Discoveries
A UMass Memorial Health Care Cancer Center of Excellence Newsletter

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Dear Colleagues,

Welcome to the inaugural newsletter of the UMass Memorial Health Care Cancer Center of Excellence. This newsletter confirms these are exciting times for cancer research and cancer care at our health care system. We opened the Ambulatory Care Center (ACC) in Worcester one year ago. The ACC supports our commitment to provide complex multidisciplinary and innovative care. We are strengthening linkages with our community oncology network and expanding medical oncology and radiation oncology with our partners at the Simonds-Sinon Regional Cancer Center at HealthAlliance Hospital, Burbank Campus and Marlborough Hospital.

Our Cancer Center continues to evolve, based on recent strategic planning that projects growth over the next 3 to 5 years. Our physicians seamlessly collaborate with cancer researchers to understand the underlying mechanisms of the disease so we can discover new knowledge that will lead to better therapy. The goal of our Cancer Center of Excellence is to provide high quality, compassionate care while offering more effective treatment through the advancement of novel therapies through clinical trials.

At the same time we need to provide training to young researchers and clinicians to care for future cancer patients. Physicians, nurses, laboratory technicians, scientists, pharmacy, ancillary and administrative personnel know all too well the suffering cancer can bring to patients and families. I’d like to thank them for working together to rapidly move discoveries to more effectively treat cancer with less toxic side effects. This and future newsletters will attest and highlight the many and diverse dimensions of our Cancer Center of Excellence. As we strive to conquer cancer and set the standard for personalized care I’d like to thank our leadership team and the Cancer Center of Excellence membership for providing patients with the best possible care and providing the ability to identify and validate therapies that will be delivered as the cancer care of the future.

Our UMass Memorial Health Care Cancer Center of Excellence Senior Management Team:

Michael Blute, MD, Director
Andrew Evens, DO, Deputy Director
Arthur Mercurio, PhD, Associate Director, Basic Cancer Research
TJ Fitzgerald, MD, Chair, Community Oncology
Sharon Hylka, Senior Vice President
Terri Russo, Deputy Director, Clinical Operations
Suzana Makowski, MD, Associate Director, Palliative Care
Gary Stein, PhD, Co-Director
Giles Whalen, MD, Deputy Director, Cancer Surgery

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.

UMass Memorial Health Care is the largest not-for-profit health care system in Central Massachusetts with 1,700 physicians and more than 13,000 employees. Our member hospitals, all fully accredited by The Joint Commission, are:

- Clinton Hospital
- HealthAlliance Hospital
- Marlborough Hospital
- UMass Memorial Medical Center
- Wing Memorial Hospital and Medical Centers

The UMass Memorial Health Care Cancer Center of Excellence is proud to be accredited by:

- Designated Centers of Integrated Oncology and Palliative Care
- Commission on Cancer

Michael Blute, MD
Located in North Central Massachusetts, HealthAlliance Hospital’s Simonds-Sinon Regional Cancer Center (SSRCC) is undergoing an expansion on the Burbank Campus in Fitchburg. The expansion will increase the size of the center by thirty percent; increasing the capacity of both Medical Oncology and Radiation Oncology.

The Center provides cancer care to all types of cancer. Care including diagnosis and treatment such as chemotherapy and biotherapy, supportive and symptom management, and pain management. Last year alone medical oncology provided over 11,500 patient visits. With the expansion totaling 22 treatment chairs and 9 exam rooms, Medical Oncology will enhance treatment capacity and improve patient flow, convenience, privacy and safety. A new state-of-the-art pharmacy within the center will provide personalized pharmacist involvement and intervention.

Radiation Oncology expansion will add a second new state-of-the-art linear accelerator (LINAC) to complement the current upgraded LINAC. Also added will be improved clinical space for examinations and follow-up care. Much attention was given in the design to patient convenience, access, privacy and safety. Last year radiation oncology provided 10,600 patient visits, showing a need in this area for the expansion.

The SSRCC is accredited by the American College of Surgeons Commission on Cancer with commendation and is dedicated to providing quality cancer care close to home. As a part of UMass Memorial Health Care Cancer Center of Excellence, the Center’s commitment is to offer patients in the North County convenience, quality of life and positive cancer outcomes. The Center is staffed with medical oncologists, radiation oncologists, oncology certified nurses, social workers, dedicated pharmacy staff, dietician services and dedicated resource volunteers. Also included is the Simonds-Hurd Complementary Care Center offering the community massage, acupuncture, Reiki, and a series of wellness programs.

The Simonds-Sinon Regional Cancer Center is fully operational during construction, which is being completed in a series of eight phases. Phase 1 is nearing completion and the entire project will be complete in early 2012.

For more information, call 978-343-5084.

“This project represents a major investment in North Central Massachusetts and in Fitchburg. The expansion is not only bricks and mortar but focused on providing an exceptional patient experience.”

- Patrick Muldoon
HealthAlliance President & CEO
Hope Lodge Worcester Celebrates 27 Years

Over the past 27 years, UMass Memorial Medical Center patients and their families have called the American Cancer Society’s Hope Lodge a home away from home. This Worcester facility welcomes patients who live more than 40 miles from the hospital where they are receiving care and who are undergoing active outpatient cancer treatments.

“Twenty-six years ago, a few people had the idea of coming up with a way to ease the burden of those traveling to Worcester for cancer care,” said Sidney Kadish, MD, radiation oncology, one of the founding members. “Hope Lodge created a home-like atmosphere for those patients and families.”

When the American Cancer Society opened the doors of the Hope Lodge in 1985, it was the first facility of its kind in Massachusetts and a beacon of hope for cancer patients who traveled to receive treatment all at no cost to the family.

Since then, it has provided more than 62,500 nights of lodging and support to guests of all ages from across the nation and around the world. Since 2005, staff has provided more than 4,440 free rides to and from treatment in Boston and Worcester.

Just three miles from UMass Memorial Medical Center, this beautifully appointed historic home has many amenities designed for guests’ comfort, including around-the-clock support and transportation to and from treatment. The average stay at Hope Lodge is eight to 10 weeks — saving an estimated $4,000 in hotel and meal costs.

According to Audrey Kurlan-Marcy, past president, Hope Lodge Board of Trustees, and volunteer patient liaison, “We have the best cancer care being offered right in our own back yard. Hope Lodge allows patients to have access to lifesaving care and treatment not available near their home.” For more information on Hope Lodge, please call 508-792-2985.

Advocacy & Support

The American Cancer Society and UMass Memorial Medical Center: A Partnership that Saves Lives

The American Cancer Society and UMass Memorial Medical Center share a common goal of saving more lives from cancer, and together their efforts are making a difference for cancer patients and their families throughout the region.

The two organizations work in collaboration to combine forces on a number of key initiatives, including cancer research, advocacy, and community outreach efforts. Additionally, the hospital further assists cancer patients in their journey by providing information about American Cancer Society programs and services.

“Our collaboration with UMass Memorial Medical Center enables us to provide the best possible care to those who are diagnosed with cancer, while promoting our overall goal of eliminating cancer as a major health problem,” said Zana Baruch, the Society’s Area Director for Health Initiatives. “Together
we are creating a world with less cancer and more birthdays.”

One way the collaboration improves care for cancer patients is through research. Over the last 30 years, the Society has funded $10.6 million in cancer research at the University of Massachusetts Medical School, and $9.3 million at our Medical Center. Former research grantee Craig Mello, PhD, a professor at UMass Medical School, is one of the 44 Nobel Prize winners whom the Society funded early in their scientific careers.

For cancer patients and caregivers who need to travel long distances to Worcester for treatment, the Society provides a free home away from home at their Worcester Hope Lodge, and an American Cancer Society Patient Navigator (Mary Turvey) works in a shared position at UMass Memorial Medical Center to serve as a personal guide for cancer patients, their families and caregivers, offering additional resources to individuals facing logistical, emotional, or cultural barriers.

Other programs and services offered to patients include free transportation to and from treatment appointments through Road to RecoverySM; helping cancer patients cope with appearance-related side effects from cancer treatments through Look Good. . .Feel Better®; and this year, as a flagship sponsor of the first ever American Cancer Society Making Strides Against Breast Cancer walk in Worcester, UMass Memorial will be encouraging the local community to get involved in the fight against breast cancer.

Several members of our staff are also engaged at many levels with the American Cancer Society. Alan G. Rosmarin, MD, Chief, Division of Hematology/Oncology and an incoming member of the Society’s New England Division Board of Directors, is one of several physicians and senior executives who volunteer on the Society’s Worcester Hope Lodge Advisory Committee, to support the mission of the Lodge by ensuring all operations are running smoothly. For more information, call 1-800-227-2345.

A Personal Tragedy Led to Inspiration

In late 1994, Dottie and Dan Manning Sr. lost their 21-year-old, son Danny Jr., to a rare form of leukemia. Devastated by their loss, they wanted to help cancer patients and their families.

The Our Danny Cancer Fund was established in 1995 from a dream he had several years ago. Danny dreamed of the day when he would be cancer-free and able to resume his life as a 21-year old. Education, marriage and children were all part of Danny’s dreams that were left unfulfilled.

“My family started the Our Danny Cancer Fund in 1995 because we didn’t want any other family to go through what we had been through. We knew research was the only way to survive cancer. Back then (1995) cancer was referred to as a letter…the Big C and usually ended in death. By starting this cancer fund, one of the first of its kind at University of Massachusetts Medical School, we were putting our grief into action” said Dottie.

But as life would have it, Dan Sr., (Director of Public Safety at UMass Medical School) was diagnosed with esophageal cancer and died in 1997. Her husband’s death only made Dottie more passionate to increase support for cancer research.

“We all depend on others to help us, take care of us, and love us. Research is helping so many who have heard the word “cancer” in their lives. Because of cancer research we can label it, control it and in many cases we have cured cancer. What a gift to cancer patients and their families,” states Dottie.

The Our Danny Cancer Fund is thankful for the past, present and future researchers who have dedicated their lives to curing cancer.
UMass Memorial Health Care Cancer Center of Excellence: Collaborative Research Program Grant Initiative

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 research programs, novel dimensions in cancer biology, tumor diagnosis, therapeutic strategies, cancer prevention and control, quality of care, risk asessment, cancer epidemiology and health outcomes. Investigators from the three cancer centers were eligible to apply. Every grant required a partnership of two or three co-investigators from the UMass Memorial Health Care Cancer Center of Excellence, Norris Cotton Cancer Center, or the Vermont Cancer Center. 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 which addresses questions relevant to cancer biology, diagnosis, treatment, and prevention and to support up to 4 studies along the entire continuum of research, from bench to community. Pursuit of fundamental mechanisms of cell and tissue function that can be translated to increased understanding of neoplastic disease is be encouraged, as well as studies which partner scientists and clinicians to develop novel approaches to tumor biology, pathology and therapy. Studies in the areas of psychosocial, behavioral, epidemiologic, palliative care, disparities research and health services research, which address prevention and control, cancer-related health policy or services, cancer in the poor and underserved communities, and clinical trials were funding priorities.

All applications are reviewed by a committee comprised of extramurally funded investigators from the three cancer institutions. Criteria included scientific merit, collaborative emphasis, and likelihood of pilot data necessary for a proposed subsequent grant application.

For more information regarding the UMass Memorial Health Care Cancer Center of Excellence Collaborative Research Program Grant Initiative, please call 508-856-3818.

Tissue Procurement in Support of Translational Cancer Research

The objective of the Tissue Bank is to systematically collect, store, and distribute human tissues to researchers to facilitate basic science, clinical research, and translational studies. The primary focus of the is to support research projects dedicated to improving the understanding, care, and treatment of individuals afflicted by cancer.

Excess surgical specimens are collected fresh and routinely snap frozen, frozen in OCT, and formalin fixed followed by paraffin embedding. Tumor tissue with matched normal (when available) has been collected from more than 3000 patients since the Tumor Bank was established in 2006. Anonymous, de-identified clinical and pathologic data are linked to the specimens in a secure database. Other disease tissues are collected per request, (e.g. cirrhosis, fibrotic disease, Crohn’s disease). Specific study needs can be met. For example, fresh tissue has been collected in media for a variety of research projects and has resulted in new cancer cell lines being established. Another project involved the collection of tissue scrapings, biopsy cores and cytology fluids...
and supported the testing and optimization of a new cytology machine invented at UMass Medical School. Genetic mutations were tested in 50 colon cancers and matched controls for a sponsored research project.

In addition to tissue collection, bone marrow and blood specimens are collected in conjunction with a clinical trial established by Jan Cerny, MD. Archived specimens with clinical follow-up are also available in collaboration with the Department of Pathology. The Tissue Bank offers a variety of services including routine histology, fresh tissue for cell culture, frozen sections, as well as DNA and RNA extractions. For more information on the Tissue Bank, please call: 508-856-4432.

The Clinical Research Office: Promoting Cutting Edge Clinical Research

The Cancer Research Office (CRO) at the UMass Memorial Health Care Cancer Center of Excellence provides a wide array of clinical research support services to investigators conducting cancer clinical research. In the past decade, there has been an explosion of knowledge through laboratory and translational research into the mechanisms of oncogenesis and the related discoveries ‘targeted therapeutics’ for the treatment of cancer. There are hundreds of such novel therapies being studied in clinical research that target specific proteins on the surface of cancer cells and/or seek and destroy the DNA/cell signaling of tumor cells. By delivering such personalized therapy, the expectation is effective and safe treatment for patients.

The overall mission of the CRO is to facilitate the development, conduct, quality assurance monitoring, regulatory compliance, and evaluation of high-level cancer-related clinical research. Clinical trials coordination and data management in the CRO are provided by research nurses, clinical research coordinators (CRCs), and data managers who work closely with the clinical care teams to directly coordinate and facilitate all clinical trial activities. The clinical research staff of the CRO are divided into disease-based specialty teams to support the multidisciplinary clinical oncology teams/clinics. The CRCs, research nurses, and regulatory coordinators also work closely with the Clinical Operations Manager (Meredith Hanrahan-Boshes) and Quality Assurance Manager (Annette Larsen).

In addition, the CRO is working towards expanding its research capabilities through its member and affiliate institutions such as the Simonds-Sinon Regional Cancer Center at HealthAlliance Hospital on the Burbank Campus. The CRO has also initiated a grassroots effort to partner with regional (New England) institutions to collaborate on clinical trials. The CRO strives to provide cancer clinical investigators and patients access to the most current and cutting-edge therapies available for the treatment of cancer. To contact the Clinical Research Office, call: 508-334-7200.

“...the unique role that academic medical centers can play is to turn fundamental discoveries into potential cures for patients. Nowhere is this more important than in cancer, where we unfortunately continue to have too few cures with current therapies. We have experienced tremendous growth of fundamental discovery here at UMass Medical School in Worcester, in areas such as RNA biology and immunology. It is now time for us to take the lead in making those discoveries available as experimental therapies for cancer patients in our community.”

- Terrence R. Flotte, MD
Dean of the School of Medicine, Executive Deputy Chancellor of the University of Massachusetts Medical School
Prostate cancer (PrCa) is the most common noncutaneous malignant disease and the second leading cause of cancer-related deaths among men in the United States. Incidence varies considerably between countries and appears to be increasing as a result of more frequent and improved diagnostic tests, an aging population, and likely increase in the occurrence of the disease.

At presentation, PrCa is highly responsive to anti-androgen treatment. However, patients with long-term application of treatment can evolve to the disease resistant to androgen ablation, commonly referred to as HR disease or castration resistant disease. To complicate matters, patients treated with long-term hormone therapy are now at risk for developing diabetes, cardiovascular disease, and osteoporosis. Identifying an alternative treatment strategy for hormone therapy will be an important translational science endeavor for patient care.

In addition to hormone ablation therapy (HBT), radiation therapy (RT) is an important primary treatment modality for localized PrCa, and recent advances in volumetric based intensity modulated radiation therapy (IMRT) and image guided radiation therapy (IGRT) have permitted RT dose escalation beyond 75 Gy with external therapy. This has reduced both biochemical failure rate and the development of metastasis. Despite these advances, patients with both intermediate and high risk features can still relapse after definitive hormone treatment and/or RT. One possible reason for these failures from RT may be due to the intrinsic radioresistance of a subpopulation of prostate tumor clonogen within the tumor. PrCA contains a variety of heterogeneous cell subpopulations characterized by over expression of oncogenic proteins such as epidermal growth factor receptor (EGFR), sonic hedgehog, Wnt/β-catenin, c-Myc, Akt and nuclear factor-kappaB (NF-κB) or inactivation of distinct tumor suppressor proteins such as phosphatase tensin homolog deleted on chromosome 10 (PTEN), Nkx3.1, p27KIP1, p53 and retinoblastoma (pRb). These molecules may cooperate for malignant transformation, tumor development, metastases and HBT resistance.

Thus, elucidating the mechanisms of malignant progression from androgen dependence to independence and finding a molecular target for treatment of PrCa by increasing the efficacy of RT is an important strategy for improved management of PrCa.

Our long-term research goal is to identify molecules for target therapy in combination with conventional radiation therapy to improve treatment outcome of cancer patients, especially high risk prostate cancer patients. We have been focused on radiation biology of prostate cancer. Our recent studies have uncovered: 1) The role and mechanisms of integrin-JNK-androgen receptor in prostate cancer progression from androgen dependent to androgen independent phenomenon; and 2) identification of cell-matrix interaction and antiapoptosis pathways regulation of radioresistance of prostate cancer. Androgen receptor (AR) plays a central role in regulating prostate cancer. We hypothesize that AR, as well as its variants, modulate cell functions in the neoplastic prostate, and this pathway may provide a novel target for prostate cancer therapy. In addition, we are also interested in role of epigenetic modifications (such as DNA methylation) and cell surface peptide receptors in differentiation of prostate cancer cells which are resistance to radiotherapy. One of these receptors is neurotensin receptor 1 which has been found to be associated with androgen independent phenotypes and development of neuroendocrine PrCA.

There have been significant advances in the past decade for patients affected with prostate cancer using of surgery, radiation therapy, and hormone treatment. Many patients are now rendered disease-free after careful application of modern therapy. Translational science and strategic molecular-based treatment applications identify treatment strategies to bring the same success to the rest of the prostate cancer patient population.
Located on the 5th floor of the new Ambulatory Care Center (ACC) in North Oncology adjacent to Breast Imaging, the Comprehensive Breast Center has a care team which includes medical, radiation, and surgical oncologists specializing in breast disease. They in turn depend on similar breast specialists in breast imaging, pathology, genetics, plastic and reconstructive surgery, as well as clinical health psychologists. Each and every newly diagnosed breast cancer patient cared for by this group is guided by a compassionate, professional, expert team of nurses led by our specialized Breast Cancer Navigator.

The care team also collaborates with the Department of Cancer Biology to devise translational research and clinical efforts to better the lives of our breast cancer patients.

Two major research efforts at the Comprehensive Breast Center are aimed at 1) better diagnosis of early breast cancer through improved imaging and 2) improved targeting of each person’s very individual breast cancer.

We were awarded one of only 5 federal grants to study the use of CT scanning in breast cancer and have raised over $500,000 to build and house the new machine in the ACC. This new scanner will allow research on a truly 3-dimensional evaluation of healthy women who are being screened for breast cancer and of women and men who have been diagnosed.

Another translational area of research at UMass Memorial Medical Center is the potential targeting of currently non responsive cancer. Currently, there are 3 predominant “molecular signatures” of breast cancer, namely estrogen sensitive, Her 2 neu positive, and Triple Negative. Our tissue bank of solid frozen tumors includes a significant number of breast cancers which can be used to aid these research efforts.

Several labs at UMass Medical School are actively investigating the biology of Triple Negative Breast Cancers (TNBC’s) with the goal of developing novel approaches to the treatment of this aggressive subtype of breast cancer. TNBC’s, so called because they lack expression of the estrogen, progesterone and HER2 receptors, occur in 12-17% of women with breast cancer and more often in young women, especially of African American and Hispanic descent. Patients with TN tumors have a worse overall prognosis than patients with hormone receptor positive tumors due to the fact that current targeted therapies for breast cancer are ineffective on TN tumors. These labs include: The Simin lab (developed a mouse model for TNBC), the Mercurio lab (also developing novel approaches to treat TNBC) and the Cantor lab (using shRNA screens to identify genes and pathways that contribute to resistance to platinum-based chemotherapies). An ongoing Neo-adjuvant multidisciplinary study led by Co-PIs Kathy Edmiston, Ashraf Khan and Leslie Shaw is aimed at identifying novel mechanisms of resistance to Herceptin in HER2 positive breast cancer patients. Biopsies are collected pre- and post-Herceptin treatment, and total gene expression analysis is performed to identify indicators of both response and resistance to this drug. The goal of these studies is to improve the identification of patients who will benefit from this treatment option, and to identify novel therapeutic approaches to overcome resistance.

Finally, the Breast Program is in discussion to participate in a new clinical trial sponsored by Avendia to develop new signatures for response to chemotherapy. The advantage of this trial will be that researchers at UMass will have access to the full gene expression data of all tumors screened in this clinical trial for research purposes.

The UMass Memorial Medical Center’s Comprehensive Breast Center is a part of the National Accreditation Program for Breast Cancer Centers.

For more information on the Comprehensive Breast Center, call: 508-334-1097.
In 2009, UMass Memorial Health Care Cancer Center of Excellence introduced a thoracic oncology multidisciplinary team approach for lung cancer care. The team clinic is held every Friday morning in the Ambulatory Care Center (ACC). The team includes a Medical Oncologist, Radiation Oncologist, Thoracic Surgeon, Clinical Health Psychologist, Nurse Practitioner, Oncology Certified Nurse Navigator, Oncology Certified Research Clinical Nurse, and Social Worker. This team approach to care occurs in one visit with three steps: 1) the patient has one appointment; 2) all of the disciplines meet pre-appointment at the Thoracic Tumor Board; 3) the team meets post-appointment to devise an individualized plan of care.

The Patient Navigator identifies barriers to care, assists with issues, develops relationships with health care Providers, and keeps communication open with all providers, patients, and caregivers as services are coordinated throughout the our system, and at affiliated facilities within the community.

There are many options for thoracic cancer treatment at UMass Memorial Health Care Cancer Center of Excellence. These include Clinical Research Trials and molecular biomarkers which are critical for cancer detection, diagnosis, follow-up, prognosis and therapy.
Excellence in Pancreatic Cancer

Pancreatic cancer is the 4th leading cause of cancer death in the United States. The five year survival rate is only six percent and there are no early detection methods. At UMass Memorial Health Care Center Cancer of Excellence, the Pancreas Program seeks to make a difference for patients and families facing this difficult diagnosis. Our multidisciplinary team has developed a program that integrates our patient-oriented research with multiple clinical disciplines in order to optimize patient care and outcomes. The Pancreas Program has also created strong ties with the community through the Pancreatic Cancer Alliance, a local volunteer organization. The combination of clinical excellence, innovative research and community partnership has created a uniquely caring and progressive program.

One of the highlights of the program is the availability patients have to cutting edge clinical trials. To increase the number of clinical trials available, the Pancreas Program faculty have joined the Pancreatic Cancer Research Team, a group of distinguished investigators dedicated to developing new treatments. Because of this effort, UMass Medical School has pancreatic cancer clinical trials that are not available at other institutions in the Northeast.

The Pancreas Working Group is another important aspect of the program. All UMass Medical School researchers interested in pancreatic cancer are invited to participate in monthly meetings. The group openly exchanges research findings and discusses collaborations and joint grant proposal opportunities. This open discussion is key for developing new ideas and advancing pancreatic cancer research at UMass Medical School. We are also piloting a Massachusetts Pancreatic Cancer Collaborative with investigators at other regional institutions, so that our complementary strengths can benefit researchers, patients, and the community as a whole.

Increasing awareness of pancreatic cancer and available treatment options is vital to improving diagnosis and outcomes. Annually, the Program holds a Pancreatic Cancer Symposium. This year, it will be held on Wednesday, November 9 in the UMass Medical School Faculty Conference Room. The Symposium offers an excellent opportunity to educate medical professionals, patients and family members about ways to improve care for pancreatic cancer patients and highlights resources available through the UMass Pancreas Program.

For more information on the Pancreas Program, call 508-856-8663.

PATIENT TESTIMONIAL

"Four years ago, I heard the words pancreatic cancer. I read the research and I made peace with myself, then I met my doctors and the team at UMass Memorial. They gave me hope; they were upbeat and positive. With surgery, chemo and radiation, I am now cancer free. I told my doctor that I am getting ready to celebrate my anniversary of my surgery and she said, whad to you mean your anniversary? It's our anniversary!"

- Alan Beck

Ribbon image is composed of the UMass Medicine Cancer Walk team t-shirts.

Contributions to UMass Memorial Health Care are deeply appreciated. Call 508-856-5520 or e-mail giving@umassmed.edu.
Palliative Care

Palliative Care has become an integral service in the Comprehensive Cancer Center, providing patients with expertise in the management of complex symptoms, whether physical, emotional, or spiritual. Each Wednesday morning from 8-9:30 am, the interdisciplinary palliative care team meets at the ACC building on the 4th floor to discuss the care and needs of patients seen in the hospitals. A similar meeting has started on Mondays at noon in our affiliate partner the Simonds-Sinon Regional Cancer Center at HealthAlliance Hospital on the Burbank campus.

Innovative collaboration with neurosurgery and the acute pain service has provided patients the ability to receive pain medicines through an “intrathecal pain pump.” With this collaboration and technology, patients have been able to return to double shifts, travel, and even play a round of golf.

Innovations in education using social media have also allowed members of the UMass Memorial Health Care community to work towards specialty certification in Palliative Care. Through the Lois Green Learning Community (www.loisgreenlearningcommunity.org) over 200 members share articles, case reports, clinical questions, videos about palliative care. Currently, an oncologist, surgical oncologist and radiation oncologist are working alongside family physicians, nurses and nurse practitioners towards their board certification in 2012. Please join the online discussion if you want to learn more about palliative care.

Research has demonstrated the benefit of incorporating mindfulness, narrative medicine, and storytelling to enhance dignity and quality of life of patients with cancer, as well as how patient stories may help medical and nursing students learn about cancer. Partnering with clinical psychology, the potential roles that mindfulness-based practices and the humanities might play in the care of our patients are beginning to be explored with the support of the Clinical Psychology program and the Center for Mindfulness.

With the future growth of our program, we look forward to further investigation into the way we can help patients live as well as they can throughout the continuum of cancer are.

Pediatric Oncology

UMass Memorial Children’s Medical Center Mission Statement: To improve the health of infants, children, and adolescents within Central New England.

The UMass Memorial Medical Center Division of Pediatric Hematology/Oncology is the region’s only full-service Pediatric Hematology/Oncology Service. A multidisciplinary staff includes pediatric specialists in hematology, oncology, surgery, radiation oncology, radiology, neurology, neurosurgery, psychology, social work and child life. The team provides diagnosis and treatment for all pediatric blood disorders and malignancies. The emphasis is on providing the most sophisticated medical care while offering both patients and their families’ optimal emotional support.

UMass Medical School has been a Children’s Oncology Group (COG) institution for more than a decade. Oncology services include: Multidisciplinary care for all forms of childhood cancer; Access to state-of-the-art protocols and investigational agents; Bone marrow transplantation for adolescents; Long-term follow-up for survivors of childhood cancer.
Our pediatric oncology program sees between 20-30 new diagnoses of cancer annually and currently has 30 patients on active treatment. The reported incidence of childhood cancer is about 2/10,000 children in US (SEER 2004). Central Massachusetts has a population of roughly one million people with 27% under 20 years of age. Thus, the number of pediatric cancer patients seen at UMass Memorial Medical Center’s Children’s Medical Center is within the expected range of cancer incidence. The Children’s Medical Center follows another 330 pediatric patients in the Pediatric Cancer Survivorship program. Most of the families of children diagnosed with cancer in Central Massachusetts come to UMass Memorial Children’s Medical Center, as well as a families from outside our region.

**Neuro-Oncology**

Glioblastoma multiforme (GBM) is a difficult disease with a poor prognosis, even after aggressive treatment with surgery, radiotherapy and chemotherapy. There is a great need for novel therapies to enhance survival. We collaborate with Dr. Rick Moser (Neurosurgery) to establish GBM stem cell cultures. Classical GBM cultures grown in fetal bovine serum form circumscribed tumors in immunodeficient mice. In contrast, cells from the stem cell cultures are invasive in xenografts. Researchers have used these cultures to develop a clonal assay to study the effects of chemotherapy. This quantitative approach is essential; killing 99% of tumor cells sounds effective but may still allow tumor recurrence.

Recently, we have developed a new approach to GBM therapy—combining chemotherapy (temozolomide) and a Notch signaling pathway inhibitor with promising results in both our cell culture clonal assay and mouse xenografts. In collaboration with Evelyn Kurt-Jones, we have found that there may be an immune response that enhances the efficacy of this dual therapy.

**Prevention & Control**

The Division of Preventive and Behavioral Medicine in the Department of Medicine conducts a wide range of research and training activities related to cancer prevention and control including:

- Clinical, community, school and worksite-based research addressing obesity prevention and treatment for children and adults. This work spans the research continuum, including basic behavioral, epidemiologic, intervention and policy studies.
- Tobacco dependence prevention and treatment research conducted in a variety of settings including primary care clinics, school health clinics, and community health centers, with a wide range of populations. Much of this research focuses on building the capacity of existing health care providers and settings to integrate tobacco treatment into routine practice and organizations.
- Interventions to reduce skin cancer risk behaviors in high-risk populations.
- The role of dietary interventions and physical activity interventions for cancer patient populations, including men with prostate cancer and women with breast cancer. Additionally, we conduct research using Geographic Information Systems to identify the relationship of neighborhood environments to physical activity and dietary behavior and to cancer risk.
- Professional education and training programs that promote evidence-based tobacco dependence treatment for medical students and for a broad range of community and health care professionals. Additionally, we are developing professional education and training programs that promote use of evidence-based obesity prevention and treatment programs and strategies for clinical and public health professionals.

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Population Health Sciences

The Population Health Cancer Study Group (PHCSG) is a cross-departmental faculty group that focuses on translational cancer research at the population and health systems level, involving communities, states, health plans and provider organizations. The goals of the PHCSG are to:

- Foster communication and collaboration across UMass Medical School, UMass Memorial Medical Center, Graduate School of Nursing, Graduate School of Biomedical Sciences and affiliated partners in the areas of cancer prevention, screening and treatment.
- Promote translational activities from cancer-related basic science to clinical and implementation activities.
- Design and implement research studies and protocols.
- Enhance the dissemination of knowledge generated from these collaborations in the areas of research, measurement, education, and policy.
- Support the development of population health research partnerships with other regional Cancer Centers.
- Help support the achievement of NCI Cancer Center designation for UMass Memorial Health Care Cancer Center of Excellence.

Members include faculty from the departments of Medicine, Family Medicine and Community Health, Pediatrics, Quantitative Health Sciences, the Graduate School of Nursing, Commonwealth Medicine, Meyers Primary Care Institute, and UMass Memorial Health Care, including the Cancer Center of Excellence. The group is facilitated by UMass Medical School’s Commonwealth Medicine, Center for Health Policy and Research.

Hereditary Cancer Syndrome Identification & Prevention: The What, Where & When

When a patient is diagnosed with cancer, one of the biggest questions that surfaces is why. For some, the answer lies in a hereditary cancer syndrome, where changes in genes that are passed along in the family put individuals at higher risk of developing certain types of cancer. For families who have these genetic changes, the screening and prevention options, as well as the management of a cancer, may differ.

When trying to distinguish patients who may be at increased risk for a hereditary cancer, there are certain red flags that increase the likelihood that there may be a genetic component. These are: individuals diagnosed with cancer younger than 50 years old, an individual with multiple types of cancer or a family history where multiple individuals have related cancers. If a patient has one, or many, of these red flags, referral to Genetics would allow assessment of a hereditary cancer syndrome.

During a genetic counseling session, the Genetics provider will ask the patient about pertinent medical history, document a detailed family history, and provide an assessment and discussion of the patient’s risk of a hereditary cancer. Genetic testing may be addressed in a session if appropriate and the patient desires the information. Genetic counselors are specifically trained to provide accurate risk assessment and work with the patient or family to come to a decision. Our staff has experience working with insurance and testing companies to insure optimal care is provided with the least financial impact to the patient. Genetic counselors are highly skilled at interpretation and explanation of genetic information, particularly when the result is not conclusive.

Should you have questions about a particular patient, or cancer syndrome, please feel free to contact Genetics at 508-856-3949. New patients can make an appointment by calling the Oncology scheduling line at 508-334-6200.
One of the most painful feelings that a cancer patient’s family may have is the feeling of helplessness. The 2011 UMass Medicine Cancer Walk is the way for each and every person to do our part in the fight against cancer.

Formerly The Walk to Cure Cancer, the UMass Medicine Cancer Walk has been renamed to reflect the institutions that it supports. The millions of dollars raised by this event since 1999 have helped build the Aaron Lazare Medical Research Building (LRB) and the Ambulatory Care Center (ACC). Research being done at the LRB has made significant strides in the field of translational research – taking scientific research results and transforming them into clinical treatment methods.

In contrast, the ACC was designed specifically to facilitate the integration of care, compassion and state-of-the-art research and technology to insure that patients achieve the best outcomes possible for their specific diagnosis. The Walk has supported the development of the laboratory facilities where, through seamless partnerships with doctors and scientists, breakthroughs in cancer diagnosis and therapy are rapidly emerging and contributing to the most effective care for patients. This year, the UMass Medicine Cancer Walk seeks to raise $800,000 in support of the research programs and trials at the UMass Memorial Health Care Cancer Center of Excellence.

Every year, the growing size of the UMass Medicine Cancer Walk serves as a testament to the incredible people who care for patients at the Cancer Center of Excellence. From their first introduction in reception, to the physicians, nurses and allied health professionals who play a part in treatment, to the friendly faces greeting them in the café and information desks throughout the hospital – patients experience warm and compassionate, yet state-of-the-art care.

There is still ample time to create your fundraising team and make a difference. This year, the Cancer Walk staff is conducting “Fundraising 101” classes, to teach participants (new and veterans) fundraising strategies to take the fear out of asking for money. Participants may find more information online at www.umassmed.edu/cancerwalk or contact the Cancer Walk office at cancerwalk@umassmed.edu or by calling 508-856-2589.

“Each year at the UMass Medicine Cancer Walk, our campus comes alive as thousands in the community join together and with us to raise critical funds for pioneering work of our Cancer Center of Excellence. It is a compelling demonstration of hope, and the tremendous outpouring of community support propels us to do all that we can to improve the prevention, detection and treatment of cancer.”

- Michael F. Collins, MD, FACP

University of Massachusetts Senior Vice President for the Health Sciences and UMass Medical School Chancellor, Professor of Quantitative Health Sciences & Medicine
## Calendar of Events & Announcements

- Cancer Center Grand Rounds presentations are scheduled monthly for the 2011-2012 school year.
- Cancer Center Seminar Series presentations are scheduled monthly for the 2011-2012 school year.
- The new clinical website for the UMass Memorial Health Care Cancer Center has been launched. Visit: http://www.umassmemorial.org/cancer.
- UMass Memorial Health Cancer Center of Excellence is currently accepting applications for membership.
- The Program Development Grant initiative is accepting applications for the 2nd quarter.

### SAVE THE DATES

- **Sunday, September 25, 2011:** UMass Medicine Cancer Walk
- **Tuesday, September 27, 2011:** Prostate Cancer Symposium
- **October 23, 2011:** Making Strides For Breast Cancer
- **November 9, 2011:** Pancreatic Cancer Symposium

For more information on the Cancer Center of Excellence, contact Priscilla Vazquez at 508.856.3818 or email: priscilla.vazquez@umassmed.edu.

### Monthly Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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<tbody>
<tr>
<td>1st Week</td>
<td>9:30 am: Pancreas Working Group (monthly)</td>
<td>2 pm: Cancer Biology Seminar (1st and 3rd Tuesday of the month)</td>
<td>8 am: Interdisciplinary Palliative Care Team Meeting (weekly)</td>
<td>7 am: GU Tumor Board (weekly)</td>
<td>7 am: Thoracic Tumor Board (weekly)</td>
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<td>10 am: Look Good, Feel Better Support Group (every other month)</td>
<td>5 pm: Cutaneous Tumor Board (every other Tuesday)</td>
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<td>2 pm: Genomic Instability and Cancer Meeting (monthly)</td>
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<td>7 am: Neuro Tumor Board (every other Wednesday)</td>
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