



*2017 Cancer Program Report*

## A MESSAGE FROM THE DIRECTOR

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Cancer challenges patients and their families in every aspect of their lives—body, mind and spirit.

For nearly two decades, the Mills-Peninsula Cancer Center has been meeting these challenges by investing in state-of-the-art technology, exploring cutting edge research, building innovative new programs and providing compassionate patient care in a soothing, healing environment.

At the core of our world-class cancer care is a committed group of physicians and staff. This year Mills-Peninsula has welcomed several more outstanding new clinicians to our team.

From a clinical perspective, Mills-Peninsula has historically been, and continues to be, at the forefront of emerging technologies. We have pioneered treatments such as prostate brachytherapy, which implants

radioactive seeds inside the body to directly target cancer cells. We offer stereotactic radiosurgery with the Varian TrueBeam® STx, a noninvasive targeted treatment that reduces radiation exposure to surrounding tissues.

We were also early adopters of digital tomosynthesis for finely detailed 3D mammography, accelerated partial breast radiation for speedier radiation treatments and heightened accuracy of tumor delineation enabled by integrated PET/CT simulators.

We continue to push the envelope of medical science by increasing our clinical research program in size and scope. Just one of the 50 clinical trials currently being conducted here is the STRIVE program, a study that aims to develop a blood test for early-stage cancer detection.

Helping people avoid cancer is, of course, a vitally important part of what we do. We offer a Breast Cancer High-Risk Program that monitors women with high risk factors for the disease, and helps to reduce that threat as much as possible. While Low-Dose Computer Tomography improves lung cancer screening for people who may not have active symptoms but are at risk.

This year we also offered free skin cancer screenings to local residents, a community-based “Ask a Pharmacist” event focusing on consumer education about HPV vaccinations, and sponsored an Oncology Symposium for cancer physicians, nurses and other professionals in the area.

At the Mills-Peninsula Cancer Center our holistic approach to patient care means we value the emotional side of healing as much as the clinical side. Recently, we launched the WINGS & WINGMEN peer support program in which volunteers who are cancer survivors themselves are trained as peer counselors to come alongside people who are currently in active treatment. This provides patients with a unique source of comfort and encouragement as they lean on someone who has walked in their shoes.

It is my privilege to work alongside the physicians and staff of the Cancer Center who live out this philosophy every day as they commit themselves to advancing our quality of care. I am proud of the talent and vision of our team, and of our clinical outcomes that exceed national benchmarks year after year. And I am deeply grateful to our patients who choose to partner with us on their healing journey.

Laura Arroyo, Director, Dorothy E. Schneider Cancer Center, Mills-Peninsula Medical Center

## CANCER COMMITTEE LEADERSHIP 2017

*Our multidisciplinary team works together to ensure we provide the highest level of care.*

ROLE	MEMBER NAME
Committee Chair/Medical Oncologist . . . . .	Bradley Ekstrand, M.D.
Cancer Liaison Physician/Surgical Oncologist . .	Kimberly Dalal, M.D.
Diagnostic/Interventional Radiologist . . . . .	Clay Napper, M.D.
Pathologist . . . . .	Keith Duncan, M.D.
Medical Director, Radiation Oncologist . . . . .	Al Taira, M.D.
Medical Director, Breast Imaging . . . . .	Harriet Borofsky, M.D.
Medical Director, Breast Cancer Services . . .	Andrea Metkus, M.D.
Cancer Service Line Administrator . . . . .	Laura Arroyo, MPH
Oncology Nurse . . . . .	Elvie Vengco, R.N.
Clinical Social Worker . . . . .	Victoria Erslovas, LCSW
Certified Tumor Registrar . . . . .	Lisa Syrett, CTR
Quality Management Representative . . . . .	Peggy Lim, MBA
Palliative Care Leader . . . . .	Suzanne Pertsch, M.D.
Cancer Conference Coordinator . . . . .	Lisa Syrett, CTR
Quality Improvement Coordinator . . . . .	Brad Ekstrand, M.D.
Cancer Registry Quality Coordinator . . . . .	Al Taira, M.D.
Community Outreach Coordinator . . . . .	Jennifer Vickerman, R.N., M.S.
Clinical Research Coordinator . . . . .	Stephanie Casal, R.N.
Psychosocial Services Coordinator . . . . .	Victoria Erslovas, LCSW
Genetic Counselor . . . . .	Diane Zastrow, M.S., LCGC
Registered Dietitian . . . . .	Debbie Kurzrock, R.D.
Pharmacist . . . . .	Trang Le, PharmD, MHA
Rehabilitation Representative . . . . .	Tiffany DeAsis, P.T.
Pastoral Care Representative . . . . .	Sam Ortega, Chaplain
American Cancer Society Representative . . .	Edmundo Nevel

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OF SURGEONS  
(ACOS)



*We are committed to exploring and embracing new technologies and treatments to provide the best possible care to our community.*

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## Chemotherapy and Infusion Treatment

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### Radiation Oncology Services

- Varian TrueBeam® STx System
  - Stereotactic Ablative Radiation Therapy (SABR/SBRT)
  - Stereotactic Radiosurgery
  - Real-time Motion Management Techniques and Tumor Tracking
  - Image-Guided Radiation Therapy
  - High-Dose Rate (HDR) Brachytherapy for Accelerated Partial Breast Irradiation
  - Low-Dose Rate (LDR) Brachytherapy
  - PET/CT On-site
  - Deep Inspiration Breath Hold (DIBH)
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### Surgical Services

- Cancer Surgery/Fellowship-Trained Surgical Oncologists
  - Minimally Invasive Surgery
  - Robotic-Assisted Surgery
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### Comprehensive Breast Services

- 3D Mammography/Digital Breast Tomosynthesis
  - Core Needle Biopsy — Stereotactic and Ultrasound
  - High-Risk Breast Clinic
  - Multidisciplinary Breast Cancer Clinic
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### Diagnostic and Interventional Radiology Services

- 4D Computed Tomography (4DCT)
  - Radiofrequency Ablation
  - Low-Dose CT Lung Cancer Screening
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### Support Services

- Nutrition Services
- Social Services
- Genetic Counseling
- Cancer Clinical Trials Program
- Oncology Rehabilitation and Indoor Pool
- Lymphedema Therapy
- On-site Tumor Registry
- Financial Counseling Service
- Cancer Education Programs
- Home Care and Hospice
- Cancer Support Groups
- Screening and Prevention Programs
- Palliative Care

At Mills-Peninsula Health Services, we provide state-of-the-art cancer treatment in a healing setting that meets your emotional and treatment needs. You'll work with doctors, nurse navigators and staff who provide personalized care to enhance your comfort and well-being. We stand by you and your family throughout your treatment journey. A few examples of the options we offer to customize your care include:

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### Breast Cancer Clinic

We offer specialized treatment planning in which each member of your medical team provides individual consultations with you on the same day. This may include a surgeon, a medical oncologist, a radiation oncologist, a plastic surgeon and a nurse navigator to guide you through the process. This same team reviews each new diagnosis, working together to create the most effective treatment plan for you.



*We specialize in care to suit your unique needs.*

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### Prostate Brachytherapy

Mills-Peninsula is a pioneer in the use of highly targeted implanted radioactive seeds to treat early stage and more advanced prostate cancer. Our providers are among the most experienced on the West Coast. We were an early adopter of real-time planning, integrating intra-procedural ultrasound imaging with computer-modeled dose distributions to increase the accuracy and effectiveness of the treatment. Prostate brachytherapy, which is not available at all cancer centers, is a highly convenient and effective treatment option for men with lower-risk disease and a powerful tool as part of integrated treatment for men with higher-risk disease.

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### Stereotactic Radiosurgery

Radiosurgery is a noninvasive treatment that can remove tumors and cancers without a surgeon having to cut into the body. Mills-Peninsula doctors use an advanced technology called the Varian TrueBeam® STx radiosurgery system to deliver a precise dose of radiation to the tumor. The radiation surgery ablates a targeted area while limiting radiation exposure to surrounding normal tissue. This can significantly shorten the duration of treatment while increasing its effectiveness.

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### Breast Cancer High-Risk Program

Women who are at high risk of developing breast cancer live with daily stress and worry. Yet no one should have to sit back and wait for a possible diagnosis. At Mills-Peninsula Health Services, we offer a Breast Cancer High-Risk Program that monitors women at increased risk and helps reduce that risk as much as possible. We provide an in-depth evaluation based on your individual risk factors. Our staff works in partnership with your primary care doctor and OB/GYN to provide you with a personally tailored plan to manage your risk.

### Genetic Counseling

Our on-site genetic counselor will help guide you through the complexity of understanding how genetics may affect the decisions you make regarding your cancer treatment. The genetic counseling team may:

- Provide risk assessments based on personal and family history
- Coordinate genetic testing to detect genetic mutations that are associated with cancer risk
- Provide education, support and resources for families with a hereditary syndrome or a strong personal or family history of cancer
- Make recommendations for cancer screening and management based on a genetic mutation or family history

### High-Dose Rate Breast Radiation

High-dose rate radiation brachytherapy lets doctors insert radioactive material directly in or near cancerous tissue. This internal radiation can dramatically shorten treatment time and may result in fewer side effects. For breast cancer, radioactive seeds are inserted through a catheter directly into the breast where the tumor was removed. The seeds deliver a highly targeted dose of radiation to this area, called the tumor bed, for a few minutes, and then they are removed. Catheter brachytherapy is done twice a day for five days. This is an outpatient procedure, so you can go home between treatments. Doctors typically use high-dose breast radiation on smaller tumors with clear margins. It takes far less time than external beam radiation, which is given five days a week for five or six weeks.

### AWARDS AND ACCREDITATIONS



We continue to enjoy our recognition from the American College of Surgeons' Commission on Cancer as an accredited cancer program. Through this optional accreditation experience, ACOS evaluates our program's initiatives and achievements, including our clinical research program, against rigorous targets and awards accreditation based on performance and outcomes.

# Doctors Excited by New Cancer Technologies

*From a breakthrough in electric field therapy to safer margins for prostate cancer treatment, there is new hope on the horizon*

Exciting new treatments are being explored every day at the Mills-Peninsula's Cancer Center. One of these treatments is an approach to brain cancer that seems like something off the pages of a sci-fi comic book.

Glioblastomas (GBM) are one of the most aggressive and difficult-to-treat brain tumors because they reproduce rapidly and are highly malignant. "We place this device, called the Optune system, on a patient's head which creates low-intensity, alternating electric fields," Al Taira, M.D., medical director of Radiation Oncology at Mills-Peninsula, explains. These fields disrupt GBM cancer cells, helping to stop them from dividing and causing some of them to die. The procedure does not disrupt healthy resting cells



"It's very 'Star Trek,'" Dr. Taira says. "And the research shows we have the potential to take a very difficult disease with a poor prognosis and improve survival. GBM is still very difficult to beat, but people are living longer because this procedure is being added to their care."

## Shorter Radiation Cycle; Same Results

The traditional treatment for a woman diagnosed with breast cancer desiring breast conservation is to undergo a lumpectomy and then receive radiation therapy over a six-week period.

"Now the entire course of radiation treatment can be completed for most of our patients in only four weeks and, for some women, in a single week," Dr. Taira says. "We're also able to treat a smaller, more targeted area, very close to where the surgery was performed. So the result is the patient is exposed to less radiation and can finish her treatment sooner."

## Waiting to Exhale

For women who have breast cancer on the left side, there is an additional risk when it comes to radiation treatment—damage to the heart. Studies have shown that incidental doses of radiation can cause breast cancer survivors to experience heart-related problems years after finishing their treatments.

"So much of the science of radiation oncology today is not just about killing cancer cells, but determining what we can do to protect healthy organs and tissue," Dr. Taira says. To that end, many left-breast cancer patients at the Center are



AL TAIRA, M.D.

being taught a technique called deep inspiration breath-hold (DIBH). The patient simply holds air in her lungs for approximately 20 seconds at a time while the radiotherapy treatment is being delivered, allowing normal breathing breaks in between treatment beams.

This action allows the lungs to expand, thereby pushing the heart away from the treatment area. Meanwhile, the radiation machine tracks the woman's breathing, only activating the beam when she is poised in the correct breath-hold position. This technique has proved very helpful in reducing the amount of radiation to the heart while making sure that the breast/chest wall area receives the full prescribed dose.

## A Margin of Safety for Men

In a similar way, men who are undergoing radiation therapy for prostate cancer are also at risk for injury to the rectum. But a new spacer device called SpaceOAR hydrogel helps protect the rectum during radiation treatments to the prostate.

Hydrogel is a water-based material that the doctor injects between the prostate and rectum. In less than a minute, the gel solidifies, forming a centimeter-wide barrier, moving the rectal wall away from the prostate and protecting it during radiotherapy. "A centimeter may not sound like much," Dr. Taira says, "but to us, that's a football field."

And the best part? Six months later, the hydrogel biodegrades on its own and disappears completely without a trace.

# Partnering With our Patients for Answers to Cancer

*Mills-Peninsula is actively involved in many national clinical trials*

“At Mills-Peninsula, we currently have access to nearly 50 National Cancer Institute (NCI) clinical trials that are open to our patients,” Stephanie Casal, M.S., R.N., CNS, manager of Clinical Research, says. “We are a part of the Sutter Cancer Research Consortium which centralizes many of the regulatory and financial aspects of clinical trials and makes it possible for us to participate in these national trials.”

For the last several years, Mills-Peninsula has been an active participant in a host of cutting-edge research studies supported by our teams of research investigators, nurses and staff. A Mills-Peninsula research committee vets all new available trials and a cancer committee routinely oversees and advocates for new pioneering research opportunities.

“We are committed to our patients and continually pushing the envelope to develop new cancer treatments to help them,” Laura Arroyo, director of the Cancer Center, says. “We are proud to offer our community access to this wide variety of industry-leading research trials, all right here in a local community hospital setting.”

## A Wide Range of Clinical Trials

“Our NCI trials run the gamut across every disease base including cancer affecting the brain, breast, gastrointestinal tract, head/neck, lung, pancreas, prostate and more,” Casal says. “These studies are extremely important to contributing to the knowledge about how we diagnosis, treat and prevent different types of cancer.”

For example, just one of the trials Mills-Peninsula is involved in is the STRIVE Study, a new blood test being developed for early-stage breast cancer detection. (See page 11 for more information.)

Another study involving Cancer Center patients is the Breast Cancer WEight Loss Study (BWEL), which is looking at whether weight loss in overweight and obese women may prevent breast cancer from coming back. Still another is NCI-MATCH, which looks at how well treatment that is directed by genetic testing works in patients with solid tumors or lymphomas that have progressed following at least one line of standard treatment, or for which no agreed upon treatment approach exists.

## Who participates in clinical trials?

Patients are selected to participate in Mills-Peninsula clinical trials according to specific protocols developed for each individual study. The inclusion criterion that allows someone to participate in a clinical study may be based on characteristics such as age, gender, the type and stage of his or her cancer, previous treatment history and other medical conditions.

“We screen all of our patients and all of the people who participate in our multi-disciplinary tumor boards, as well as anyone who contacts us and wants to be screened by our medical oncologists. Whenever possible, we fit them into studies where they are eligible,” Casal continues.

“I’ve been in this division for eight years and nearly everyone that I’ve approached for a clinical trial has participated, particularly in our breast cancer studies,” she says.



*“It’s been my experience that patients are very excited about better understanding their disease and taking advocacy into their own hands.”*

STEPHANIE CASAL, M.S., R.N., CNS  
MANAGER OF CLINICAL RESEARCH

# Cancer Screening, Prevention and Education

*At Mills-Peninsula, we want to help people prevent cancer as much as we want to cure cancer. So we are proud to offer our community valuable screenings and prevention information to help them stay as healthy as possible.*

## Free Skin Cancer Clinic

This year we offered a free skin cancer screening to local residents in a one-day clinic at Mills-Peninsula Medical Center. Spearheaded by San Mateo dermatologist, Peter Webb, M.D., five Mills-Peninsula physicians, plus nurses and hospital staff, volunteered their time and expertise for the day. The patients were screened primarily for the three most common types of skin cancer—basal cell carcinoma, squamous cell carcinoma and melanoma—plus any type of pre-cancerous lesions.

**OUTCOMES:** The team was able to successfully screen and educate 91 visitors. Through this event, 15 patients were identified as having abnormal results. The clinical team made recommendations and referrals, ensuring that each patient was referred for appropriate follow-up evaluation, biopsy and/or treatment.

## Sharing Our Knowledge

We also think knowledge is a powerful prevention tool. So we continue to share cancer information among our community's top cancer oncologists, nurses and experts in the area by offering an annual Oncology Symposium.

**OUTCOMES:** This year's symposium was attended by approximately 70 local cancer professionals and featured lectures on advances in cancer treatments and technologies for breast cancer, colon cancer, brain cancer and more. Speakers included Andrea Metkus, M.D., Vino Verghese, M.D., Kimberly Dalal, M.D., Al Taira, M.D., Kent Adler, M.D. and Harriet Borofsky, M.D.



## Getting the Word out about HPV Vaccinations

On October 6, 2017, we participated in a community-based “Ask a Pharmacist” event held at the Hillsdale Mall in San Mateo. Working together with several other healthcare organizations throughout the Bay Area, staff from the Cancer Center volunteered to provide education and prevention services to our local community. The focus for this event was to educate the public about the Human Papillomavirus (HPV) vaccination and its impact on reducing the incidence of cervical, vaginal and vulvar cancers in women, and penile cancer in men.

**OUTCOMES:** By the end of the day, our team of volunteer nurses met with over 70 participants to share printed materials, discuss the pros and cons of vaccinations and generally raise awareness of this cancer-preventing option.

# STRIVE Study Advances Development of a Cancer-Detecting Blood Test

*New technology could discover cancer long before it would appear on a mammogram*

**STRIVE** is a clinical study that seeks to enroll up to 120,000 women at the time of their screening mammogram to validate a new blood test for early-stage breast cancer detection. Begun in July 2017, the study will span five years and is being conducted at Sutter Health and Mayo Clinic. As a participating site, Mills-Peninsula is proud to be a pioneer and early adopter of this important research study.



HARRIET BOROFSKY, M.D.

“This is huge,” Harriet Borofsky, M.D., medical director of the Women’s Center, says. “The idea is, when breast cancer first begins, tiny DNA fragments are shed into the bloodstream. So, in theory, we are hoping to use this blood test to detect cancer at its earliest possible stage, long before it would appear on a mammogram, ultrasound or MRI. And, of course, the earlier we can detect breast cancer, the more effectively we can treat it.”

The study is being funded by GRAIL, Inc., a life sciences company that has secured more than \$1 billion in venture funding with investors that include Amazon, Bill Gates, Bristol-Myers Squibb, Johnson & Johnson Innovation and a host of other financial partners.

GRAIL, Inc. chose the Mills-Peninsula Women’s Center to participate in the trial because of the extremely high volume of women screened and treated here, as well as the Center’s impressive screening success rate. Each year the Center performs approximately 25,000 mammograms. About 80 percent of screening-detected breast cancers are discovered at their earliest stages when more treatment options are available and cure rates are highest.

“This new blood test could change the way women are screened for breast cancer,” Dr. Borofsky says. “And Mills-Peninsula is at the forefront of this research.”

## Leading the Way in Breast Health

Mills-Peninsula has a long history of embracing cutting-edge technologies. A decade ago, the Women’s Center was among the first to adopt digital mammography. Then three years ago, that technology was updated to digital breast tomosynthesis, also known as 3D mammography. “It’s the most impactful technology that I’ve seen in my career. It increases our ability to detect early breast cancer, while minimizing the number of recalls and the need for additional testing,” Dr. Borofsky says.

One drawback to 3D mammography was that it delivered an increased radiation dose to the patient, compared with standard mammography. But in March, the Women’s Center replaced the traditional standard views with computer generated views based on new, advanced software, which decreases the radiation dose by half, making it equivalent to standard mammography.

This past February, the Women’s Center also installed the latest advancement in dedicated breast biopsy systems—the Affirm prone tomographic biopsy table, which is equipped with 3D imaging. The new device markedly improves imaging resolution of subtle findings detected on 3D images, which allows biopsies to be performed faster and in a minimally invasive way. Often these procedures can be performed the same day, reducing anxiety and enabling a quicker diagnosis.



# WINGS & WINGMEN Program Provides Support

*“To know the road ahead, ask someone who is coming back.” – Chinese proverb*

Getting insights from someone who has already been where you are headed is useful in many areas of life. But to someone who has been recently diagnosed with cancer, who is frightened and anxious about the road that lies ahead, it's invaluable.

First launched at Sutter Health, Santa Rosa five years ago, **WINGS & WINGMEN** is a peer counseling program. WINGS is an acronym for “Women Inspiring, Nurturing, Giving and Supporting.”

The program matches Mills-Peninsula cancer patients with carefully screened and trained peer volunteers who provide support, comfort and non-medical, practical advice to others who have been newly diagnosed with cancer or who are facing new decisions with their illness.

Each counselor is a cancer survivor who has been out of active treatment for a year or more. Both men and women serve as volunteer counselors. They are paired with a patient of the same gender of comparable age who is undergoing a similar type of cancer treatment.

## A Grateful Spirit

“The theme I hear from every single one of our volunteers is that they are the ones who are grateful,” Victoria Erslovas, licensed clinical social worker and manager of the Cancer Center’s WINGS & WINGMAN program, says. “They tell me, ‘Thank you for letting me give back. Thank you for this experience because it’s so fulfilling to me.’ It’s amazing because we can’t thank them enough and here they are overflowing with gratitude. It’s such a win-win situation.”

“I’m a peer counselor because I want to give back the knowledge I gained and the help I received at Mills-Peninsula’s Cancer Center,” Glenda Guthart, two-time cancer survivor and volunteer peer counselor, says. “I want to help someone else.”

Guthart was first diagnosed with ductal carcinoma in situ (DCIS) in 2003. “It’s hard to hear the words ‘You have cancer,’” she says. “It’s very frightening. And then it sort of takes over your life.” Eleven years later, Guthart was diagnosed with invasive ductal carcinoma (IDC). “It was still difficult,” she says, “but not as hard as the first time because I’d learned so much by this point. Knowing more about my disease and what to expect made the difference.”

One of the patients Guthart has counseled was a surgical nurse who was about to undergo surgery followed by

accelerated radiation treatment, which Guthart had already experienced. “She asked me, ‘What are the benefits of the accelerated treatment? What are the drawbacks? Why did you choose this form of treatment? Were you happy with your decision? What about the side effects?’” Guthart recalls.

“Even though she was a medical professional herself, she said hearing about my experience made it easier for her to make her own decision,” Guthart says.



## Getting Volunteers Prepared

Each peer counselor volunteer must first undergo extensive vetting through the Mills-Peninsula Hospital Auxiliary and then complete another course to specially equip them to participate in the WINGS & WINGMAN program. The new counselors practice reflective listening and do extensive role playing. They study cultural differences, diversity issues and the importance of confidentiality, and learn how to respond to a person in crisis.

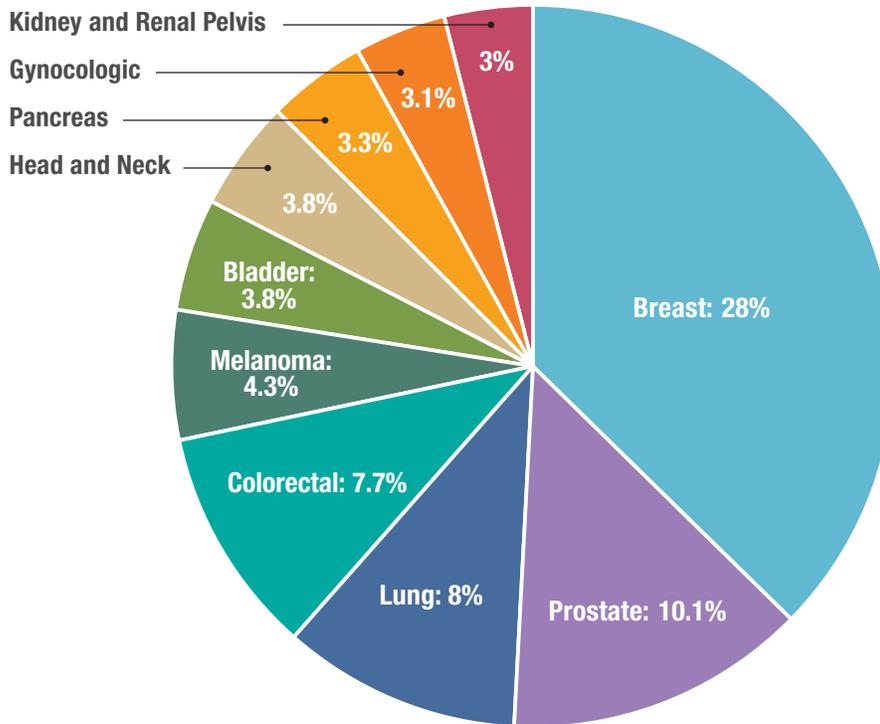
“Some cancer patients don’t have the support of their families, or even tell their families,” Guthart continues. “We’re here to listen, not to make it our own cancer, but to listen and give these patients the comfort and support they need.”

“Spending time with someone who has been through a similar experience often reduces the patient’s sense of anxiety, fear and isolation,” Erslovas adds. “It’s reassuring for people to know they don’t have to go through this alone.”

## REVIEW OF MPMS CANCER CASES

### Top 10 Disease Sites, 2016 Registry Data

The Mills-Peninsula Medical Center's Cancer Program serves the needs of our community and surrounding areas. The chart below reflects the numbers and disease sites of the 1,173 cancer patients served at Mills-Peninsula in 2016.



### Age distribution of our patient population in 2016

