centerpoint

Yale Cancer Center A Comprehensive Cancer Center Designated

Yale Cancer Center's community newsletter winter 2009



Mark and Sharon Peel have shared their passion for music throughout his treatment and recovery from prostate cancer.

Husband and Wife Face Cancer Diagnosis

One Step at a Time

There were no symptoms that alerted Mark Peel to the fact that he might have prostate cancer. He was 60 years old and in good health when a routine blood test revealed his PSA had increased significantly in a matter of months. This prompted a biopsy, which revealed Mark had stage II prostate cancer. Mark and his wife, Sharon, were in disbelief when they received the news. Mark was fairly young and had remained healthy up until his diagnosis. Immediately it became clear to the couple that they had no other choice but to find the best care possible for Mark, and they committed to finding it together.

The couple sought out several opinions and was faced with many different treatment options. Potential treatments included watchful waiting, surgery, hormonal therapy, cryosurgery, and two forms of radiation therapy. All carried their own possible side effects and complications, including incontinence and impotence, two worrisome side effects of treatment for

prostate cancer. At one point during their medical consultations, Mark and Sharon were told that based on Mark's condition, there was no possibility of nervesparing during his surgery, which meant it would be impossible for Mark to regain normal sexual function after treatment. "I wasn't ready to give up at that point. I'm still young and have a lot of life left to live. The most important thing, of course, was saving my life, but also having a life in the end worth living," Mark said.

Mark and Sharon researched the various options for treatment with surgery and weighed the risks and benefits. "There was so much conflicting data we weren't sure what we were going to do. Once we found Dr. Colberg, he laid it all out for us in an unbiased way and helped us look at our options from all angles. He never made us any promises, but gave us hope, and that's exactly what we needed at that time. He was the physician we trusted most," Sharon said.

Mark wanted to be treated by a

continued on page 3 >

Oncology Pharmacy Team Plays Critical Role in Patient Safety and Care

Patients get to know their physicians and nurses during visits to Yale Cancer Center but many may not know there is a staff of oncology pharmacists providing expertise and support behind the scenes. These specialized pharmacists ensure that each patient's chemotherapy treatment is correctly ordered, prepared, and administered. In 2008, Yale-New Haven Hospital oncology pharmacists provided over 45,000 doses of chemotherapy to cancer patients treated by Yale Cancer Center physicians; a number that has increased by over 30% over the last three years. The pharmacy team thoroughly evaluates each chemotherapy order through a series of multiple checks, before any patient is started on their treatment, providing a critical component to enhanced patient safety.

"The pharmacists in the oncology clinics are a critical element of patient treatment and quality control at Yale Cancer Center. Their expertise and commitment to patient safety helps to ensure that we provide the optimal care for each patient we see," Edward Chu, MD, Chief of Medical Oncology and Deputy Director of Yale Cancer Center, said.

Led by Nancy Beaulieu, RPh, a Board Certified Oncology Pharmacist (BCOP), and Manager of Oncology Pharmacy Services, the pharmacy staff reviews each physician's order for accuracy, dosage, frequency continued on page 6 >>>

Yale Cancer Center's

Cancer Survivors Day

Save the Date ...

Wednesday, June 3rd 9:15 AM

Yale's West Campus (formerly Bayer) West Haven, CT

Hosted by **Dr. Mel Goldstein**

Keynote Address by **Dr. David Katz**

For more information (888)700-6543

Sponsored in part by:







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Contributing Writer
Emily Fenton

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Yale Cancer Center yalecancercenter.org 333 Cedar Street PO Box 208028 New Haven, CT 06520-8028

Yale Cancer Center's quarterly newsletter is written to inform the public and the Center's friends, volunteers, donors, and staff on current items of interest at Yale Cancer Center. All inquiries should be addressed to Renee Gaudette, Director of Public Affairs and Marketing, 157 Church Street, New Haven, CT 06510-2100. Yale Cancer Center complies with the Health Insurance Portability and Accountability Act (HIPAA) of 1996.

Early Immune Response to Cancer Confirmed

Cancer researchers continually search to find the answers to how and why cancer develops. Recognizing the positive link between the earlier detection of cancer and a patient's chance for cure, the focus on finding the earliest signs of cancer remains strong.

Dr. Michael Girardi, Associate Professor of Dermatology and Associate Clinical Director of the Immunology and Immunotherapy Research Program at Yale Cancer Center, has narrowed his research priorities at Yale to investigate the relationship between the immune system and cancer. Over the last decade, Dr. Girardi and his research team have made several important discoveries to aid our understanding of the role our immune system plays in cancer. Most recently, their research narrowed in on the correlation between damaged cells and cancer development.

The human body uses a process called immunosurveillance to continually monitor, detect, and destroy malignant cells. While immunosurveillance has been commonly accepted, Dr. Girardi analyzed the process more closely to determine if there were very early signs of damaged cells that could be recognized by the immune system before further developing.

In collaboration with colleagues at the King's College School of Medicine in London, Dr. Girardi's team

studied how the immune system responds to epithelial cells displaying Rae-I, a marker of stress and inflammation. Such markers are considered very early cellular flags for tumor development.

"We recognize that the battle against cancer is more easily won and the odds are stacked in our favor when we can identify responses to the earliest signs of the disease," Dr. Girardi explained. "By identifying how the immune system reacts to the first cellular flags for the disease we can discover new ways to suppress the development of cancer."

The expression of Rae-I molecules triggers an immune system response and reorganization of dendritic cells, T cells, and natural killer T cells, all of which are known to help destroy malignant cells. By studying the immune

"Our findings confirm our body's natural reaction and immune response to damaged cells. While we do not know how often our immune system is activated against cellular changes, the potential that our immune system continually battles early cellular signs of cancer is clear."

Dr. Michael Girardi



Dr. Michael Girardi, Associate Professor of Dermatology and Associate

Clinical Director of the Immunology and Immunotherapy Research

Program at Yale Cancer Center

response to determine the chain of events once Rae-I molecules have been flagged, researchers found that the body's immune system does immediately respond to destroy the damaged cells. Unfortunately, the research also revealed that the molecules had the ability to manipulate our body's response and in some situations avoid destruction by the immune response.

"Our findings confirm our body's natural reaction and immune response to damaged cells. While we do not know how often our immune system is activated against cellular changes, the potential that our immune system continually battles early cellular signs of cancer is clear," Dr. Girardi explained.

Because epithelial tissues are a component of several of the body's organs, including the skin, lungs, colon, prostate, bladder, and cervix, Dr. Girardi's work will

have implications in the fight against many types of cancer. The next step will be to determine how to easily identify the early flags found in immunosurveillance to detect cancers at their earliest point and to customize immunotherapies to combat the cancer's development.

The results of Dr. Girardi's collaborative study will have a permanent impact on the field of cancer research. In humans, there is a whole family of analogues to Rae-I, such as MICA and MICB. "Our findings confirm the role of the immune system in earliest signs of cancer and will open the door to new methods of detection and treatment by targeting MICA and MICB genetic variations," Dr. Girardi said. (>

Breast Cancer Alliance Continues to Fund New Research Opportunities at Yale

In 1996, Mary Waterman, a Greenwich, Connecticut resident who was battling breast cancer, founded the Breast Cancer Alliance (BCA), an organization devoted to supporting breast cancer research, early detection, and education. Although Ms. Waterman succumbed to the disease less than a year later, the BCA has become the fourth-largest non-profit, private funding provider for breast cancer research, education, and outreach programs in the United States. The BCA provides funding to high-impact, innovative, breast

cancer research and early detection initiatives at institutions spanning from Boston to Washington, D.C. To date the Alliance has raised and awarded over \$12.4 million to support scientists and medical professionals in their fight against breast cancer.

The Breast Cancer Alliance provided over 25% of their total funding to support research at Yale Cancer

Center and Yale School of Medicine over the last decade. Most recently, the BCA agreed to fund projects for Michael DiGiovanna, MD, PhD, Associate Professor of Medical Oncology, and Zhiwei Hu, PhD, a research scientist in the Department of Obstetrics, Gynecology & Reproductive Sciences, awarding \$100,000 to each. This is Dr. DiGiovanna's second round of funding from the group.

"The money that the Breast Cancer Alliance has provided for breast cancer research at Yale over the years is immeasurable. It has enabled us to embark on some very important research projects, and it is amazing to think what continued generous funding from the BCA will do for breast cancer research in the future," Dr. DiGiovanna commented.

The BCA has also agreed to renew the Norma Lies Mitchell Breast Surgery Fellowship Grant at Yale for 2009–IO, with \$75,000 to continue the fellowship for a second year. This provides an opportunity for a selected surgeon to pursue an extra year of specialized studies in breast surgery following the completion of their surgical residency. This level of specialized medical education is not typically available to surgical residents.

The primary fundraiser for the BCA is an annual luncheon and fashion

show that is co-sponsored by Richards of Greenwich, Mitchells of Westport, and is a charitable event attended by over 800 contributors. Contributions also come from individual and corporate donors, and from various other community fundraising activities. The BCA distributes funding, with the guidance of their Medical Advisory Board and outside experts, through a stringent

grant application process, and accepts annual applications from individuals for Young Investigator, Exceptional Project, Breast Surgery Fellow, and Education and Outreach awards.

In the I3 years since its founding, the Breast Cancer Alliance has been dedicated to funding community, education, and breast cancer research initiatives. The recent funding awarded to Yale Cancer Center continues this tradition, and the Breast Cancer Alliance remains a vital fixture at Yale, supporting new and innovative breast cancer research, and ultimately, taking one step closer to a cure. \diamondsuit

If you would like more information about the Breast Cancer Alliance, please visit breastcancer alliance.org



▶ Husband and Wife Face Cancer continued from page I

physician he felt comfortable with and could trust. After many consultations with several different physicians, Mark and Sharon decided Dr. John Colberg, Associate Professor of Surgery and Director of the Yale Urologic-Oncology Program, was the right match for them. "He returned my call on a Saturday morning, and the more I talked with him the more my confidence in him grew. I had called Dr. Colberg just to ask a few questions, but during the conversation I connected with him on a personal level and asked if he would perform my surgery," Mark explained. "He said he'd be happy to."

After talking it over with Dr. Colberg they decided the best overall results could be achieved with daVinci Robotic Prostatectomy Surgery. The daVinci Robotic System is used to assist the surgeon during the operation. The surgeon remotely operates the three arms of the robot and the camera attached, which allows the surgery to be performed through five or six small incisions in the abdomen. It is similar to an open prostatectomy, but it provides much more precision and has a shorter recovery time. "The daVinci Robot is a wonderfully advanced technology that, for Mark's situation, provided more options for a better recovery. Because of the exact precision provided, the theory is that we have fewer incidences of impotence, as well as improved continence rates," Dr. Colberg explained.

Dr. Colberg also informed the couple that he saw no reason why the nerves couldn't be spared, but he would have to wait until the surgery to be sure.

During Mark's surgery all nerves were spared and today his PSA remains constant. "Cancer is a matter of life or death, and I can't imagine coping

with it emotionally unless you go through it with someone you love

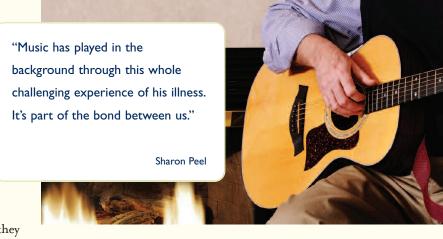
and who supports you; my wife Sharon was that person for me. I could not have done it without her," Mark said.

Together, Mark and Sharon were able to make it through his treatment decision process and subsequently, the treatment itself. However, the couple also commented that they

had some help from music. Mark has been playing and writing music for over 40 years. "Music has always served as a type of therapy for Mark; it's something we both enjoy, particularly the folk and rock music of the 60's," Sharon said. "I was there when he first picked up a guitar and struggled to learn those chords. Music has played in the background through this whole challenging experience

of his illness. It's part of the bond between us."

Mark and Sharon have shared their story in a diary they kept throughout the decision-making process and treatment. They hope that it will help other couples facing a similar difficult decision and help them to realize they have options.



"The best advice we can give is to do your research and don't hesitate to take the time to find a physician you feel completely comfortable with. Also, being treated at a major research center like Yale Cancer Center that has cutting-edge technology makes all the difference. The resources at Yale are outstanding, and even if you have to travel it's worth it; it's your life." \(\begin{align*} \cdot \text{} \)

event calendar

March 2, 2009

Yale Cancer Center's Third

Annual Survivorship Conference

Creating an Outstanding Cancer Survivorship Program; A one-day workshop for healthcare professionals Sponsored by Yale Cancer Center, the Connecticut Challenge Survivorship Clinic, and the CT Cancer Partnership 9:00 AM; The Anlyan Center (203) 785-6595

March II, 2009

Understanding Cancer Lecture Series

Treatment Options for Pancreatic Cancer Wasif Saif, MD Sponsored by Yale Cancer Center and Yale-New Haven Hospital 6:00 PM;YNHH EP Cafeteria (888) 700-6543 or www.ynhh.org

April 1, 2009

Understanding Cancer Lecture Series

Therapeutic Choices for Prostate Cancer Wm. Kevin Kelly, DO and Richard Peschel, MD Sponsored by Yale Cancer Center and Yale-New Haven Hospital 6:00 PM;YNHH EP Cafeteria (888) 700-6543 or www.ynhh.org

April 16, 2009

The Art of Healing

Bernie Siegel, MD Sponsored by the Yale-New Haven Hospital Auxiliary 6:00 PM;YNHH EP Cafeteria (888) 700-6543 or www.ynhh.org

April 18, 2009

La Cassa Magica

Yale Cancer Center's Annual Gala 6:00 PM; Belle Haven Club of Greenwich (203) 436-8531

May 13, 2009

Understanding Cancer Lecture Series

Lung Cancer Treatment Update Frank Detterbeck, MD and Roy Decker, MD, PhD Sponsored by Yale Cancer Center and Yale-New Haven Hospital 6:00 PM;YNHH EP Cafeteria (888) 700-6543 or www.ynhh.org



WNPR - Connecticut Public Radio

February 22, 2009

Gary Friedlaender, MD

When Cancer Metastasizes

March 1, 2009

Wasif Saif, MD

The Diagnosis and Treatment of Liver Cancer

March 8, 2009

Harriet Kluger, MD

Treatment Innovations for Melanoma

March 15, 2009

Edward Chu, MD

Colorectal Cancer Awareness

March 22, 2009

Bonnie Indeck, MSW

The Patient Support System

March 29, 2009

Deb Collyar

The Important Role of a Patient Advocate

April 5, 2009

Wasif Saif, MD

Treatment Obtions for Pancreatic Cancer

April 12, 2009

Michael DiGiovanna, MD, PhD

Myths and Facts about Breast Cancer

For the latest schedule information and audio and written archives of all shows, please go to yalecancercenter.org/answers

patient support groups at Yale Cancer Center



Sup-port [suh-pawrt, -pohrt]

to sustain (a person, the mind, spirits, courage, etc.) under trial or affliction

Yale Cancer Center has numerous support groups available for our patients and their families.

For more information, please go to yalecancercenter.org/patient/support or call I-866-YALECANCER.

Yale Patient Group

Susanne Lee, LCSW

(203) 688-4550

Shoreline Patient and Family

(203) 688-3748 Michele Ryan, LCSW Carol Ridolfi, RN (203) 453-7208

Brain Tumor

Angela Thomas, LCSW (203) 688-7528 Betsy D'Andrea, RN (203) 737-1671

Head and Neck Cancers

Mary Crooks, LCSW (203) 688-4183 Shelley Jolie, RN (203) 785-6520

Lung Cancer

Irene Scanlon, LCSW (203) 688-3218 Linda David, RN (203) 688-5864

Metastatic Melanoma

Bonnie Indeck, LCSW (203) 688-6573

Multiple Myeloma

Nora Rightmer, LCSW (203) 688-9386 Diane Dirzius, RN (203) 785-7938

Prostate Cancer

Susanne Lee, LCSW (203) 688-4550 Nora Rightmer, LCSW (203) 688-9386

Relaxation & Imagery to Support Healing

Lina Chase, LCSW (203) 785-6501

Stem Cell Transplant

(203) 688-4183 Mary Crooks, LCSW Ann Conkling-Walsh, RN (203) 688-7298

A support group for women with breast cancer Carol Ridolfi, RN (203) 453-7206

Discovery to Cure Gala - A Black and White Ball

Commons at Woolsey Hall glittered during the Discovery to Cure Gala - A Black & White Ball held on September 13, 2008. The Yale Cancer Center Gynecologic Oncology Program sponsored the event. Discovery to Cure is dedicated to developing innovative approaches to the prevention, early detection, and effective treatment of women's reproductive cancers.







The event was co-chaired by Stephanie Ercegovic and Jacques Dickinson. Debra H. Levin was honorary chairperson. Special guests included film and TV actor Justin Long and author and comedian John Hodgman (Yale '94), otherwise known as the Mac and PC in the advertisements produced by Apple Inc. The efforts of the Gala committee, many of whom are cancer survivors treated through the Discovery to Cure program, were evident throughout the successful evening.

Yale Cancer Center would like to thank each contributor to the evening, including the Gold and Silver donors: Laboratory Corporation of America; Yale School of Medicine Department of Obstetrics and Gynecology; Friends and Family of Bonnie L. Silverman; and Yale-New Haven Hospital.

Close to three hundred guests enjoyed bidding for an array of unusual items during a silent auction held during the cocktail reception in the Presidents Room. After a gourmet dinner, guests heard remarks from several physicians and researchers from the program including Gil Mor, MD, PhD, Associate Professor of Obstetrics and Gynecology, Director of Reproductive Immunology and Translational Research, Alessandro Santin, MD, Professor of Obstetrics and Gynecology, and Thomas Rutherford, PhD, MD, Associate Professor, Obstetrics and Gynecology and Chief, Section of Gynecologic Oncology at Yale School of Medicine.

Guests enjoyed dancing to music provided by Flamingo, a fourteen-piece all-female swing band. The professionally trained musicians play together throughout New England. In addition, members of Yale Swing & Blues, a Yale student swing dance club joined guests on the dance floor providing inspiration and instruction.







I Mary and Frank Grazioso

² Ed and Lisa Raice with Marshall and Debra Levin

³ Dr. and Mrs. Peter E. Schwartz

⁴ Inger Schoelkopf, Doug Ross, Dr. Ann Ross, Dr. Charles Lockwood,

⁵ Jacques Dickinson, Stephanie Ercegovic, and Dr. Thomas

⁶ Dr. Richard Edelson with John Hodgman and Justin Long

Smilow Cancer Hospital: Building Hope

The Smilow Cancer Hospital will be a world-class cancer hospital right in Connecticut. Building on the rich scientific tradition of Yale Cancer Center, it will enhance an exceptionally successful program that is bringing laboratory discoveries quickly and efficiently to advance clinical patient care. The cancer hospital is building hope for the patients of tomorrow and for the search to find the cure.

The case for continued financial support has never been stronger so please consider a contribution today.

For more information, please go to yalecancercenter.org/involved



The new cancer hospital is currently under construction and is on schedule to begin opening in October of this year. The 14-story building will be the most comprehensive cancer facility in the region.



A bridge will connect the new Smilow Cancer Hospital to Yale-New Haven Hospital and Yale-New Haven Children's Hospital.



Providing for patients at Yale Cancer Center.

Please consider yourself asked and donate blood.

1-800-GIVE LIFE

>> Oncology Pharmacy Team continued from page I

of chemotherapy, possible side effects, potential negative drug interactions, and the inclusion of appropriate supportive care medications. In the clinic setting, once the order has been verified for treatment, a multistep process ensues, which includes processing the order in the pharmacy computer system, performing mathematical calculations, and reviewing the patient's latest blood results to ensure an adequate blood count for treatment.

program teams by attending team meetings, conferences, and research site initiation visits. The new Smilow Cancer Hospital will combine the three existing oncology pharmacy locations into one facility on the 8th floor of the building. "The Smilow Cancer Hospital will allow us to become even more integrated in the clinical program teams," Beaulieu said.

Keeping current with new therapies, dosages, and





left: Wendelin Nelson, PharmD, BCOP gathers medications for mixing. **right:** Alexandra Igoumenos, PharmD, discusses a chemotherapy order with Nancy Beaulieu, RPh, BCOP.

In addition, laboratory results measuring kidney and liver function are reviewed to assess that the patient can fully metabolize and eliminate each chemotherapy drug administered. Next, the correct medications and supplies are gathered to prepare for mixing. A trained oncology technician mixes the chemotherapy in a clean room (a specifically designed environment for preparing intravenous medications), bags the completed mixture using safe handling procedures, and sends it out for final preparation check. At this time, a second pharmacist then performs the final product check before it is sent to the nurses for infusion.

"Each patient's chemotherapy medication is custom made to their individual requirements. This ensures that every patient receives the correct dosage and treatment. Pharmacy is an integral line of defense in the patient safety process of chemotherapy administration at Yale," Beaulieu explained. Additionally, when nonroutine treatment is ordered, Ms. Beaulieu and her team research the prescribed treatment and analyze the available data before proceeding with the therapy.

Ms. Beaulieu has been specializing in oncology at Yale-New Haven Hospital for over 15 years and while the practice has grown substantially, the priorities of the pharmacy team have remained the same. "We are here to provide the oncology pharmacy expertise needed to support the physicians and nurses in the care of each cancer patient," Beaulieu said. "It is important that patients know we are available to discuss their drug treatment plan and answer any questions or concerns they have regarding medications. One of our ongoing goals is to make our presence more visible in the clinics."

Many of the pharmacists focus on specific disease areas and work with the Yale Cancer Center clinical

indications for treatment is an ongoing challenge for oncology pharmacists. In the last few years, Ms. Beaulieu and her team have seen the frequency of treatments multiply, increased use of oral medications, and fresh challenges created by the side effects from innovative-targeted therapies. New protocols emerge daily and the constantly evolving cancer treatment environment demands continuing education.

Clinical research and teaching are critical components of Yale Cancer Center's mission. The pharmacy team participates in research advances by supporting the treatment strategies of the numerous clinical trials through the trial protocols. Pharmacists are also actively involved in formal teaching, by instructing classes at the Yale University School of Nursing and the University of Connecticut School of Pharmacy. In addition, Yale-New Haven Hospital offers an oncology residency program for pharmacists to specialize their education in cancer care. Working along with the specialized pharmacists and the cancer clinical programs helps the residents gain first-hand experience to tailor their career in oncology services. The intellectual challenge and the desire to make a positive impact in patient's care is what keep the pharmacy staff interested and committed to their clinical role at Yale.

"Having witnessed so many improvements in cancer therapy over the last 15 years, there is an incredible level of satisfaction in knowing that as an oncology pharmacist you provide the drug therapy that may cure a patient's cancer today or in the future. There is no greater gratification than seeing a patient years out from treatment, walking through the center just to say hello." said Beaulieu. O