic cancer includes alternating annual endoscopic ultrasound (EUS) and MRI, beginning at age 50 or 10 years earlier than the youngest diagnosis in the family, whichever comes first, if there is a family history of pancreatic cancer or a personal history of pancreatitis.