



# NEW DEPTHS, NEW HEIGHTS

The Lefcourt Family Cancer Treatment  
and Wellness Center

2015 – 2018 Highlights



ENGLEWOOD  
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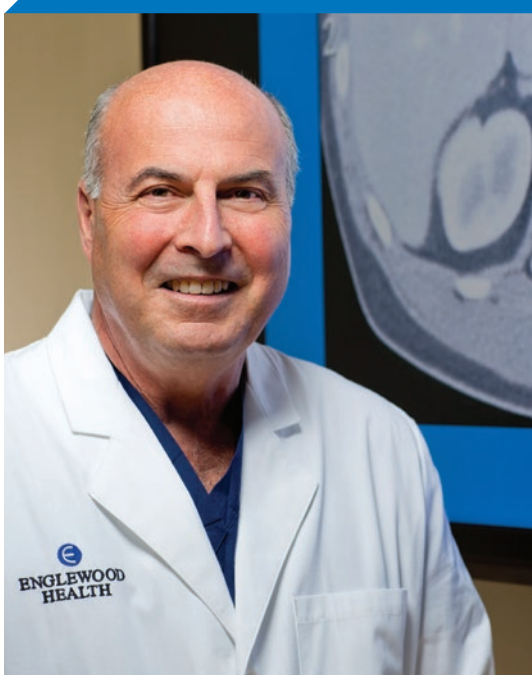


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This report is dedicated to our many patients and families who entrust us with the opportunity and honor to be part of their incredible lives.





A LETTER FROM

## Steven T. Brower, MD, FACS

Medical Director  
The Lefcourt Family Cancer Treatment and Wellness Center  
Chief of Surgical Oncology and Hepatobiliary Surgery

I am honored to present this progress report from The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health. The past three years have been a transformative time for the cancer center, a time in which we have harnessed the power and promise of precision medicine to improve the care we provide to our patients.

When I entered the field 30 years ago as a surgical oncologist training at the National Institutes of Health, I could not have imagined where we would be today. We can now detect cancer earlier, target treatments more appropriately, and manage adverse side effects more effectively to enable patients to live better, more fulfilling lives. Incredibly, today the majority of the patients with cancer are alive five years after diagnosis, up from 50 percent in the 1970s. Thanks to this progress, our patients are witnessing important family milestones that we all deserve and cherish.

The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health recently received two national accreditations. We were granted a three-year accreditation with commendation by the Commission on Cancer of the American College of Surgeons. Of the 1,500 hos-

pitals accredited by the Commission on Cancer nationwide, only a small percentage of hospital cancer programs receive this commendation status. We also received a full three-year accreditation with commendation by the National Accreditation Program for Breast Centers, another program of the American College of Surgeons. What do these accreditations mean for our patients in the community? Simply put, these designations validate the outstanding care and patient outcomes achieved within our cancer center. They also give our referring physicians confidence that the individuals practicing within our cancer center emphasize the highest level of commitment to the care of people with cancer. And these accreditations also reinforce the concept that collaboration is the path to conquering the unknown — and groundbreaking discoveries are able to be translated within a community teaching setting that also prioritizes the patient and family.

### **NEW DEPTHS: PRECISION MEDICINE AND A NEW UNDERSTANDING OF THE BIOLOGY OF CANCER**

Precision medicine may mean something different to each of us caring for patients. My own definition includes subspecialized expertise among our disease management

teams that allows oncologists to spend most of their waking day thinking about a particular cancer such as lung cancer, colorectal cancer, breast cancer, or prostate cancer. Individuals trained at the finest cancer centers deliver a recommendation for a patient's care that is both evidence based and balanced by the patient's quality of life. I think this stresses the importance that precision medicine is about improving our patients' lives, so that they cannot only live longer, but can live much better. This is the commitment of everyone working within The Lefcourt Family Cancer Treatment and Wellness Center.

Precision medicine that uses targeted therapies and immunotherapy has been incredibly successful in treating some of the most complex cancers such as lung cancer, head and neck cancer, bladder cancer, and non-Hodgkin's lymphoma. These successes are based on decades of research conducted by basic scientists and clinicians working together, many times within the construct of clinical trials, enabling us to translate these advances into clinical success. Our team prioritizes this translational aspect of bench-to-bedside research. We not only have programs studying early transformation of how normal cells

become more aggressive (owing to an ongoing collaboration with the NIH), but we continue to expand our portfolio of clinical trials that utilize the most advanced approaches to immunotherapy and targeted therapy for cancers such as lung cancer, lymphoma, breast cancer, and male genitourinary malignancies.

In the pages that follow, you will note innovative work being accomplished by our cancer site-specific disease management teams that are employing the following cutting-edge areas of medicine:

- ▶ Precision medicine
- ▶ Epidemiology and cancer screening of high-risk populations
- ▶ Immunology
- ▶ Cancer risk and genetic counseling
- ▶ Molecular aspects of breast and colon cancer
- ▶ Patient blood management and transfusion-free surgery
- ▶ Precise surgical techniques in neurological malignancies

### NEW HEIGHTS: TRANSFORMATION AND GROWTH OF OUR CANCER CENTER

The delivery of care in our cancer center stresses personal treatment and integrated programs, but we are always propelled forward by the important pillar of technology. You will read about our recent investments in technology such as precision radiology and radiation oncology equipment. You will also learn about the recent renovation of our facility and the important aspects of our value-added programs such as patient navigation and integrative medicine. And you will read about some of the generous benefactors

who are helping to make our success possible.

In my office at The Lefcourt Family Cancer Treatment and Wellness Center, I have a photograph of individuals I have had the honor and pleasure of caring for over the years, and they are now long-term cancer survivors. This is perhaps the most important reminder for me about what our teams are seeking to achieve. In a similar fashion, in this report you will meet nine amazing individuals, who were gracious enough to share their stories of ongoing challenge and success after treatment within our cancer center.

On the whole, progress from one year to the next is incremental. It builds upon the extraordinary commitment that each of our cancer center physicians and health care professionals bring to the bedside. As you can see in this report, every year brings new knowledge and insight that helps direct further treatment and ultimately improves the outcome for our patients. I believe we are on a trajectory for extraordinary advances and success within The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health.

Sincerely,



Steven T. Brower, MD, FACS  
 Medical Director, The Lefcourt Family Cancer Treatment and Wellness Center  
 Chief of Surgical Oncology  
 Englewood Health



A QUALITY PROGRAM  
 OF THE AMERICAN  
 COLLEGE OF SURGEONS



A QUALITY PROGRAM  
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▲ Ana Burga, MD, pathologist.

◀ Minaxi Jhaver, MD, chief of hematology/ oncology, in the hospital's Wilson Kaplen Infusion Center.

# Precision Medicine: Tailoring Treatments to Targets

In May 2017, the U.S. Food and Drug Administration made a paradigm-shifting approval, permitting the immunotherapy drug pembrolizumab to be used to treat patients with solid tumors containing a DNA repair defect called microsatellite instability (MSI) — regardless of the origin of the tumor. It was the first “tumor agnostic” approval ever, with the indication being specific to a molecular marker rather than a tumor site.

The game-changing approval is another milestone in the evolving field of precision medicine, whereby specific targetable genes in patients are identified and therapy is tailored to that person’s genes.

Use of genetic and molecular information about a patient’s tumor has become part of routine oncologic care. “Precision medicine gives us deeper insights into the biology of the tumor and

enables us to understand the mechanisms driving the specific tumor,” explains Minaxi Jhawer, MD, chief of hematology/oncology at Englewood Health. “By precisely targeting these markers and personalizing patient care, we are achieving dramatically better results for our patients with cancer than ever before.”

## TESTING FOR MARKERS

Not all patients with a similar stage of breast or colon cancer are biologically or clinically the same. Some may be at high risk for recurrence, and others at low risk. Identifying markers to differentiate these patients helps with prognostication. For example, since the OncotypeDX test was introduced several years

ago to determine if a patient with breast cancer needs chemotherapy, Englewood Health has made it a standard part of care for appropriate patients with breast cancer. The test gives the team the ability to understand the biology of a patient’s specific tumor and risk stratify the patients. Low-risk patients may be spared chemotherapy, while the high-risk patients are given aggressive treatment modalities.

“We have always been ahead of the curve in identifying the best prognostic indicators for our patients,” notes Englewood Health pathologist Ana Burga, MD.

“Besides breast cancer, we routinely analyze colorectal cancer tumors to identify patients who have a high microsatellite instability tumor,” she adds, in reference to cancer cells with a large number of a genetic mutation that results in an inability to

correct mistakes when DNA is copied in the cell. “These cancers could be genetically driven and associated with Lynch syndrome [a hereditary cancer syndrome] or be sporadic. Nevertheless these patients are known to benefit significantly with immunotherapy drugs.”

Today, genomic profiling is performed for patients with all stages of gastric, colorectal, lung, nasopharyngeal, endometrial, head/neck, anal, breast, and prostate cancers, melanoma, glioblastoma, and gastrointestinal stromal tumors, since targeted therapies have been developed for patients with these cancers who have certain biomarkers. Examples of genomic markers include:

- ▶ HER2 testing in gastric, colorectal, and breast cancers (as HER2-amplified tumors will respond well to drugs like trastuzumab).
- ▶ MSI in colorectal and endometrial cancers.
- ▶ ALK in lung cancer (which can be treated with crizotinib).
- ▶ BRAF in melanoma (a target of numerous melanoma medications).
- ▶ p16 as an indicator of human papillomavirus status in patients with head and neck and anal cancers.

Patients with advanced cancers and those whose tumors develop resistance to treatment may undergo even more expansive profiling for a wider panel of markers. This helps identify established targets for therapy as well as therapies being tested in clinical trials, giving patients the best overall options. The results of all testing are presented and discussed at the cancer center’s cancer conferences, where multidisciplinary cancer care teams pool their input to determine the best treatment for each patient.

## INFLUENCE BEYOND OUR CANCER CENTER

The expertise of Englewood Health’s oncology professionals also extends beyond the hospital’s walls. Dr. Jhawer serves on the Clinical Practice Guidelines Committee of the American Society of Clinical Oncology, which sets standard guidelines for cancer treatment and provides education and resources to oncologists across the world. And Dr. Burga is the cancer center’s physician liaison to the Commission on Cancer, a multidisciplinary program of the American College of Surgeons and the cancer center’s accrediting body.



## Cancer Prevention and Control: Prostate, Lung, and Colorectal Cancer Screening

An ounce of prevention is worth a pound of cure. For cancer, finding a tumor early — when it is most curable — is the next best thing to prevention. In recent years, Englewood Health has made a concerted effort to promote early detection in cancer, including prostate, lung, and colorectal cancers.

### PROSTATE CANCER SCREENING

Prostate cancer screening has been controversial due to the limited specificity of prostate specific antigen (PSA) testing. Since the FDA approval of PSA for screening in 1994, death from prostate cancer has markedly decreased, but concerns have been raised about overdetection and overtreatment of low-grade disease. Subsequent discoveries and advancements have improved care and treatment for patients, with an emphasis on shared and individualized decision making.

Screening advancements have resulted in a decreasing number of unnecessary biopsies. In addition

to PSA, there are now reflex tests available such as free PSA, PHI, and 4K score to better risk-stratify patients. Multiparametric MRI (mpMRI) has also played a tremendous role by improving diagnostic accuracy over the traditional methods and by reducing the number of unnecessary biopsies. The technology, called MRI/ultrasound fusion-guided prostate biopsy, was introduced at Englewood Health in 2017. It is a two-step process where a patient first undergoes mpMRI of the prostate. A radiologist then evaluates the images and identifies and marks any suspicious areas for further evaluation. The urologist then fuses the images with real-time ultrasound images, producing 3D images of the suspicious areas that are then targeted during the biopsy.

“Another exciting advancement is the introduction of genomic biomarkers and a number of genomic tools available that have improved detection, prognosis, and risk stratification,” says Mazyar Ghanaat, MD, program director of urologic oncology.

“Among these tools are newer types of tests to help identify patients who require prostate biopsy, help with management of patients with prior negative biopsies, and help improve prostate cancer risk stratification. Other biomarkers can help in the management of metastatic prostate cancer by predicting resistance or response to therapy. We are hopeful that ongoing advancements and clinical trials in prostate cancer, the most common cancer type in men in the United States, will help improve screening, diagnosis, and treatment; minimize overdiagnosis and overtreatment; and maximize survival.”

### LUNG CANCER SCREENING

For people at increased risk of lung cancer, Englewood Health offers low-dose CT scans. Studies have shown that low-dose computed tomography scanning can help find small lung cancers. In fact, the landmark National Lung Cancer Screening Trial demonstrated that the use of this test in high-risk populations reduces cancer deaths by 20 percent.





◀ Mazyar Ghanaat, MD, program director of urologic oncology.

◀ Radiology techs Ana Fraga-Guerrero and Maria Stingone with the UroNav MRI/ultrasound fusion biopsy technology.



◀ Mark Shapiro, MD, chief of radiology.



◀ Mitchell Spinnell, MD, gastroenterologist.

“Prior to the introduction of this important tool, physicians had little to offer for the early detection of lung cancer,” says Mark Shapiro, MD, chief of radiology. “We began performing low-dose CT scans for lung cancer in 2014, and have since performed more than 1,100 scans for at-risk smokers and former smokers. Ten cancers were diagnosed.” To make the program a success, Englewood Health has targeted the identification of high-risk patients in primary care offices, followed up with screened patients for repeat scans or other additional tests, and upgraded CT and scanner equipment to optimize dose and radiation exposure.

The time between detecting a suspicious finding on a CT scan and starting treatment for lung cancer is relatively short at Englewood Health: just two to three weeks — much faster than most hospitals’ lung cancer screening programs. Moreover, a dedicated navigator helps patients coordinate all aspects of their care, from diagnosis through treatment

and survivorship. The goal is for patients to see all members of their multidisciplinary team on the same day to discuss their treatment.

The benefits of this screening are predicated on adhering to evidence-based criteria and guidelines. In recognition of responsible use of this technology for lung cancer screening, Englewood Health was named a Screening Center of Excellence by the Lung Cancer Alliance in 2017.

### **COLORECTAL CANCER SCREENING**

While colorectal cancer screening with colonoscopy is generally advised to begin at age 45 and occur every ten years, people with an increased colorectal cancer risk due to heredity (such as Lynch syndrome or polyposis) or personal medical history (such as inflammatory bowel disease) may need to start this screening earlier and have it more frequently — as often as every one to two years in some cases. Englewood Health’s cancer specialists

assess each patient’s risk and, working with the team in the Cancer Risk Assessment and Genetic Counseling Program, tailor an individualized plan of care. Colorectal cancer can often be prevented by removing potentially precancerous polyps before they have the opportunity to progress to cancer, making colonoscopy a proven technique for cancer prevention.

Englewood Health also responds to the unique needs of the large Asian population in Bergen County. Immigrants from Korea, Japan, and parts of China have an elevated risk of gastric cancer and may benefit from screening endoscopy. The good news is that they know they need screening. “Screening endoscopy is standard in these countries, so people who move here from those nations expect it when they get here,” explains gastroenterologist Mitchell Spinnell, MD. “Some of them used to travel back and forth to Korea to get their screening, and now they know they can have it here.”



◀ Hematologists/oncologists Brian Kim, MD, and Maxwell Janosky, MD.

▶ T-cells (purple) attacking cancer cells.

# Unleashing the Immune System's Power to Fight Cancer

Immunotherapy — boosting the power of the immune system against cancer — has transformed the landscape of cancer treatment, becoming the fifth pillar of cancer therapy (in addition to surgery, chemotherapy, radiation therapy, and targeted therapies). Englewood Health has experience offering these novel therapies for patients with various types of cancer and is exploring new ways to use them more effectively.

Over the last few years, multiple immunotherapy drugs have been approved by the U.S. Food and Drug Administration — ranging from nivolumab and ipilimumab for melanoma, to pembrolizumab, atezolizumab, and durvalumab for lung and bladder cancers, among others. In addition, most of these medications have been subsequently approved for other cancer indications, making immunotherapy an option today for more people with advanced cancer.

“For some patients, immunotherapy has been revolutionary,” asserts medical oncologist Brian Kim, MD. “There are patients with stage IV melanoma, for whom long-term survival was once unheard of, who can now expect to live five to ten years with immunotherapy.” Similar advances have been observed for patients with advanced bladder cancer. No new drugs were approved for bladder cancer for 30 years, but five immunotherapy agents were FDA approved for this disease over the last few years alone. Patients with metastatic lung cancer,

who once received prognoses of 12–18 months, are now living longer without disease progression while receiving immunotherapy.

Side effects remain a concern, but they have generated insights into new ways to use these therapies. Dr. Kim describes a patient with advanced lung cancer who needed to stop immunotherapy due to side effects, but has maintained remission for two years even without this treatment — indicating that sustained benefit may be achieved in some patients even after treatment is stopped. “We’ve had lots of success stories,” adds Dr. Kim.

Englewood Health investigators are evaluating new ways to use immunotherapy in people with autoimmune diseases, such as Crohn’s disease or lupus, who take medications to suppress their overactive immune systems. Many immunotherapies work by blocking proteins cancer cells use to evade detection by the immune system, unleashing the power of im-

mune cells to find and kill cancer cells. Englewood Health doctors are identifying other medications to

give these patients to make it safer for them to receive cancer immunotherapy. “We’re trying to learn how to specifically suppress the autoimmune disorder while boosting the cancer-fighting effects of immunotherapy,” notes medical oncologist Maxwell Janosky, MD.

*“There are patients with stage IV melanoma, for whom long-term survival was once unheard of, who can now expect to live five to ten years with immunotherapy.”*

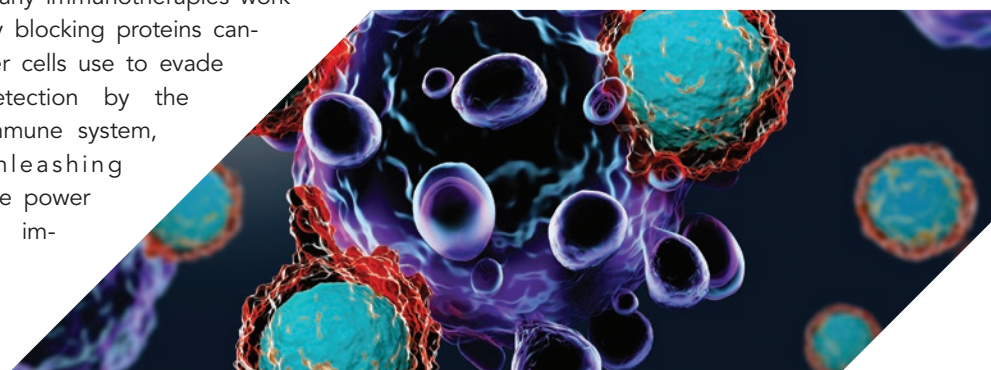
– Brian Kim, MD

*“We’re trying to learn how to specifically suppress the autoimmune disorder while boosting the cancer-fighting effects of immunotherapy.”*

– Maxwell Janosky, MD

## AREAS FOR FURTHER DEVELOPMENT

Despite the success of immunotherapy, not everyone responds, and some patients who initially do well eventually relapse. This remains an area of investigation: identifying factors that distinguish responders from nonresponders so doctors can optimize treatment and determine who is most likely to benefit. Englewood Health is conducting several immunotherapy clinical trials, including those evaluating immunotherapy drugs in combination with chemotherapy drugs to see if the effectiveness of treatment can be further enhanced.





## Cancer Risk Assessment and Genetic Counseling

Englewood Health has a dedicated Cancer Risk Assessment and Genetic Counseling Program for people with an increased risk of cancer due to hereditary factors, personal medical history, or other risk factors. What sets the program apart from many others is its staff of advanced practice nurses in genetics (APNG), certified through the American Nurses Credentialing Center. There are fewer than 60 such professionals in the country, and the three at Englewood Health make up most of those in New Jersey. The Commission on Cancer has commended the program at Englewood Health for Best Practices.

The advanced genetics nurses not only provide the program's services,

but also participate as active members of the cancer center's multidisciplinary conferences — presenting patients' genetic test results and identifying those who should be recommended for a consultation. "In most hospitals, genetic counseling is a separate entity, but at Englewood Health, we are part and parcel of each patient's team," notes Rosalyn Stahl, MD, associate chief of pathology, who leads the program.

### PROGRAM'S GROWTH OVER 15 YEARS

The Cancer Risk Assessment and Genetic Counseling Program was launched in 2003 to identify patients at elevated risk for breast and ovarian cancers. Since then, it has grown to include people at increased risk of

pancreatic, colorectal, endometrial, stomach, and lung cancers. Along the way, many more cancer-related genetic mutations have been identified, so even people who have already been tested may consider being retested every few years as new mutations are pinpointed.

All patients diagnosed with breast cancer are now screened for genetic risk and referred to the program if necessary. In addition, patients are advised to consider a consultation if they were diagnosed with cancer before age 50 or have multiple close family members diagnosed with cancer before age 50; were diagnosed with more than one cancer; and/or have three or more close family members with different types of cancer.



◆ Patricia Mazzola, APNG, and Rosalyn Stahl, MD, associate chief of pathology.

*“In most hospitals, genetic counseling is a separate entity, but at Englewood Health, we are part and parcel of each patient’s team.”*

– Rosalyn Stahl, MD

### EVALUATION OF GENETIC AND ENVIRONMENTAL RISKS

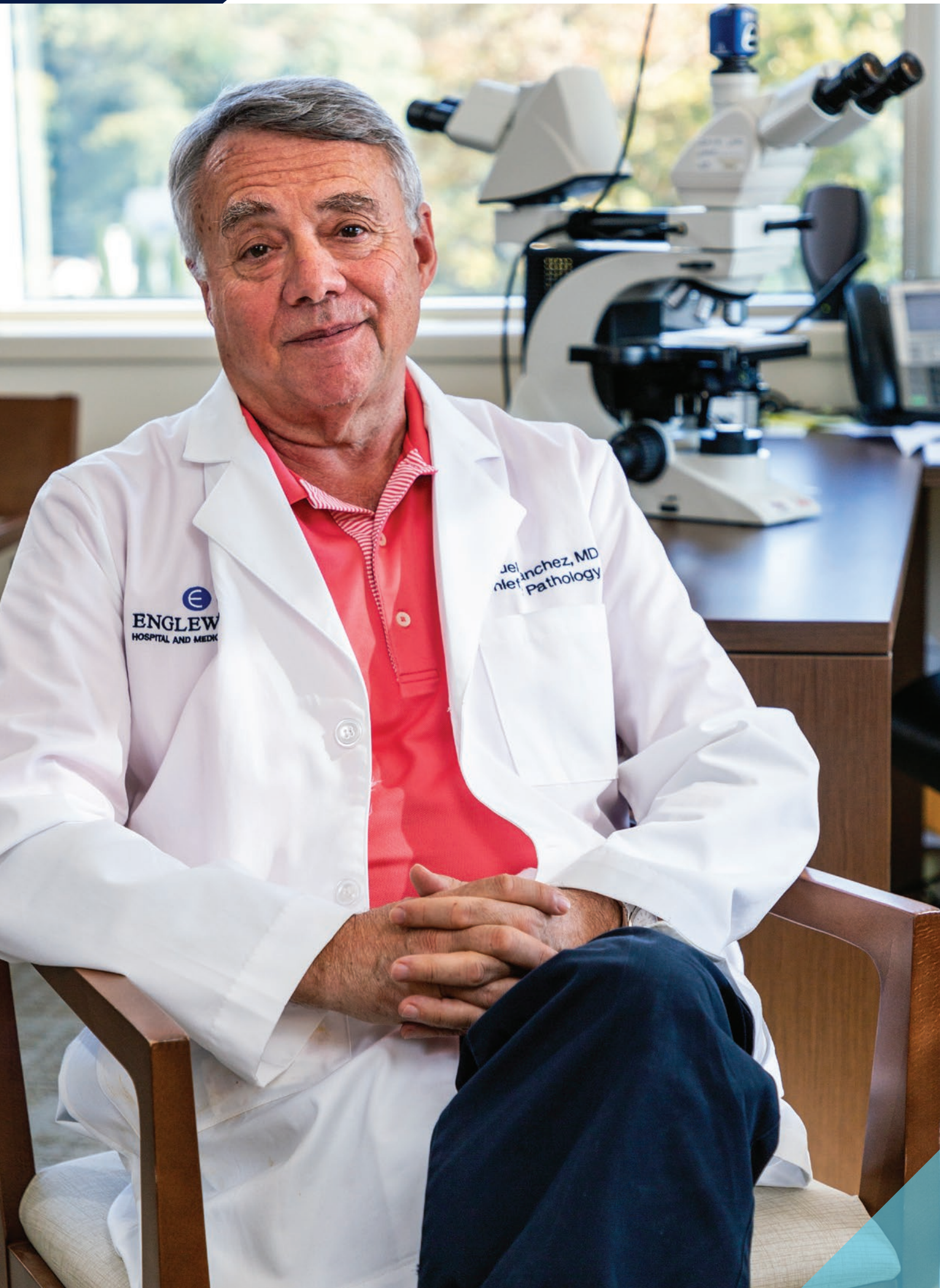
Despite the known contribution of genetics to cancer, most cancers arise sporadically. “Ninety percent of cancers are not hereditary,” explains Patricia Mazzola, APNG, AGN-BC, the program’s coordinator. She and the team, therefore, take into account other factors when evaluating a patient, such as certain environmental and lifestyle factors. The program’s services include:

- ▶ Assessment of personal and family medical history.
- ▶ Genetic testing for multiple genes at the same time, if the team recommends it and the patient desires it.

- ▶ Discussion of genetic test results and their implications.
- ▶ Individualized recommendations about ways patients can reduce their risk of cancer and about routine screening tests, following guidelines set forth by groups such as the National Comprehensive Cancer Network and the American College of Radiology. For example, patients with a family history of breast cancer may be advised to have mammograms at an earlier age, interspersed with periodic breast ultrasound scans or breast MRI.

The team prides itself on being accessible and seeing patients quickly, sometimes the same day as some-

one has been diagnosed with cancer. The results of their consultations can have an important impact on a patient’s ultimate treatment plan. “We work closely to obtain all the information we can before a decision is made about a patient’s surgery, collaborating with pathologists, surgeons, and radiologists,” says Mazzola. “We try to see patients during the same visit as their biopsy and help them navigate the process, so they know what they need to do next.”



  
ENGLEWOOD  
HOSPITAL AND MEDICAL CENTER

Javier Sanchez, MD  
Pathology

# Molecular Aspects of Breast and Colorectal Cancer: Joint Efforts with the National Cancer Institute

Englewood Health is combining its clinical expertise with the basic science acumen of the National Cancer Institute (NCI) to pursue several avenues of research delving into the molecular aspects of breast and colorectal cancer. Thomas Ried, MD, who leads the NCI's Cancer Genomics Section, knew about Englewood Health's strengths in this area and approached the medical center in 2014 about collaborating. Here are some projects now underway:

## CLONAL INSTABILITY IN NONINVASIVE BREAST CANCER

Findings of ductal carcinoma in situ (DCIS) have risen in incidence with refinements in mammography. Some DCIS will progress to invasive breast cancer and some will not. "The challenge is, we have no means of separating the bad guys from the others," explains Miguel A. Sanchez, MD, chief of pathology at Englewood Health and the medical director of The Leslie Simon Breast Care and Cytodiagnosis Center, who is spearheading the joint initiative with the NCI, together with pathologist Jausheng Tzeng, MD, also from Englewood Health. As a result, all women with DCIS are usually treated with surgery, and sometimes with radiation therapy and/or hormonal therapy — all of which may cause side effects.

In this research project, investigators are analyzing DNA from DCIS samples from patients and correlating the findings with clinical outcomes. The goal: to identify genetic mutations that can differentiate aggressive DCIS from DCIS that is likely to remain dormant. Such information could spare some women from unnecessary surgery and radiation therapy.

◀ Miguel Sanchez, MD, chief of pathology and medical director of The Leslie Simon Breast Care and Cytodiagnosis Center.

## IMPROVING COLORECTAL CANCER SCREENING IN INFLAMMATORY BOWEL DISEASE

People with inflammatory bowel disease (IBD), such as ulcerative colitis and Crohn's disease, have an increased risk of colorectal cancer and typically undergo colonoscopy every one to two years, with multiple biopsies done to analyze tissue for premalignant changes. However, pathological analysis may not be entirely accurate: it can be difficult to distinguish premalignant changes from inflamed bowel. Analysis of DNA, the focus of this project, may be a more valid tool. "If you perform DNA analysis of colonic mucosa, you can see molecular changes that precede pathological changes and predict colorectal cancer development," says Dr. Sanchez.

Pathologist Daniela Hirsch, MD, a collaborator of Dr. Ried, came to the NCI in fall 2018 from the University of Heidelberg to lead this project in cooperation with the Englewood IBD team. The project involves performing DNA analysis on previously collected colon biopsy samples from 300 IBD patients and correlating the results with their clinical information. If predictive molecular markers can be confirmed, then the use of DNA analysis to predict colorectal cancer in people with IBD could prove more accurate than current means. It could also shorten the length of time to complete a colonoscopy because fewer tissue samples are required.

## PREDICTING RESPONSE TO PRESURGICAL RECTAL CANCER THERAPIES

Chemotherapy and radiation therapy are often given to patients with rectal cancer before surgery to shrink the cancer, but not all patients respond — and many experience uncomfortable side effects. Dr. Ried is conducting "single cell culture analysis" to identify genomic markers distinguishing responders from nonresponders. With this technique, tumors can be grown in a laboratory from a single cell in culture and analyzed for mutations. Dr. Ried, Dr. Sanchez, and the colorectal cancer team plan to compare the results of the analysis between responders and nonresponders to find markers predictive of a response to presurgical treatment. If successful, this research would help guide physicians and spare some patients from therapies that would be ineffective for them.



## Patient Blood Management and Bloodless Surgery

For nearly a quarter of a century, Englewood Health has maintained a progressive approach to patient blood management. Through the internationally recognized Institute for Patient Blood Management and Bloodless Medicine and Surgery, established in 1994, the hospital offers safe and effective techniques performed without the transfusion of blood from a donor. Bloodless medicine and surgery can reduce the risks of blood transfusions (including infections and other complications), improve patient outcomes, and respect the needs of patients for whom blood transfusion is not an option (such as Jehovah's Witnesses). Englewood Health became the first hospital in the country to use patient blood management as a standard of care for all patients.

Englewood Health's bloodless medicine experts are now applying the knowledge they have learned to employ bloodless surgical techniques for patients with cancer, including complex procedures that other hospitals refuse to perform without transfusions. Moreover, the use of bloodless medicine in people who refuse blood transfusions for religious reasons or personal preferences is yielding insights that can improve cancer care for patients everywhere.

### **COMBATING CANCER'S DEVASTATION ON THE BLOOD SUPPLY**

Bloodless medicine techniques have been refined in people planning for elective surgeries like joint replacements. But cancer presents its own

set of challenges. Its treatment, and sometimes the disease itself, can devastate the blood supply, causing white and red blood cell counts and platelets to plummet, as well as levels of iron and other building blocks of blood. At Englewood Health, patient blood management strategies are utilized before, during, and after transfusion-free cancer surgeries.

Preoperatively, patients may receive erythropoietin and iron to raise red cell counts, combating anemia.

During surgery, patients may undergo hemodilution (removing blood from the patient at the start of surgery, giving them fluids to maintain blood pressure, and then returning their blood at the end of surgery), or cell salvage (collecting and filtering





*The use of bloodless medicine in people who refuse blood transfusions for religious reasons or personal preferences is yielding insights that can improve cancer care for patients everywhere.*

◀ Nimesh Nagarsheth, MD, director of gynecologic oncology and director of robotic surgery, and Sherri Ozawa, RN, clinical director of the Institute for Patient Blood Management and Bloodless Medicine and Surgery.

▶ Patients undergoing chemotherapy are closely monitored for anemia and can be treated with a variety of therapies such as iron infusion, bone marrow stimulating injections, and supplemental B12 and folate.



blood lost during the operation and returning it to the patient through a closed circuit).

Postoperatively, erythropoietin and iron may be given, and blood draws minimized (using smaller pediatric tubes).

#### **COMPLEX TRANSFUSION-FREE SURGERY**

Nimesh Nagarsheth, MD, chief of gynecologic oncology and director of robotic surgery, has performed complex bloodless procedures for patients who were turned away elsewhere. One was a 52-year-old Jehovah's Witness with a 28-pound uterine leiomyosarcoma. Despite the size of the tumor plus the patient's multiple other medical problems, Dr. Nagarsheth and his colleagues were

able to support her before and after surgery and use cell salvage during the procedure to remove the tumor.

"We frequently see patients who have been told by experts at major institutions that they couldn't help them," says Dr. Nagarsheth. "Then they have a conversation with us and are able to receive some form of treatment that no one else offered them. Patients come to us from across the country and around the world, even though there are plenty of other hospitals between their homes and here where they could have stopped."

#### **A BETTER OUTCOME FOR ALL PATIENTS**

Englewood Health's success with patient blood management is so

strong that virtually all surgeries at the hospital are now performed without transfusions, and for good reason: the hospital stay is typically shorter, patients recover more quickly, and there is a lower risk of complications. In fact, research shows that many patients are receiving blood transfusions when they don't all need them. "Why use a resource we don't have to use, especially when that resource can sometimes harm the patient?" notes Sherri Ozawa, RN, clinical director of the bloodless medicine institute. "Regardless of what patients want, we try to avoid transfusions because we know that's better. We were the mother ship for this movement."



## Precision Therapies for Neurological Cancers

Tumors of the brain and spinal cord can be challenging to treat successfully. They may be inoperable. The blood-brain barrier prevents many large molecular anticancer medications from crossing into the brain to reach tumors. Bathing the brain with whole brain radiation can cause side effects and cannot be repeated if the tumor comes back. And most malignant brain tumors eventually develop resistance to therapy, if they ever respond at all.

At Englewood Health, neurosurgeons and neuro-oncologists are finding more effective ways to circumvent these obstacles to improve the care of patients with brain and spinal cord tumors, as well as

those with cancers of the peripheral nervous system. One of those approaches is stereotactic radiosurgery (SRS), which delivers highly focused beams of radiation directly to tumors while sparing nearby healthy central nervous system tissue from radiation exposure. Using the hospital's TrueBeam® Radiotherapy System, doctors aim a single beam of high-intensity radiation at a patient's tumor, and they can go home the same day. Sometimes larger tumors require up to three to five treatment "fractions" over several days.

"SRS treatment is done once on an outpatient basis. There's minimal radiation to the normal brain, and it often can be repeated if the can-

cer returns," says Englewood Health neurosurgeon Kevin Yao, MD. "With traditional whole-brain treatment, you can't repeat this type of radiation if the tumor survives or returns." Moreover, unlike Gamma Knife® radiosurgery, which requires patients to have a rigid frame screwed into the skull for rigid fixation SRS, patients receiving SRS using the TrueBeam approach wear a thermoplastic form-fitting mask that allows the treatment team to make adjustments for the patient and maintain comfort.

### MINIMALLY INVASIVE NEUROSURGERY

For those whose tumors are surgically accessible, Englewood Health's



*Our neurosurgeons and neuro-oncologists are finding more effective ways to improve the care of patients with brain and spinal cord tumors, as well as those with cancers of the peripheral nervous system.*

◀ Neurosurgeon Kevin Yao, MD, sees a patient during a follow-up visit.

▶ Members of the neurological cancer disease management team meet weekly to discuss patient cases.



neurosurgeons rely on the hospital's expertise in bloodless medicine and patient blood management to operate with as little blood loss as possible. They have become known for performing large operations that other surgeons have turned away due to concerns about excessive blood loss, completing these procedures safely. The team is also proficient with "awake" surgery for patients with tumors near vital areas of the brain responsible for speech and movement, performing surgery guided by the patient's responses during the operation. "We've developed a targeted and elegant way to remove tumors that might otherwise be challenging to resect," notes Dr. Yao.

#### **CUSTOMIZING CHEMOTHERAPY**

Treatment with the drug temozolomide and radiation therapy is a standard approach for patients with glioblastoma multiforme, the most aggressive brain tumor, but not all patients respond well to therapy. Patients with certain biomarkers are more likely to fare better than those without those markers. At Englewood Health, all patients with brain tumors have their cancers molecularly profiled for biomarkers that may indicate whether they are candidates for this treatment. Those deemed not to be candidates bypass what would likely be an ineffective therapy, so the treatment team can immediately move forward with more promising treatment, such as

the drug bevacizumab (Avastin®) or Novocure™, a cap which uses electrical fields of different frequencies to treat brain tumors.

#### **CLINICAL TRIAL OPPORTUNITIES**

For patients who do not respond well to standard therapies or for whom standard therapies are not feasible, the neuro-oncology team offers clinical trials of innovative approaches. For many people with nervous system cancers, clinical trials offer the most hope for extending life. Englewood Health's team evaluates all patients with nervous system cancers to determine if they are eligible to receive a promising investigational treatment.



## Stephen Swiderski, a World Traveler, Faces a Formidable Journey Through Bile Duct Cancer

Twenty countries in 20 years is more than most people can claim as a travel history, but for Stephen Swiderski, journeys are a passion. Two years ago, he did a 15-city trip across Italy over six weeks. When pressed, he'll admit that his favorite trip — the place that lived atop his bucket list, unchecked for far too long — is the Great Wall of China. It did not disappoint when he finally made the trip across the wall.

Amid these journeys was one he never expected to go on: a diagnosis of stage III cholangiocarcinoma, or bile duct cancer.

"The diagnosis really took me for a loop, and it took everyone else with me," Swiderski says.

It wasn't long before he was in conversations with his doctors about a treatment plan consisting of an eight-hour surgery followed by 28 days of radiation.

"I was going to fight it with all I had in me," he says. "This was something that physically and emotionally I could not succumb to. There were people that I just couldn't leave and that is what gave me the strength to say, 'Steve, you're going to fight this thing tooth and nail.'"

Swiderski explained that he is still amazed by his doctors' abilities to take their respective passions and use them to save the lives of their patients. His surgeon, Steven Brower, MD, was a particularly strong guiding light throughout treatment. "Dr. Brower dismisses this as part of his job, but it is so much more than that. The same goes for the nurses that gave me so much of their time and were so compassionate with me. Even the assistants who came in to change the bed linen were caring and empathetic," Swiderski says.

The feeling is mutual. His medical oncologist, Minaxi Jhawer, MD, says,

"It was such a pleasure to take care of Stephen. He always had a smile and positive attitude. We were able to navigate through the chemotherapy without any issues. I feel proud to have been part of his team, as we worked with the physicians, the patient navigator, nutritionist, and other staff to get Stephen through his care."

Now that he is on the other side of this cancer, he plans on returning to the life that he knows and loves. He's already set plans for trips to Portugal, Spain, and Malta. Swiderski found that when you finish cancer treatment, you have to regain your life — and return to it a smarter, wiser, and more aware person.

"And I can't say enough about Englewood Health. You're not just a number there. You're a person, you're a face, you're Steve."



## Mary Ann Fernandez, Yogi Mom of Three, Faces Breast Cancer with an Upbeat Attitude and Creative Expression

The five basic principles of yoga are exercise, breathing, relaxation, diet, and meditation. Being a yoga instructor herself, Mary Ann Fernandez was probably as mentally and physically resilient to face cancer as can be hoped. That didn't make it any easier, however, when she was diagnosed with breast cancer in August of 2015.

"I remember when they said the words, 'breast cancer,' it all became fuzzy. I just collapsed because I didn't anticipate this being a big deal — I even had my youngest son in the waiting room. I had to walk out and look at him," Fernandez says.

A mother of three and the owner of a brand-new yoga studio, Fernandez was in great health at the time of her diagnosis, so the news came as that much more of a surprise to her and her family.

"Everything moved really quickly after that. I met my surgeon, Dr. [V.

Merle] McIntosh, had more MRIs and testing done and began chemotherapy with my oncologist Dr. [Jill] Morrison," Fernandez says.

She was initially hesitant to undergo treatment, wondering if there was a holistic alternative she could explore rather than surgery and chemotherapy. "Ultimately, I was like, 'I have three kids. I have to do treatment. I have to stick around,'" she says.

Fernandez' relentless optimism is what carried her through cancer treatment. At no point did she consider the possibility that she would not be OK in the end. She never lost her positive spirit or her sense of fun.

"I had a little project going on. I decided each day at chemotherapy was a theme, dressed up and took pictures. One day was *The Matrix* — I dressed up and had the blue cupcake and the red cupcake. Another was IV pole dancing — I came in a bikini and fur boots. If I had to be

there for three hours, I was going to have fun," Fernandez says.

"Mary Ann was always so upbeat and positive about getting through her treatments and beating this," says Dr. McIntosh. "She was an inspiration and continues to be, as she works hard to motivate others to take care of themselves and to have an optimistic outlook."

Today, Fernandez is cancer free and back to doing what she loves. She teaches yoga, not only in her studio, but also at the Graf Center for Integrative Medicine at Englewood Health. She donates her time to Graf Center; she felt it was important to give back to the place that helped her through this incredibly tough time.

"I was in the best hands I can imagine at Englewood Health. I'm so happy I choose to go there."



## Lawrence D'Ercole Undergoes Pioneering Treatment for Lung Cancer

"I've been married to my sweetheart, Janet, for 59 years. We have three sons, three daughters-in-law, and nine grandchildren — all I can say is I'm so happy to still be here to see them," says Lawrence D'Ercole. He made history for being the first patient in New Jersey and one of the first in the country to undergo a new kind of radiation therapy for lung cancer following its FDA approval in April 2018.

The initial symptoms were mild enough — a little weight loss and a cough. So, when he was diagnosed with stage I lung cancer, it came as all the more of a shock to him and his family. "They did a CAT scan and found a nodule on my upper left lung. The patient coordinator at Englewood Health recommended I see Dr. Dubin," D'Ercole says.

Unbeknownst to D'Ercole, David Dubin, MD, chief of radiation oncology, and Michael Speiser, PhD, chief

physicist, had just finished establishing stereotactic body radiation therapy (SBRT) with Varian Calypso® Anchored Beacon® transponders at The Lefcourt Family Cancer Treatment and Wellness Center.

Treating lung cancer with radiation therapy presents challenges. Ideal radiation treatment would target only the exact area of the tumor and no surrounding healthy tissue, but tumors in the lungs are constantly shifting position as the patient breathes. This motion typically requires larger treatment areas to ensure the moving tumor receives the full treatment. SBRT with Varian Calypso allows physicians to insert transponders — which act like a tiny GPS — around the tumor and track its whereabouts during radiation therapy 25 times a second. This makes the process much more precise and simultaneously spares the healthy tissue around the tumor.

"Mr. D'Ercole was a great candidate for this therapy," says Dr. Dubin. "Not only was his tumor location appropriate, but he happened to be great at holding and controlling his breath, taking in the same amount of air with each inhale. Like any treatment, this won't be appropriate in every case. Where the tumor is, the size of the patient, and the patient's lung capacity all play a role. But this treatment should be the standard, in my opinion, simply because of how accurate it is," Dr. Dubin says.

Two months after finishing radiation therapy, D'Ercole has started to feel better and has been spending a lot of time with his family. "I feel really lucky to have gotten to Englewood Health when I did. I've been there for other procedures and everyone is always great. I wouldn't go anywhere else for treatment," D'Ercole says.



▲ Terri and Wanda Faulk.

## Wanda and Terri Faulk, Twin Sisters and Breast Cancer Survivors

For Wanda Faulk, the hardest part of cancer treatment came on the day she went to her salon to get her hair done for a wedding she was attending the following afternoon. During the appointment, her beautician suddenly emptied out the salon — telling everyone else to go get some food — then pulled Faulk aside and told her that her hair was falling out in chunks. This was a devastating blow to Faulk, who, before treatment, got her medium-length hair done almost every week.

“My mother and sister came to the salon. We cried together for a while, but then I told my beautician to just cut it and we went to Paterson to get a wig. The next day at the wedding, no one was the wiser,” Faulk says.

Faulk had had leakage in her breast and was referred to V. Merle McIntosh, MD, chief of breast surgery. “Dr. McIntosh initially thought the leakage was the result of an infection, but upon further screening, she

determined I did in fact have breast cancer,” she says.

Faulk underwent chemotherapy and a mastectomy. On the day of her surgery, Dr. McIntosh walked with her to the operating room — a gesture that she remembers and appreciates to this day.

It’s been several years since she finished cancer treatment at Englewood Health. As a long-time breast cancer survivor, she is the person to whom the women in her life turn when they are faced with the same diagnosis. She offers them the understanding that only a fellow woman who has contended with breast cancer can provide. Faulk imparts everything she learned during treatment, and in the years since.

“My treatment was exemplary. Everyone treated me well, from the ER nurses to the cafeteria staff. I refer everyone I know to Dr. McIntosh. My sister received treatment from Dr.

McIntosh and so is my friend who was just diagnosed three months ago,” Faulk says.

When Wanda Faulk’s twin sister, Terri Faulk, was diagnosed just after her 50th birthday, she was shocked and frightened and experienced all the emotions one might expect — but she also had the benefit of having witnessed her sister go through it and survive.

“I’d like to think I was a good example of how not to fall apart. Terri had six-plus weeks of radiation done and, like was the case with me, the team at Englewood treated her extremely well. She made many friends there. They even played Marvin Gaye for her during treatment.”

As for herself, Wanda Faulk has chosen not to grow out her hair since treatment. She keeps it short because, as she explains, she is a changed woman and isn’t going back to who she was before.



## Keith Wilhemson — Schoolteacher, DJ, Family Man — Chooses Englewood for Rectal Cancer Treatment

“Initially I thought my stomach pains were a result of stress — my job can be pretty straining sometimes. Then around April 2018, I started noticing a change in my system. I was having to run to the bathroom more than is normal for me,” Keith Wilhemson says.

He visited a doctor for his stomach issues and was told it was likely a bacterial infection.

“I was really lucky because before my doctor prescribed me the medicine, he decided to do a colonoscopy just in case. That’s when they found the tumor,” Wilhemson said.

He was diagnosed with locally advanced rectal cancer.

Three kids under the age of nine, a loving wife, a fulfilling career as a Paterson schoolteacher, and a side gig as a DJ were all more than enough reasons to keep Keith fighting through cancer treatment.

“My wife and I did our due diligence. We spoke to people at different hospitals, including one where we have some family friends working. Ultimately, we just felt very comfortable at Englewood Health. With them, everything was on the table. They were extremely open with us and that really gained our trust,” Wilhemson says.

Wilhemson underwent nearly six weeks of radiation and chemotherapy. In September, Anna Serur, MD, chief of colorectal surgery, removed the tumor from his colon. He will soon undergo additional chemotherapy, the last portion of his treatment plan.

Wilhemson has healed well from surgery. The last couple months have been spent at home with his 8-year-old twin boys and his 2-year-old daughter. Wilhemson says this time has given him a renewed appreciation for all the stay-at-home parents out there.

“My experience with treatment has been really positive. When I went in for my infusions, I always messed around and joked with the team. They gave me a funny certificate when I finished my infusions. Now they’re actually planning their Christmas party and are having it at the restaurant where I DJ on the weekends. I think I’ve made some friends that will last beyond treatment,” Wilhemson says.

His surgeon, Dr. Serur, says, “We worked together with Keith and his family to provide the best long-term outcome and not to disrupt his life. Most importantly, we wanted Keith to continue smiling and doing what he loves best. We tailored his treatment without compromising his quality of life. He and his family went to Ireland in between his treatment and surgery, he took his kids to Disney World, and he celebrated his children’s birthday parties with a bash.”





## For Kevin Lee, Being Cancer Free Means a Return to His Life's Mission

Kevin Lee worked in the fine jewelry industry for 27 years before immigrating to the United States from South Korea in the mid-1980s. Since then, Lee has dealt with myriad health issues and has had a number of tumors detected in his body, prompting 10 surgeries.

In May of 2017, Lee received a diagnosis of bile duct cancer — one more in a long line of challenging news he's gotten from doctors over the years. At this point in his life, Lee was extremely hesitant at the thought of more treatment and another surgery.

His mindset changed when he met his surgeon, Steven Brower, MD, at The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health. Lee describes Dr.

Brower as a humble man, with a confidence that put him at ease during some of the toughest moments.

After surgery, Lee decided to change up his lifestyle and begin a diet and exercise regimen that allowed him to gain strength.

In July of 2018, Lee came back to Englewood Health for a CT and MRI. When the results came back, he got his first piece of good news in a long time: the results were finally clean with no cancer cells remaining. These days Lee is a little less focused on his survival and is able to focus on the things he loves, including teaching gospel and studying for an upcoming mission trip to Kenya.

For Korean patients who seek care at Englewood Health, the Center

for Korean Health and Wellness is an invaluable resource. The center, staffed by Korean-speaking staff, provides patient support and services to meet the health care needs of the growing Korean-American community in New Jersey, especially for patients who may have special language or cultural needs.

"Even for long-time residents of the United States, like Mr. Lee, it helps to have the support of people who know the language and culture," says Jina Kang, patient navigator in the Center for Korean Health and Wellness. The center also offers free education and support programs for the Korean community throughout the year, including many activities for health issues of particular concern to Koreans, such as hepatitis, liver cancer, and other cancers.



## Jason McMurtrie, Diagnosed with Pancreatic Neuroendocrine Cancer, Seeks Bloodless Surgery Expertise

Jason McMurtrie, a 47-year-old airport facility manager, and his wife, Amber, love to travel — they split their time between Pennsylvania and the island of Grenada. In the fall of 2017, McMurtrie received news that threw his life off course: He was diagnosed with a rare malignancy called a pancreatic neuroendocrine tumor, and he needed surgery to remove it.

“The first surgeon I saw, in Pittsburgh, said he always kept blood available for use in the operating room, but would make an exception for me,” McMurtrie says. “I wanted to have surgery where blood is not considered an option.”

This past spring, research and the recommendation of a friend led the McMurties to the Institute for Patient Blood Management and Bloodless Medicine and Surgery at Englewood Health and pancreatic neuroendocrine tumor expert Ste-

ven Brower, MD, chief of surgical oncology and hepatobiliary surgery. Dr. Brower is also the medical director of The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health. Surgery on the pancreas is difficult to begin with, Dr. Brower says, but McMurtrie’s tumor resided in an especially tricky spot — in the center of the organ atop a large artery and vein.

“With our radiologists’ help, we mapped out a laparoscopic operation that could remove the growth and leave a normal, functioning pancreas instead of having to remove half or two-thirds of the organ,” Dr. Brower says. “Removing that much of the pancreas would have increased Jason’s risk of hormonal or digestive dysfunction.”

McMurtrie was nervous about the surgery but ready to have it. “My anxiety stemmed from the thought of having my first major surgery,”

he says. “I spoke with Dr. Brower and his team about how I was feeling, and they were very caring. They sent an email of encouragement and confidence to let me know I was in good hands.”

In September of 2018, Dr. Brower removed the tumor through several small incisions in McMurtrie’s abdomen. The surgery went off without a hitch. McMurtrie didn’t lose any blood, and the operating team did not have to perform an autotransfusion — recycling of a patient’s blood back to him or her using a closed circuit — as they had prepared to do. After four nights in the hospital, he returned home to Pennsylvania. With the tumor gone, his future is bright.

“Going forward, I’ll have a few more checkups, but Dr. Brower feels confident that chapter of my life is closed,” McMurtrie says. “That makes me happy.”



## Fourteen Weeks Pregnant, Carolina Antonelli Faces a Cancer Diagnosis and a Wrenching Decision

Love at first sight is a particularly illusive kind of magic, the existence of which has been debated for centuries. But if you ask Matthew Antonelli, he'll tell you he knows it to be real — because he felt it the second he laid eyes on Carolina. He took one look at her curly head of hair and her bright smile and knew instantly that she was the one for him. It wasn't long before he got down on one knee and proposed atop a snowy mountain.

"It was a fairytale. I found the right girl, we got married and then it gets even better — she's pregnant. But then it just goes downhill," he says.

Fourteen weeks into her pregnancy, Antonelli was diagnosed with cervical cancer. The couple faced a nearly impossible decision.

"We knew we wanted a family. We wanted this baby more than any-

thing. It was a tough situation to accept," Antonelli says.

The choice of whether or not to terminate the pregnancy in the interest of her own health plagued the couple. They worried that following through with the pregnancy might endanger mother and baby, but terminating meant losing the possibility of a future with biological children.

In recent years, cervical cancer has become somewhat rare. It was, and still is, even rarer to have cervical cancer during a pregnancy.

"We had to perform a robotic pelvic lymphadenectomy during her second trimester to make sure the cancer hadn't spread to the lymph nodes," says Nimesh Nagarsheth, MD, director of gynecologic oncology and director of robotic surgery. "In all the world's literature we have, this was only the second time this

procedure was performed. After confirming that the cancer hadn't spread, Carolina was able to choose to keep the pregnancy."

After her surgery, Antonelli underwent chemotherapy. "We did our research; we visited other hospitals. But nothing gave us the warm feeling we got at Englewood Health. They gave us the positive atmosphere and reassurance we needed," Mr. Antonelli says. He was at her side every day and, within a few months, a healthy baby girl was born.

"Angelina is the sweetest little girl. She's such a miracle. I'm so grateful to Englewood Health. Because of them, I have a beautiful family and a lot to look forward to," Antonelli says.



## Renovations and Expansion of Our Cancer Center

In 2013, our cancer care services were spread out, and our infrastructure was challenged to support our commitment to leading-edge care close to home. We identified a vision for the next few years that brought together existing and future talent, services, and technology in a single centralized location that would embody a patient-first philosophy.

This vision matured into a multiyear modernization project and strategy that has since elevated cancer care to a level that rivals the quality found at leading cancer centers

across the nation. We have since added three additional floors in The Russell and Angelica Berrie Center for Humanistic Care dedicated to cancer and wellness services. The 185,000-square-foot facility now houses all cancer services and specialists in a single location, minimizing patient anxiety and making for a smooth, seamless transition from one area to another. This transformative project included The Wilson Kaplen Infusion Center, The Leslie Simon Breast Care and Cytodiagnosis Center, The Coe Radiation Oncology Center, Graf Center for In-

tegrative Medicine, The Braverman Family Executive Wellness Program, and physician practices and offices, as well as The Taub Family Education Center and administrative space. As part of the breast center's renovation and expansion, we introduced spa-like amenities to create a therapeutic environment, as well as a new clinical floor plan to optimize patient flow. At the same time, advanced equipment such as 3D Mammography™ (breast tomosynthesis) ensures that patients benefit from a high-tech, high-touch experience.



▲ The Leslie Simon Breast Care and Cytodiagnosis Center.



▲ The Wilson Kaplen Infusion Center.



▲ Jolynne Guidotti, APN, oncology patient navigator.

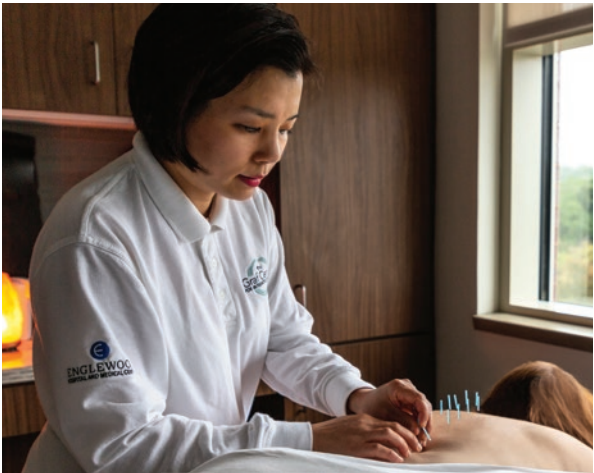
# Patient Navigation

Over the past three years, we have enhanced the care we provide to patients through a dedicated oncology patient navigation program. These patient navigators in The Cahn Family Cancer Care Companion Program

serve as a patient’s direct contact within The Lefcourt Family Cancer Treatment and Wellness Center and help coordinate the patient’s care. They are critical to identifying patients’ personal needs and creating a

personalized care plan. Our patient navigators also help schedule appointments, provide information on community and hospital resources, and facilitate communication among a patient’s care team members.

# Integrative Medicine



▲ Jin Hyun Park, LAc, acupuncturist in the Graf Center for Integrative Medicine.

In 2015, thanks to the generous support of our friends Jennifer and David Graf, we opened the Graf Center for Integrative Medicine. The Zen-like center offers acupuncture, meditation, therapeutic massage, holistic nutritional counseling, and other evidence-based services focused on prevention, recovery, and support. Our cancer center team works closely with the Graf Center to provide services for patients undergoing cancer treatment. As integrative medicine has become more mainstream, it is important that such services are overseen by licensed or certified professionals and delivered in coordination with a patient’s doctor. In 2017 alone, nearly 3,300 patients sought services at the Graf Center, and the average monthly volume has increased each year since it opened. Increasingly, the Graf Center is partnering with community and civic organizations to bring wellness services and education to more of our neighbors. In 2018, we welcomed Tracy Scheller, MD, MS, MBA, FACOG, as the new medical director of integrative medicine.



▲ David Dubin, MD, chief of radiation oncology, and radiation therapy technologists Brittany Paladino and John Johnson.

## Leading-Edge Technology

Over the past four years, Englewood Health has invested in advanced technology to aid in the diagnosis and treatment of cancer.

Central to our arsenal has been the acquisition and development of two Varian TrueBeam® linear accelerators for external beam radiation therapy and radiosurgery. TrueBeam's state-of-the-art technology allows for safer and more efficient radiation therapy, offering seamless integration of patient imaging, motion management, and treatment. This results in more precise treatments in less time, while providing a more comfortable experience for patients. TrueBeam technology treats the affected area of the body with increased accuracy and precision, targeting cancer cells while minimizing damage to surrounding normal tissue.

"TrueBeam gives us the tools that we need to treat more complex cancer cases, unlocks treatment options

for patients who otherwise may not be candidates for traditional radiotherapy, and offers unique benefits to patients with lung, head and neck, breast, and prostate cancer," says David Dubin, MD, chief of radiation oncology.

The advanced system delivers many forms of treatment, including image-guided radiotherapy (IGRT), image-guided radiosurgery (IGRS), intensity-modulated radiotherapy (IMRT), RapidArc® radiotherapy, and gated RapidArc®. Integrated motion management hardware and software accounts for even slight shifts of a patient's movements, allowing physicians to monitor the patient and tumor movement at all times. This helps ensure patients do not receive too high or too low a dose of radiation.

Englewood Health has been at the forefront of advanced radiosurgery for years. As an official reference

site for Varian Medical Systems and other major medical companies, Englewood Health often employs radiation oncology to demonstrate to other institutions how even the most advanced techniques can be performed in a community hospital setting.

In 2018, we introduced lung stereotactic body radiation therapy (SBRT) with Varian Calypso® Anchored Beacon® transponders. As a result of our extensive experience with SBRT, the team at Englewood Health was the first center in New Jersey, and one of the first in the entire nation, to perform this advanced form of radiation therapy (see patient story on page 20). The Calypso system, which was cleared by the FDA in April 2018, is the only device on the market that delivers real-time, 3D tumor position information 25 times per second, improving confidence that the prescribed dose has been delivered to the tumor.



▲ Anna Serur, MD, chief of colorectal surgery.

## Complex, Robotic Surgery

Our surgeons use minimally invasive approaches — robotic or laparoscopic surgery — to perform even the most complex surgeries, such as rectal cancer or ulcerative colitis surgery. Anna Serur, MD, joined Englewood Health in early 2017 as

chief of colorectal surgery. Dr. Serur specializes in laparoscopic and robotic colorectal surgery, anorectal procedures and reoperative abdominal and pelvic surgery, including sphincter-sparing surgery and avoidance of permanent colostomy.

These minimally invasive approaches use small incisions in combination with 3D high-definition imaging for enhanced vision and control, leading to a more precise and accurate procedure.



▲ In 2015, Englewood Health acquired a 3T MRI machine, offering high-quality images for more accurate diagnoses as well as better comfort for patients.



## Cancer Clinical Trials

The best management for any cancer patient is in a clinical trial, according to the National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines. To that end and as part of the cancer center’s mission, physician-investigators are actively researching new treatment options for our patients through clinical trials. These trials are looking at new, innovative ways to diagnose and treat cancer in patients. In addition to offering new biological, targeted, and immunotherapy drugs, we are working with institutions such as the National Cancer Institute to study the biology of cancer cells and understand what drugs will be the most effective in fighting a patient’s cancer.

Cancer Study	Patients Enrolled (2015-current)	Funding Received	
NCI Cooperative Group Studies	S1403	2	
	S1007	5	
	A221201	3	
	E1412	1	
	E2112	1	
	S0931	1	
	S1505	1	\$89,425
	B-51	2	
	Prospect	2	
	TNT Rectal	1	
	S1406	2	
	A041202	1	
	BWEL	3	
Korean Breast Registry	9	—	
Rectal surveillance registry	3	—	
Connect MDS	6	—	
Magnify	2	\$57,443	
Pallas	11	\$120,980	
Celgene ABOUND	1	\$38,898	
My Plan	15	\$21,700	
Inform CLL	2	\$9,050	
Complement	5	\$36,240	
Merck Breast	1	\$37,675	
Merck Keynote 185 MM	2	\$67,150	
BBI Pancreatic	1	\$10,000	
COMET	2	\$8,950	
Bayer Prostate	1	\$22,400	
Genentech Lung	3	\$80,772	
Ovario	1	\$12,000	
<b>Total</b>	<b>89</b>	<b>\$612,684</b>	





## Grand Rounds and Scientific Symposia

Beginning in October 2015, we began a monthly Cancer Center Grand Rounds series. Each month, we delve into a topic of interest to our cancer specialists and other health-care professionals. Our own cancer center members have presented on clinical research and practice topics such as ductal carcinoma in situ, urological malignancies, medical marijuana and pain management, and radiation therapy advances. We have also welcomed esteemed colleagues from other institutions as guest speakers.

These academic sessions are held in The Taub Family Education Center, a suite of conference and seminar rooms built as part of our multiyear renovation and expansion project. The rooms are outfitted with multimedia capabilities to support the learning needs of our members.

Also in 2015, we held our inaugural Cancer Symposium. These continuing medical education programs, open to both our own members and community physicians, have highlighted scientific advancements in oncology and featured leading experts from national and international organizations.

### 2015 CANCER SYMPOSIUM

Molecular Pathology in the Diagnosis and Treatment of Cancer

#### Guest Speakers

GERT AUER, MD, PHD  
Professor, Cancer Proteomics  
Karolinska Biomics Centre and  
Karolinska Institutet Karolinska  
University Hospital

KERSTIN HESELMAYER-  
HADDAD, PHD  
Staff Scientist  
National Cancer Institute

THOMAS RIED, MD  
Chief, Section of Cancer Genomics  
National Cancer Institute

### 2016 CANCER SYMPOSIUM

Lung and Gastrointestinal Cancers: Screening and Treatment in High-Risk Populations

#### Guest Speakers

JAMES PARK, MD  
Associate Professor of Medicine  
NYU School of Medicine  
Clinical Director of Hepatology  
Co-Medical Director of Transplant Hepatology  
Director of Asian Liver Health Program  
Division of Gastroenterology, Department  
of Medicine  
NYU Langone Medical Center

ALEX KAGEN, MD  
Site Chair, Department of Radiology  
Mount Sinai Roosevelt  
Associate Professor of Radiology  
Icahn School of Medicine at Mount Sinai

HOO GUEN CHUN, MD  
Director of Comprehensive Cancer Institute  
Seoul St. Mary's Hospital  
Vice President of External Affairs  
and Collaborations  
Seoul St. Mary's Hospital  
Professor of Internal Medicine  
Catholic University of Korea

### 2018 CANCER SYMPOSIUM

Cancer Case Studies and Screening Guidelines



## 2017 Public Outcomes Report

The Lefcourt Family Cancer Treatment and Wellness Center at Englewood Health is a Comprehensive Community Cancer Program, accredited by the Commission on Cancer (CoC) of the American College of Surgeons. Accreditation allows programs to demonstrate the high quality of care that they provide and their commitment to continuous quality improvement.

To earn voluntary CoC accreditation, a cancer program must meet or exceed certain quality care standards and maintain levels of excellence in the delivery of comprehensive patient-centered care, as demonstrated every three years during a rigorous on-site survey.

As a CoC-accredited cancer center, we take a multidisciplinary approach to treating cancer. Surgeons, medical and radiation oncologists, diagnostic radiologists, pathologists,

and other cancer specialists partner in a multidisciplinary approach to improve patient care. The CoC Accreditation Program provides the framework for us to improve our quality of patient care with a focus on the full spectrum of cancer care including prevention, early diagnosis, cancer staging, optimal treatment, rehabilitation, life-long follow-up for recurrent disease, and end-of-life care. When patients receive care at a CoC facility, they also have access to information on clinical trials and new treatments, genetic counseling, and patient-centered services including psycho-social support, a patient navigation process, and a survivorship care plan.

Like all CoC-accredited facilities, The Lefcourt Family Cancer Treatment and Wellness Center maintains a cancer registry and contributes data to the National Cancer Data Base (NCDB), a joint program of the

CoC and American Cancer Society. This nationwide oncology outcomes database is the largest clinical disease registry in the world. Data on all types of cancer are tracked and analyzed through the NCDB and used to explore trends in cancer care. CoC-accredited cancer centers, in turn, have access to information derived from this type of data analysis, which is used to create national, regional, and state benchmark reports. These reports help CoC facilities with their quality improvement efforts.

Our cancer center diagnoses and treats approximately 1,200 patients each year. In addition, we offer screenings to detect early-stage cancers and we participate in cancer-prevention programs to raise awareness of risks and early intervention approaches.

**STANDARD 1.5**

**Clinical Goal: Improve Diagnostic Accuracy of Clinically Significant Prostate Biopsies by Providing MRI Fusion Technology**

The only way to diagnose/confirm prostate cancer is through a biopsy. Using MRI/US fusion, one study found prostate cancer in 37% of 195 men with prior negative biopsies; 29% of the cancers were high grade.

Englewood Hospital decided to begin offering MRI/US fusion biopsies to 1) patients with elevated prostate-specific antigen (PSA) with or without a digital rectal exam (DRE) and no prior prostate biopsy, 2) patients with elevated PSA and prior negative biopsy, and 3) patients on active surveillance.

Englewood’s chief of radiology, Dr.

Mark Shapiro, and his team selected the UroNav system and decided to have it installed in the hospital’s outpatient radiology department. A urology surgical technician was hired, and the urology staff was trained on the UroNav.

In 2017, Englewood began offering MRI/US fusion biopsies to men with Prostate Imaging–Reporting and Data System (PI-RADS) scores of 3, 4, or 5, including those who had received their MRIs at other institutions.

Of the five patients who received MRI/US fusion biopsies and had documents recording their pathology results (those whose biopsies had been performed at Englewood, rather than by UroNav), one showed benign prostatic tissue, one a low-

grade carcinoma, one prostatitis, one benign prostatic hypertrophy but no tumor, and one benign prostatic hypertrophy negative for carcinoma.

Though the team determined that no changes are needed to the system itself, Dr. Shapiro would like to work on patient retention rates. Of the 63 patients with PI-RADS scores of 3, 4, or 5, only six had the MRI/US fusion biopsy using UroNav.

Unlike traditional transrectal US, MRI/US fusion allows the physician to use 3D imaging to guide the needle directly to the suspicious site. Dr. Shapiro is confident that the urologists are obtaining more accurate biopsy results with MRI/US fusion.

**Prostate Cancer Diagnostic Testing Using MRI/US Fusion Biopsy**

Number of male patients who received pelvic MRI 1/1/17–12/31/17	200
Number of patients who had prostate checked	175
Number of patients assigned a PI-RADS score	168
Number of patients with PI-RADS score or 3, 4, or 5	63
Number of patients with PI-RADS scores of 3, 4, or 5 who had biopsy using UroNav system	6
Number of patients who had UroNav biopsies who had documented results	5

**STANDARD 1.5**

**Programmatic Goal: Reducing Burnout for Our Clinical Staff by Developing a ‘Caring for the Caregivers’ Program**

During 2017, we teamed up with the Max Shaw Foundation to offer a donor-led Caring for the Caregivers class to cancer center clinicians (MDs, PAs, NPs, and MAs), to sup-

port and strengthen them in their role as healer. The interactive workshops focused on deep breathing and meditation, movement, and effective and meaningful sharing with coworkers.

Two sessions, which included lunch, met five times each during fall 2017. To measure impact, we conducted

a baseline survey and a post-class quality of life (QOL) survey. Much of the feedback was that the sessions were too long and that they were held during working hours, when it was difficult to attend. The revised goal is to offer the sessions at times more convenient for staff, such as after their shifts.

**Caring for the Caregivers Program**

<b>Number of people who registered</b>	<b>6</b>
Number of people who attended	5 (83%)
Number of attendees who returned baseline survey	3 (60%)
Number of attendees who returned post-class survey	1 (20%)

**STANDARDS 4.1 AND 4.2  
Prevention and Screening: Breast  
and Prostate**

In 2017, Englewood Hospital conducted screenings for prevalent types of cancer, to address the health needs of the uninsured and underinsured. Breast cancer is the

most common cancer in the United States, followed by lung/bronchus and prostate, according to the National Cancer Institute, National Institutes of Health.

**Prevention and Screening: Prostate**

Date	Activity	Location	Type of Event	# Attendees	Comments
3/2/17	Robotic presentation	Englewood Hospital	Prevention	35	
6/4/17	GWB Challenge	George Washington Bridge/Ross Dock	Prevention	1,000	Great overall feedback.
6/12/17	Men's health talk	JCC	Prevention	5	All of the attendees conferred with Dr. Sorbellini; 1 scheduled a follow-up appointment.
6/15/17	Blood screening (PSA)	JCC	Prevention	12	10 of the 12 patients were given referrals.
6/24/17	Cancer (Stage 3), hepatitis B screening, PSA	Englewood Hospital	Prevention/ Screening	200	200 screened; 6 referred for high PSA.
9/14/17	Prostate screening	Englewood Hospital	Screening	64	9 with elevated PSA and referred to urologist.

**Prevention and Screening: Breast**

Date	Activity	Location	Type of Event	# Attendees	Comments
2/24/17	ACS/Univision free mammogram event	Englewood Hospital	Screening	55	
3/8/17	Breast Health for MOM 101	Englewood Hospital	Prevention	15	
3/16/17	ACS/Univision free mammogram event	Englewood Hospital	Screening	39	
3/25/17	Breast health and awareness	Long Island Marriott	Prevention	650	37 patients requested appointments.
4/22/17	Breast health and awareness	Newark Marriott	Prevention	600	59 patients requested appointments.
4/26/17	Walk with a Doc	Winton White Stadium	Prevention	40	
5/17/17	Skip and Paint event	Fort Lee Recreation Center	Prevention	90	
10/5/17	BergenFest	MetLife Stadium	Prevention	1,000	
10/7/17	Englewood Latino Festival	Englewood, NJ	Prevention	500	
10/14/17	Norwood Health Fair	Norwood, NJ	Prevention	250	
10/24/17	Speakers Bureau	Greek Orthodox Church, Tenafly, NJ	Prevention	30	
10/26/17	Autumn Years Expo	St. Leon's Armenian Church, Paramus, NJ	Prevention	338	



▲ The Englewood team at the 2017 American Cancer Society George Washington Bridge Challenge.

**STANDARD 4.6**

**Monitoring Compliance with Evidence-Based Guidelines: Salpingectomies for Elective Sterilization and Hysterectomies for Benign Conditions**

As The Lefcourt Family Cancer Treatment and Wellness Center’s 2017 Evidence-Based Guidelines study, the committee reviewed compliance with the recommendation that salpingectomy (removal of fallopian tubes) be used as a primary sterilization procedure and that it also be performed during hysterectomies for benign conditions.

A relatively recent recommendation (2013) for salpingectomy as a primary sterilization procedure was discussed during a GYN cancer conference in early 2016. The recommendation is based on a study showing a large increase in ovarian cancers in women whose fallopian tubes were not removed during hysterectomies for benign conditions. The theory is that most ovarian can-

cers originate in the fallopian tubes. In response to physicians’ questions about the hospital’s statistics and about gynecologists’ awareness of the recommendation, Dr. Tismenetsky (pathology) and Dr. Nagarsheth (GYN oncology) decided to review the data.

To determine if NCCN guidelines were followed for these patients, the team reviewed all elective surgical sterilization procedures from 2015, identifying the physicians who performed them, as well as which patients had salpingectomy. Dr. Tismenetsky and Dr. Nagarsheth also reviewed all of the hysterectomies for benign conditions.

A quality improvement for 2017 was a letter to GYNs and primary care MDs, explaining the recommendations based on the 2015 data.

The team determined that Englewood Hospital’s rates of salpingectomies done at the time of hysterec-

tomy for benign conditions was very good. In 2015, 98% were done with salpingectomy, and in 2016 the rate was 99.3%. In the single 2016 case in which the tubes were left, the decision not to perform a salpingectomy was made intraoperatively because it was clinically inadvisable.

During February 2017, the GYN staff was educated about the role of salpingectomies in reducing ovarian cancer risk and the recommendation of the American College of Obstetricians and Gynecologists that patients be offered laparoscopic salpingectomy as an alternative to tubal ligation.

The tubal ligation rate for 2015 was 78%. For 2016, the rate decreased from 81% before education to 71% after education. During the data analysis, the team identified some physicians who performed tubal ligations exclusively. The plan is to educate these physicians on the benefits of salpingectomies.

**Salpingectomies for Elective Sterilization and with Hysterectomies for Benign Conditions**

<b>Female elective sterilization procedures</b>	<b>115</b>
Tubal ligations	84 (73%)
Salpingectomies for sterilization	31 (27%)
<b>Hysterectomies for benign conditions (fibroids, prolapse, etc.)</b>	<b>142</b>
Hysterectomies with salpingectomy	141 (99.3%)
Hysterectomies without salpingectomy	1 (.7%)



▲ Free prostate cancer screening event held in September 2017.

**STANDARD 4.7**  
**Study of Quality: Shave Biopsy vs. Excisional Biopsy for Diagnosis of Melanoma**

A 2011 study found that punch and shave biopsies were appropriate for the diagnosis of melanoma. Dr. Steven Brower, medical director of The Lefcourt Family Cancer Treatment and Wellness Center, decided our pathology department should examine the biopsies done at Englewood, to compare the diagnostic accuracy of the two types of biopsies.

Dr. Ana Burga and Dr. Roslyn Stahl, from the Department of Pathology, reviewed the 2016 melanoma cases.

Though the original purpose of the review was to compare shave biopsies and excisional biopsies, the reviewers found that rather than doing shave biopsies, all the of dermatologists have actually been doing saucerizations, a form of excisional biopsy. All 22 (saucerization) biopsies for suspected melanoma had the same depth of lesion as the subse-

quent wide excision and left no residual melanoma. In the other three of the 25 melanoma cases, the dermatologist did a wide excision only, without a biopsy.

At the November 2017 meeting of the Dermatologic Cancer Conference, the melanoma surgical oncologist discussed biopsy methodologies with the dermatologists, to encourage clarification and consistency of approach regarding biopsies on suspected melanomas.

**Shave Biopsy vs. Excisional Biopsy for Diagnosis of Melanoma**

<b>Total number of biopsies and excisions for suspected melanoma 2016</b>	<b>25</b>
Number of biopsies	22
Number of wide excisions	3

**STANDARD 4.7**  
**Quality Improvement: Fertility Counseling for Breast Cancer Patients Under 50**

The breast cancer disease management team wanted to ensure that cancer patients under the age of 50 were receiving appropriate information on fertility, as well as referrals for fertility counseling.

The team reviewed all of the medical records from June 1, 2016, to December 31, 2016, for premenopausal patients under the age of 50 who had been newly diagnosed with breast cancer and had had a chemotherapy talk.

Of the patients seen by the medical oncology group, 63% received fertility counseling. (Two were not documented; for one, chemotherapy was not recommended; and one was already menopausal.)

**Fertility Counseling for Breast Cancer Patients Under 50**

<b>Total patients</b>	<b>14</b>
Patients seen by medical oncology group	79%
Patients who received fertility counseling	64%

**STANDARD 4.8****Quality Improvement: Documenting Fertility Counseling for Breast Cancer Patients Under 50**

According to National Comprehensive Cancer Network guidelines, women under the age of 50 undergoing chemotherapy for breast cancer should receive fertility counseling.

From June 1, 2016, to Dec. 31, 2016, of 14 patients, 79% were seen by

Hematology Oncology Physicians of Englewood (HOPE). Of the nine patients for whom fertility counseling would have been appropriate, seven received counseling. As a result, the team recommended that the HOPE medical record be updated to include an area for the documentation of counseling sessions. The team also decided that all cancer patients under the age of 50 (women and men with any kind of cancer) who are prescribed chemotherapy

should receive fertility counseling. After the update to the record, the team reviewed the records of all patients with cancer under the age of 50 for the month of October 2017, to see if the change had had an effect on the rate of fertility counseling. Of four patients, one was not eligible, and the other three received fertility counseling, indicating that the updated record was having the desired effect.

**Documenting Fertility Counseling for Breast Cancer Patients Under 50**

<b>Number of patients prescribed chemotherapy during October 2017</b>	<b>4</b>
Number of patients N/A	1
Number of men prescribed chemotherapy	0
Number of women prescribed chemotherapy	3

**STANDARD 4.8****Quality Improvement: GYN MD Awareness Campaign, Salpingectomies for Elective Sterilization and with Hysterectomies for Benign Conditions**

To help reduce ovarian cancer risk, Englewood Hospital undertook education of the GYN staff on salpingectomies, including the recommendation of the American College of Obstetricians and Gynecologists that patients be offered laparoscopic

salpingectomy as an alternative to tubal ligation.

During February 2017, presentations on the benefits of salpingectomy were given during surgical grand rounds and at the GYN departmental meeting. Everyone on the GYN staff also received a letter and the PowerPoint slide deck via email. During the data analysis, the team identified some physicians who performed tubal ligations exclusively.

The plan is to educate these physicians on the benefits of salpingectomies. The tubal ligation rate for 2015 was 78%. In 2016, the rate decreased from 81% before education to 71% after education. During the education process, some surgeons said they would do more salpingectomies if provided additional tools and equipment were on the surgical tray during procedures. Those updates are in review.

**GYN MD Awareness Campaign, Salpingectomies for Elective Sterilization and with Hysterectomies for Benign Conditions**

Tubal ligation rate for 2015	78%
Tubal ligation rate in 2016 before physician education	81%
Tubal ligation rate in 2016 after physician education	71%

**THE LEFCOURT FAMILY  
CANCER TREATMENT AND  
WELLNESS CENTER CANCER  
REGISTRY**

In an 18-month period (July 2016 through December 2017), there were 1,824 diagnosed and treated cases recorded in The Lefcourt Family Cancer Treatment and Wellness Center cancer registry. The top

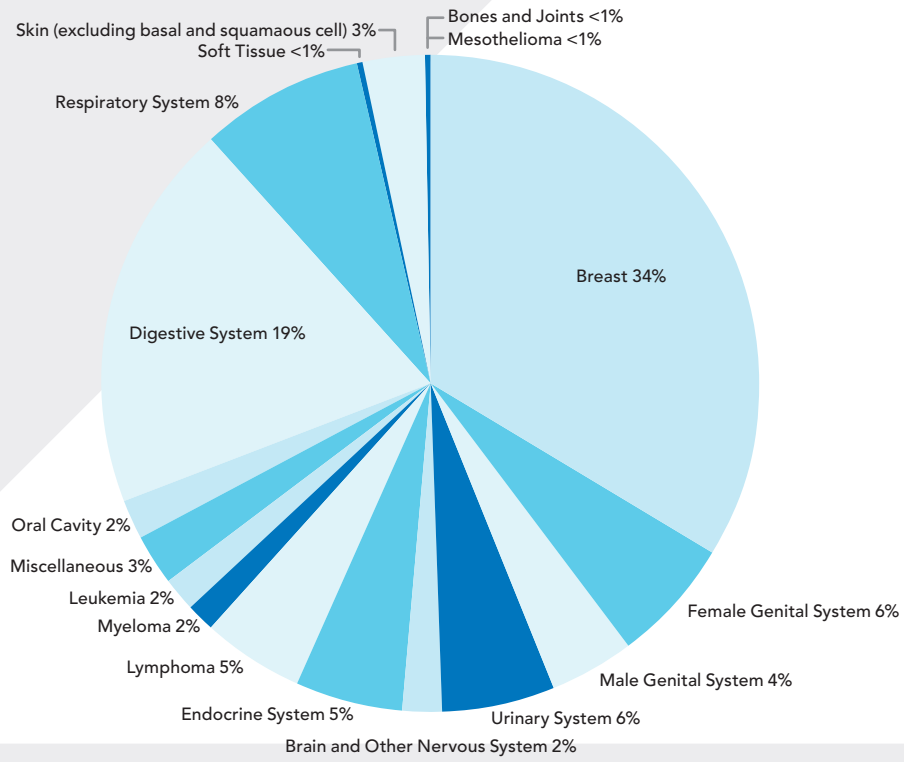
eight types of cancer at Englewood Hospital during this period were breast, lung and bronchus, colon excluding rectum, bladder, thyroid, Non-Hodgkin lymphoma, prostate, and pancreas.

Site Group	Total Cases
<b>Oral Cavity and Pharynx</b>	<b>35</b>
Tongue	9
Salivary Glands	4
Floor of Mouth	1
Gum and Other Mouth	5
Tonsil	8
Oropharynx	5
Hypopharynx	2
Other Oral Cavity and Pharynx	1
<b>Digestive System</b>	<b>350</b>
Esophagus	10
Stomach	31
Small Intestine	6
Colon Excluding Rectum	129
Rectum and Rectosigmoid	61
Anus, Anal Canal, and Anorectum	5
Liver and Intrahepatic Bile Duct	20
Gallbladder	4
Other Biliary	9
Pancreas	66
Peritoneum, Omentum, and Mesentery	9
<b>Respiratory System</b>	<b>148</b>
Nose, Nasal Cavity, and Middle Ear	2
Larynx	6
Lung and Bronchus	140
<b>Soft Tissue</b>	<b>6</b>
Soft Tissue (excluding heart)	6
<b>Bones and Joints</b>	<b>1</b>
<b>Skin Excluding Basal and Squamous</b>	<b>53</b>
Melanoma	50
Other Non-Epithelial Skin	3
<b>Breast</b>	<b>618</b>

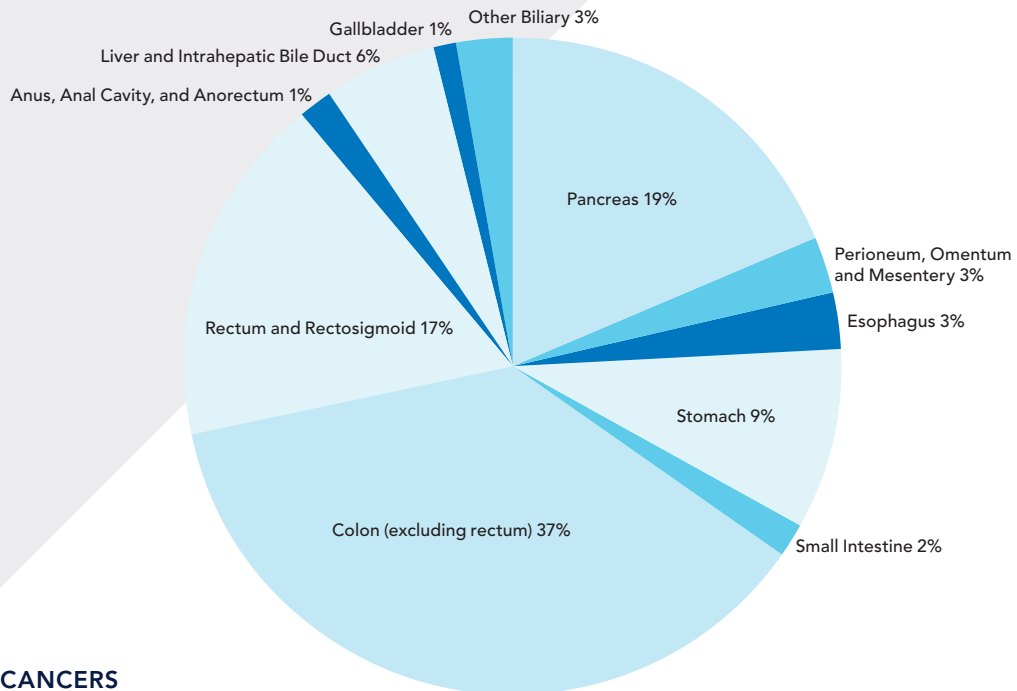
Site Group	Total Cases
<b>Female Genital System</b>	<b>111</b>
Cervix Uteri	10
Corpus and Uterus	68
Ovary	20
Vagina	1
Vulva	9
Other Female Genital Organs	3
<b>Male Genital System</b>	<b>72</b>
Prostate	68
Testis	4
<b>Urinary System</b>	<b>102</b>
Bladder	69
Kidney and Renal Pelvis	29
Ureter	3
Other Urinary Organs	1
<b>Eye and Orbit</b>	<b>0</b>
<b>Brain and Other Nervous System</b>	<b>39</b>
Brain	15
Cranial Nerve/Other Nervous System	24
<b>Endocrine System</b>	<b>94</b>
Thyroid	86
Other Endocrine Including Thymus	8
<b>Lymphoma</b>	<b>89</b>
Hodgkin Lymphoma	5
Non-Hodgkin Lymphoma	84
<b>Myeloma</b>	<b>30</b>
<b>Leukemia</b>	<b>28</b>
Lymphocytic Leukemia	14
Myeloid and Monocytic Leukemia	14
<b>Mesothelioma</b>	<b>2</b>
<b>Kaposi Sarcoma</b>	<b>0</b>
<b>Miscellaneous</b>	<b>46</b>
<b>Total</b>	<b>1,824</b>



## CANCER DIAGNOSES

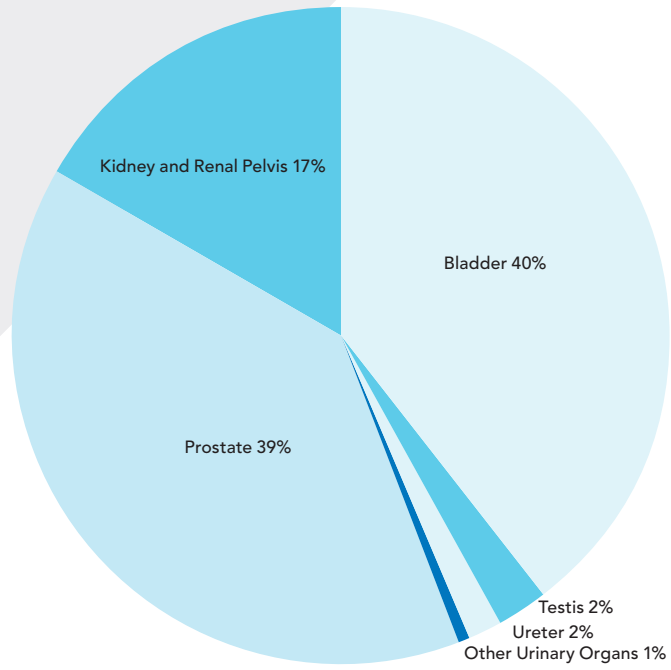


## SELECT CANCER SITE GROUPS

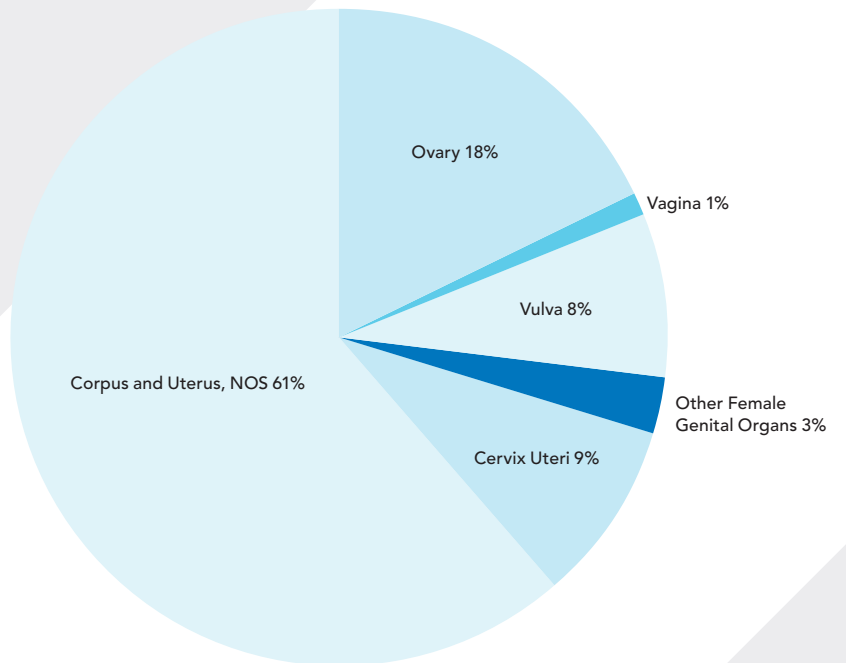


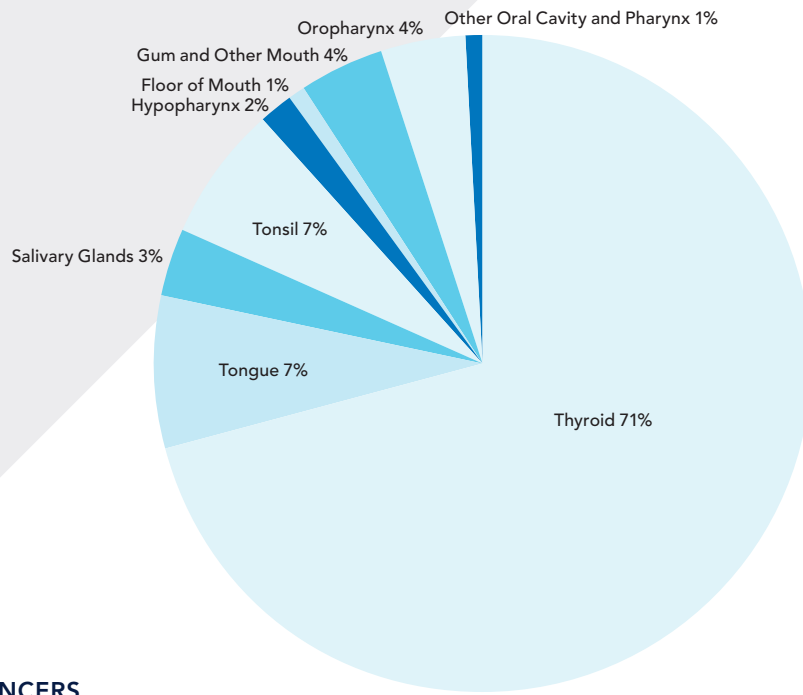
## DIGESTIVE CANCERS

GENITOURINARY CANCERS

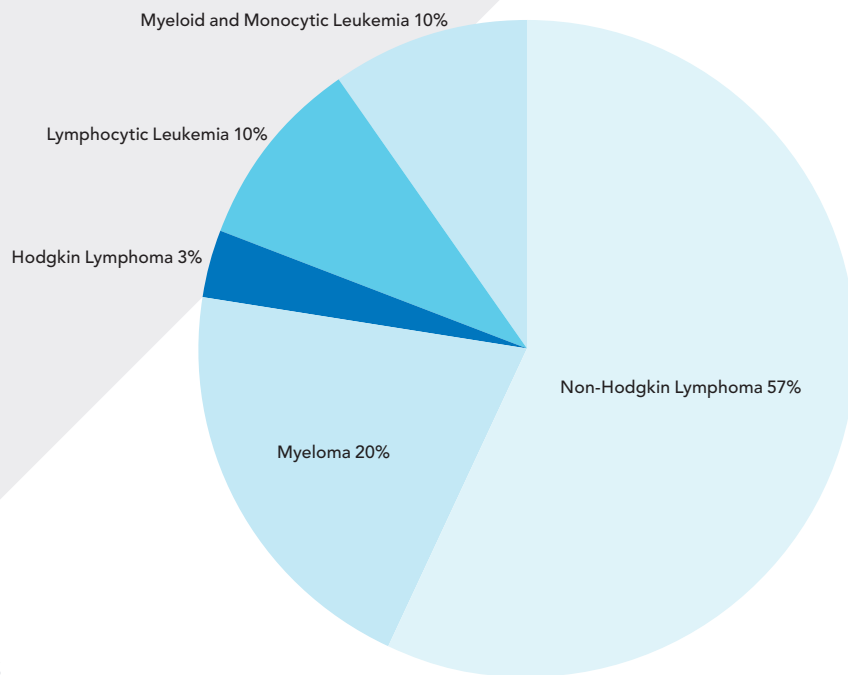


GYNECOLOGIC CANCERS





**HEAD AND NECK CANCERS**



**BLOOD CANCERS**

# Partners in Progress

Philanthropy is rarely accidental. Just ask the almost 5,000 individuals who purposefully gave to Englewood Health in 2017 — among them, many grateful past patients who credited their positive hospital experience to a physician.

Such was the case with the late Ronald Lefcourt, a local businessman and long-time patient of Herbert Dardik, MD. In honor of his beloved and trusted physician and in recognition of exceptional care received at Englewood Health, Mr. Lefcourt made a lead gift to Englewood Health Foundation's \$50 million capital campaign, *Transforming the Future*. The gift would name our new cancer center, The Lefcourt Family Cancer Treatment and Wellness Center. Thanks to the generosity and legacy of Ronald Lefcourt, patients in our region have benefited from a stronger clinical team, new services and programs, and enhanced diagnostics and treatment, all centered on the humanistic care our patients expect.

Grateful patient giving like Mr. Lefcourt's stems from the ongoing stewardship support of physicians at Englewood Health, including members of Physician Partners.

Since 2013, the Physician Partners Program has inspired a culture of philanthropy and plays an essential role in delivering next-generation health care. The program enables physicians at Englewood Health to pledge annual support to benefit our health system. Participation has increased each year since its inception, and in 2017, physician giving exceeded \$1.3 million.

"I started my career and training as an engineer, so I tend to look at everything in a process-oriented way," says Richard Goldweit, MD, chief of interventional cardiology, who helped champion the launch of the Physician Partners Program. "I think it is a very natural process to want to support Englewood Health and the local community. Most people are passionate about the place in which they work, and they care about the people that they surround

themselves with. To me, it is a very balanced equation. You want to promote the very best that the environment can provide."

We reached, and exceeded, our capital campaign goal by December 2017, thanks to the generosity of community members such as Ronald Lefcourt. Our own physicians pledged their leadership support with nearly \$6 million in philanthropic gifts to benefit *Transforming the Future*.

Mark Shapiro, MD, chief of radiology, served as vice chair for the campaign and led physician giving. "If the physicians show the community that they are standing by the institution and want to see it succeed, it makes a big statement. We want to show that we are here for the community and that we are providing the best medical care. To do that requires a lot of financial resources. An MRI machine, for example is \$2 million, and recently we were lucky enough to purchase a state-of-the-art MRI. The most successful institutions are those that the community stands by and contributes to within their means."

Thanks to purposeful philanthropy and conscientious stewardship by physicians at Englewood Health, patients are enjoying greater access to state-of-the-art care and are on a path to better health each day.



◀ Warren Geller, president and CEO, Englewood Health and Englewood Hospital; Jay Nadel, chairman, Board of Trustees, Englewood Health Foundation; Ronald Lefcourt, benefactor; and Thomas C. Senter, Esq., chairman, Boards of Trustees, Englewood Health and Englewood Hospital.

# Grateful Patients Give Back to Englewood Health



▲ Woody Rudin, Elise Winters, and Leo and Eva Gans at the 2018 President's Reception.

Elise Winters and her husband, Woody Rudin, named the Dr. Michael Schleider Grand Rounds in 2018. "As former teachers, Elise and I are caregivers by nature and firmly believe in the importance of helping others through education," says Mr. Rudin. "For our estate, we wanted to carry on that idea and support an institution that takes care of people and fosters continuing education for its caregivers."

Eva Gans, a long-time patient of Nimesh Nagarsheth, MD, chief of gynecologic oncology, made a gift in recognition of her physician and the care she received. Her gift helped support the expansion of The Lefcourt Family Cancer Treatment and Wellness Center, and an outpatient oncology room is named in her honor.

# Annual Walk for Awareness Raises Funds for Breast Care

Walking has its benefits, especially when you join Englewood Health's Walk for Awareness. This annual fundraiser encourages participants to raise funds for The Leslie Simon Breast Care and Cytodiagnosis Center. Patients like Patricia Ianni chose to support this event in recognition of care received. "I am here today," she insists, "because of [Englewood Health's] nursing care and the incredible team of physicians. They were there for me. One held my hand until I fell asleep. Another would take lotion and heat it in warm water. Who does that?"



▶ Patricia Ianni with her breast cancer surgeon, V. Merle McIntosh, MD.



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The Lefcourt Family Cancer Treatment and Wellness Center.  
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ENGLEWOOD  
HEALTH

THE LEFCOURT FAMILY CANCER TREATMENT AND WELLNESS CENTER

350 Engle Street, Englewood, NJ 07631

[englewoodhealth.org/cancer](http://englewoodhealth.org/cancer)