

# Cancer

CENTER OF EXCELLENCE

## 2011 Annual Report



# *Our volunteers*

♥ We honor our volunteers in this year's Annual Report as they play an important role in the way we deliver patient- and family-centered care.

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Scan the QR code to learn more about the  
Cancer Center of Excellence.



# Cancer Center Overview

## Teamwork Makes All the Difference



Leadership guru Ken Blanchard said it best: “None of us is as smart as all of us.” We wholeheartedly agree, which is why we place such emphasis on teamwork — a focus that is yielding outstanding results today and exceptional promise for the future.

It starts with our transdisciplinary approach to cancer care. At the UMass Memorial Health Care Cancer Center of Excellence, teams of cancer specialists work together in the same facility where scientists and clinical investigators conduct cancer research. As a result of this close collaboration, our patients not only benefit from a wealth of clinical expertise about the most effective ways to treat their specific type of cancer, but they also gain streamlined access to knowledge from basic science discoveries and state-of-the-science clinical trials of novel therapies.

In fact, in the past year our Cancer Center’s Clinical Research Office (CRO) has expanded the number of open clinical trials by 50 percent, bringing us that much closer to our goal of having a portfolio of studies for every stage and grade of every type of solid-tumor cancer, especially for patients with advanced disease.

We also are expanding cancer care resources at our member and affiliate hospitals. The Simonds-Sinon Regional Cancer Center at HealthAlliance Hospital broke ground this year on an expansion (to be completed in 2012) that will increase the center’s size by 30 percent. Accredited by the American College of Radiology, the center also is acquiring a second state-of-the-art linear accelerator that offers image-guided radiation therapy (IGRT) and enables radiosurgery and dual-beam

treatment. Additionally, Marlborough Hospital is building a new 14,500-square-foot Cancer Pavilion to provide increased medical and radiation oncology services.

What’s more, we are establishing a network whereby UMass Memorial cancer specialists see patients at a growing number of community hospitals. Through these alliances, we can ensure that the same high-quality cancer care and access to clinical trials offered at our Worcester campus are conveniently available in the community.

Validating that the comprehensive cancer care we provide to patients is of the highest quality, UMass Memorial Medical Center was recently rated as high-performing in cancer (as well as eight other medical specialties) by *U.S. News & World Report’s* 2011–12 Best Hospitals rankings.

While we are proud of this honor, its real significance lies in what it represents to our patients and their families: that right here, close to home, they have a nationally recognized team of cancer experts on their side, dedicated to providing the highest standard of care today and translating new discoveries into the effective treatments of tomorrow.

Together, we’re making it happen.

### **Michael Blute, MD**

*Director, UMass Memorial Health Care  
Cancer Center of Excellence*

*Professor of Surgery, UMass Medical School  
Interim Director, Division of Urology, Department of Surgery,  
UMass Memorial Medical Center*

*"It's my opportunity to offer someone else some kindness."*

Ed Gardella, Volunteer  
Worcester, MA



*Ed Gardella helps patient George Phipps with a beverage.*

♥ After his own bout with cancer seven years ago, Ed Gardella vowed to give back. "I was inspired by the children I'd see getting treatment and said, 'If I get through this, I'd like to do something to help others with cancer.'" Ed spends his volunteer time bringing drinks and snacks to patients, delivering lunches to them, as well as getting a pillow, blanket or anything else to make them comfortable. He understands that when someone is ill, even little things can be very upsetting. Conversely, little things can be a tremendous blessing. "I'm amazed at the commitment and caring of the nurses and staff." Spending time at UMass Memorial gives Ed an opportunity to offer someone else some kindness. "This is the most satisfying work I've ever done."

# Report from the Cancer Committee

**A**s chair of the Cancer Committee at UMass Memorial Medical Center, I am pleased to provide a report on the 2011 activities of the Cancer Committee and our UMass Memorial Health Care Cancer Center of Excellence.

We started our year by marking the six-month anniversary of the successful move of many cancer services to the new Ambulatory Care Center. This state-of-the-art clinical space is enhanced by views of Lake Quinsigamond and the wonderful art work created by local artists. It provides staff and patients with a welcoming area that honors the work of the physicians and the courage of our patients and their families.

An important task of the Cancer Committee is to establish and monitor annual goals to provide direction for our cancer program activities. This is a required standard for accreditation by the American College of Surgeons Commission on Cancer. Goals are selected in four different areas; clinical, community outreach, quality improvement and program development. Many of this year's goals were inspired by our move to the Ambulatory Care Center. Some of these goals will be completed within a year, and some will require more time, but all are aimed at enhancing quality of care for our patients and the surrounding population. Our 2011 goals follow:

## Clinical Goals

- Finalize and implement the white cell growth factor guidelines in one year and track outcomes the following year.
- Develop and pilot a patient satisfaction survey for patients being prescribed preoperative sedation before sentinel lymph node biopsies.
- Continue to review outcomes reporting at the Cancer Committee.

- Through the Lean process, standardize 80 percent of chemotherapy orders by June 2011.
- Assist in the process of evaluating oncology electronic medical records and computerized order entry for ordering chemotherapy.



## Community Outreach Goals

- Evaluate the ability to do a telemedicine pilot program in cancer in one year at HealthAlliance Hospital.
- Provide a videoconference component at the breast conference at HealthAlliance Hospital.
- Develop an appendiceal cancer symposium.
- Identify a work group to consider developing algorithms in consultation with primary care physicians for recommendations for PSA screening in two years.

## Quality Improvement Goals

- Assess the practitioner percent of use and ease of use with the standardized antiemetic protocol.
- Outline the next steps to revising the hospital-wide pain policy through the work of the Pain Steering Committee.
- Develop a protocol for palliative sedation for patients who are receiving comfort measures for relief of severe distress.
- Assess the effectiveness of a patient navigator by examining the interval between diagnosis and treatment for lung cancer using tumor registry data.

## Programmatic Goals

- Formalize the administrative structure of the volunteer program, in conjunction with the American Cancer Society staff, and develop a tool to assess patients' experiences/satisfaction with the volunteer program.

- Complete an application for breast center accreditation from the American College of Surgeons.
- Create an ACC Operations Team to meet semi-monthly to address work flow processes, and improve patient, physician and staff experiences.
- Develop a new patient guide for oncology patients entering the UMass Memorial system.
- Complete a needs assessment for breast and GI cancer survivorship programs.
- Develop a policy and procedure for requesting tumor registry data.

The standards only require one goal for each of the four areas. It is a testimony to the strength of our program that we select several goals each year, to continually enhance the impressive work of all staff members in the UMass Memorial Cancer Center of Excellence.

In addition to establishing and achieving the above stated goals, the Cancer Committee continues to ensure multidisciplinary treatment planning for all patients; maintains a comprehensive tumor registry database for collecting data for internal use and external state and federal reporting; participates in continuous performance improvement activities and community outreach activities; and enhances the education for staff members.

I hope you enjoy reading our Cancer Center of Excellence Annual Report and learning more about our center.

Respectfully submitted,

**Kathryn Edmiston, MD**

*Chair, Cancer Committee*

## Cancer Committee Members


Michael Aronson, MD  
 Graham Barnard, MD, PhD  
 Kristen Baskerville  
 Michael Blute, MD  
 Roberta Braga  
 Amy Confalone, RN, BSN  
 Donna diBuono, CCRP  
 Michele Dilley  
 Kathryn Edmiston, MD  
 Barbara Giguere, MSN, RN  
 Veronica Gilbertie  
 Catherine Gray, CTR  
 Neil Grossman, MD  
 Dora Hallock, RN, MS, ONC, CRNI, CHPN  
 Meredith Hanrahan-Boshes, RN  
 Sarwat Hussain, MD  
 Sharon Hylka, MS, RN  
 Sidney Kadish, MD  
 Ashraf Khan, MD  
 Patricia Lacki, MSC, LCSW  
 Suzana Makowski, MD, MMM  
 Justin Maykel, MD  
 Pamela Mottla, MSM, OT/L  
 Mary Naples, RN, BSN, CAS  
 Susan Quitadamo, CTR  
 Alan Rosmarin, MD  
 Terri Russo, RN, BS  
 Suzanne Sears  
 Ellen Sharenow, PhD  
 Karen Smethers, RPh  
 Mary Sullivan, DNP  
 Peggy Thrappas  
 Mary Turvey, LICSW  
 Gopal Vijayaraghavan, MD  
 Giles Whalen, MD  
 Susan Zweizig, MD

*"It's a tremendous sense of self satisfaction."*

Neal Schreckinger, Volunteer  
Shrewsbury, MA



♥ That's how Neal Schreckinger feels about volunteering at UMass Memorial through the American Cancer Society (ACS). After retiring, he decided it was time to give back to his community. He chose to help cancer patients because many of his family members and friends had battled the disease. He enjoys the bond and rapport he has with patients who come in for treatments. "In addition to talking about the ACS programs, we talk about sports and politics, and joke around. Recently, I gave a couple some tourist information since they weren't from Massachusetts. They ended up spending some quiet time on Cape Cod." Neal enjoys being able to help others and make a difference. "It's a tremendous sense of self satisfaction."



*Andrew Evens, DO, MSc, medical director,  
UMass Memorial Cancer Center Clinical  
Research Office*

## A New and Improved Clinical Research Office Offers Hope for Cancer Patients

**W**hat a difference a year makes. Since Andrew Evens, DO, MSc, became medical director of the UMass Memorial Cancer Center Clinical Research Office (CRO) in January 2011, the number of open clinical trials has increased by 50 percent and patient enrollment is beginning at UMass Memorial member and affiliate hospitals, improving local access to novel therapies.

“Our aim is to try as much as is humanly possible to give every cancer patient — whether newly diagnosed or relapsed — the option of enrolling in a clinical trial to access new and improved therapies,” Dr. Evens said. Today, nearly 90 trials are active, including those in breast, lung, pancreatic and other gastrointestinal cancers, lymphoma, prostate and other genitourinary cancers, and leukemia, as well as gynecologic and pediatric oncology.

What’s more, research coordinators are aligned with clinical teams at the UMass Memorial Health Care Cancer Center of Excellence and attend weekly tumor board meetings. This provides a streamlined and integrated approach to identifying patients who may benefit from an appropriate clinical trial.

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But that's just for starters.

UMass Memorial has changed its cooperative group affiliation from the Chicago-based Cancer and Leukemia Group B (CALGB) to the Eastern Cooperative Oncology Group (ECOG), headquartered in Boston. One of the largest clinical cancer research organizations in the United States, ECOG conducts clinical trials in all types of adult cancers. Its proximity promises to further expand the UMass Memorial presence on the national clinical research stage and provide more opportunities for Central Massachusetts patients to access these national studies.

In addition, an effort is under way to establish a regional New England oncology clinical trial consortium comprising hospitals from throughout the region. This includes work toward master contracts and Internal Review Board (IRB) reciprocities among the universities and hospitals.

"If a trial opens at one institution, it can open at multiple sites in an expedited fashion if we establish master agreements and IRB reciprocities," Dr. Evens said. "And the faster we can get answers, the faster we can advance science."

To support these initiatives, the CRO has made important infrastructure enhancements including an updated website with improved access to clinical trial information for investigators and adoption of detailed fiscal standard operating procedures.

"Our overarching goal is to significantly expand the access of clinical trial opportunities to investigators and patients," Dr. Evens added. "This year, we've made great strides in that direction, and there's a good deal more on the horizon."

## B-SMART Trial: A Collaborative Study of the Role of MRI in Breast Cancer Pre-op Staging

A collaboration between the Comprehensive Breast Center at the UMass Memorial Health Care Cancer Center of Excellence and Texas Tech University Health Sciences Center promises to advance our knowledge of the role of magnetic resonance imaging (MRI) in surgical treatment planning for breast cancer.

The B-SMART trial (Breast Cancer Staging MAgnetic Resonance for Treatment) seeks to determine if using MRI for pre-operative staging translates into better surgical outcomes. In women with newly diagnosed breast cancer who are candidates for breast conservation surgery (lumpectomy), MRI may help to ensure that as little healthy tissue as possible is removed, preventing the need for additional surgical procedures to revise the margins and delivering a better cosmetic result.

Four hundred women are being enrolled in the B-SMART trial. Half will be randomized to undergo pre-op staging with mammogram, ultrasound and MRI, and half will undergo staging with mammogram and ultrasound alone, all followed by surgery. The primary outcome measure will be to determine if MRI makes a 10 percent difference in the margin revision rate within three years.

An earlier, similar United Kingdom trial revealed no difference, but it didn't consider breast density, noted Robert Quinlan, MD, director of the Comprehensive Breast Center.

"Because we're recording breast density in our study, we'll see if that's a characteristic that makes a difference," he said.

*"It's such a reward."*

Sandra Rice,  
Volunteer  
Uxbridge, MA



♥ Cancer patients benefit from spending time with Sandra Rice. With a strong commitment to giving back, Sandra checks in with patients to offer a snack or a warm blanket and makes sure the clinic's kitchen is stocked for the day. She enjoys meeting wonderful people. If she notices a patient who may want company, she'll sit and offer a listening ear and kind words. "I try not to talk about the disease, but rather everyday topics. It's such a reward to give back to the community."



Scan the QR code to hear the story of Sarah, a cancer survivor.



# Program Overview — Breast Cancer

## Our Comprehensive Breast Center — A Model of Integrating Multidisciplinary Care and Research

In the past year alone, the volume of new patients seeking evaluation at the UMass Memorial Comprehensive Breast Center has doubled — a testament to the high-quality, compassionate care that we deliver, and the appeal of the way in which we deliver it, including the convenience of having a wealth of diagnostic and treatment resources in a single, close-to-home location.

“The Breast Center is the model for the various multidisciplinary centers that have been developed in other specialties at the UMass Memorial Health Care Cancer Center of Excellence,” said Robert Quinlan, MD, director of the Comprehensive Breast Center.

“We bring together a care team that includes medical, radiation and surgical oncologists specializing in breast disease, along with specialists in breast imaging, pathology, genetics, plastic and reconstructive surgery, and health psychology,” he explained. This team meets weekly to share expertise on each patient’s case.

“Every newly diagnosed breast cancer patient is cared for by this group, supported by an expert team of nurses and guided through treatment by our breast cancer patient navigator,” Dr. Quinlan added. (See page 13 for more about the patient navigator.) “Care is highly individualized.”

One of the center’s strengths — underscoring its truly comprehensive offerings — is that the care team works closely with the University of Massachusetts Medical

School Department of Cancer Biology on translational research and clinical efforts to devise new, more effective breast cancer treatments. This collaboration helps to speed the time that a discovery goes from the bench to the bedside, ensuring that patients benefit from the latest advances as soon as possible.

Research efforts at the center currently focus on two key areas: earlier diagnosis of breast cancer through improved imaging, and targeted therapies that take aim at the unique aspects of each patient’s breast cancer.

UMass Medical School, in fact, is one of only five institutions in the world investigating new techniques for producing three-dimensional images of breast cancer tissue using dedicated breast computed tomography (CT). In addition to eliminating the uncomfortable compression of mammography, this new technology promises to increase the rate of detection of breast cancer, decrease false-positive results and improve treatment strategies.

Principal investigator Andrew Karellas, PhD, professor of radiology, along with colleagues Stephen Glick, PhD, and Srivivasan Vedantham, PhD, professor and assistant professor of radiology, respectively, have received more than \$3 million in National Institutes of Health funding to investigate the feasibility of a dedicated breast CT system, which produces a 3-D image of the breast that gives radiologists a better diagnostic tool for identifying potentially cancerous lesions.

“We believe that breast CT may be especially efficacious in imaging the dense breast,” Dr. Karellas noted. A prototype system is being built and will be installed at the Comprehensive Breast Center within the next year.

Another important area of translational research focuses on targeted therapies for specific types of breast cancer, namely estrogen-sensitive, HER-2/neu and triple negative cancers. Targeted therapies are drugs or other substances that block the growth and spread of cancer by interfering with specific molecules involved in tumor growth and progression.

Dr. Quinlan notes that the center’s goal is to understand why certain types of breast cancer do not respond to treatment or become resistant to treatment over time, and to identify novel therapeutic approaches to overcome this resistance.

Importantly, the Breast Center also is participating in a new clinical trial sponsored by Agendia, an outgrowth of the Netherlands’ equivalent of the National Cancer Institute. In fact, researchers are the only ones in New England with access to this company’s remarkably extensive gene-expression assay. The potential this holds for gaining insight into how cancer genes work is extraordinary.

“With the ongoing work of scientists here and around the world, the future looks bright for discovering more effective and less toxic treatments to better the lives of breast cancer patients,” Dr. Quinlan said. “Each discovery brings us that much closer to a cure.”



## Breast Cancer Patient Navigator: ‘It’s a Team Effort’

Patient navigator Linda Anderson, RN, reaches out to all patients newly diagnosed with breast cancer at the UMass Memorial Health Care Cancer Center of Excellence.

“My role is to help each patient get through treatment as seamlessly and stress-free as possible,” she said. “I go with the patient to see the surgeon, making sure the patient understands her options. From there, I set up appointments with the patient’s multidisciplinary team, keep track of lab and pathology reports, and encourage patients and families to call me any time.

“When it comes to cancer, asking questions is important” Anderson emphasized. “It’s safe to ask me anything; it’s important not to hide it like many people did years ago. I often talk to patients about body image and how their diagnosis alters that, and how to explain cancer to kids.”

Anderson notes that part of her role is to help the family as well. “It’s a team effort to get the person to wellness,” she said. Perhaps the most important message Anderson conveys to patients and families is one of hope.

“When a woman is first diagnosed it’s probably her darkest hour,” she said. “I’m here to reassure her that there is hope, that we’re able to cure many cancers today. And I’m here to help patients move forward and through the process.”

# *pink*

Lighting the Way  
to a Cure



## Pink: Lighting the Way to a Cure

Pink: Lighting the Way to a Cure is an event that celebrates the lives of those touched by breast cancer. Each October, during Breast Cancer Awareness Month, guests are invited to honor a friend or loved one by lighting a votive or pillar candle. In addition, UMass Memorial Health Care Cancer Center of Excellence physicians and researchers discuss the breast cancer research underway at the center and the exciting treatment advances it promises.

Through the sale of the candles and donations, the event also raises funds to support research, education and patient care at the UMass Memorial Comprehensive Breast Center (last year's event raised nearly \$10,000). It is hosted by the Pink Revolution, a group of women — many of them breast cancer survivors who underwent treatment at the center — who want to give back and help other women who are on the journey to fight breast cancer.

"Patients treated at the center feel a lot of respect and gratitude for the care they received," said Nannette Duquette of the UMass Medicine Development Office. "And they know that there's great research going on, including clinical trials, right here in their own backyard.

"These women want to keep their fundraising dollars local and know where they're going," Duquette added. "All proceeds from Pink: Lighting the Way to a Cure go to the Breast Center, benefiting local patients who are treated here."



*"I've met amazing people."*

Peg Bastien, Volunteer  
Worcester, MA



♥ Peg Bastien's favorite part of volunteering is seeing the patients. "I've met amazing people," she said. From the nurses to the patients to fellow volunteers, Peg says her role is rewarding. After surviving breast cancer, Peg wanted to do something as a way to recognize her caregivers at UMass Memorial, whom she described as kind and compassionate. In addition to spending time with chemotherapy patients and trying to help them keep their minds off their procedures, she helps out with the American Cancer Society's Look Good ... Feel Better program. While there is satisfaction in helping, Peg said, "What the patients give me is far more than I can give to them."

# 2011 Tumor Registry Data and Update

The staff of the UMass Memorial Medical Center Tumor Registry is proud to present a myriad of accomplishments for 2011.

Staff includes:

- One full-time manager
- Two full-time certified tumor registrars
- Two full-time oncology data technicians
- One part-time follow-up clerk

Abstracting data from the medical record into the tumor registry software requires certification. Certification is obtained through the National Cancer Registrars Association's Council on Certification. Continuing education is a requirement in order to retain certification. Our certified tumor registrars added 2,743 cases into the Medical Center tumor registry database, of which 2,523 were patients who received an initial diagnosis and/or treatment at UMass Memorial Health Care hospitals.

A typical abstract consists of 100 to 150 data items that must be coded after reviewing and assessing the entire medical record. Data collected on each case includes demographics, sites of cancer and specific types of cancer, stages of disease, treatment, and outcomes. All data is coded according to the coding conventions established and required by the North American Association of Central Cancer Registrations.

Our oncology data technicians are responsible for reviewing all malignant pathology reports, all pathology reports on benign brain and central nervous system tumors, and all oncology codes from inpatient and outpatient visits for cancer for the Medical Center.

- In one year, 26,977 pathology reports were screened, from which came 2,023 new cases and more than 290 recurrences.
- From the automated case finding report on all inpatient and outpatient billing codes, 71,080 cases were reviewed for potential inclusion into the registry, of which 819 new cases were identified that were only clinically diagnosed.
- Of the remaining cases reviewed, 29,423 had follow-up information added to the records.

From their review, the suspense system is built so the tumor registrars know which cases need to be abstracted. Our technicians also assist the tumor registrars by entering demographic and patient-specific information such as smoking history and family history.

And finally, the tumor registry collects follow-up information yearly on more than 14,500 patients. Our follow-up clerk is responsible for obtaining information on patients yearly. Data is collected through reviewing the hospital medical record system. Letters are sent to physicians in the community to obtain information if the patient hasn't been seen at the Medical Center for follow-up care.



Scan the QR code to learn more about thoracic surgery at UMass Memorial.

Outcome data are vital to researchers at the Medical Center and at the University of Massachusetts Medical School. In 2011, we established a critical link with UMass Medical School's Cancer Center Tissue and Tumor Bank. The tissue bank has provided researchers at UMass Medical School and across the country with cancer outcome data.

In addition, in 2011 we provided information to our own researchers working on a multitude of projects from the departments of surgery, radiology, pathology, medical oncology, and family medicine, including others looking at incidences of sentinel node biopsies, ductal carcinoma in situ of the breast, triple negative cancers of the breast, cases of colorectal and anal cancers, and the efficacies of a HMO on screening for cervical and colorectal cancers.

We conducted quality improvement studies with physicians and staff from many departments, such as medical oncology and genetics. Researchers who are submitting grant applications request race and ethnicity information on the cancer populations we serve, as we are the only database at the Medical Center able to provide that information on specific types of cancer. And finally, we have assisted with many marketing projects to determine the patient populations we serve and identify opportunities to expand our services.

I am proud to be the manager of a department of such dedicated and professional staff, all working with a common goal of helping national, state, local and hospital-wide efforts on the war against cancer.

Respectfully submitted,

**Catherine Gray, CTR**

*Manager, Tumor Registry*

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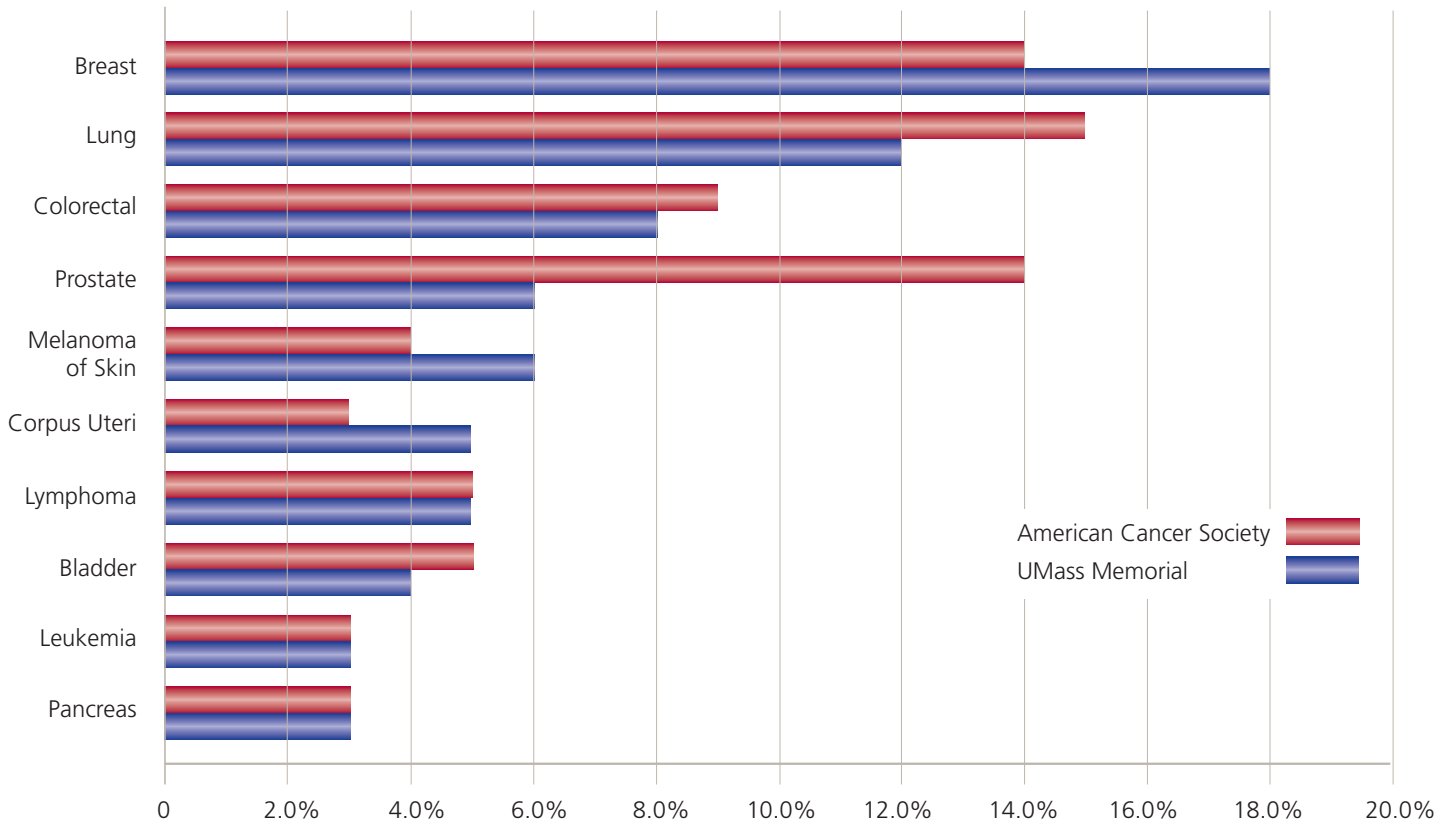
*"It fills my life."*

**Marilyn Leardi**, Volunteer  
Worcester, MA



♥ After her husband passed away, Marilyn Leardi was spending a lot of time at home alone. Her friend, another UMass Memorial cancer center volunteer, suggested Marilyn volunteer, too. "Instead of wallowing in the loss of my husband, I'm giving something back to help others," she said. Marilyn spends her time on the 6th floor of the ACC Building in the infusion area where she enjoys sitting with and talking to patients and making sure they have what they need to be comfortable. "Volunteering fills my life. It gives me something else to think about."

## Cancer incidence for UMass Memorial Medical Center compared to American Cancer Society national incidence statistics



A review of the UMass Memorial Medical Center 2010 incidence report of our top ten cancer sites demonstrates the diversity and strength of our Cancer Center of Excellence team. When comparing the 2010 incidence data to the American Cancer Society data, our expertise is identified in several key areas.

- For the third year in a row the number of breast cancer cases has far exceeded the number of cases expected. The data demonstrate the esteem at which our Comprehensive Breast Center is held in Central Massachusetts. Patients seek their care here, even when there are closer alternatives for treatment. The expert team of clinicians and scientists develops compassionate, coordinated and individualized plans of care for each patient.
- This same trend is noted for our gynecologic oncology program. Our nationally recognized team of physicians offers patients the most current advances in treatment, especially in clinical trials.

- The number of colorectal patients increases every year as patients are educated to the advantages of having their care delivered by board-certified colorectal surgeons and the importance of early screening.
- Rarely is the pancreas among the top ten cancer sites, but our Pancreas Program draws patients from all over Central New England, many of whom come to us through involvement in the Pancreatic Cancer Alliance. The alliance is a group of patients and families affected by pancreatic cancer. The alliance supports others in their fight against the disease.
- The same can be said about leukemia and lymphoma. Our Blood and Marrow Transplant Program continues to grow. The arrival of a new physician with expertise in the treatment of lymphoma has supported the growth of this program.
- Our dermatologists are experts in treating patients through Moh's procedures. The expertise of our physicians attracts patients from outside our catchment area, as noted by the increased incidence of melanomas at our Medical Center in the graph on the preceding page.
- Our multidisciplinary Lung Cancer Program cares for the high number of patients that, unfortunately, continue to be afflicted with this disease. A dedicated nurse navigator assists patients and their families through the course of treatment.
- Prostate cancer has a high incidence nationally. With promising new clinical trials and expert staff, we hope to grow the number of patients seen locally. The number of patients treated with prostate cancer continues to grow.

*"It's the best way to interact with patients."*

**Katie Mitaszka**, Volunteer  
West Boylston, MA

♥ A college student earning her physician assistant degree, Katie Mitaszka spent her summer helping cancer patients at UMass Memorial. Interacting with patients allowed her to meet early career goals, and she enjoyed talking to patients, helping nurses, taking lunch orders and transporting patients to the lobby. "I really liked it and I gained more experience in adult patient care." She added, "Volunteering is the best way to interact with patients."

Scan the QR code to hear  
Ann's cancer care story.



# Collaborating Research Throughout New England

The UMass Memorial Health Care Cancer Center of Excellence is one of three institutions to partner in the UMass/Dartmouth/Vermont Cancer Centers Collaborative Research Program Grant Initiative.

These awards provide funding for initiating collaborative efforts, including:

- Research programs
- Tumor diagnosis
- Cancer prevention and control
- Risk assessment
- Health outcomes
- Novel dimensions in cancer biology
- Therapeutic strategies
- Quality of care
- Cancer epidemiology

Applying for the grants required a partnership of two or three co-investigators from the UMass Memorial Cancer Center of Excellence, Dartmouth-Hitchcock Norris Cotton Cancer Center and/or the Vermont Cancer Center (University of Vermont). The maximum award for each grant was \$120,000 with an opportunity for a second year of funding.

The program supports basic, clinical, population-based and translational research that addresses questions relevant to cancer biology, diagnosis, treatment, and prevention, and supports up to four studies along the entire continuum of research, from bench to community.

Initially, six grants were awarded. Topics ranged from taking a closer look at protein kinase A and mechanotransduction in ovarian cancer pathogenesis, coordinating cycling and differentiation in erythropoiesis and the roles of Chk1 and MLL1, developing an Internet-based weight loss and exercise intervention for breast cancer survivors, and investigating the impact of fatty acid acquisition on diffuse large b-cell lymphoma signaling and prognosis.

The Our Danny Cancer Fund enables scientists and physician-investigators at all three cancer centers to grow these collaborations that combine expertise, strategies, perspectives and resources to develop innovative cancer research programs.

The collaborative work is tangible evidence that the medical community is making a difference in challenging the obstacles to cancer prevention, early detection, treatment and cure.

# Report from the American Cancer Society



The American Cancer Society (ACS) is a tremendous support to our patients on their cancer journey. From educational programs to transportation, hundreds of patients were assisted this year. A collaborative agreement was signed in August between the ACS and UMass Memorial signifying the continuation to work together to offer programs to patients and families. Below is a summary of the ACS work performed from September 2010 to August 2011 on behalf of UMass Memorial Medical Center patients.

- The total number of patients reached was 817. (This represents 35 percent of the Medical Center cancer patient population. Our HealthAlliance Hospital staff referred 52 percent of patients.)
  - Thanks to the **Road to Recovery** program, 33 patients received 206 rides to appointments through this volunteer transportation program.
  - 82 female patients attended a **Look Good ... Feel Better** program to help restore their self-image and cope with appearance-related side effects of cancer.
  - 12 female patients were referred to the **Reach to Recovery** program, offering support, hope and information to women with breast cancer.
  - **Personal Health Organizers** (information packets for newly diagnosed patients) were given to 553 patients.
  - Medical Center staff referred patients to the **Cancer Resource Network** to assist them with:
    - Disease information
    - Tools to help with treatment
    - Financial advice
    - Emotional support
  - Patients visited the **ACS Resource Centers** located on both the Memorial and University campuses for information on cancer and support programs. A patient navigator and three volunteers assist patients.
  - The ACS and the Medical Center collaborated to provide the **patient navigator** mentioned above. Mary Turvey, LICSW, provides information about ACS resources, Medical Center support programs and services, and community resources, and assists in meeting other cancer-related needs articulated by patients and families.
- The navigator refrains from formal assessment of patient or family psychosocial needs and does not provide medical advice. In total, 570 patients were assisted:
- 441 newly diagnosed cancer patients (within 12 months of diagnosis)
  - 129 cancer survivors (diagnosis beyond 12 months)
  - 384 caregivers; 100 received a pilot caregiver packet
- Medical Center patients represent approximately 85 percent of **Hope Lodge** Worcester guests. At the Hope Lodge:
    - 73 patients had 1,771 overnight stays (28 of these patients had multiple admissions).
    - Hundreds of rides were provided (includes rides to Brigham and Women's Hospital, Massachusetts General Hospital, Dana Farber Cancer Institute and various Worcester sites).
  - The **ACS daffodil campaign** raised \$3,095. Thanks to contributors' generosity:
    - About 150 anonymously donated bouquets of daffodils (Gifts of Hope) were given to patients March 17.
    - Children's Medical Center cancer patients were given 22 Bear Hugs (Boyd's stuffed bears), anonymously purchased and distributed.
  - UMass Memorial Medical Center coordinated a walk team, the UMass Memorial Lifesavers, for **Making Strides Against Breast Cancer/Boston**, raising \$470.
  - The Cancer Center of Excellence was the flagship sponsor for the inaugural **Making Strides Against Breast Cancer/Worcester** walk on October 23. The group was represented at the corporate kickoff breakfast on August 23, with \$10,000 exclusive level sponsorship.

# Serving and Educating Our Community

The mission of UMass Memorial Medical Center is to improve the health of the people of Central New England through excellence in clinical care, service, teaching and research. Members of the Cancer Center support this mission by developing community education and screening programs that help keep patients and families healthy. Below are 2011 highlights.

## Colorectal Cancer Education Forum • March 14

About 140 people attended our third annual event to learn about prevention, screening and the latest treatments for colorectal cancer. In addition to individual presentations, two panel discussions (one with health care experts and a second with patients in various stages of treatment) allowed participants to answer questions from the audience.

## Skin Cancer Screening Program • May 21

In our Dermatology Clinic located on the Medical Center's Hahnemann Campus, our clinicians screened about 80 individuals for skin cancer. The program was sponsored by the Medical Center and the American Academy of Dermatology.

## PMP/Appendiceal Cancer Education Forum: Awareness, Options and Advances • May 25

More than 120 people attended our inaugural education event covering this disease. Topics included a panel discussion, patient and family perspectives on the disease, wellness and advanced care decision making.

## Cancer Walk • September 25

More than 10,000 people donned their walking shoes at the 13th Annual Cancer Walk. The walk has raised millions of dollars to support cutting-edge research and clinical care at the UMass Memorial Health Care Cancer Center of Excellence and UMass Medical School.

## Prostate Cancer Education Forum • September 27

This year, 135 participants attended our program. The free event welcomed men at risk, diagnosed men and survivors, along with their loved ones and health care professionals. Topics included advances in radiation oncology, managing incontinence and impotence, the importance of a multidisciplinary team and research. The day also featured a patient panel of four speakers who shared their unique experiences.

## Pink: Lighting the Way to a Cure • October 19

Hundreds of candles burned brightly to honor, memorialize and celebrate the many lives that have been touched by breast cancer. This special evening allowed participants to hear firsthand from breast cancer survivors about their journeys, as well as Medical Center physicians' research under way and exciting advances in care for those affected by breast cancer.



### **Pancreatic Cancer Education Forum: Expert Care and Resources • November 9**

This year, about 145 people attended our program where participants learned about pancreatic cancer, the role of screening, risks, and new treatments and advances. A panel presentation included perspectives from caregivers, a pancreatic cancer survivor and family members who have supported pancreatic cancer patients.

### **Lung Cancer Education Forum: Health, Hope and Healing • November 16**

This free evening symposium welcomed about 80 patients, survivors, caregivers and those at risk for lung cancer. Participants learned about reducing risk factors, the importance of early diagnosis and early treatment, advances, as well as coping with a diagnosis.

### **Easier Than You Think – Employee Colonoscopy Screening Program**

We continued to offer this program throughout the year to employees of the Medical Center and Medical School as a way to educate staff about colon cancer and how screening saves lives. The wellness program provides incentives to employees — age 50 and up — to have a first screening colonoscopy. Employees age 40 and older with a family history or other risk factors for colon cancer are also eligible. About 550 staff has taken advantage of this benefit to date.

*"I feel I can make a difference."*

**Linda Rosky**, Volunteer  
Worcester, MA

♥ Meet Linda Rosky, a retired teacher who is giving back to the community. Our gynecologic oncology patients benefit from her philanthropic efforts each time she volunteers. Through the American Cancer Society (ACS), Linda has spent the last two years meeting with patients and helping them access cancer-specific information from which they can benefit. She is eager to share information on the many ACS programs offered to UMass Memorial patients and families, and enjoys spending time interacting with patients. The simple act of sitting with patients and talking and listening to them gives her a sense of satisfaction. "I feel I can make a difference just by listening," she said.

# National Institutes of Health Support/Grants

Adkins, N.	Role of Chromatin and ATP-dependent Remodeling on DNA DSB Processing
Bach, I.	Roles of LIM Cofactors for Regulating ERalpha During Oncogenesis and Development
Baehrecke, E.	Genetic Regulation of Autophagic Cell Death 5
Barnard, G.	A Phase II, Multicenter, Randomized, Double-blind, Placebo-controlled, Dose-ranging Trial to Evaluate the Efficacy, Safety and Tolerability of AST-120 (Spherical Carbon Adsorbent) for Eight Weeks in the Treatment of Mild Hepatic Encephalopathy
Benanti, J.	Regulation of Cellular Growth and Division by Ubiquitin-Mediated Proteolysis
Bicknell, A.	Translation-dependent mRNA Degradation in Normal and Malignant T Cells
Cantor, S.	BACH1/FANCI Checkpoint, Recombination and Chemoresistance
Carone, D.	Heterochromatin Instability and Misregulation of Noncoding RNA in Cancer
Castilla, L.	<ul style="list-style-type: none"> <li>• Mechanisms of Cbfb-MYH11 Mediated Acute Myeloid Leukemia</li> <li>• Cooperating Genes in Inv (16) Acute Myeloid Leukemia</li> <li>• Identification of CFBF-MYH11 Specific Inhibitors for Acute Myeloid Leukemia</li> <li>• Development of Inhibitors of the Leukemia Fusion Protein CBFbeta-SMMHC</li> </ul>
Clark, J.	Role of IRS-2 in Breast Cancer 1
Dekker, J.	<ul style="list-style-type: none"> <li>• Unraveling Chromatin Interaction Networks that Regulate the Human Genome</li> <li>• Structural Annotation of the Human Genome</li> <li>• Enhance Human ENCODE By Function Comparisons to Mouse</li> </ul>
Doubeni, C.	Understanding Racial and Ethnic Differences in Survival from Colorectal Cancer
Edmiston, K.	A Randomized, Double-blind Placebo-controlled Trial of Neratinib (HKI-272) After Trastuzumab in Women With Early-Stage HER-2/neu Overexpressed/Amplified Breast Cancer
Fazio, T.	The Role of Chromatin Regulation in Normal and Cancer Stem Cell Self-renewal
Field, T.	Long-Term Survivorship in Older Women with Early Stage Breast Cancer
FitzGerald, T.J.	<ul style="list-style-type: none"> <li>• Chemoradiotherapy in Subjects with Unresected, Locally Advanced Squamous Cell Carcinoma of the Head and Neck</li> <li>• A Randomized Phase III Trial Comparing Sequential Therapy With TPF/Chemoradiation (ST) to Cisplatin-based Chemoradiotherapy with Accelerated Concomitant Boost Radiotherapy (CRT) for Locally Advanced Squamous Cell Cancer of the Head and Neck</li> <li>• High-dose Cisplatin Versus Accelerated Fractionation Radiotherapy with Panitumumab in Patients with Locally Advanced Stage III and IV</li> <li>• Squamous Cell Carcinoma of the Head and Neck Radiotherapy with Concurrent High-Dose Cisplatin Versus Accelerated Fractionation</li> <li>• Radiotherapy with Panitumumab in Patient with Locally Advanced Stage III &amp; IV Squamous Cell Carcinoma of the Head and Neck</li> </ul>
Gerson, K.	MicroRNA Regulation of Breast Carcinoma Invasion
Gifford, H.	Feasibility of Multipinhole SPECT for Prostate Imaging
Glick, S.	<ul style="list-style-type: none"> <li>• Development of a Photon Counting Detector for CT Breast Imaging</li> <li>• Role of 3-D Tomography in Breast Cancer</li> <li>• Modeling of PET Imaging Systems</li> </ul>

Green, M.	Role of Lipocalin 24p3 in Apoptosis and Leukemia
Grenier, D.	Humanized Mice for the Study of Induced Pluripotent Stem Cells
Hardy, W.	Elucidation of Signal Transduction Pathways Controlling Oncogene-induced Senescence in Melanoma and Breast Cancer
Houghton, J.	<ul style="list-style-type: none"> <li>• Stem Cells and Gastric Cancer</li> <li>• Inhibition of Fas-Apoptosis in Gastric Cancer</li> </ul>
Houston, T.	QUIT-PRIMO: Web-delivered Clinical Microsystem Intervention for Tobacco Control
Hsieh, C-C.	<ul style="list-style-type: none"> <li>• In Utero Influences, Breast Stem Cells and Breast Cancer Risk Factors</li> <li>• Stem Cells and Perinatal Factors for Breast Cancer Risk</li> </ul>
Imbalzano, A.	Transcription Factor Function in Chromatin
Jones, S.	The Role of MDM Proteins in Cell Growth and Tumorigenesis
Karellas, A.	Role of 3-D Tomography in Breast Cancer
King, M.	<ul style="list-style-type: none"> <li>• Digital Restoration of SPECT Images for Tumor Detection</li> <li>• Patient Motion Detection and Compensation in SPECT</li> </ul>
Kowalik, T.	Cytomegalovirus and Nuclear Tumor Suppressors
Lawrence, J.	<ul style="list-style-type: none"> <li>• Translating Dosage Compensation to Trisomy</li> <li>• Nuclear and Chromatin Packaging of Mammalian X Chromosome</li> </ul>
Lewis, B.	<ul style="list-style-type: none"> <li>• Involvement of miRNAs in Kras-induced Pancreatic Tumorigenesis</li> <li>• Molecular Dissection of Pancreatic Ductal Adenocarcinoma</li> <li>• Molecular Mediators of Metastasis in Hepatocellular Carcinoma</li> </ul>
Li, S.	<ul style="list-style-type: none"> <li>• Efficacy of IPI-926 and IPI-493 in BCR/ABL CML Model</li> <li>• Targeting Leukemia Stem Cells Through Inhibiting the Alox5 Gene Function</li> <li>• Targeting Leukemia Stem Cells in Ph+ Leukemia</li> <li>• Survival Mechanisms of Cancer-initiating (Stem) Cells in Ph+ Leukemia</li> </ul>
Liu, Q.	Breast Cancer Treatment with Antibody Targeted T Cells
Lyle, S.	LEF/TCF Function in Adult Stem Cell Fate and Tumorigenesis
Mao, J.	<ul style="list-style-type: none"> <li>• Hedgehog-Gli-Activation in Rhabdomyosarcoma</li> <li>• Gli-Mediated Transcriptional Regulation in Medulloblastoma</li> </ul>
Mardilovich, K.	Upregulation of IRS2 by Hypoxia Protects Breast Carcinoma Cells from Apoptosis
Marinus, M.	DNA Mismatch and Double-Strand Break Repair
Mazor, K.	<ul style="list-style-type: none"> <li>• Cancer Research Network Across Health Care Systems – CRN Pilot: Studying Communication in Cancer Care</li> <li>• Cancer Research Network Across Health Care Systems – Health Literacy</li> <li>• Effective Communication for Preventing and Responding to Oncology Adverse Events</li> <li>• Formative Research to Prepare to Assess Patient-centered Communication in Cancer Care</li> </ul>
Mercurio, A.	Integrin Function and Signaling in Carcinoma Progression
Moormann, A.	T Cell Immunity in Endemic Burkitt Lymphoma

*Continued on next page*

Continued

Ockene, J.	<ul style="list-style-type: none"><li>• RCT for Smoking Cessation in 10 Medical Schools</li><li>• Urinary Levels of Melatonin and Risk of Breast Cancer</li></ul>
Pellish, R.	Impact of Experience with the Third Eye Retroscope on Detection Rates and Withdrawal Times During Colonoscopy
Raffel, G.	Yolk Sac Progenitors as a Developmentally-restricted Target Population for Congenital Leukemia
Rando, O.	Genomic Analysis of Histone Replacement Dynamics in Yeast
Rhind, N.	<ul style="list-style-type: none"><li>• Single Molecule Analysis of the Regulation of DNA Replication Origin Firing</li><li>• Mechanism of the S-Phase DNA Damage Checkpoint</li><li>• Enhancing Glioma Chemotherapy by Suppressing Notch Signaling</li></ul>
Rock, K.	<ul style="list-style-type: none"><li>• Immunobiology of CTL Responses to Exogenous Antigen</li><li>• Immunobiology of MHC Restriction of T-Cells</li></ul>
Rooney, T.	Understanding Breast Cancer Through BACH1 Clinical Mutations
Santra, M.	Characterization of FBXO31 Tumor Suppressor Function and Identification of Therapeutic Targets for FBXO31-deficient Cancers
Shaw, L.	<ul style="list-style-type: none"><li>• IRS-2 Function in Tumor Progression and Metastasis</li><li>• Insulin Receptor Substrate Function in Breast Cancer</li></ul>
Sheppard, S.	<ul style="list-style-type: none"><li>• MicroRNA Control of Angiogenesis</li><li>• Effectiveness of Screening Colonoscopy for Reducing Risk of Death from Colorectal Cancer</li></ul>
Simmons, M.	Mechanism(s) of Notch1 Activation in T-ALL
Sluder, G.	Centrosome Reduplication and Consequences of Cleavage Failure/Prolonged Mitosis
Stavnezer, J.	C-myc DNA Breaks and C-myc-IgH Locus Translocations: Roles of AID and Oxidation
Stein, G.	<ul style="list-style-type: none"><li>• Bone Cell Structure and Gene Expression</li><li>• Cell Cycle Regulation of Histone Gene Expression</li><li>• Nuclear Structure and Gene Expression</li><li>• Architectural Epigenetics of Embryonic and Induced Pluripotent Stem Cells</li><li>• Runx Control of Prostate Cancer Bone Metastasis</li></ul>
Tseng, J.	<ul style="list-style-type: none"><li>• Determining the Optimal Sequencing Strategy for Pancreatic Cancer Treatment</li><li>• Development of a Prediction Rule for Cystic Lesions of the Pancreas</li></ul>
van Wijnen, A.	Bone Cell Growth Regulation by Runx2/Cbfa1
Vedantham, S.	Design and Optimization of Dedicated Computed Tomography of the Breast
Wassef, W.	Race Dependent Risk Pancreatitis
Yang, X.	Epigenetic Regulation of Integrin Beta4 Expression and Basal Breast Cancers
Yunus, S.	Myraid Pharm/MPC-6827-01 Phase II Study of Azixa (MPC-6827) for the Treatment of Patients with Recurrent Glioblastoma Multiforme
Zhang, H.	Genetic Pathways of Replicative Senescence and Its Function in Tumorigenesis
Zweizig, S.	<ul style="list-style-type: none"><li>• Gynecologic Oncology Group</li><li>• Precision Therapeutics/CT9 ChemoFx Observational Study</li></ul>

# Cancer

## CENTER OF EXCELLENCE



UMassMemorial  
Health Care



University of  
Massachusetts  
UMASS Medical School

At the UMass Memorial Health Care Cancer Center of Excellence, our philosophy of care centers on hope as we treat our patients and their loved ones with compassion and commitment throughout their cancer journey, from prevention and diagnosis through treatment, survivorship and palliative care. We encourage our patients to take part in our clinical trials in order to rapidly benefit from therapies that will be the cancer care of the future.

Combining the resources of our member and affiliated community hospitals, and our teaching and research partner, the University of Massachusetts Medical School, the Cancer Center of Excellence provides the most complete, multispecialty cancer care in Central New England and is a leader in treating breast, colorectal, lung and pancreatic cancers, and other common and rare cancers.

Contributions to UMass Memorial Health Care Cancer Center of Excellence are deeply appreciated. Call 508-856-5520 or e-mail [giving@umassmed.edu](mailto:giving@umassmed.edu).

[www.yourhopeline.org](http://www.yourhopeline.org)    Tel: The HOPE Line, 866-597-HOPE (4673)

UMass Memorial Cancer Center of Excellence is accredited by the following:



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