ONE SHOT.
GENERATIONS OF PROTECTION
NAVIGATING THE ROAD TO QUALITY CARE
Initiatives target enhancement of the patient experience

THE SCIENCE OF PROTEOMICS
Better cancer detection and treatment may lie in a single drop of blood

AT LAST, A SHOT OF PREVENTION
 Exporting state-of-the-art care

Meet...Ask...Understand.
New website provides patient, physician perspective on cancer clinical trials

CANCER DISCOVERY & CARE
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Five years ago this month, we opened the doors of Hillman Cancer Center — launching a new era in cancer care and research for western Pennsylvania. We’ve made tremendous strides over that time, expanding our hub-and-spoke model to extend world-class care closer to home for patients at more than 40 locations throughout western Pennsylvania, and now two international centers in Dublin and Waterford, Ireland. Our research staff has grown exponentially, with more than 50 scientists joining us in the quest for better treatment and outcomes. University of Pittsburgh Cancer Institute (UPCI) faculty has attracted nearly $147 million in annual funding from the National Institutes of Health. And we’ve established exciting new programs — such as the Center for Environmental Oncology and the African American Cancer Care Partnership — that are leading to innovative prevention and detection strategies.

Perhaps most importantly, however, community support for our programs has never been stronger. The “Bring Hope to Life... A Future Without Cancer” capital campaign is the centerpiece of an ambitious, five-year strategic plan to support the construction of new research facilities, the recruitment of additional world-class investigators and clinicians, the expansion of basic and clinical research studies, and enhanced assistance for economically disadvantaged patients.

We are more than halfway to our $100 million fundraising goal, with more than $55.2 million in funding raised through this fiscal year. UPMC has committed a dollar-for-dollar match of monies contributed by individuals, corporations, and foundations, bringing our total goal to $200 million.

The fruits of this support are already coming to bear. For example, the Hillman Fellows Program for Innovative Cancer Research, established through a $20 million lead gift from Henry L. Hillman and the Hillman Foundations, provides grants for researchers to pursue novel, high-priority cancer projects. The program is leading to advances in cancer immunology, biomarkers for the early detection of cancer, cancer vaccines and cellular therapies, methods for diagnosing and monitoring cancer, and programs in cancer prevention that are based on genetic and environmental risks for disease.

UPMC Cancer Centers and UPCI are poised to break through to a new era in cancer research, treatment, early detection, and prevention. Ultimately, the results will be measured by a single standard: improving the quality of life, as well as duration of life, for our communities and our families in this region and around the world.

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If you had told Kathleen McIntyre-Selman, MD, early in her career as an obstetrician and gynecologist a vaccine would be developed that could prevent cervical cancer she wouldn’t have believed you.

“At some point in my lifetime I never thought I would see the day when cervical cancer could be prevented by a simple vaccination,” says Dr. McIntyre-Selman, director of the Women’s Cancer Wellness Center at Magee-Womens Hospital of UPMC. “It is just amazing to think that future generations of women, including my own daughters, won’t have to die from this disease. Only 25 years ago we were not even certain that a specific virus was the cause of cervical cancer. And now, we can give a girl or young woman a shot to prevent it entirely.”

Her youngest daughter, 22 year-old Madeline (Maddie) Seltman, made a personal decision to be vaccinated, putting into practice her mother’s belief that advances in science which made the vaccine possible are enabling women to free themselves from the pain of the past.

“IT’S SAFE AND CAN SAVE WOMEN FROM SERIOUS HEALTH CONSEQUENCES IN THE FUTURE.”

“IT’S SAFE AND CAN SAVE WOMEN FROM SERIOUS HEALTH CONSEQUENCES IN THE FUTURE.”

“I for me, there really wasn’t a downside to getting the vaccine — it’s safe and can save women from serious health consequences in the future,” says Maddie. “The potential for preventing cervical cancer in developing countries where screening is not readily available makes it especially promising.”

This vaccine is the first of its kind to prevent cancer. It works against several strains of the human papilloma virus, or HPV, an extremely common group of sexually transmitted viruses that cause virtually all cervical cancers, and that also are linked to other types of cancer.

The discovery of the HPV vaccine is based on more than a century of observation and science that linked cervical cancer to sexually transmitted diseases, or STDs. The link was first noted anecdotally.

“Scientists of the time noted that different orders of nuns had different rates of cervical cancer. Those orders that took in “wayward” girls had a high incidence of cervical cancer, while those orders that accepted only virgins had virtually no cervical cancer,” says Dr. McIntyre-Selman, who also is associate professor, Department of Obstetrics, Gynecology and Reproductive Sciences, Division of Gynecologic Specialties, University of Pittsburgh School of Medicine.

continued on page 4
These kinds of observations were the springboard for subsequent research throughout the 20th century that is still ongoing today. More recent advances in molecular biology made it possible to grow HPV in the laboratory which formed the basis for the vaccine.

The vaccine stimulates the body to develop antibodies that can recognize and attach to the surface of the virus, marking it for destruction by white blood cells before it has a chance to alter the cells. Once the virus has established itself within a woman’s cervical cells, the antibodies are not effective, so it is important to provide vaccination before a woman is ever exposed to HPV.

The vaccine produces responses to four types of HPV. Seventy percent of cervical cancers are caused by two of these types—HPV 16 and HPV 18. Experts believe that HPV 16 is the chief culprit, responsible for half of all cervical cancers. The vaccine is recommendable—not made up of a live or dead virus of any kind, consisting only of proteins — so it is safe, as well as effective against cervical cancer.

Cervical cancer itself can be easily treated and cured when found early. But when it’s not, it is deadly, killing a half a million women worldwide every year. As it grows outwards, cervical cancer can respond to chemotherapy and radiation treatments, but once it has begun to spread, it is not often curable.

Unlike most cancers, cervical cancer is a disease of younger women. Women at increased risk are between ages 15 and 50, usually related to exposure to HPV at their teens and 20s. Since treatment for cervical cancer usually makes pregnancy no longer possible, women in their 30s and 40s who are affected may not be able to have children.

Cervical cancer is rare in the United States today because most women get Pap tests that find abnormal cells in the cervix early before they have developed into cancer. But, Pap tests are not 100 percent accurate and they may not always pick up abnormal cells which may be present in only a small part of the cervix.

“Pap tests are a necessary and important tool, but they are not foolproof. In some situations when a woman has mild abnormalities that are not cancer, we can tell her to wait it out, which causes a lot of anxiety,” says Dr. McIntyre-Seltman. “The HPV vaccine helps us tremendously because it prevents cancer and pre-cancerous cells from developing in the first place.”

Since HPV is transmitted during sexual contact, experts recommend that girls and young women, ages 9 to 26, be vaccinated prior to their first sexual experience. Dr. McIntyre-Seltman cautions that routine screening with Pap tests is still necessary to protect women since there may be additional types of HPV linked to cervical cancer that are not covered by the vaccine. Even so, theoretically, the rate in cervical cancer of women who are vaccinated could drop by 70 percent by the next generation.

“The availability of the vaccine will have a huge impact on the burden of this disease. I encourage mothers to talk to their daughters about the vaccination because it can save us all from unnecessary heartache,” says Dr. McIntyre-Seltman.

As for Maddie, she’s looking forward to putting her passion for improving women’s health into practice in the Peace Corps as she leaves for Mali, West Africa, and begins public health work to make a real and lasting difference in the lives of women and girls.

Cervical cancer is only one of several cancers scientists believe are linked to infection with HPV. Twenty-five to thirty percent of patients with head and neck cancer also test positive to HPV 16 — the most common type of HPV found in cervical cancer. In some head and neck tumors, such as those found in the throat or base of tongue, the frequency of HPV infection may be as high as 60 to 70 percent. HPV is a formidable foe because it produces proteins that interfere with the functions that should normally lead to cell death. The vaccine can stimulate the immune system which is necessary to prevent the growth of abnormal cells, enabling it to hide in cells and avoids the immune system’s attack.

Robert Fellers, MD, PhD, co-leader of the Vaccine Immunology, Immunotherapy, and Immunoprophylaxis Program, University of Pittsburgh Cancer Institute, is examining a hypothesis that head and neck cancer in older patients is HPV-related. He notes that head and neck cancer may be an entirely separate disease from head and neck cancer that is HPV-negative (caused differentially by MD in NCI’s Department of Medical Genetics and Biochemistry). He notes that many differences caused by HPV infection indicate that it may respond differently to chemotheraphy based on a unique gene expression profile. Dr. Fellers is working towards the future vaccine that targets the specific problems expressed in HPV-positive and HPV-negative cancer.

If successful, scientists could use these gene expression patterns to develop bio-markers to detect and later cancer earlier and treat it more effectively.

DURING MY LIFETIME, I NEVER THOUGHT I WOULD SEE THE DAY WHEN CERVICAL CANCER COULD BE PREVENTED BY A SIMPLE VACCINATION.
At the University of Pittsburgh Cancer Institute (UPCI) physician-researchers are using the study of proteins to make advances in the way cancer and other diseases are detected, treated, and managed.

Proteomics is an emerging biomedical discipline that analyzes the body’s proteins and their interactions on the cellular level.

“Understanding how cancer cells work, what proteins are present, and how they interact with each other will lead to the discovery of better diagnostic markers and therapeutic targets,” says Dr. Conrads.

Dr. Conrads, who recently joined UPCI from the National Cancer Institute, is working with colleagues at the UPCI Clinical Proteomics Facility to develop a method of detecting cancer at the protein level using mass spectrometry.

From these observations they hope to identify protein patterns that may lead to earlier diagnosis of cancer and also determine which proteins are likely to respond to various treatments.

“This information also can help interpret the function of individual proteins and establish errors in protein pathways found in disease, making it possible to develop more effective, less toxic treatments,” says Dr. Conrads.

HER-2 is an important protein whose expression level has been associated with aggressive forms of breast cancer — the second leading cause of cancer-related deaths of women in the United States. Herceptin has been shown to be an effective treatment for HER-2 breast cancer.

The HER-2 study is one example of how proteomics can not only detect disease, but also drive protocol and disease management.

Better cancer detection and treatment may lie in a single drop of blood.

The sequencing of the human genome is one of the greatest scientific achievements of our time, leading to advances in each discipline of medicine. Proteomics is forging new pathways for treatment of many diseases, including cancer.

Proteomics, like genomics, is forging new pathways for treatment of many diseases, including cancer.

“Currently, the most promising application for proteomics is in the screening of protein biomarkers for certain diseases,” says Dr. Conrads. “Armed with these technologies, the impending era of individualized patient-tailored therapy is imminent.”
A diagnosis of cancer is overwhelming enough — patients shouldn’t have to deal with the additional stress of navigating the patient care system. This is the basic premise behind new quality improvement initiatives being implemented at Hillman Cancer Center and throughout the UPMC Cancer Centers network.

Initiatives target enhancement of the patient experience
More than 36,000 new patients are evaluated for hematologic and oncologic disorders at UPMC Cancer Centers each year. At Hillman alone there has been a more than 170 percent increase in patient volume since it opened in September 2002.

“We grow very quickly, so we needed to refocus on the processes and infrastructure to support that growth,” says Holly Lorenz, RN, MSN, vice president and chief operating officer, Clinical Services, UPMC Cancer Centers. “It was important to take a step back to identify ways we can make the patient experience as meaningful and seamless as possible.”

Under the leadership of Ms. Lorenz, a number of patient-focused quality improvement initiatives are transforming the scope of the patient experience — from parking to wait time to ease of scheduling appointments.

At the heart of these initiatives are the patients themselves, who are providing input to the processes through many avenues including surveys designed to measure perceptions and a newly established Patient Advisory Group. “By involving patients in our process we are able to view the patient experience through their eyes — targeting improvements where they will have the greatest impact for our patients,” explains Ms. Lorenz.

The first step in engaging patient feedback was the launch of a Patient Greeter Program. A team of more than 20 administrators, clinical staff, and patient educators participated in the greater initiative, which incorporated distribution of surveys and personal interviews with patients to gauge their treatment experience. While most patients had glowing comments about the care they received, they were not as complimentary about some of the processes. Concerns ranging from simple needs — such as a lack of clocks and signage, to more global issues including extended patient wait times — were identified through the greater program.

“Some of the concerns identified were just common sense things that could be easily fixed, such as installing clocks or installing bathroom doors that open more easily,” says Ms. Lorenz. “We are continuing to tackle the more complex issues by rethinking operations to improve flow and make the patient’s care as seamless as possible.”

The Patient Advisory Group, comprised of patients, family members, physicians, administrators, and front-line managers provides a dynamic forum for communication — outside of the examination room. The resulting dialogue has led to targeted interventions to improve efficiency and build a more responsive culture of patient-centered care.

One member of the group, Alan Green, a 10-year veteran of health care administration and practice management who is also a cancer patient currently in remission, brings a unique perspective to the group. “Best practices for consistency in care are absolutely essential to this environment,” Mr. Green says. “Every patient who walks through the door should have a good experience.”

Another tool implemented at Hillman Cancer Center to facilitate communication of and response to concerns and complaints is a Patient Care Hotline. The patient care line, 412-623-CARE (2273), was established as a help channel for patients and families. Anyone requiring assistance or experiencing delays may call this number during their visit and have an immediate response by the patient relations staff.

At the grassroots level, a Most Valued Patient (MVP) program was begun to address problems before they become patient complaints. The MVP program establishes a method to effectively address concerns before they escalate. The program is based on the acronym “ABOVE” which employs the protocol of:

• apologizing for the patient’s inconvenience
• being a listener to the patient’s concern
• assessing the solution to the problem
• valuing patient feedback
• expressing thanks to the patient

Additionally, staff members receive ongoing education and suggestions to improve patient communication. Managers reinforce this patient-centered culture through positive feedback and ongoing support. “We want staff to realize that it’s not just high tech that’s important to patients, we also need to be high touch,” explains Ms. Lorenz.

There are already measurable signs of improvement. For example, in the surgical clinic the registration staff schedules patients who will require a shorter visit during a dedicated block of time to improve flow, resulting in a 45 percent reduction in wait times. Another example of process improvement is in blood collection and turnaround of lab results. Through a system of pre-registration and a reduction of redundant work, lab wait time has decreased by more than 70 percent.

Patients know we are listening as they’ve seen positive changes based on their input and continue to give us feedback and ideas for enhancements.

The effectiveness of the quality improvement initiatives are continually gauged through follow-up surveys and weekly monitoring. Patients have also been responsive to the process improvement. “Patients know we are listening as they’ve seen positive changes based on their input and continue to give us feedback and ideas for enhancements,” says Ms. Lorenz. “Our staff have been key to this transformation as we learn and favor bests from each other.”

Turning Challenges into Positives

When William Dickson George III (“Dick”) was a patient at Hillman Cancer Center in 2005, he and his family became aware of a need for a more personal way to help many first-time patients or patients who visit Hillman alone. Having experienced the stresses of cancer, they knew that having an advocate in the clinical setting can make a big difference.

Dick’s sisters, Nonie Wyckoff and Madelaine McCrady and niece, Shelley Clement, chose to turn their family’s challenges into a more positive experience for other patients visiting Hillman. They established The Patient Advocacy Program Fund, raising more than $460,000 to support a patient liaison position at Hillman Cancer Center. The position, which was launched in the spring of 2007, provides on-site assistance to patients and their families while waiting for a physician visit or treatment.

Patient liaison Lynda Staylor plays a vital role in making the patient experience at Hillman as seamless as possible — offering guidance and support when patients need it. Lynda’s interaction with patients and family members is demonstrated daily through her keen ability to anticipate needs and provide assistance. Always considering the unique individuality of each patient, Lynda keeps patients informed, helping to alleviate the anxiety sometimes associated with an appointment. Additionally, comfort foods, warm blankets, and special activities have been designed to enhance the overall patient/family experience. She has even accompanied patients who are alone to an appointment to provide emotional support.

Dick’s family feels that it is incredibly rewarding to see how well the constant, universal needs for compassionate communication are being enhanced at Hillman through the patient liaison position — making a vital difference as Hillman continues to grow.
**What is a clinical trial?** The short answer, clinical trials are research studies in which people help doctors find ways to improve health and, in this case, new cancer treatments. However, for many people, clinical trials are so much more.

Meet Bob Burnett. After being diagnosed with prostate cancer in 2002, Bob underwent a prostatectomy. After the operation Bob’s doctor told him that his PSA numbers had gone up slightly, an indication that cancer cells could be growing again.

Like many cancer patients, Bob had a lot of questions about his cancer and treatment options. He recalls discussing his options with his oncologist. Bob’s doctor ... me about some of my concerns,” explains Bob. “Not just about clinical trials, but also about enhancing my quality of life.”

Most advances in the diagnosis and treatment of cancer have occurred because of clinical trials that study the effect of cancer treatments such as surgery, radiation therapy, chemotherapy, and biological therapy. These trials not only benefit patients, who are receiving cutting-edge treatments, but they also are helping to advance medical science.

While the importance of clinical trials in improving the prevention and treatment of cancer is undeniable, the reality is only a small percentage of adult cancer patients participate in clinical trials.

Bob has decided to take an active role in educating other cancer patients and their families about cancer clinical trials. Bob is one of eight patients being featured in the new UPMC-Cancer Centers’ interactive website designed to help cancer patients and their families learn about cancer clinical trials.

“People need to know what’s out there, and to take advantage of any opportunity to find a new cure or treatment,” says Bob. “Cancer will not go away simply by wishing it away.”

“Clinical trials are extremely important as new and more effective cancer drugs and treatments are developed and need to be tested,” says Samuel Jacobs, MD, associate director of clinical investigations at UPCI and UPMC Cancer Centers. “Unfortunately, many cancer patients have fears and misconceptions about these trials.”

To combat these misconceptions, Dr. Jacobs put together a team consisting of Valerie Montano, PhD, Beth Simon, DrPH, MSN, RN, and Suzanne Poroznik to develop a website to educate patients and encourage greater participation. The team partnered with MedReform, a company founded to commercialize a Carnegie-Mellon University-patented technology called the Synthetic Interview™ which forms the basis for the site’s capabilities.

Also lending their expertise are Dwight Heron, MD, director of radiation oncology services, UPMC Cancer Centers, and Marguerite Bonaventura, MD, assistant professor, division of surgical oncology, UPMC Cancer Centers.

“Many times, a patient is overwhelmed by the volume of information presented to them by their oncologist,” explains Dr. Jacobs. “The idea behind the website is to give patients the opportunity to ask the questions they are interested in and get answers directly from patients and physicians.”

“Our hope is that this site will alleviate patient fears and provide helpful information by allowing patients to ask questions that they might not have been able to ask their own personal oncologist.”

The UPMC Cancer Centers’ clinical trials website features interview clips with clinical trial participants who share their own personal views and experiences, and allows visitors to access an extensive menu of clinical trial topics and terms including:
- why people participate in clinical trials
- side effects and safety
- apprehensions and misconceptions
- how to find a clinical trial
- insurance coverage
- definitions of common terms associated with clinical trials

The website is designed to stimulate conversation by allowing visitors to ask the questions they have, and receive video-based answers from cancer patients, as well as medical experts.

“Our site also addresses minority participation in clinical trials with a special section dedicated to the legacy of the Tuskegee Syphilis Study and its impact on the participation of African-Americans in clinical trials.

In the end, deciding to participate in a clinical trial is a very personal decision. UPMC Cancer Centers’ interactive website is a great resource for patients considering participation in a cancer clinical trial. However, it also is important to discuss questions and concerns with your physician.
ENDOWED CHAIRS
An important number of endowed chairs support the mission of the UPMC Cancer Centers and the University of Pittsburgh Cancer Institute. The income generated from endowed chairs is used to support critical and focused initiatives that are in line with our mission to improve patient care and care delivery.

The Claude Worthington Benedum Endowed Chair in Radiation Oncology
The Richard M. Cyert Endowed Chair in Molecular Oncology
The Gregory T.H. Davies Endowed Chair in Brain Tumor Research and Physician Education
The Laverne E. Ekron Endowed Chair in Hematology and Oncology
The William Endowed Chair in Oncology
The Arnold F. Endowed Chair in Cancer Prevention
The Sampson Family Endowed Chair in Thoracic Surgical Oncology
The Sandra and Thomas Usher Endowed Chair in Melanoma
UPMC Endowed Chair in Head and Neck Cancer Surgical Research
UPMC Endowed Chair in Lung Cancer Research

VISIONARY SOCIETY
These dedicated partners have given or helped to raise a cumulative total of $1 million or more in support of cancer research and care.

American Cancer Society, Inc.
The Giant Eagle Foundation
HighPoint Physicians
Elsie H. and Henry L. Hillman Foundation
The Henry L. Hillman Foundation
The Hillman Foundation
Family and Friends of Albert P. Knowles
New Era Cap Charitable Foundation and Family of David C. Koch
Mario Lemieux Foundation
Richard King Mellon Foundation
Susan G. Komen Breast Cancer Foundation
Arnold D. Palmer 2002<br>Services Group and PNC Foundation
Myles D. Sampson* and Family
Sandra and Thomas Usher Foundation
Wheeler Family Charitable Trust
* deceased

FAMILY LEGACY SOCIETY
Often, a personal experience with cancer or the loss of a loved one to the disease spurs a family to establish funds that honor a patient or caregiver through support of ongoing efforts to improve detection, prevention and treatment.

Suzanne Hill Alfano Endowment for Lung Cancer Research
Nathan S. Arenson Fund for Pancreatic Cancer Research
Beckwith Family Foundation
Endowed Research Scholars Program
The Heidi Browning Endowed Ovarian Cancer Research Scholars Fund
The Marie Louise Farrow Cancer and Cancer Research
Scott Landshark Entrepreneurship Grant
Stanley M. Marks, M.D. Endowed Research Fund
Diane Mahon Entrepreneurship Fund
James A. Mollo Jr. Endowed Research Endowment Fund
PNNL Innovation Fund
Michael J. Ponder Research Fund
Mark R. and Leah M. Drogue Women’s Cancer Research Endowment Fund
Pamela and Russell Rosenberg Cancer Research Endowment Fund
The Spang Translational Research Core Facility
Joseph and Giovanna Tepic-Reschke Memorial Fund
Mary and John R. Frawley Cancer Research Fund
Dr. Leonard F. Fudenberg Memorial Fund

ANNUAL GIVING
The Annual Fund provides vital support for the operation of clinical programs, tumor and clinical research programs, recruitment of new physicians and scientists, and support of education and outreach programs. The list below includes annual donations at the following designated levels.

100 Club of Greater Pittsburgh
The Baum Foundation
The Buhl Foundation
The Cahn Family Foundation
The Cohen Foundation
The Conover Foundation
The Diament Foundation
The Gateway Foundation
The Gendebien Foundation
The Hillman Foundation
The Iris Foundation
The Julia C. Kinsey Foundation
The Lipton Foundation
The MacArthur Foundation
The Markowitz Foundation
The Mellon Foundation
The Meiser Foundation
The Paterno Foundation
The Pennsylvania Foundation
The Pittsburgh Foundation
The PNC Foundation
The Robert J. Thomas Foundation
The Wexner Family Foundation

CIRCLE OF HOPE
The Circle of Hope includes children’s family foundations, and provides key financial contributions of $25,000 or more to the mission of UPMC Cancer Centers. The list below includes annual donations at the following designated levels.

American Cancer Society, Inc.
The Cheng Family Foundation
The Dietz Foundation
The Edens Family Foundation
The Emery Foundation
The Evans Foundation
The Fisher Family Foundation
The Garber Foundation
The Gendebien Foundation
The Giordano Foundation
The Gruber Foundation
The Halpern Foundation
The Heinz Foundation
The Herring Family Foundation
The Jacobson Family Foundation
The Keller Family Foundation
The Kopp Family Foundation
The Landshark Foundation
The Levine Foundation
The Loeb Family Foundation
The Mandel Foundation
The Milkovich Foundation
The Morris Family Foundation
The Newton Foundation
The Pendergast Foundation
The Purnell Foundation
The Quigley Foundation
The Rineer Foundation
The Rubenstein Family Foundation
The Schuster Foundation
The Siddall Family Foundation
The Smolik Family Foundation
The Sowa Foundation
The Tisch Family Foundation
The Tomlinson Foundation
The Ullman Foundation
The Zeller Family Foundation

Thanks to the continuing support of our donors, the University of Pittsburgh Cancer Institute and UPMC Cancer Centers are translating new discoveries in the laboratory into effective methods for preventing, detecting, and treating cancer. Gifts received during fiscal year 2007 are bringing renewed hope to cancer patients and their families in our region and beyond. It is with deepest gratitude that we recognize our partners – individuals, families, businesses, corporations, foundations, and organizations – for their ongoing support of our mission to build a future without cancer.
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UPMC Cancer Centers and the University of Pittsburgh Cancer Institute gratefully acknowledge gifts from the following individual estates and trusts.

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On Oct. 4, nearly 900 supporters of UPMC Cancer Centers and the University of Pittsburgh Cancer Institute gathered at Atlantic Aviation, formerly the FBO Aviation Center, Moon Township, to celebrate the advances in cancer prevention, detection, and treatment being made at Hillman Cancer Center.

The event, hosted by honorary chair Teresa Heinz, and general chairs Susan and Michael Boyle and Bonnie and Tom VanKirk, generated nearly $6 million in sponsorships and contributions for cancer research and patient care. This included more than $1 million from Teresa Heinz and The Heinz Endowments in support of the Center for Environmental Oncology; $1 million from Harriet and Ronald B. Herberman, MD, to establish the Ronald B. Herberman, MD, Endowed Cancer Research Fund; $1 million from the Hillman Foundations to fund innovative cancer research; and $1 million from the David S. and Karen A. Shapiro Foundation to establish the Frieda G. and Saul F. Shapira BRCA-Associated Cancer Research Program. This year’s gala was a “green” event incorporating environmentally friendly elements, from the organic menu featuring locally-grown foods to the program’s messages about cancer prevention and early detection. Due to the timing of this publication, donors to this gala will be recognized in a future publication.

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**2007 meeting highlights**

Physician-researchers from UPMC Cancer Centers and the University of Pittsburgh Cancer Institute recently presented findings from more than 40 studies at the American Society of Clinical Oncology Annual Meeting in Chicago.

Presentation highlights included an evaluation of a National Surgical Adjuvant Breast and Bowel Project (NSABP) trial, which found that the risk of congestive heart failure in women treated with Herceptin and combination chemotherapy for early-stage breast cancer does not increase over time. The study led by Raina Rai, MD, developed a prediction model to help oncologists assess the risk of heart failure in individual breast cancer patients prior to treatment with Herceptin and combination chemotherapy.

A study led by John Kirkwood, MD, has found that higher levels of a protein called S-100 in patients with melanoma may correlate with a higher risk of the disease returning. The study evaluated and tested serum samples from 100 patients who were treated with high-dose interferon, a standard immunotherapy treatment for melanoma, an average of eight years after the disease occurred in 64 of the patients within an average of 30 months. When the researchers found high levels of S-100 in the serum sample, they found that the higher the level of the protein, the greater likelihood the patient’s disease had returned.

Samuel Jacobs, MD, shared the findings of a 60 patient study which indicates that patients treated for follicular lymphoma, a slow-growing type of non-Hodgkin’s lymphoma, may benefit from chemotherapy followed by radiation therapy. More than 50 percent of patients achieved a complete response to the treatment and only a small subset of patients received a second course of chemotherapy was used, side effects were limited. The use of radiation therapy following chemotherapy was very well tolerated. The researchers also found that PET scanning was useful in determining which patients were at highest risk for their disease to recur.

In October, physician-researchers from UPMC Cancer Centers and the University of Pittsburgh Cancer Institute (UPCI) will present findings from more than 21 studies at the 49th Annual American Society for Therapeutic Radiation and Oncology (ASTRO) Meeting in Los Angeles.

Presentation highlights will include a discussion on the role of PET/CT in the pre- and post-treatment assessments for patients diagnosed with solitary peripheral lung lesions receiving fractionated stereotactic radiosurgery, a revolutionary, non-surgical approach to medically-inoperable patients. The study provides valuable insight into tumor response and appears to further demonstrate this cutting-edge approach as an effective alternative to surgery in selected patients.

Other presentations will highlight radiation therapy treatment options for head and neck and esophageal cancer, as well as patient sensitivity to radiation.

**“Hoops for a Cure” milestone**

In March 2007, the 12th annual “Hoops for a Cure” event helped to raise more than $75,000 to benefit the Nathan S. Arenson Fund for Pancreatic Cancer — bringing their grand total of contributions to more than $1 million.

For the past 10 years the Arenson family and their friends have planned events — including the “Hoops for a Cure” charity basketball game that features Pittsburgh Pirates football players playing against Charleroi Valley High School alumni and an annual fashion show — to benefit pancreatic cancer research in memory of Nathan S. Arenson, who was diagnosed with pancreatic cancer in 1993.

The Nathan S. Arenson Fund for Pancreatic Cancer helps to support the research of Oliver J. Finn, PhD, professor and chair of the Department of Immunology at the University of Pittsburgh School of Medicine and co-leader of the Cancer Immunology, Immunotherapy and Immunoprevention Program at the University of Pittsburgh Cancer Institute.

**Second international cancer center opens**

In January 2007, UPMC Cancer Centers reached another milestone — opening its second international cancer center in Dublin, Ireland. The UPMC Cancer Center, a joint program of UPMC/Community Health Systems, formerly “Balla Hospitals.” The center provides cancer patients in Dublin with state-of-the-art radiation therapy and comprehensive cancer care.

The partnership will bring the people of Dublin convenient access to treatments including intensity-modulated radiation therapy (IMRT) and image-guided radiation therapy (IGRT) — based on UPMC Cancer Centers’ hub-and-spoke model. The center also houses Europe’s first Trilogy TX image-guided radiosurgery system from Varian Medical Systems.

**Preclinical gene therapy advances in ovarian cancer**

David L. Bartlett, MD, chief, Division of Surgical Oncology, and a team of researchers reported promising results that may lead to advances in the treatment of ovarian cancer at the American Society of Gene Therapy annual meeting.

The team inoculated mice with an ovarian cancer cell line, treating some immediately with a genetically engineered vaccine containing a cytokine that induces cell death, or apoptosis. Treatment was delayed 30 to 60 days in another group of mice as cells multiplied entirely in control mice. Immediate treatment completely prevented tumor growth in 50 percent of the mice, and delayed treatment significantly inhibited tumor growth. These promising preclinical results may soon be translated into a clinical trial for women with recurrent ovarian cancer.
UPMC Cancer Centers offers cancer patients exceptional care and innovative treatments close to home. Working in tandem with the University of Pittsburgh Cancer Institute, western Pennsylvania’s only National Cancer Institute-designated Comprehensive Cancer Center, UPMC Cancer Centers provides the latest advances in cancer prevention, detection, diagnosis, and treatment at community-based locations throughout the region.

The University of Pittsburgh Cancer Institute comprises the academic and research activities for cancer at the University of Pittsburgh and the University of Pittsburgh Medical Center.

For information about supporting cancer research efforts and patient care at the University of Pittsburgh Cancer Institute and UPMC Cancer Centers, contact us at 412-623-4700.

UPMC Cancer Centers and University of Pittsburgh Cancer Institute