WORLD-CLASS CANCER CARE close to home
CANCER CARE
second to none

At the University of Cincinnati Cancer Institute, our ultimate goal is for all patients to receive an unparalleled level of care. Our competition isn’t others who deliver cancer care in this community. Our competition is the disease cancer. That’s why we support anyone and anything that lessens the suffering and mortality associated with this dreaded disease.

We are all privileged every day to work in an atmosphere of dedication to higher education, expertise, and groundbreaking research. Our bright-eyed, motivated trainees are always asking “why?” That curiosity and creativity will not only inspire our young people today to become part of comprehensive cancer care in the future, it will ensure that our patients are receiving the leading edge of cancer care today.

We are constantly learning and growing into the future of medicine in this region and thanks to our collaborative culture, our patients have access to more than 90 UC Health cancer specialists, including subspecialty and multidisciplinary expertise that’s only available in an academic medical center. Plus, we have hundreds of alumni who still call the Cincinnati area home, who turn to the Barrett Cancer Center for recommendations, second opinions, reassurance, and exceptional care, particularly for patients with complicated problems.

As a longtime, vital part of the community, we have a vested interest in the optimal outcome of every patient we see.

It’s our tremendous honor to help patients and their families in their battle against this disease. We not only want to help them beat cancer; we want to ensure they maintain their dignity and comfort throughout their journey. And, we want to develop the best cancer care in the world with expertise, genuine interest, commitment, and compassion.

William Barrett, MD
UC Cancer Institute Director

OUR COMPETITION
IS NOT OTHER FACILITIES
AND PEOPLE WHO
DELIVER CANCER CARE
IN THIS COMMUNITY.
OUR COMPETITION
IS CANCER.
No patient in the Greater Cincinnati metropolitan area should ever have to pack a suitcase to get the most advanced cancer care. This idea drives leaders at the UC Cancer Institute to pursue top-notch care close to home, says William Barrett, MD, director of the UC Cancer Institute.

Top physicians? They’re recruiting them. Advanced technologies? The UC Cancer Institute is investing in them. And research breakthroughs that prolong life? They’re making them.

These efforts directly or indirectly benefit every resident of Cincinnati. Here’s how:

**Push for NCI designation.** National Cancer Institute-designated programs are the backbone of the nation’s cancer research efforts. There are only 69 NCI-designated centers in 35 states.

“In cancer, the NCI designation is the ultimate validation by an outside entity,” Barrett says. “NCI has to be convinced our research is pushing forward the field of oncology,” he says, noting that UC Cancer Institute’s robust leukemia research, population science, proton beam research, and cancer biology programs will anchor the NCI application. If the UC Cancer Institute earns the coveted NCI designation, the entire tristate region will benefit from:

- Lower cancer mortality rates
- Access to leading-edge care and breakthrough treatments, including clinical trials, for local residents
- Top medical talent
- Millions of dollars in research grants, which generate jobs and growth for local economies

**Centers of Excellence.** Within the UC Cancer Institute, 10 well-organized working groups called Centers of Excellence focus on specific cancer types, such as brain, head and neck, and breast. Collaboration by clinicians and researchers takes medicine from the lab to the bedside and back again, not only improving treatment for patients but also the speed at which they can access that treatment.

**Community impact.** UC Cancer Institute educational events positively influence the region. For example, at one community engagement event, “we invited students from eighth grade to premed with an interest in medicine and oncology to come interact with physicians and scientists here. It was really a remarkable thing to see eighth graders and established scientists generating ideas on cancer prevention and detection in Cincinnati,” Barrett says.

**Precision medicine.** The UC Cancer Institute is a leader in pushing cancer care to new horizons. “With new targeted agents, molecular biology advancements, precision technology, and novel therapies specific either to the tumor or the patient, cancer treatment is becoming individualized,” says Thomas Herzog, MD, deputy director of the UC Cancer Institute. “It’s giving the right drug at the right time at the right dose. And we are at the forefront of this evolving paradigm.”
In 2016, the UC Cancer Institute received full accreditation from the American College of Surgeons’ Commission on Cancer (CoC). The UC Cancer Institute is one of the CoC’s five oldest cancer programs, with the first continuous date of accreditation in January 1934.

This 2017 Report to the Community reports 2016 data taken from the UC Cancer Institute Cancer Registry on 12/31/16 and compiled by our dedicated Certified Tumor Registrar team.
Patients get the finest minds — but also caring hearts

At the UC Cancer Institute, our mission is patient care — and caring. Just ask Joe Peeden. When Peeden started having trouble speaking and swallowing, he suspected allergies. But when he started losing weight, and feared losing income, he got it checked out. “I happen to be a sales rep, so not being able to speak was affecting my work,” Peeden says.

An ear, nose, and throat specialist discovered a cancerous mass on his larynx, and told Peeden the needed surgery would cost him the ability to speak, or to taste. It was a choice the 49-year-old Cincinnati resident wasn’t ready to make.

At the UC Cancer Institute, head and neck cancer surgeon Keith Wilson, MD, promised to try and preserve both senses — and defeat the cancer.

“Our philosophy is to treat each patient as a person,” says Wilson, who is also an associate professor at UC College of Medicine. “For each individual, we develop a care plan in a multidisciplinary setting.” That means Peeden had access to a financial counselor, social worker, dietitian, and others. And it meant he came to view his medical team as friends who truly cared about him.

The UC Cancer Institute understands that a cancer diagnosis can be traumatic emotionally as well as physically. “In many centers, the medical part is all that is addressed,” Wilson says. “We look at it as not just a medical illness — we take care of the whole person.”

ADVANCED, ACCESSIBLE CARE

Patients also have access to the latest, research-based care. For Peeden, that began not with drastic surgery, but radiation and chemotherapy. And it continued with a leading-edge immunotherapy drug. “Keytruda had just been approved by the FDA,” when his doctors recommended it for him, Peeden says.

Now, Peeden can speak fine, and his sense of taste is coming back after being affected by the radiation. His cancer, though, shows no sign of returning. A December scan found that “everything was just perfect. Dr. Wilson said it looks like we’re out of the woods.” Peeden is back at work — and back to enjoying Cincinnati Reds’ baseball games, thanks to his care team. “I am just Mr. Gratitude to these people,” he says.
What’s so special about subspecialization?

A focus on specific cancers leads to better care and faster research breakthroughs

The newest, leading-edge cancer treatments are often described with words like “targeted” or offering “pinpoint precision.” It’s their intense focus that makes them so effective.

The same is true with physician expertise. The more an oncologist can focus on a specific type of cancer — or type of treatment — the better their patient outcomes will be.

“Community physicians are excellent jacks-of-all-trades who are very well-rounded and have experience with a lot of different areas,” says William Barrett, MD, director of the UC Cancer Institute. “But we are fortunate as an academic medical center that most of our physicians have particular expertise with specific focus.”

Whether dealing with a common cancer like breast or colon, a rare malignancy like uveal melanoma, or a certain type of surgery or treatment, such as proton therapy, UC Cancer Institute’s physicians are some of the most experienced in the region.

SUBSPECIALTY

Oncofertility: Saving a life and preserving a future

As a children’s heart specialist, Micean Johnikin, MD, knows what it’s like to deliver a serious diagnosis. And she also learned how frightening it is to receive one when a radiologist confirmed her fear: At 38, she had Stage II breast cancer.

Beating the cancer was Johnikin’s priority, but she knew the treatment could kill any chances of having a family.

Given her concern, her care team at Saint Joseph East Breast Center in Lexington referred her to the oncofertility specialists at the UC Cancer Institute.

The UC Cancer Institute oncofertility program offers fertility preservation counseling and treatment options to men, women, and adolescents with cancer and cancer survivors. Fertility preservation also benefits people with a bone marrow transplant, a stem cell transplant, and even rheumatic diseases.

With little time before chemotherapy began, Johnikin met with oncofertility specialist Julie Sroga-Rios, MD, every few days, so the physician could monitor her egg production.

Her eggs were ready for harvest on a Sunday, a fact that didn’t deter the UC Cancer Institute oncofertility team, says Johnikin, who is now cancer-free and looking forward to the future — and a family.

SUBSPECIALTY

A view into the future of ocular oncology

Uveal melanoma, a malignancy that occurs on the pigmented part of the eye, is diagnosed in only about 2,500 adults each year in the United States.

For years, treatment, which consists of a disk-shaped shield containing radioactive seeds being placed over the tumor, required hospital stays.

But recently, the UC Cancer Institute became one of the region’s only facilities to offer the treatment as an outpatient procedure. The outpatient therapy became possible through collaboration between UC Cancer Institute experts in ocular oncology and radiation oncology, says ophthalmologist Zélia Correa, MD, PhD, director of ocular oncology at the UC Cancer Institute and professor in the Division of Ophthalmology at the UC College of Medicine.

In the treatment, known as brachytherapy, a shield containing the radioactive seeds is attached to the outer surface of the eye, left on for several days, and then removed. Patients wear a wristband that alerts others to the radiation, and a lead-coated eye patch that prevents radiation from escaping. This treatment has been shown to be very effective in promoting local tumor control, and now it can be provided with minimal disruption to the patient’s life.

Cases were presented to tumor boards at the UC Cancer Institute

779

Types of Cancer Treated

Anus
Blood and hematologic disorders
Bones and joints
Brain and nervous system
Breast: Male and female
Cervix
Colorectal cancer
Corpus uteri
Digestive organs
Esophagus
Eye and orbit
Kaposi’s sarcoma
Kidney
Larynx
Leukemia
Lip, oral cavity, and pharynx
Liver
Lung
Lymphoma
Melanoma, skin
Mesothelioma
Multiple myeloma
Ovary
Pancreas
Prostate
Rectum
Respiratory and intrathoracic organs
Small intestine
Soft tissue
Stomach
Thyroid
Urinary bladder
Uterine
Vulva and vagina
Immunotherapy restores hope, and health

When Amy Keirle’s doctors found a mass on her ovary two years ago, she knew where to go for treatment: the UC Cancer Institute, where family friend William Barrett, MD, also happens to be the director. “My dad has been friends with Dr. Barrett since middle school. So as soon as we realized there was a mass on my ovary, we called him,” she says.

But surgery produced a bombshell: Keirle didn’t have ovarian cancer. The kindergarten teacher had Stage IV colon cancer, which had spread to her ovary. She was just 29.

After surgery to remove much of her colon, and chemotherapy, scans showed Keirle’s cancer might be returning, so she underwent 30 rounds of radiation.

THE BODY’S BEST DEFENSE

That worked, for a while. But when tests again indicated new cancer cells, her UC Cancer Institute team, including gynecologic oncologist Thomas Herzog, MD, and hematologist Tahir Latif, MD, had a new weapon, an immunotherapy drug called Keytruda.

Immunotherapy uses biological drugs, which are immune system substances, to help increase the body’s ability to fight cancer. Various types of immunotherapy can be used to slow or stop cancer cells from growing or spreading. One type of immunotherapy is monoclonal antibodies, including Keytruda, which turn off the “checkpoint” proteins that normally keep the body from attacking certain kinds of cancer cells.

IN THE HOME STRETCH

Now, two years later, Keirle is back at work and cancer-free. “I’ve been doing immunotherapy since February,” Keirle says. “I’ve had two PET scans, and both are clear.”

And she feels better. “Chemo was brutal. But there are no side effects with immunotherapy.” She was too sick to work during chemotherapy, but now Keirle is back in the classroom with her kids. What’s more, she has renewed hope of someday having children of her own. Initially, there wasn’t time to preserve fertility, Keirle says, “because my cancer was so advanced. But this spring, we did the egg-freezing process.”
A team approach to cancer care

Tumor boards assemble experts from all fields to tackle cancer together

Toni Kuhlman’s cancer journey started in 2014 with a pulled muscle and a conscientious family physician who wasn’t satisfied that muscle strain was the only cause of her pain. That doctor ordered an X-ray, which revealed a mass in her lung. After one oncologist gave her just months to live, and a brutal treatment plan, her bosses referred the 60-year-old grandmother to William Barrett, MD, director of the UC Cancer Institute. He gave her hope, and his personal cell phone number.

He also added medical oncologist John Morris, MD, who is director of Experimental Therapeutics & Thoracic Cancer and the Head & Neck Oncology Program, as well as Sandra Starnes, MD, co-director of the Comprehensive Lung Cancer Center and John B. Flege Chair in Cardiothoracic Surgery, to her care team.

All three participated in a tumor board reviewing Kuhlman’s case. Tumor boards are multidisciplinary groups of up to 30 subspecialists, who meet regularly to discuss the best, scientifically validated treatment options for each patient. “These teams consist of experts on particular cancers from each medical specialty — surgeons, medical oncologists, radiation oncologists, diagnostic radiologists, and pathologists — working closely together to develop treatment recommendations for each patient they see,” says Barrett.

“It’s a tremendous benefit to patients to have all this expertise in a room personalizing care to the individual,” he adds. “For each type of cancer, we are able to bring together those who focus on that specific area to come to a consensus on the best course of treatment and care for each patient.”

Four years — and four new grandchildren — later, regular chemotherapy is part of Kuhlman’s routine. And UC Cancer Institute doctors and nurses are part of her family. “I say, ‘Dr. Morris, are you going to keep me alive until I’m 100?’ And he says, ‘How about 103?’”

Consultation and collaboration helps patients and physicians

Cancer doesn’t care which hospital you go to or who your doctor is. Neither does William Barrett, MD, director of the UC Cancer Institute. In fact, he doesn’t view other Cincinnati hospitals and physicians as competition. “The ‘competition’ is not with the UC Cancer Institute and community hospitals,” he says. “The competition is with cancer.”

That’s why camaraderie, not competition, is the goal in sharing the vast cancer-fighting expertise the UC Cancer Institute has to offer with physicians throughout the region and even the world. By sharing that expertise through consultation and collaboration, the institute is an invaluable area resource.

When local or regional providers consult the UC Cancer Institute for a second opinion on complicated or advanced cancers, they tap into decades of research, including the most current clinical and translational investigations that deliver improved treatment outcomes. Their patients benefit by gaining access not to just one doctor, but to teams of physicians and researchers who can look at the case from multiple angles. The collaboration also opens the door for patients to participate in clinical trials with the potential to further advance treatments, says Thomas Herzog, MD, deputy director of the UC Cancer Institute.

Partnering with Children’s Hospital

Cincinnati Children’s Hospital Medical Center and the UC Cancer Institute have been fighting cancer side by side for years in the region. Now, they’re collaborating on providing proton therapy to children and adults as well as through the Basic and Translational Pediatric CNS Malignancies Pilot Grant Program.

Lifesaving treatment for lung cancer has given Toni Kuhlman more precious time with her grandchildren.
Pinpoint precision

New proton therapy offered at the UC Cancer Institute targets cancer tumors with millimeter accuracy

Whitney Hoffer, 31, is a busy mom who only has time for the essentials. So when she was diagnosed with classical Hodgkin’s lymphoma at 28 weeks pregnant with her second child, she needed treatment that worked, but also minimized her downtime. Proton therapy was the answer.

Proton therapy is an advanced form of radiation therapy offered at the UC Cancer Institute Proton Therapy Center, located on the Cincinnati Children’s Liberty Campus. Instead of using conventional X-ray energy that can affect healthy cells and cause side effects, it uses just the nucleus of a hydrogen atom.

“X-rays are like a wave. They travel past the tumor. They are effective, but can expose a lot of healthy tissue to radiation,” says John Breneman, MD, medical director of the Proton Therapy Center. “Protons are actual particles. You can give them a certain amount of ‘gas’ so that they stop when they deposit their dose of radiation into the tumor.”

The ideal candidate for proton therapy has a tumor located in a delicate area (such as near a vital organ) or in an area where conventional radiology could leave long-term damage (such as near the heart). This includes brain tumors, head/neck tumors, left-sided breast cancers, tumors in the chest and pelvis, and most childhood cancers.

“There will come a day when proton therapy is much more broadly offered. The technology is very complicated and very expensive,” Breneman says, noting that UC Cancer Institute’s 120-ton proton beam machine had to be lowered through the roof of a specially made building that could handle its size and weight.

While the UC Cancer Institute is among only two dozen U.S. sites that offer proton therapy, it stands alone with its research applications. “Our proton facility has a dedicated treatment room for research — the only one of its kind in the world — where physicians partner with biologists, engineers, and physicists to develop new treatment methods,” Breneman says.

All Hoffer knows is that she got her life back — and fast. She celebrated by running the Flying Pig half-marathon in May 2017, just a month before daughter Madison’s first birthday.

Nurses guiding cancer care

Within compassion lies a purely coincidental second word: compass. Put the two words together, and that’s the sweet spot where nurse navigators at the UC Cancer Institute work every day.

“When you’re fighting cancer, you feel adrift,” says cancer survivor and Cincinnati resident Linda Heile. “I don’t know how I could have done this without my nurse navigator saying, ‘I’ve got you. I will navigate for you. I will be your compass.’”

Heile’s nurse navigator, Marilyn Kugler, BSN, RN, explains her role: “When a patient hears the word cancer, everything just stops. They don’t hear what comes next. I help them get answers to the questions they don’t know to ask. I know the ins and outs of the system and how to expedite their care.”

In Heile’s case, Kugler:

- Was with Heile the day she got her cancer diagnosis
- Accompanied her to surgery scheduling
- Visited her the day of surgery
- Helped her find treatment specialists and accompanied her to appointments
- Got her a same-day dermatology appointment when chemotherapy triggered skin irritation

And these were just the technical things. “Marilyn made me feel like I would get better. She got me through it. It was breathtaking, the level of personal attention and compassion she gave. She led me, and I followed her lead,” says Heile, who, with successful treatment now complete, relishes her roles as active grandmother and retired teacher-turned-creative writer.

UC Cancer Institute nurse navigators embrace their role on the front lines of cancer care. “We are the chief hand-holders, patient advocates, and compassionate caregivers,” Kugler says. “Researchers are very good at targeting treatments to cancers. As cancer nurses, we are very good at personalizing that care to human beings.”

2/3

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Sleepless in Cincinnati

An innovative program leads to faster breast cancer treatment at the UC Cancer Institute

Travel back in time to June 2014. If you were a woman diagnosed with breast cancer, you would have to wait nearly two months for surgery. Today, thanks to a program called “Sleepless Nights” at the UC Cancer Institute, that time has been cut to less than three weeks.

Waiting an average of 52 days “was too many sleepless nights for women,” says Elyse Lower, MD, medical director of UC Cancer Institute’s Comprehensive Breast Cancer Center, one of the institute’s 10 Centers of Excellence.

Cutting that wait time by nearly two-thirds to 18 days on average wasn’t easy. In order to do it, “This is how we’ve always done it” was eliminated from the vocabulary. “We measured everything,” Lower says, noting that the breast cancer program examined its performance against 35 national quality metrics. Ultimately every department — from scheduling and radiology to pathology and surgery — shrunk the time needed to do their jobs without sacrificing quality. Actions included:

- Streamlining scheduling
- Turning radiology rooms over faster to open up more appointment times
- Adding another MRI biopsy machine
- Obtaining sign-offs by radiologists on mammograms more quickly — without sacrificing quality or the teaching time academic radiologists need with students
- Having radiologists order their own follow-ups to expedite patient throughput

The pièce de résistance may have been the hiring of a nurse navigator, who works one-on-one with patients to ensure regular communication and timely scheduling for radiology, biopsy, and surgery.

Today, UC Cancer Institute’s breast cancer program is the only triple-accredited program in Ohio. (See story on next page.) It ranks among the largest breast cancer programs in the region. And, thanks to the Sleepless Nights project, the timeliness of care now aligns with the quality of care. “This is a better way to get our patients through something that is potentially agonizing for them,” Lower says. “It fits with our goal to make sure we are providing the very best breast care and breast cancer care in the region.”

Triple crown for breast center

UC Cancer Institute breast cancer program receives national recognition for quality — three times

Every May, across the border in Louisville, there’s a potential Triple Crown winner running at Churchill Downs. Now, the UC Cancer Institute has a triple-crown winner of its own: the Comprehensive Breast Cancer Center.

The center is the region’s only breast facility whose excellence has been recognized by three separate, independent organizations that examine and evaluate the quality of care provided at breast cancer treatment programs.

The national recognition “truly speaks to the medical excellence” provided by the institute’s breast specialists, including a Certified Breast Team Nurse Navigator, says Elyse Lower, MD, medical director of UC Cancer Institute’s Comprehensive Breast Cancer Center.

Triple Crown awards include:

- Named a Comprehensive Breast Center of Excellence, one of only 18 centers nationwide, by the National Consortium of Breast Centers, which evaluates patient outcomes and treatment procedures
- Accreditation by the American College of Surgeons’ National Accreditation Program for Breast Centers, which measures the quality of care provided by a center against nationally recognized benchmarks
- Named a Breast Imaging Center of Excellence by the American College of Radiology for being fully accredited in mammography, stereotactic biopsy, ultrasound, and MRI

The UC Cancer Institute knows cancer. But when it comes to providing efficient, quality care, there’s so much more to learn. That’s why UC Cancer Institute faculty and staff are getting help with Lean training through a partnership with the UC Lindner College of Business to identify, and then eliminate or reduce wasteful activities, so that all efforts serve patient needs. MBM students studying Lean practices in health care are analyzing the cancer institute’s processes and offering solutions to improve efficiency and effectiveness of care.
Advancing care for patients here — and around the world

Sometimes the most complicated things start out seemingly simple. It’s almost always that way in cancer research. A researcher tilts her head or furrows his brow, wondering … what if?

And luckily, the researchers at the UC Cancer Institute have many “what ifs?”

- What if a drug used to treat type 2 diabetes could help patients with head and neck cancer?
- What if precisely targeted, high-dose radiation therapy could shrink the time between treatment and surgery to remove a tumor?
- What if extensive genomic sequencing of lung tumors can better guide treatment of those tumors?

EARLIER ACCESS TO LIFESAVING THERAPIES

As the Cincinnati area’s only academic cancer center, UC Cancer Institute physicians and researchers have the opportunity to seek answers to those and many other questions through basic, translational, and clinical research projects. And the expertise that drives research breakthroughs flows into the Greater Cincinnati medical community, meaning sick patients don’t have to travel hundreds of miles to access the latest treatment advances.

For example, the UC Cancer Institute was among the nation’s first cancer centers to offer the promise of emerging immunotherapy treatments that use the body’s own natural defenses to fight cancer. UC Cancer Institute patients participated in clinical trials for drugs like Opdivo and Keytruda years before they were widely available, says John Morris, MD, director of Experimental Therapeutics & Thoracic Cancer, and the Head & Neck Oncology Program. “Those drugs have turned out to be a home run, and many of our patients have benefited from them.”

And, as a research institution, the UC Cancer Institute draws to Cincinnati people who ask the questions that will bring new answers in cancer treatment, says Thomas Herzog, MD, deputy director of the UC Cancer Institute. “Talented people want to be in a learning, research environment. And there’s no better challenge than having people around who are constantly asking ‘why?’”
In 2016, the UC Cancer Institute had **130 clinical trials** open to accrual. Following is just a sampling of those studies.

### ANY SITE

- **13 open studies of advanced solid tumors, metastatic cancer cells, and molecular profiling, including:**
  - A Phase 1 Study of MEDI4736 (Anti-PD-L1 Antibody) in Combination with Tremelimumab (Anti-CTLA-4 Antibody) in Subjects with Advanced Solid Tumors
  - A Phase 1b Study Evaluating the Safety, Tolerability and Immunogenicity of CMR905 (Sequentially Administered LV305 and Gp105) in Patients with Locally Advanced, Relapsed, or Metastatic Cancer Expressing NY-ESO-1
  - Exceptional Responders Pilot Study: Molecular Profiling of Tumors From Cancer Patients Who Are Exceptional Responders

### BRAIN AND NERVOUS SYSTEM CANCER

- **9 open studies of glioblastomas, meningiomas, and spine cancer, including:**
  - A Phase I/III Randomized Trial of Veliparib or Placebo in Combination with Adjuvant Temozolomide in Newly Diagnosed Glioblastoma with MGMT Promoter Hypermethylation
  - A High Throughput, Sensitive and Non-invasive Technique for Detection and Quantification of EGFRvIII Mutation in the Peripheral Blood of GBM Patients
  - Randomized Phase II Trial of Hypofractionated Dose-Escalated Photon IMRT or Proton Beam Therapy Versus Conventional Photon Irradiation with Concomitant and Adjuvant Temozolomide in Patients with Newly Diagnosed Glioblastoma

### BREAST CANCER

- **12 open studies investigating treatment options for HER2-positive breast cancer, lymph node dissection, and breast conservation surgery, including:**
  - A Randomized Phase III Clinical Trial Evaluating Post-Mastectomy Chestwall and Regional Nodal XRT and Post-Lumpectomy Regional Nodal XRT in Patients with Positive Axillary Nodes Before Neoadjuvant Chemotherapy Who Convert to Pathologically Negative Axillary Nodes After Neoadjuvant Chemotherapy
  - Phase III Randomized, Placebo-Controlled Clinical Trial Evaluating the Use of Adjuvant Endocrine Therapy +/- One Year of Everolimus in Patients with High-Risk, Hormone Receptor-Positive and HER2/neu Negative Breast Cancer
  - A Phase II Randomized Controlled Trial of Ganciclovir for Autologous T cells for Patients with Triple Negative Breast Cancer: Hoosier Oncology Group BRE12-158

### FEMALE GENITAL CANCER

- **15 open studies of ovarian, endometrial, cervical, peritoneal, fallopian tube, and uterine cancer, including:**
  - A Randomized Phase II/III Study of Paclitaxel/Carboplatin/Meflozin (NSC916478) Versus Paclitaxel/Carboplatin/Placebo as Initial Therapy for Measurable Stage III or IVa, Stage IVb or Recurrent Endometrial Cancer
  - Phase III Randomized Study of Concurrent Chemotherapy and Pelvic RT with or Without Adjuvant Chemotherapy in High-Risk Patients with Early-Stage Cervical Carcinoma Following Radical Hysterectomy (RTOG#0734: ECOG#0734)
  - The MILO Study (MEK Inhibitor in Low-Grade Serous Ovarian Cancer): A Multinational, Randomized, Open-Label Phase 3 Study of MKB-0162 vs. Physician’s Choice Chemotherapy in Patients with Recurrent or Persistent Low-Grade Serous Carcinomas of the Ovary, Fallopian Tube or Primary Peritoneum
**Gastrointestinal Cancer**
15 open studies of cancer of the pancreas, colon, stomach, and liver, including:
- A Phase 2/3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Assignment Study to Assess the Efficacy and Safety of Reparixin in Pancreatic Islet Auto-Transplantation
- Randomized Phase III Study of Sorafenib Versus Stereotactic Body Radiation Therapy Followed by Sorafenib in Hepatocellular Carcinoma
- A Phase III Open-Label, Multicenter Trial of Maintenance Therapy with Avelumab (MSB001078C) Versus Continuation of First-Line Chemotherapy in Subjects with Unresectable, Locally Advanced or Metastatic, Adenocarcinoma of the Stomach, or of the Gastric-esophageal Junction

**Genitourinary Cancers**
8 open studies of prostate, kidney, and bladder cancer, including:
- EVEREST: EvErolimus for Renal Cancer Ensuing Surgical Therapy, A Phase III Study
- A Randomized, Double-Blind, Multicenter, Parallel-Group, Phase III Study to Evaluate Efficacy and Safety of DCVAC/PcA Versus Placebo in Men with Metastatic Castration Resistant Prostate Cancer Eligible for first Line Chemotherapy
- A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Phase III Study of ARN-509 in Men with Non-Metastatic (MO) Castration-Resistant Prostate Cancer

**Head and Neck Cancer**
15 open studies of metastatic squamous cell carcinoma, anaplastic thyroid cancer, nasopharyngeal carcinoma, malignant salivary gland tumors, and oropharyngeal cancer, including:
- A Phase 1b/2, Open-Label, Multicentre Study Assessing the Safety, Tolerability, Pharmacokinetics, and Preliminary Anti-Tumor Activity of MED4736 in Combination with AZD9150 or AZD3563 in Patients with Advanced Solid Malignancies and Subsequently Comparing AZD9150 and AZD3563 Both as Monotherapy and in Combination with MED4736 as Second-Line TRT in Patients with Recurrent and/or Metastatic Squamous Cell Carcinoma of the Head and Neck
- A Randomized Phase II Trial for Patients with Pi6 Positive, Non-Smoking Associated, Locoregionally Advanced Oropharyngeal Cancer
- A Phase I Dose-Finding Study of Metformin in Combination with Concurrent Cisplatin and Radiation in Patients with Locally Advanced Head and Neck Squamous Cell Carcinoma

**Leukemia and Lymphoma**
10 open studies for acute myelogenous leukemia, acute lymphoblastic leukemia, myeloid leukemia, chronic lymphocytic leukemia, and large B cell lymphoma, including:
- A Phase 3, Randomized, Study to Assess the Efficacy and Safety of Ublituximab in Combination with Ibrutinib Compared to Ibrutinib Alone, in Patients with Initially Treated High-Risk Chronic Lymphocytic Leukemia (CLL)
- An Open-Label, Phase Ib/2 Study Investigating Recommended Phase 2 Dose, Safety, Tolerability, and Preliminary Efficacy of TAK-659 in Adult Patients With Relapsed or Refractory Acute Myelogenous Leukemia (AML)
- Randomized Phase II Open Label Study of Lenalidomide R-CHOP (R2CHOP) vs RCHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine and Prednisone) in Patients with Newly Diagnosed Diffuse Large B Cell Lymphoma

**Hematological Cancers**
18 open studies of hematological cancers, amyloidosis, multiple myeloma, and bone marrow transplants, including:
- A Phase 3, Randomized, Controlled, Open-label, Multicenter, Safety and Efficacy Study of Dexamethasone Plus MLN9708 or Physicians Choice of TRT Administered to Patients with Relapsed or Refractory Systemic Light Chain (AL) Amyloidosis
- Protocol for a Research Database for Hematopoetic Stem Cell Transplantation and Marrow Toxic Injuries
- A Multicenter Phase 1/2b Study of the Bruton’s Tyrosine Kinase inhibitor, Ibrutinib (PCI-32711), in Combination with Carboplatin (Kyprolis) in Subjects with Relapsed or Relapsed and Refractory Multiple Myeloma

**Lung Cancer**
16 open studies to research the effectiveness of various treatments for non-small cell lung cancer, including:
- Randomized Study of Erlotinib vs. Observation in Patients with Completely Resected NSCLC and an Eastern Cooperative Oncology Group Performance Status of 2
- A Randomized Phase III Study of Sublobar Resection (SR) Versus Stereotactic Ablative Radiotherapy (SABR) in High-Risk Patients with Stage I Non-Small Cell Lung Cancer (NSCLC) and an Eastern Cooperative Oncology Group Performance Status of 2

**Melanoma**
7 open studies of melanoma, including:
- A Randomized Phase II Trial of Ipilimumab with or without Bevacizumab in Patients with Unresectable Stage III or Stage IV Melanoma
- A Phase III Randomized Trial Comparing High Dose Interferon to MK-3475 (Pembrolizumab) in Patients with High Risk Resected Melanoma
- A Randomized, Phase II Trial of Intermittent Versus Continuous Dosing of Dabrafenib (NSC-763760) and Trametinib (NSC-763093) in BRAFV600E/K Mutant Melanoma

**The UC Cancer Institute is shifting the focus of cancer clinical trials to increase investigator-initiated trials, which will be necessary in order to achieve NCI designation. Investigator-initiated trials are developed right here at Cincinnati.**

**HEALTH STATISTICS FOR 2016**
- UC Cancer Institute participation rate in interventional trials is higher than the national average of 3%, reported by the National Cancer Institute.
Today’s University of Cincinnati College of Medicine students are Cincinnati’s cancer care experts of tomorrow

The UC Cancer Institute takes seriously its charge to train the next generation of cancer doctors. So seriously that Trisha Wise-Draper, MD, PhD, medical director of the UC Cancer Institute Clinical Trials Office, doesn’t blink when she says, “We’ve trained most of the physicians in the city.”

What does this mean to Cincinnatians? You’re receiving the latest cancer care offered by the brightest minds.

“Everyone is at the top of their game here. Trainees are up on the latest medical literature, and they’re comparing what they are seeing to what they’re reading,” says William Barnett, MD, the UC Cancer Institute director. “Between medical school, residency, and fellowship training, most cancer doctors in the community have ties here that remain after they go out to work in Cincinnati.”

This has a domino effect that extends to patients in both tangible and intangible ways, including:

Access to a vast network of experts. Area oncologists “have a link to the UC Cancer Institute and can rely on their teachers, who keep up with all the data through conferences and research,” Wise-Draper says. “Our experts know what the best and most encouraging data is at any given time.”

Research and early clinical trial development. “Many UC Cancer Institute clinicians are doing our own research, trying to understand why drugs do or do not work so that we can make new treatments that outsmart cancer,” Wise-Draper says.

The UC Cancer Institute also has a Phase 1 clinical trials program, which offers experimental therapies in their earliest stages to patients otherwise out of treatment options. “It’s important to understand that early trials are where novel treatments come from,” Wise-Draper says. The link between town-and-gown physicians gives all patients better access to these trials.

Better cancer care. In training the next generation of cancer care providers, the UC Cancer Institute is elevating cancer care throughout the region. “We want Cincinnatians to get cancer care here as good as anywhere in the world,” Barrett says. “When our trainees go work in community hospitals and private practices, we want to support that.”
John C. Morris, MD, co-director of the Comprehensive Lung Cancer Program at the UC Cancer Institute, has a seemingly strange goal: to put himself — and his colleagues — out of work.

Morris, who is also director of Experimental Therapeutics & Thoracic Cancer, and the Head & Neck Oncology Program, oversees UC Cancer Institute's smoking cessation program that helps more than 60 Cincinnati-area residents each year. Smoking is the leading cause of lung cancer and a contributing factor to most other cancers, not to mention heart disease. Getting people to stop smoking would mean fewer lung cancer patients, and Morris is just fine with that.

“That would be a nice reason to be put out of business,” he says. “I’m treating two people (for lung cancer) who started smoking when they were 8 years old.”

Smoking cessation is just one of more than 215 outreach programs conducted each year by the UC Cancer Institute to help prevent cancer or find it early when it is most successfully treated, says William Barrett, MD, the UC Cancer Institute director. “We are committed to working in and with the community to improve the health of all residents.”

In partnership with area companies, including Cengage, Smucker’s, and Ethicon, the UC Cancer Institute provides cancer screenings at employee health fairs. Through the First Ladies Health Day Initiative, the UC Cancer Institute offered cancer screenings and educational information for breast, prostate, and lung cancer at 23 African-American churches throughout the city. The initiative was named for the pastors’ wives at those churches who spearheaded the program in conjunction with UC Health and other local health partners.

Our ultimate goal is to reduce health disparities and educate our community to achieve health equity, says Sandra Starnes, MD, co-director of the Comprehensive Lung Cancer Center and John B. Flege Chair in Cardiothoracic Surgery. “It’s about building trust. We go into the community and meet people on their terms.”

The UC Cancer Institute reaches into the community to prevent cancer

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Findlay Market is about so much more than food. It’s about creating connections with the community. That’s the same mission Najeeb Crossley, MD; Vicky Reese, CPT; Paulette Collins, CPT; and Debbie Overly, RN, have in bringing lifesaving prostate cancer screenings and education to the Cincinnati community.
Focus on Survivorship

Services help cancer patients live their best lives

More patients than ever are surviving cancer thanks to early detection and advances in treatment. But, with the increase in survival, many patients are experiencing problems due to their treatments such as fatigue, lymphedema, and memory problems. Survivorship begins after active treatment ends, and focuses on the prevention and management of treatment-related problems, development of a healthier lifestyle, detection of recurrence or new cancers, and access to helpful resources.

"Survivorship is a necessary component of care as rates of survival continue to climb. It begins after diagnosis and continues throughout a patient’s life span," says Beverly Reigle, PhD, RN, director of the Survivorship Program at the UC Cancer Institute and associate professor in UC’s College of Nursing.

The mission of the Survivorship Program at the UC Cancer Institute is to help each patient reach their highest level of wellness and quality of life by:
- Recommending evidence-based interventions that alleviate or even eliminate the short-term and long-term effects of cancer and cancer treatment
- Monitoring survivors’ health for early detection of recurring, spreading, or new cancer
- Encouraging a healthy lifestyle through personalized nutrition and fitness recommendations
- Providing support and education resources to survivors and their families or caregivers
- Fostering research and continued education within the medical community about the unique health care needs of cancer patients and cancer survivors

"However, because it is a newer field," Reigle says, "there is a huge need for research in order to discover best practices in caring for this population." To advance that body of knowledge, our UC Cancer Institute researchers are conducting four studies funded with grants of $50,000 each from the Robert C. and Adele R. Schiff Family Foundation:

Amanda Jackson, MD, assistant professor in the Division of Gynecologic Oncology, is evaluating combined electrochemical therapy (ECT) to relieve the burning, tingling, and loss of sensation, known as neuropathy, in breast and gynecologic cancer survivors treated with chemotherapy.

Christopher Dandoy, MD, pediatric bone marrow transplant physician at Cincinnati Children’s Hospital Medical Center, is evaluating a screening tool to predict and identify cardiovascular dysfunction in children who have undergone stem cell treatment for cancer.

Ryan Gobble, MD, assistant professor in the Division of Plastic, Reconstructive Surgery, is evaluating whether the use of sphingosine could decrease the incidence of breast implant infection after breast cancer surgery.

James Whiteside, MD, associate professor in the Division of Obstetrics and Gynecology, and Jaime Lewis, MD, assistant professor in the Division of Surgical Oncology, are evaluating the use of fractional CO2 laser in the management of vaginal atrophy and dyspareunia in breast cancer survivors.

Alternative Approach

Integrative medicine offers additional therapeutic options to ease the pain and stress of cancer treatment

Mammograms, chemotherapy, and surgery have long been tools in the cancer-fighting arsenal. Now, many cancer patients are adding acupuncture, relaxation, and nutrition to their toolbox. Experts with UC Health Integrative Medicine are offering these services at the Barrett Cancer Center and in West Chester Hospital to help patients combat stress, problems with sleeping and nausea, and other effects of the disease and treatment. Among the offerings are:
- Acupuncture
- Relaxation and breathing techniques
- Medical massage therapy, craniosacral therapy, and aromatherapy
- Non-medical nutrition (what and how to eat to support good appetite, digestion, and optimal healing)
- Groups for mindful stress reduction and self-massage techniques

The focus of integrative medicine is to help the whole person achieve overall wellness, says Sian Cotton, PhD, director of UC Health Integrative Medicine. "Physicians, our licensed integrative health specialists, and patients work as partners to engage body, mind, and spirit for the optimal health of the patient," says Cotton, who is also a professor within the UC College of Medicine and director of UC’s Center for Integrative Health and Wellness. The UC Cancer Institute is proud to join the top cancer centers in the country in offering evidence-informed integrative health services as part of optimal cancer care.

Cancer is the second most common reason patients seek integrative oncology consult, usually because they have one of these three questions:
- After a new diagnosis of cancer they want to know, "What do I do next?"
- During treatment, they want to know, "What can I do to address side effects?"
- After treatments, they find out, “How can I reduce my risk of recurrence?”

"Integrative oncology treatments not only help patients feel better; scientific evidence shows that integrative techniques, in combination with traditional medical management (i.e., chemotherapy, surgery, and radiation) allow patients to live longer," says Rekha Chaudhary, MD, neuro-oncologist for the University of Cincinnati Gardner Neuroscience Institute and assistant professor of medicine in the Division of Hematology Oncology in the Department of Internal Medicine. “We treat the whole person, not just the cancer, allowing our patients to maximize their mental and physical health.”
Through the generosity of our community and supporters, the UC Cancer Institute is able to provide the highest quality patient care, foster innovative, world-renowned cancer research, and educate the brightest health care professionals of tomorrow. Along with our partners at UC Health and Cincinnati Children’s, we are working to achieve National Cancer Institute (NCI) designation as a Comprehensive Cancer Center by raising funds for research, faculty recruitments, and community outreach to address regional health disparities.

Your support can change the lives of cancer patients! We invite you to be a part of the exciting work happening within the UC Cancer Institute. To give your gift, please visit foundation.uc.edu/give. To speak with someone directly about your interest in giving, please call the UC Cancer Institute Development Office at 513-558-9931.

The UC Cancer Institute is able to provide the highest quality patient care; foster innovative, world-renowned cancer research; and educate the brightest health care professionals of tomorrow. Along with our partners at UC Health in many disciplines, including:

- UC Cancer Institute’s Comprehensive Breast Cancer Center has been reaccredited as a “Certified Quality Breast Center of Excellence” in the National Quality Measures for Breast Centers (NQMB) Program — the highest distinction for excellence. The center remains the only program in the Tristate area and one of 18 centers nationally to gain this distinction.
- ACR Breast Imaging Center of Excellence distinction for breast imaging program, which recognizes centers nationwide that successfully achieve accreditation in all of its breast imaging, including breast biopsy, ultrasound, and mammography.
- Cincinnati’s largest multispecialty physician group with nearly 800 board-certified clinicians and surgeons.
- University of Cincinnati Medical Center, the region’s largest hospital, primary referral center and provider of tertiary and quaternary care.
- University of Cincinnati Medical Center is accredited by The Joint Commission. Our Joint Commission Accreditation means that the center has demonstrated compliance with organizational, patient care, and safety standards.
- Daniel Drake Center for Post-Acute Care, Cincinnati’s premier provider of long-term acute care.
- Lindner Center of HOPE, the region’s premier mental health center.
- The UC Center for Reproductive Health and Cancer and The Young Women’s Center for Reproductive Health and Development at Cincinnati Children’s Hospital Medical Center are proud to be part of a network called the Oncofertility Consortium, a nationwide network of physicians and researchers funded by the National Institutes of Health to expand fertility options for cancer survivors. We are one of just 50 Oncofertility Consortium sites nationally, providing our patients with access to the latest clinical care initiatives and translational research in the area of fertility preservation.
- Three institutes of excellence: UC Cancer Institute; UC Neuroscience Institute; Heart, Lung, Vascular Institute.

In 2016, the UC Cancer Institute once again received full accreditation from the American College of Surgeons’ Commission on Cancer (CoC). The UC Cancer Institute is one of the CoC’s five oldest cancer programs, with the first continuous date of accreditation in January 1934.

To earn voluntary CoC accreditation, a cancer program must meet 34 CoC quality care standards, be evaluated every three years through a survey process, and maintain levels of excellence in the delivery of comprehensive patient-centered care.

UC Cancer Institute’s Cancer Committee supports the center’s commitment to providing safe, quality care and service. The multidisciplinary team — made up of physicians, researchers, social workers, nurse navigators, hospital employees, and members from the American Cancer Society — meets quarterly to monitor the performance of the hospital’s cancer program, to review available services and programs, to identify and fill gaps in service, and to monitor any care improvement initiatives. They are dedicated to ensuring that all of UC Cancer Institute’s patients receive the highest level of care.

A slice of hope
The UC Cancer Institute fundraiser known as Slice Night combines two unbeatable pastimes: eating pizza and doing good. Each fall, more than a dozen local pie makers contribute pizza, and a single entrance fee buys participants all the slices they can eat. And the whole pie — 100 percent of the proceeds — benefits cancer research at the UC Cancer Institute, and patients like Toni Kuhlman.

Kuhlman, a lung cancer survivor who says she feels like her UC Cancer Institute caregivers are part of her family, helps out each year at the event. Over its four years, Slice Night has raised $100,000 for the UC Cancer Institute. “It’s awesome,” Kuhlman says. “It just gets bigger every year.”
2017 UC Cancer Institute Commission on Cancer Performance Improvement/Accreditation Committee Membership List

William Barrett, MD, Professor & Chair, Department of Radiation Oncology; Medical Director, Barrett Cancer Center; Director, UC Cancer Institute; CoC Cancer Liaison Physician
Melissa Campbell, RN, BSN, MS, OCN, Director, Nursing Administration
Cathy Chien, Business Manager, Brain Tumor Center
Natalie Ciulla, Program Manager, UC Cancer Institute
Kara Evans, BS, MBA, Cancer Accreditation & Grants Manager, UC Cancer Institute
Casey Faber, Health Initiatives Representative, American Cancer Society
Lisa Grate, PharmD, BCP, Pharmacy Clinical Coordinator, Hematology Oncology and Bone Marrow Transplant
Kathy Gubser, Manager, Registration
Cherryanne Gunsch, DPT, CLT-LANA, Rehabilitation Services
Anumeha Gupta, MD, Hospice and Palliative Medicine Physician, Professor, Division of Hematology Oncology
Kelly Guthrie, RD, CSO, LD, Clinical Dietitian, Specialist in Oncology Nutrition
James Hill (ad hoc), Manager, Pathology
Jennifer Hopper, LGC, Licensed Genetic Counselor, CCHMC
Amanda Jackson, MD, Assistant Professor, Division of Gynecologic Oncology; CoC Cancer Committee Chair
Donnetta Jackson, CTR, Manager, Tumor Registry & Accreditation
Alison Kastl, BS, CCRC, Director, Clinical Trials, UC Cancer Institute
Tahir Latif, MD, MBBS, MBA, FACP, Professor & Interim Chief, Division of Hematology Oncology; Director, Outpatient Infusion Services
Sarah Lukey, MSW, LISW, Outpatient Social Worker, Center for Women’s Cancer
Anndee Meyer, PhD, RN, C, OCN, Nurse Navigator, Breast Cancer
Beverly Reigle, PhD, RN, Director, Survivorship Program
Carla Schutte, CTR, Certified Tumor Registrar
Mike Shook, MBA/HCM, BA, RT(T), Director, Radiation Oncology
Lawrence Sobel, MD, Assistant Professor & Diagnostic Radiologist, Department of Radiation Oncology
Rosie Thomas, RN, BSN, Clinical Director, Barrett Cancer Center
Annette Turner-Shepherd, RT(R)(M), Manager, Radiology Women’s Imaging
Lana Uhrig, RN, MBA, PhD, Executive Administrative Director, UC Cancer Institute
Jiang Wang, MD, PhD, Associate Professor, Department of Pathology and Laboratory Medicine; Director, Surgical Pathology
Michelle Woodward, MSN, APRN, OCN, CNS-BC, Clinical Nurse Specialist