Building Hope:
Taking Cancer Care to the Next Level

Baylor Charles A. Sammons Cancer Center at Dallas *2008 Annual Report*

Baylor Charles A. Sammons Cancer Center at Dallas

2008 Annual Report

Contents

On the cover: Rendering of the new 450,000-square-foot outpatient cancer center.

Above: Rendering of the Healing Garden at the new cancer center.

Cancer research studies on the campus of Baylor University Medical Center at Dallas are conducted through Baylor Research Institute, Mary Crowley Medical Research Center, Texas Oncology, and US Oncology. Each reviews, approves, and conducts clinical trials independently. Their clinical trials are listed together, in this publication, for the convenience of patients and physicians.

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Letter *from the Director*

The year 2008 was a turning point for Baylor Sammons Cancer Center. After 3 years of strategic planning, the new cancer center project was approved by the Baylor board of trustees. The three-phase, 5-year project will include a new 450,000-square-foot outpatient cancer center, conversion of the Collins building into a dedicated cancer hospital, and renovation of the Sammons building. All of us are excited about this major expansion of oncology at Baylor Dallas! The project was formally announced in September at a ceremony featuring Governor Rick Perry and Mayor Tom Leppert. In November, we were pleased to welcome Alan M. Miller, MD, PhD, as the new director of the Sammons Cancer Center and chief of oncology. Dr. Miller was selected for these positions on the recommendation of a search committee headed by Dr. Pick Scruggs. Dr. Miller is an expert on blood and stem cell regulation. He was the founding director of the bone marrow transplant program at Tulane. He also served as associate senior vice president for health sciences at Tulane and headed a Louisiana Board of Regents–funded clinical and translational research, education, and commercialization program. The announcement of the new cancer center project and arrival of Dr. Miller ushered in a new era in oncology at Baylor University Medical Center and Baylor Health Care System.

Dr. Scruggs announced his retirement in November and will be sorely missed. In addition to directing radiation oncology at Baylor, Pick served as chair of the Cancer Center Medical Committee for 18 years. Fortunately, the medical committee chair has been assumed by Dr. John Preskitt, our longstanding division director of surgical oncology and immediate past president of the Baylor Dallas medical staff.

Excellence in patient care, research, and education continues to be our goal. Advances in molecular biology, genetics, and immunology have identified new pathways that make targeted therapy to the cancer cell increasingly effective. Oncology has emerged as one of the most exciting fields in medicine, in large part because progress in the basic sciences is being rapidly translated to the bedside and clinic. The result will be improved outcomes for patients. We will bring these new advances to our patients as swiftly and safely as possible.

This is my final director's letter. It has been a privilege to serve in this position for the past 32 years, and I thank my physician colleagues and Baylor staff for their support and encouragement.

Sincerely yours,

Marvin J. Stone

Marvin J. Stone, MD, MACP

Leadership *Changes*

Alan M. Miller, MD, PhD

Alan M. Miller, MD, PhD, became director of the Baylor Charles A. Sammons Cancer Center and chief of oncology for Baylor Health Care System in November 2008. Before coming to Baylor he served as associate senior vice president for health sciences at Tulane University Health Sciences Center and in 2007 as interim senior vice president for health sciences at Tulane University. He is a practicing medical oncologist and previously served as director of the bone marrow transplant program and vice president and associate dean for clinical affairs at Tulane.

Dr. Miller received his PhD in physiology from the Roswell Park Division of the State University of New York at Buffalo and his MD from the University of Miami. He did his residency in internal medicine and fellowship in medical oncology at the University of Florida. Dr. Miller's research and clinical activity have focused on blood and stem cell regulation. He has published numerous articles in peer-reviewed journals on this subject.

While at Tulane, Dr. Miller served as principal investigator of a Louisiana Board of Regents–funded clinical and translational research, education, and commercialization program. For 10 years he led the National Institutes of Health–funded Tulane Southwest Oncology Group efforts. Dr. Miller has strong interests in health care policy and serves on the Association of American Medical Colleges Healthcare Advisory Panel and was formerly vice chairman of the Louisiana Health Care Commission.

"It is an exciting time to be joining Baylor Sammons Cancer Center," Dr. Miller stated. "The next few years will see a tremendous growth in the center's programs and facilities. We have a tremendous opportunity to build on the foundation established by Dr. Marvin Stone and the leaders of the cancer center to grow our reputation as a regional and national destination cancer center through patient care, education, and research."

Dr. Alan M. Miller

John T. Preskitt, MD, FACP

Dr. John T. Preskitt

John T. Preskitt, MD, FACP, was named chair of the Sammons Cancer Center Medical Committee in September 2008. Dr. Preskitt replaces Robert "Pick" Scruggs, MD, who retired after serving as chair since 1990. Dr. Scruggs was a leader at Baylor University Medical Center at Dallas for more than 30 years, serving as medical director of radiation oncology and assistant chief of the Department of Oncology since 1995, president of the medical staff in 2001, and chairman of the medical board of Baylor Dallas in 2002.

Dr. Preskitt joined the Baylor Dallas medical staff in 1981 after completing his internship and residency at Baylor Dallas and a surgical oncology fellowship at M. D. Anderson. He is active in the teaching of surgical residents and has served as medical director of surgical oncology of the Department of Oncology, president of the medical staff in 2007, and chairman of the medical board of Baylor Dallas in 2008. Dr. Preskitt is a regent of the American College of Surgeons and has served on several committees, including the Executive Committee of the Commission on Cancer.

The New Cancer Center *Unveiled*

With goals of reducing cancer to a chronic disease and ultimately finding a cure, Baylor University Medical Center at Dallas announced that it is developing North Texas' first dedicated cancer hospital along with a new outpatient cancer center that will be the largest in North Texas. The new 450,000-square-foot cancer center is scheduled to open in 2011. Work on the dedicated cancer hospital will begin in 2010 with completion scheduled for 2013.

"When completed in 2013, it will be our goal to be a nationally and internationally renowned cancer care destination, building on Baylor Dallas' commitment to providing advanced cancer treatments and leading the charge of improvement in cancer care through research," said Joel Allison, president and CEO of Baylor Health Care System.

An aerial view shows the planned location of the new 10-story outpatient cancer center on the south side of the Baylor Dallas campus (at the top of the illustration above). The existing Collins building will be renovated into a 120-bed inpatient cancer center. A new circular sky bridge will connect all of the buildings housing cancer services.

The 120-bed inpatient cancer hospital will be the first in North Texas and only the second in Texas.

The outpatient cancer center and inpatient cancer hospital are a $350 million investment.

"Baylor Dallas has historically been the leader in cancer care in North Texas, and we feel a great responsibility to offer the best cancer care in the country," said John B. McWhorter, the hospital's president and senior vice president at Baylor Health Care System. "We want people to be cared for in a compassionate manner. And we want to continue to be the destination center for cancer care for citizens of North Texas."

Based on feedback from patients, families, physicians, and staff, the new cancer center will be a patient-centered facility designed to anticipate needs throughout the continuum of care. Activities of the Virginia R. Cvetko Patient Education Center will be expanded, and additional complementary medicine programs will be offered, including programs for massage, acupuncture, music, and art.

In addition to the comprehensive cancer services already offered at Baylor Dallas, the outpatient cancer center will offer easy access and convenient parking; a comfortable and calming atmosphere; a new chapel; an urgent care clinic especially for cancer patients; an outdoor healing garden providing a peaceful respite; and a patient navigation program

News Coverage

The September 26th announcement of Baylor Dallas' new cancer facility received national attention. Baylor made news across the country, including an appearance on the big screen in New York City's Times Square.

Dallas Mayor Tom Leppert and Texas Governor Rick Perry were featured speakers at the announcement. Under the governor's leadership, voters recently approved a $3 billion bond package to establish the Cancer Prevention and Research Institute of Texas, which will create and expedite innovation in the area of cancer research and prevention. "We're moving closer to the cure, we're moving closer to the day when cancer's deadly role in our society, in our lives, has been eliminated," Governor Perry stated.

Announcement of the new cancer center in Times Square, New York City.

to help guide patients through their cancer journey.

"We're entering a new era in cancer care at Baylor Dallas," said Marvin J. Stone, MD, director of the Baylor Charles A. Sammons Cancer Center. "We've made enormous progress during the past 32 years, but now we're ready to rise to the next level, paralleling the striking advancements we've seen in the field," he said.

The new cancer center will allow for a more comprehensive, personalized medicine program, including areas of research such as targeted therapy. Targeted therapy allows physicians to analyze a patient's genes and determine what type of treatment will work best for that particular patient. The new cancer center will also allow clinicians to engage in further cancer research, focusing on breakthroughs that directly affect patients, whether through a more accurate diagnosis or more effective treatment. In addition, clinical trial participation will be expanded beyond the more than 150 studies already offered to Baylor patients.

Baylor conducted a thorough analysis of national cancer rates, as well as regional and local needs, in planning the new cancer center and cancer hospital. In Texas, 97,281 new cancer cases were projected to be diagnosed in 2008, according to the Texas Cancer Registry. In Dallas County, 8,451 new cancer cases were projected in 2008. According to the American Cancer Society, the lifetime risk of developing cancer is 1 in 2 for men and 1 in 3 for women.

Profile: Donna Bowers

When Donna Bowers talks about the plans and vision for the new cancer facilities at Baylor University Medical Center at Dallas, she is not just speaking as the vice president of the oncology program for Baylor Health Care System. Rather, her words carry a deeper meaning—not only as a proud, long-time Baylor employee, but as a cancer survivor herself.

Like many Baylor employees, Ms. Bowers' life journey revolves around the hospital. She began her career in the medical records department at Baylor Dallas, now known as health information management (HIM), while still in high school. She went on to obtain her bachelor's degree in health information management at Texas Woman's University while continuing to work full-time at Baylor. At age 19, while still attending college full-time, she was named evening manager for the HIM department. Upon graduation from Texas Woman's University, she returned to the day shift, taking over HIM responsibilities for the Baylor Charles A. Sammons Cancer Center, and met her husband, Steven

Bowers, MD. After a short stint living in Colorado, the couple moved back to Dallas to attend law school at Texas Wesleyan Law School and to begin a family.

In 1992, she worked at Baylor Dallas as associate director of HIM and then spent 5 years as the director leading the department. In 2001, she moved into administration at Baylor Dallas. She became vice president of oncology for Baylor Health Care System in 2005. She jumped at the chance to oversee the design and building of the new cancer facilities at Baylor Dallas and develop the oncology strategy for the system, but this was more than a career opportunity—this was a chance to give back in a very personal way.

In 1999, during her rise to career success, Ms. Bowers, then 38, director of HIM and mother to 4-year-old Josh and 5-year-old Carli, felt a lump during a breast self-exam. When she didn't feel any changes after a week, she began rounds of doctor visits. "I was told there was a 99% chance it was cancer," she said. "I told them those weren't very good odds, but that is how sure they were. Once my breast cancer diagnosis was confirmed, I chose to undergo a mastectomy. I also had 6 months of chemotherapy and radiation and reconstructive surgery."

Ms. Bowers, cancer free for 9 years, looked for a way to give back to those who helped her during her fight. It came with her chance to help develop the new cancer facilities at Baylor Dallas and through a system-wide initiative to grow the oncology service line. "I knew I could truly understand what a patient needed when they came into the organization," she said. "We did numerous focus groups with patients and their families to find out what they wanted, and each time I knew what they said was right because that is what I would want as a patient. It offered validity—I could feel it too."

"The outpatient center will be 450,000 square feet and definitely designed around the patients and their families," she said. "We will keep it very beautiful and elegant —a timeless elegance. We also want it light, bringing in as much of the outdoors as we can."

The new cancer hospital will also have many of the features that patients and their families want. "We will have bigger patient rooms with more access for family members, more eating places, and special places like the healing gardens," said Ms. Bowers. "We are also focusing more on the caregivers. We become very attached to our patients and it can be an emotionally difficult job. We want to provide a place for healing, calming, and spirituality for everyone involved in the cancer journey."

"At Baylor Dallas and across the system, we lead the Dallas–Fort Worth area in providing quality cancer care," said Ms. Bowers. "I know that as an administrator, but also as a patient. There is no place in the area I would rather be treated for cancer than at Baylor. We will soon have the physical space to allow us to offer all of the services our patients trust us to have, including quality and compassionate care, research and clinical trials, education, support, chapel, specialized cancer treatment programs, integrated services, specialty boutique, and all other amenities that our patients need and want in a beautiful environment focused on the cancer patient and their families."

"The oncology service line across Baylor is growing and developing," she added. "Most Baylor facilities offer cancer care to patients. We are working with each facility to develop new oncology services as well as expand the quality services currently provided. Cancer touches all of us in some way. Baylor Health Care System is the place to go for quality, compassionate, and innovative live-saving treatments. For Baylor, the patient and their families come first, and the growth and development is dedicated to them."

Building Hope *Through Specialized Care*

Blood and Marrow Transplant Unit Update

Symposium

On Saturday, April 5, 2008, Baylor Dallas sponsored "Hematopoietic Stem Cell Transplantation: Past, Present, and Future," a day-long symposium on blood and marrow transplantation medicine. The symposium, attended by 97 physicians, nurses, social workers, and other health care professionals, was designed to provide a comprehensive overview of blood and marrow transplantation medicine over the last 25 years and current and new approaches to hematopoietic cell transplantation and cellular therapy. The program addressed new developments in hematopoietic transplantation biology.

The program was chaired by Joseph W. Fay, MD, and Edward D. Agura, MD, acted as moderator. Along with an introduction by Marvin J. Stone, MD, and closing remarks by Dr. Fay, presentations were given by international leaders in the field, including Rainer F. Storb, MD, Bruce R. Blazar, MD, Fred R.

Members of the accreditation team for the Foundation for the Accreditation of Cellular Therapy (FACT). Standing, left to right: Laura Brougher, RN, BSN, OCN; Lowell Anderson-Reitz, RN, MS, ANP, AOCN; Shawnette Graham, RN, BSN, OCN; and Deb Spitzer, RN, MSN, OCN. Seated: Pam Carnevale, MHSA; Edward Agura, MD; Jane Golinski, MT(ASCP), BB; and Josephine Murphy, MT(ASCP).

Appelbaum, MD, John R. Wingard, MD, and Karolina Palucka, MD.

FACT Accreditation

In 1998, Baylor Dallas' Blood and Marrow Transplantation Program received its initial accreditation from the Foundation for the Accreditation of Cellular Therapy (then known as Foundation for the Accreditation of Hematopoietic Cell Therapy). The program has maintained FACT accreditation since that time.

On July 8, 2008, Baylor received notification that the program earned reaccreditation for 3 years. The accreditation applies to all services and facilities inspected by FACT, specifically adult autologous and allogeneic hematopoietic progenitor cell transplantation, bone marrow and peripheral blood cellular therapy product collection, and cellular therapy processing.

Graft-Versus-Host Disease Clinic

Many complications can be associated with a blood and marrow transplant. One of the most difficult to treat is graft-versus-host disease (GVHD). To combat this disease, Baylor Charles A. Sammons Cancer Center at Dallas established a multidisciplinary clinic.

GVHD occurs after an allogeneic transplant, when a donor's immune cells attack the recipient's body. The acute form often appears within 100 days of transplant and may cause a skin rash, cramping, nausea, diarrhea, or a sudden rise in liver function test results. In chronic cases, which tend to occur much later following bone marrow transplantation, symptoms can mimic other medical problems, making diagnosis difficult. Common symptoms include changes in the patient's skin, dry eyes, mouth dryness and pain, weight loss, and low blood counts.

"We simply cannot predict which patient will present with GVHD," said Estil Vance, MD, hematologic oncologist on the medical staff at Baylor Dallas. "This disease can be disabling. The comprehensive care provided by a multidisciplinary team like the one at Baylor Dallas enables patients to make remarkable gains and enjoy a better quality of life."

James Chippendale (left front in red parka) and the Love Hope Strength Foundation team at the base camp of Mount Everest.

One Patient's Journey: James Chippendale

James Chippendale of Dallas was diagnosed with acute myelogenous leukemia in 2000. After three rounds of intense chemotherapy, radiation, and a bone marrow transplant at Baylor, Mr. Chippendale came back healthier, stronger, and ready to join the battle against leukemia.

Mr. Chippendale, president of CSI Entertainment Insurance headquartered in Dallas, teamed with musician and cancer survivor Mike Peters of The Alarm, an alternative rock band from Wales, to found the Love Hope Strength Foundation (LHSF) in 2006. The foundation works to raise funds through innovative concerts and climbs—including climbs to the top of the Empire State Building and the base camp of Mount Everest. "The efforts of so many have allowed LHSF to provide critical funding for cancer centers worldwide so that all people have access to information, quality cancer treatment, and medication and, therefore, have the best chance for survival," said Mr. Chippendale.

LHSF raised approximately $700,000 its first year and hosts chapters in the United States, Australia, the United Kingdom, and Peru.

Brenda Bailey, RN, BSN, OCN, CCRN

The Best Are at Baylor

The Texas Nursing Association and the Dallas–Fort Worth Nurse Executives' annual list of "Great 100 Nurses" in the Metroplex included one of Baylor Charles A. Sammons Cancer Center at Dallas' own in 2008: Brenda Bailey, RN, BSN, OCN, CCRN, blood and marrow transplant unit supervisor.

Of the 100 nurses honored for being role models in leadership, service to the community, compassion as a caregiver, and significant contributions to nursing, 20 work within Baylor Health Care System. "Words cannot express the honor that I feel with this recognition," Ms. Bailey said.

Breast Cancer Update

Breast MRI for Breast Imaging

Breast magnetic resonance imaging (MRI) is an additional procedure that aids in the detection of breast cancer at Baylor University Medical Center at Dallas. The advanced technology of the breast MRI unit works in concert with both the dedicated breast biopsy console and the computer-aided detection technology. Also, breast MRI aids in differentiating between benign and malignant lesions and is key in confirming the extent of the disease.

This advanced technology allows breast MRI-guided biopsies to be performed with great accuracy and ease and reduces the overall biopsy exam time. With breast MRI-guided biopsy, most women can resume normal daily activity immediately.

10th Anniversary of Hereditary Cancer Risk Program

2008 marked the Hereditary Cancer Risk Program's 10th anniversary. Since 1998, this service has provided cancer risk assessment and genetic counseling to participants at risk for breast and/or ovarian cancer. Genetic testing for *BRCA1* and/or *BRCA2* is offered if indicated by the pedigree analysis.

The program meets all guidelines established by the American Society of Clinical Oncologists, in which cancer predisposition testing should be offered when (1) the person has a strong family history of cancer or very early onset of disease; (2) the test can be adequately interpreted; and (3) the results will influence the medical management of the patient or family member.

Since 1998, the program has seen 1,692 high-risk individuals (1,659 women and 33 men), and 1,555 (92%) chose to have genetic testing. Families learn about the Hereditary Cancer Risk Program through community education programs, Internet resources, and physician referrals. Testing results are shown in Table 1.

Table 1. *Results of Genetic Testing in 1555 Patients, 1998–2008*

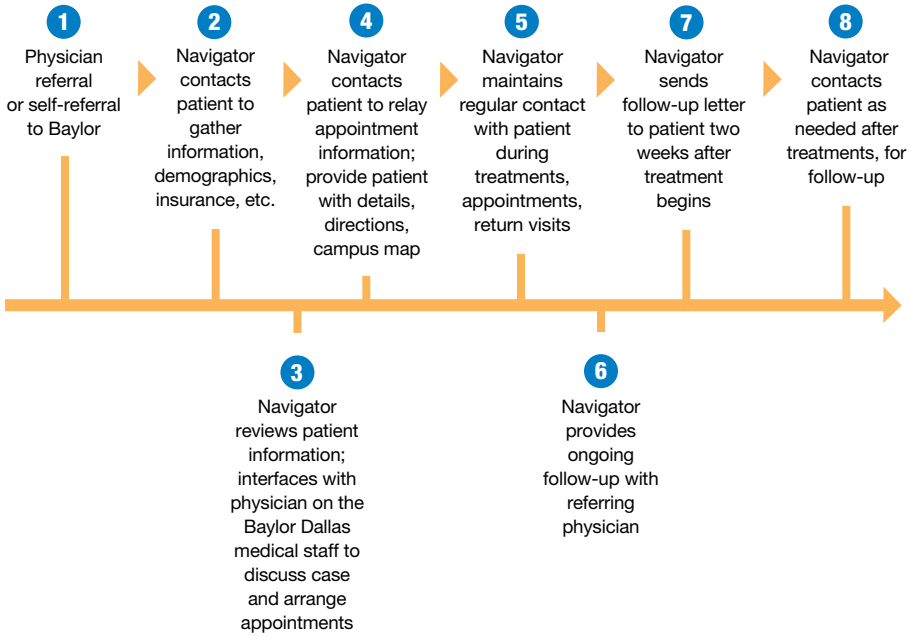
Category	Result	n	N (%)
Positive	Mutation	142	204 (13%)
	p53	1	
	Single site	56	
	Ashkenazi multisite	5	
Negative	Comprehensive	1039	1243 (80%)
	Single site	71	
	Ashkenazi multisite	30	
	Comprehensive and LRP	25	
	Comprehensive and BART	39	
	Comprehensive and p53	5	
	Previous variant amended	33	
	Single site–polymorphism	1	
Other genetic variant	Uncertain significance	70	93 (6%)
	Favor polymorphism	17	
	And negative BART	5	
	And negative p53	1	
Pending		15	15 (1%)
Total		1555	

Building Hope *One Patient at a Time*

Patient Navigation Program

In 2008, the Baylor Charles A. Sammons Cancer Center at Baylor University Medical Center at Dallas launched a patient navigation program as part of its ongoing commitment to provide advanced cancer patient care. The program, led by Cynthia Robinson Hawkins, RN, offers cancer patients and their families guidance throughout the continuum of care. Patient navigators can expedite access to services by coordinating logistics, appointments, educational resources, and other services. The patient navigators serve as part of the care team alongside the physician, nurse, social worker, and other allied staff offering referring physicians a point of contact for information, communication, and follow-up. The navigator is there to assist referring physicians in getting their patients care from initial appointment through diagnosis, treatment, and recovery. This program alleviates stress and helps simplify the organization of care for the patients and their loved ones.

Streamlining Treatment for Cancer Patients



Virginia R. Cvekto Patient Education Center

Hugs, tears, laughter, creativity, and relaxation all come together to help cancer patients and their caregivers heal at the Virginia R. Cvetko Patient Education Center at Baylor Sammons Cancer Center. For almost 30 years, the Cvetko Center has been an important resource for cancer patients and their loved ones. The center bears the name of cancer patient Virginia Cvetko, and her belief that there is life and hope with cancer remains the center's guiding principle.

The Cvetko Center offers Internet access and information about cancer and associated health issues in patient education and resource rooms. The resource rooms offer cancer medical guides, inspirational books, cookbooks, videos, and DVDs. Refurbished wigs may be available at no cost to patients in need who are undergoing cancer treatment.

Whenever possible, the Cvetko Center collaborates with community organizations to provide a greater offering of programs. Many Cvetko Center activities are cosponsored by the American Cancer Society (ACS). One long-time and very successful program is the Cancer Survivors Network program. In this program, cancer survivors visit patients currently undergoing treatment for cancer to provide support and to listen. In 2008, 1,140 visits were made by dedicated volunteers.

ACS also collaborates on the Look Good . . . Feel Better program, a quarterly program that teaches women make-up and hair tips during chemotherapy treatment. In addition, Cvetko Center social workers work with ACS to obtain equipment for patients and transportation to and from their treatment appointments.

The ACS also regularly has a representative present in the lobby of Baylor Sammons Cancer Center providing

patients with information and the ACS Personal Health Manager, an information resource for patients.

Cancer Support, Education, and Special Programs

Education and support are the cornerstones to the many programs offered through the Cvetko Center. The center offers seven ongoing disease-specific groups along with many special disease-specific programs throughout the year. In addition, the Cvetko Center provides complementary care programs such as Journaling for Health and Express Yourself, a program that helps patients and their families express emotions and anxiety through art. More than 3,450 participants attended the ongoing and special programs presented by the Cvetko Center in 2008, an increase of 20% over 2007.

Celebrating Cancer Survivors and Barrett Lectureship

The Virginia R. Cvetko Patient Education Center and US Oncology together sponsored Baylor Dallas' celebration of National Cancer Survivors Day, June 2 through 6, 2008. Refreshments and information were available in the lobby of the Baylor Sammons Cancer Center all week. Tables were staffed by Cvetko Center volunteers and staff, as well as representatives from many local cancer support organizations, including the American Cancer Society, Gilda's Club North Texas, and the Leukemia and Lymphoma Society. Information was available on survivorship issues, early detection and prevention, and the many support groups and programs offered at Baylor Sammons Cancer Center and in the Dallas area.

In conjunction with the celebration, the annual Charlotte Johnson Barrett Lectureship was held on June 5. This year's guest speaker, Cornelius O. "Skip" Granai III, MD, asked, "Are commonly held beliefs—dogs bark, cats meow, birds live in the sky—and unquestioned answers always fact?" Dr. Granai believes that patients count on doctors to hold a certain place in their lives. "Perceived for Birds" explored the needs of patients and physicians and the vital relationship between the two. In addition to the noon lecture, Dr. Granai met with oncology staff on the fourth floor of Hoblitzelle Hospital, the sixth floor of Roberts Hospital, and the Blood and Marrow Transplant Unit.

At the Barrett Lectureship, left to right: speaker Skip Granai III, MD, C. Allen Stringer, Jr., MD, and Marvin J. Stone, MD.

Waldenström's Macroglobulinemia Program

The Cvetko Center hosted a special program on myeloma and macroglobulinemia on August 23, 2008, in collaboration with the Leukemia and Lymphoma Society of North Texas. The program featured Marvin J. Stone, MD, medical director of Baylor Sammons Cancer Center at Dallas. Dr. Stone presented "Myeloma and Macroglobulinemia: Similarities and Differences." His presentation was followed by "Update on Waldenström's Macroglobulinemia and Multiple Myeloma" presented by Steven P. Treon, MD, PhD, program director for the Bing Center for Waldenström's Research at Dana-Farber Cancer Institute in Boston. The program was attended by more than 50 people, including members of the Waldenström's Macroglobulinemia Support Group and the North Texas Myeloma Support Group.

Neil Senzer, MD, and C. Allen Stringer, Jr., MD, at the Ovarian Cancer Survivor Celebration.

Survivor Celebrations for Ovarian Cancer and Breast Cancer

On September 22, 2008, the center hosted the Second Annual Ovarian Cancer Survivor Celebration. The celebration included an update from the National Ovarian Cancer Coalition and a presentation by Neil Senzer, MD, entitled "Current Ovarian Cancer Research." The presentation was followed by lunch for the more than 160 people present.

The First Annual Breast Cancer Survivor Celebration was held on October 14, 2008. Ebony Steele, nationally known syndicated radio host and breast cancer survivor, shared her experience with breast cancer and emceed the event. John Pippen, MD, was the featured speaker with his presentation, "Exciting New Targeted Therapies for Breast Cancer." The event drew more than 140 participants.

Complementary Care Workshop

Again this year, the Cvetko Center and the Healing Environment at Baylor University Medical Center presented "Complementary Methods for Health and Relaxation," a half-day workshop for oncology patients, families, and professionals. The event was held on November 15, 2008, with Mark A. Casanova, MD, giving the keynote address, "Enhancing Quality of Life Focusing on the Whole Person." Breakout sessions covered art, touch therapies, Tai Chi, Qigong, and organic versus natural foods. Almost 100 people attended this year's program.

Promoting Prevention and Cancer Screenings

Baylor Dallas hosted a community prostate cancer screening on September 20, 2008. The free screening was for men 50 years and older and men 40 and older in high-risk groups (African Americans, Hispanics, and those with a family history of prostate cancer). Of the 271 men screened, 10% had abnormal prostate-specific antigen levels.

Ebony Steele, Pam Carnevale, MHSA, manager of the Cvetko Center, and John Pippen, MD, enjoying the Breast Cancer Survivor Celebration.

It's a Guy Thing, a morning devoted solely to men's health, was on Saturday, June 7, 2008. The free event drew more than 125 attendees from the community.

Baylor Dallas also served as a host site for a free community melanoma/skin cancer screening on May 10, 2008. Among the 222 people who were screened, physicians found three cases of melanoma, 15 cases of basal cell carcinoma, and six cases of squamous cell carcinoma.

Kitchens Lectureship: Music and the Mind

On March 18, 2008, Dr. Richard Kogan gave the Lloyd Wade Kitchens Lecture at internal medicine grand rounds. The title of Dr. Kogan's presentation was "Music and the Mind: George Gershwin." Dr. Kogan has had an active career both as a concert pianist and psychiatrist. He has been praised for his "exquisite playing" by the *New York Times*. He won first prize in the Chopin Competition of the Kosciuszko Foundation and has performed throughout the world as a recitalist and orchestral soloist. Dr. Kogan is a graduate of Juilliard Pre-College, Harvard College, and Harvard Medical School. He is affiliated with Weill-Cornell Medical School as director of its Human Sexuality Program.

The lecture was given in memory of Dr. Kitchens, who remained at Baylor for his entire career, practicing with Texas Oncology, PA. Dr. Kitchens also served as medical director of the Virginia R. Cvetko Patient Education Center from 1980 until his death in 2001. He was an accomplished pianist, and George Gershwin was one of his favorite composers.

Profile: Andrew Janke Working with the Cvekto Center to Help Cancer Survivors

The impact of a cancer diagnosis on one's soul never goes away. Andrew Janke, a 27-year-old Dallasite and a testicular cancer survivor, has discovered this first hand. He's determined to help others who have successfully gone through cancer treatment find answers to their questions and form a cancer survivor's network.

When he was 23, Mr. Janke discovered a suspicious lump on his testicle. His primary care physician immediately referred him to a urologist on the medical staff at Baylor University Medical Center at Dallas. "After my appointment," Mr. Janke said, "I really had no reaction. I went to work and sat in the parking garage for 15 minutes thinking, 'He didn't just say that I have cancer, did he?'"

Mr. Janke underwent a radical inguinal orchiectomy, a procedure to remove the entire testicle, 3 days after his diagnosis by the urologist. A biopsy of the tissue to verify the type of testicular cancer helped

determine a follow-up treatment plan. "Within 2 weeks of my initial operation," said Mr. Janke, "I underwent the first of four rounds of chemotherapy."

During his chemotherapy treatments, his girlfriend—now fiancée—and family and friends were all there to support him. His brother moved in to help him with everyday chores, and his parents, who live in Tennessee, rotated visits. "My folks would come when my chemo treatments were the heaviest. It was so nice to know someone was at my apartment, that I wasn't alone," he remembered.

Following his chemotherapy treatment, a successful second operation took place because the cancer had spread to his lymph nodes. Six months after being diagnosed, he began to recover. "The tests show I'm cancer free now," said Mr. Janke. But somehow, Mr. Janke can't quite believe, deep in his soul, that that's truly the case.

While he's required to have frequent checkups for the rest of his life, he's found that much of the support network he had when he was going through treatment is no longer there. "Once I finished my second operation and was back on my feet, no one mentioned 'it' anymore," he commented. "I felt like people heard I'm 'cancer-free' and thought, 'Okay, it's no longer a big deal.'" What Mr. Janke wants people to understand is that even though someone is determined by physicians to be "cancer-free," it is still a very big deal. "There are all sorts of side effects that come about after cancer treatment," he said. "Three years later I still have a lot of questions: Is this normal? Does this mean the cancer is coming back? There are always questions that crop up."

To help himself and others like him deal with the issues and questions that face survivors of cancer, Mr. Janke volunteered to work with the Virginia R. Cvetko Patient Education Center at Baylor Dallas to develop a transition program called Life After Cancer. "This program will help people who've gone through cancer treatment address their fear of recurrence, psychosocial issues, long-time side effects, and quality of life issues," explained Pam Carnevale, Cvetko Center manager. "Physicians, social workers, dietitians, and chaplains will all take active roles in this program to help develop a cancer survivor's network."

To help with funding to get the program off the ground, Mr. Janke organized a local car show with the proceeds going to the Cvetko Center. "I've always enjoyed anything with four wheels," laughed Mr. Janke. "I've always been a big Chevy fan." With help from local vendors, he registered 30 cars for his car show, which was carefully timed to coincide with National Cancer Survivor's Day in June 2008.

Andrew Janke, left, with Cvetko Center and event staff at the car show organized to raise money for the Life After Cancer program.

Building Hope *Through Quality Improvement Efforts*

Commission on Cancer Accreditation

In 2008, the Baylor Charles A. Sammons Cancer Center received renewal of accreditation from the Commission on Cancer. The Teaching Hospital Cancer Program at Baylor Dallas was awarded approval with commendation for the next 3 years. There are 36 standards in the accreditation process, of which nine are eligible for a commendation rating. Baylor received seven commendations on the survey.

Approximately one-fourth of the nation's hospitals treating cancer patients receive Commission on Cancer approval. Only 31% of teaching hospital cancer programs receive approval without contingencies.

Cancer Registry Update

By Laura Siciliano, RN, OCN

The year 2008 was one of achievement as well as growth and development for the Baylor University Medical Center Cancer Registry. The registry staff grew in 2008 with the addition of Delia Moncada, CTR, cancer registry supervisor, and registrars Lydia Vega, CTR, Elizabeth Teter, RHIA, and Alicia Moreno, RN, CTR. Two members of our staff, Takisha Brown and Gary Vogt, were successful in obtaining credentialing as certified tumor registrars.

The goals of the cancer registry focus on accuracy and efficiency of data collection, abstracting, casefinding, and follow-up. The priority goals achieved in 2008 were abstracting data within 5 months of date of initial patient contact, increasing and maintaining follow-up percentages above the required Commission on Cancer standards, and submitting error-free data to the National Cancer Data Base's Annual Call for Data for the years 2002 and 2007 prior to the November 4 deadline.

The registry continues to facilitate and participate in the Hospital Registry Webinar Educational Series conducted by the North American Association of Central Cancer Registries. In addition, two registry staff members attended the annual Texas Tumor Registrars Association educational conference in San Antonio. A monthly physician-driven "lunch and learn" program has been implemented to meet the needs of the cancer registrar in answering key site-specific questions. The kickoff of this program began with Dr. Granger Scruggs, who guided staff members on a tour of the radiation oncology department followed by a review of the charting process, which led to an understanding of the intricacies of the radiation treatment planning and delivery processes.

In October 2008, Baylor Sammons Cancer Center hosted its seventh annual Regional Cancer Registry Educational Conference entitled "Value of Quality Data: Focus on Head and Neck and Central Nervous System Cancers." Over 60 cancer registrars from around the state attended the all-day session featuring physicians on the medical staff at Baylor as speakers who covered topics from diagnosis through treatment of these cancers.

Summary of 2007 Cancer Registry Data

By R. Pickett Scruggs, MD

During reporting year 2007, the Cancer Registry at Baylor University Medical Center at Dallas abstracted 3,137 analytical cases (cases in which patients were first diagnosed or initially treated at Baylor Dallas). Females accounted for 59% of the patients. Data on age and stage are summarized in Figures 1 and 2.

The top five sites of diagnosis were similar to those of the previous year. These included breast (690), lung (291), colorectal (248), prostate (203), and liver/biliary (152). Comparing 2007 data with 2006 data showed that colorectal, prostate, and liver/biliary cases remained very similar in number. The number of breast cases increased by 87 (14%). Contributing to this increase was the relocation of the breast imaging center to a new location on the Baylor Dallas campus. The Darlene G. Cass Women's Imaging Center is larger and more easily accessible to patients. In addition, Baylor Dallas began operating a full-service

Figure 1. *Age by Gender of 3,137 Analytic Cases*

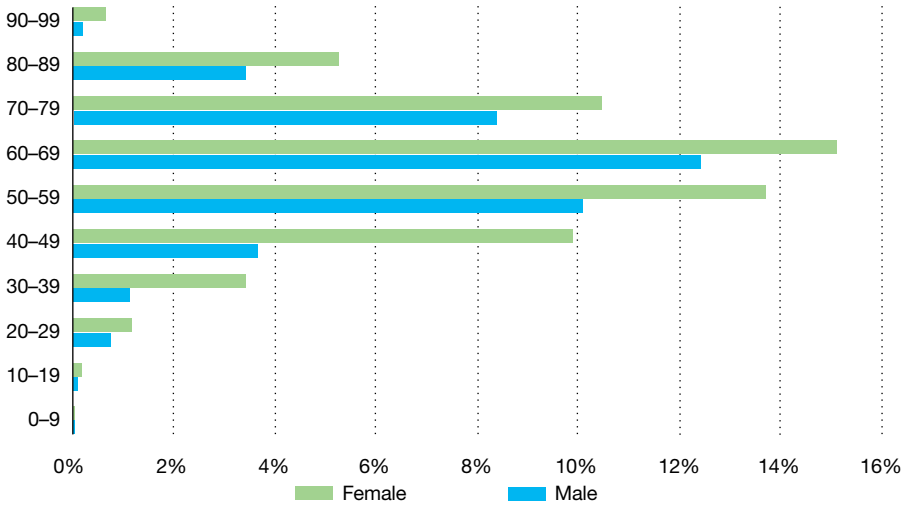
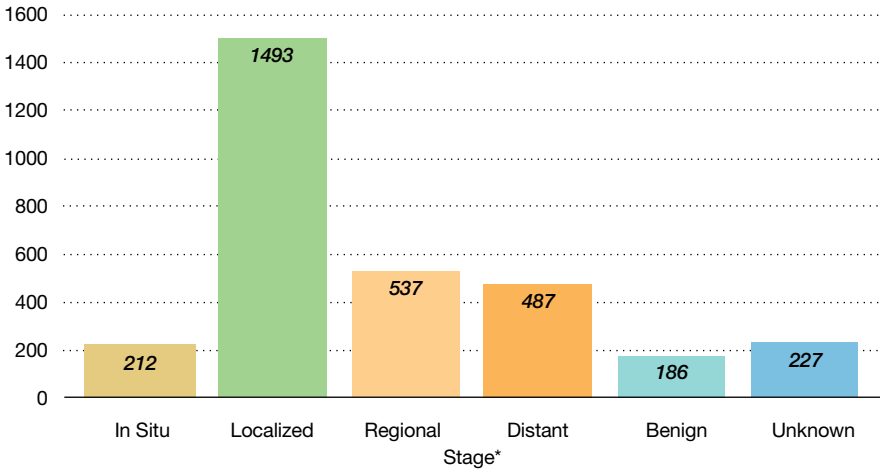


Figure 2. *2007 Analytic Cases by General Stage*



*From SEER: Surveillance, Epidemiology, and End Results Program

breast imaging center in North Dallas. Baylor Dallas has a well-known and very active medical and surgical digestive disease service, which contributed to an increase of more than 100% in the number of esophageal cancers reported.

Baylor Dallas is in Texas Health Service Region 3, with 117 reporting facilities in 19 counties. A comparison of Baylor Dallas' 2007 registry data with data on expected new cases in Region 3 for 2007 revealed that Baylor Dallas saw almost 13% of all cancers in the region. Baylor Dallas' cancer registry reported 46% of the new cases of liver, 24% of pancreas, 17% of breast, 18% of esophageal, 19% of thyroid, 18% of kidney, and 19% of gynecologic cancer in the region.

Baylor Dallas' top 10 sites are compared with estimated new cases from the National Cancer Data Base in Figure 3. The distribution of cases at Baylor Dallas is similar to the national distribution, with the exception of prostate, lung, and bladder cancers, which made up a smaller percentage of overall Baylor Dallas cases, whereas breast, liver, and pancreas cancers made up a greater percentage of cases.

Figure 3. *Baylor Dallas Top 10 Sites Compared to National Statistics*

Baylor Dallas Top 10	*USA National Top 10*
Breast	Prostate
Lung	Lung
Colon/Rectum	Breast
Prostate	Colon/Rectum
Liver	Bladder
Pancreas	Non-Hodgkin's Lymphoma
Corpus Uteri	Melanoma
Kidney	Kidney
Non-Hodgkin's Lymphoma	Leukemia
Leukemia	Corpus Uteri

Baylor University Medical Center at Dallas 2007 Analytic Cases

Primary Site	Total	Sex		General Stage					
		Male	Female	In Situ	Local	Regional	Distant	Benign	Unknown
All Sites	**3137**	**1297**	**1840**	**212**	**1493**	**537**	**487**	**186**	**222**
Head and Neck	**44**	**32**	**12**	**1**	**15**	**18**	**5**	**1**	**4**
Lip	2	2	0	0	0	0	0	0	2
Tongue	20	15	5	0	8	10	2	0	0
Oropharynx	1	1	0	0	0	0	0	0	1
Hypopharynx	2	1	1	0	0	2	0	0	0
Other	19	13	6	1	7	6	3	1	1
Digestive System	**691**	**421**	**270**	**15**	**319**	**174**	**94**	**12**	**77**
Esophagus	41	31	10	5	17	10	3	0	6
Stomach	46	32	14	1	19	7	8	5	6
Colon	136	70	66	1	60	42	22	1	10
Rectum	112	60	52	2	55	33	9	0	13
Anus/Anal Canal	16	10	6	3	6	3	2	0	2
Liver	152	121	31	0	100	22	16	2	12
Pancreas	129	67	62	1	42	39	26	1	20
Other	59	30	29	2	20	18	8	3	8
Respiratory System	**310**	**158**	**152**	**2**	**121**	**75**	**89**	**2**	**21**
Nasal/Sinus	2	1	1	0	2	0	0	0	0
Larynx	13	9	4	1	3	5	1	0	3
Lung/Bronchus	291	145	146	1	112	70	88	2	18
Other	4	3	1	0	4	0	0	0	0
Bone	**14**	**9**	**5**	**0**	**8**	**3**	**2**	**1**	**0**
Connective/Soft Tissue	**20**	**12**	**8**	**0**	**12**	**5**	**1**	**0**	**2**
Skin	**73**	**40**	**33**	**4**	**48**	**11**	**5**	**1**	**4**
Melanoma	65	34	31	4	43	9	5	0	4
Other	8	6	2	0	5	2	0	1	0
Breast	**690**	**11**	**679**	**139**	**414**	**116**	**14**	**2**	**5**

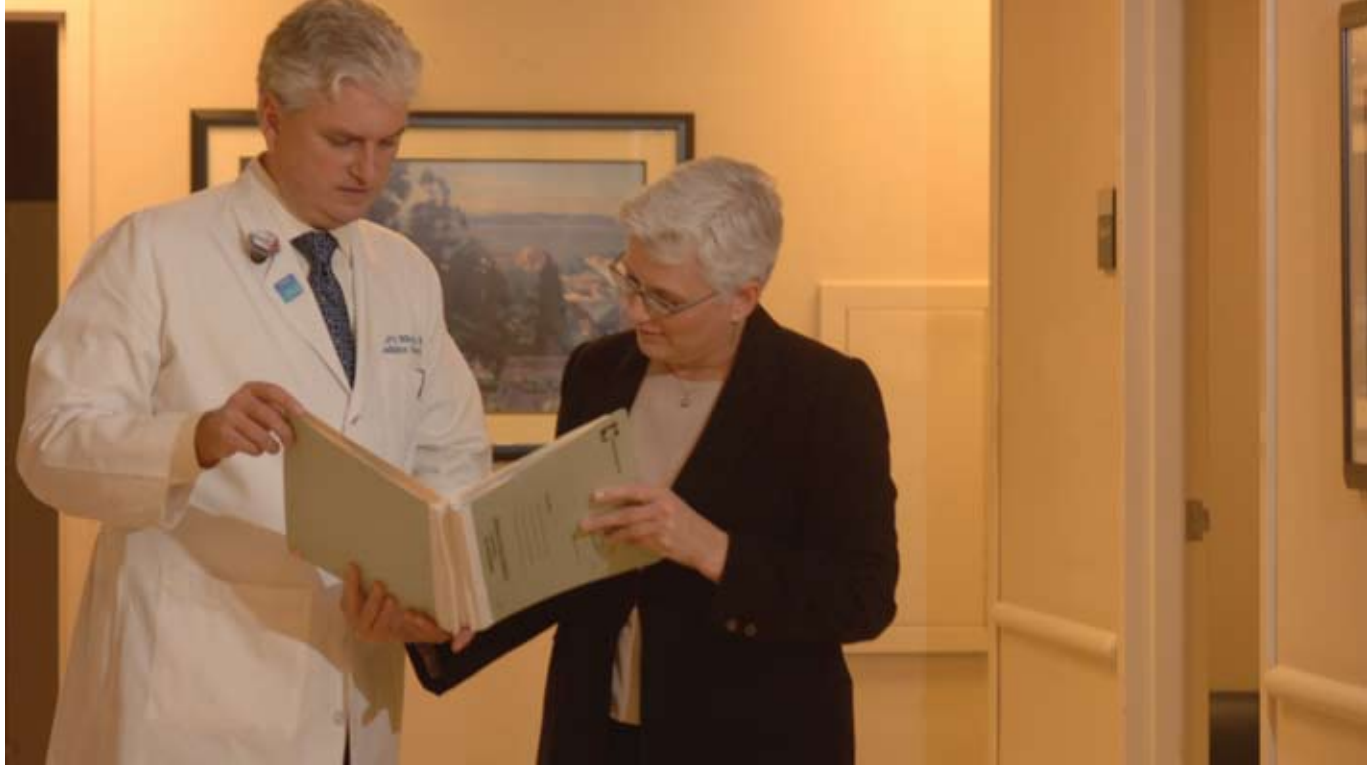
Baylor University Medical Center at Dallas 2007 Analytic Cases

(Continued)

Primary Site	Total	Sex		General Stage					
		Male	Female	In Situ	Local	Regional	Distant	Benign	Unknown
Female Genital	**283**	**0**	**283**	**20**	**143**	**53**	**42**	**7**	**18**
Cervix Uteri	32	0	32	2	22	5	1	0	2
Corpus Uteri	127	0	127	0	85	27	7	1	7
Ovary	89	0	89	0	23	19	34	5	8
Vulva	28	0	28	15	12	1	0	0	0
Other	7	0	7	3	1	1	0	1	1
Male Genital	**213**	**213**	**0**	**0**	**168**	**30**	**5**	**0**	**10**
Prostate	203	203	0	0	162	28	3	0	10
Testis	9	9	0	0	6	2	1	0	0
Other	1	1	0	0	0	0	1	0	0
Urinary System	**175**	**127**	**48**	**31**	**108**	**22**	**10**	**1**	**3**
Bladder	59	45	14	28	23	8	0	0	0
Kidney/Renal	113	80	33	2	83	14	10	1	3
Other	3	2	1	1	2	0	0	0	0
Brain and CNS	**149**	**60**	**89**	**0**	**26**	**3**	**3**	**114**	**3**
Brain (Benign)	9	4	5	0	0	0	0	9	0
Brain (Malignant)	43	24	19	0	24	3	3	10	3
Other	97	32	65	0	2	0	0	95	0
Endocrine	**107**	**28**	**79**	**0**	**56**	**17**	**3**	**22**	**9**
Thyroid	83	21	62	0	56	17	2	0	8
Other	24	7	17	0	0	0	1	22	1
Blood and Bone Marrow	**156**	**86**	**70**	**0**	**0**	**0**	**156**	**0**	**0**
Leukemia	98	51	47	0	0	0	98	0	0
Multiple Myeloma	41	24	17	0	0	0	41	0	0
Other	17	11	6	0	0	0	17	0	0
Lymphoma	**114**	**63**	**51**	**0**	**39**	**5**	**53**	**0**	**17**
Hodgkin's Disease	8	3	5	0	4	0	4	0	0
Non-Hodgkin's	106	60	46	0	35	5	49	0	17
Unknown Primary	**77**	**31**	**46**	**0**	**5**	**0**	**4**	**22**	**46**
Other/Ill-Defined	**21**	**6**	**15**	**0**	**11**	**5**	**1**	**1**	**3**

Patient Care Evaluation Study: 10-Year Experience with Prostate Brachytherapy at Baylor Sammons Cancer Center

By Barry N. Wilcox, MD, FACRO, and Janet Reynolds, CTR



Dr. Barry Wilcox and Janet Reynolds

Prostate cancer afflicts one in six men in this country. Approximately 186,320 cases will be diagnosed in 2008. Outside of skin cancer, it is the most common cancer diagnosed in men and the second leading cause of cancer death, behind lung cancer. In 2008, 28,660 men will die of this disease, accounting for 10% of all cancer-related deaths in men.[1]

Patients with prostate cancer have a variety of treatment options available to them, especially if they have early disease. The choices are watchful waiting (primarily in selected older patients or those with significant health problems), surgery, and radiation. New treatments, such as cryotherapy, are being explored; however, long-term follow-up data are limited.

Prostatectomy is the definitive surgical option. It can be done in several ways: radical retropubic prostatectomy, radical perineal prostatectomy, laparoscopic radical prostatectomy, or robotic-assisted laparoscopic radical prostatectomy.

Radiation therapy can be administered using either external beam radiation or brachytherapy (internal radiation) and, in certain circumstances, as a combination of both. When used appropriately, all three approaches are effective.

External beam radiation can be delivered by a number of different techniques: three-dimensional conformal radiation therapy (the planned dose conforms to a tumor with a convex surface); intensity-modulated radiation therapy (the planned dose conforms to a tumor with a concave component to its surface, e.g., the interface of the prostate with the rectum); image-guided radiation therapy (using the previous techniques with daily visualization of the prostate to more accurately track organ movement); stereotactic body radiation therapy (delivering a smaller number of high-dose treatments requiring image guidance); or conformal proton beam radiation therapy (minimizing radiation to surrounding organs).

Brachytherapy is radiation given within or next to the tumor from an internal source rather than from an external source. Arguably, despite all the advances in external beam technology, this represents the most conformal way to deliver radiation to the prostate. It can be done using permanent implantation of interstitial seeds (using I-125 or Pd-103) or temporary implantation of high-

dose-rate seeds (using Ir-192). When used as a single modality treatment, there are restricted stage- and pathology-dependent criteria of applicability.

The Baylor Brachytherapy Experience

Baylor University Medical Center at Dallas was one of the first cancer centers in Northeast Texas to offer prostate brachytherapy beginning in February 1997. As a consequence, a significant clinical experience with the procedure has developed. The 400 patients treated over this decade have a 5.5-year median follow-up. All the cases were done either by Neil Senzer, MD, or Barry Wilcox, MD, collaborating with a urologist on the Baylor Dallas medical staff. While I-125 was the preferred isotope at our institution, 13% of the cases were done with Pd-103 (based on tumor growth rate selection factors) during the early years of the experience. All patients offered implants alone were low risk, defined as patients with a Gleason score ≤6, a prostate-specific antigen (PSA) level ≤10, and clinical stage ≤T2b. A few patients with Gleason scores of 7 were allowed to have the implant alone if their predominant pathology was grade 3 (3+4) rather than poorly differentiated grade 4 (4+3) and if they had minimal unilateral disease on biopsy specimen. Some patients received preimplantation external beam radiation of 45 Gray (Gy) to the pelvis; however, this group of patients had intermediate-risk or high-risk disease.

The registry data show that the median age at diagnosis and treatment was 67 years. Eighty-eight percent of the patients were Caucasian, 8% were African American, and 3% were Hispanic. Of the 400 patients, 314 (79%) had brachytherapy without the addition of supplemental external beam radiation. The median PSA level was 6.1, and 79% of tumors were either well or moderately differentiated (18 were well differentiated, 299 were moderately differentiated, and 83 were poorly differentiated).

Thirty-five percent of patients received a short-term (mean, 4 months) course of androgen blockade, usually to shrink the gland below 60 cc but sometimes to defer treatment for other reasons, such as allowing time for a treatment decision, waiting for isotope availability, or travel. The average-size gland at implant was 38 cc, and the median target dose was 145 Gy for I-125 and 115 Gy for Pd-103. Those who received external beam radiation were then implanted with I-125 to a dose of 110 Gy.

Our technique included a pubic arch and ultrasound volume study from which a dosimetric preplan was rendered. Over the ensuing decade, various incremental improvements were adopted as technologic advances permitted. These included computer preoperative dosimetry, postoperative dosimetry (day of the procedure), conversion from an analogue to digital transducer, and use of stranded seed sources rather than loose seeds.

Results

Survival. The actuarial survival rate for the 400 patients treated at the Baylor Sammons Cancer Center with brachytherapy is shown in Figure 1. The disease-specific survival for these patients was 99%, with only four of 400 patients expiring from their disease, while a fifth patient with active prostate cancer expired secondary to lung cancer (Table 1).

Figure 1. *Baylor Dallas Observed (Actuarial) 5-Year Survival in Stage II Prostate Cancer Patients Treated with Brachytherapy*

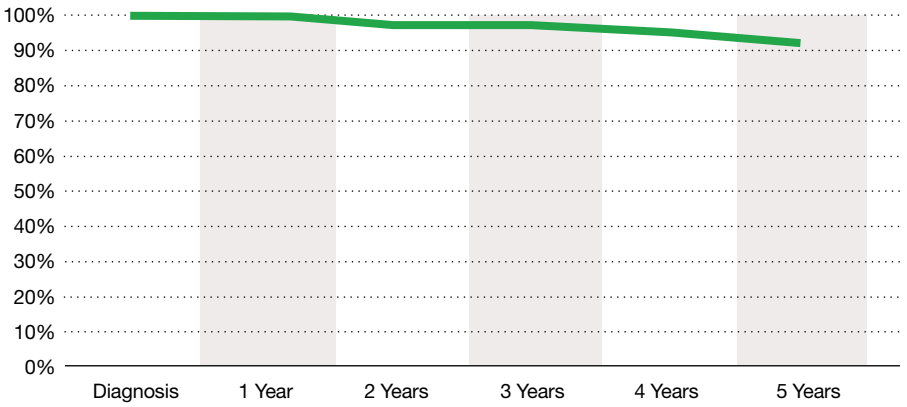


Table 1. *5-Year Status of 400 Patients with Prostate Cancer Treated with Brachytherapy*

Status	Evidence of Prostate Cancer	No. (%)
Alive	No	349 (87%)
	Yes	5 (1%)
Died	No	39 (10%)
	Yes	5 (1%)
	Unknown	2 (0.5%)

Table 2. *Recurrences Occurring 1–10 Years after Brachytherapy for Prostate Cancer in 400 Patients*

Recurrence	No. (%)
None	385 (96%)
Local	5 (1%)
Biochemical	5 (1%)
Distant Metastasis	5 (1%)

Using statistical extrapolation, the projected 10-year actuarial survival rate was 90%. Further analysis of the recurrences at Baylor Dallas suggested that only 1.5% to 2.5% had local-only recurrences, which confirms excellent local control of this disease with this technique (Table 2). Our rate of a transient PSA rise after implantation, what is referred to as "PSA bounce," was 3%. This rate is lower than that reported in some series and can probably be attributed to our older patient population.

Side effects and complications. Side effects from radiation are well documented and, with the exception of fatigue, are confined to the pelvic area. This is a consequence of bladder and rectal irritation. All of our patients experienced grade 1 to 2 urinary and rectal symptoms. These symptoms generally lasted 4 to 6 months after implantation.

Late urinary complications such as persistent obstruction or retention (grade 3)[2] from brachytherapy occurred in 4% of the patients. There were no grade 4 complications. Of the 13 patients afflicted, a transurethral resection of the prostate (TURP) was required in 11, while 2 patients required prolonged use of an indwelling Foley catheter or intermittent self-catheterization. Two patients became incontinent after the TURP procedure, which is consistent with the 18% to 25% risk[3] in published reports. Of the two patients who had catheterizations rather than TURP, one was able to regain continence through bladder training, while the other did not. In total, only three patients experienced permanent urinary incontinence—a rate of 0.75%.

Grade 3 rectal complications, which can manifest in persistent or recurrent bleeding requiring surgical correction, are also a concern for anyone contemplating prostate brachytherapy. In our series, such complications occurred in only four patients (1%). This percentage is below that of some published studies, which show a rate of 5% to 11%.[4,5] No grade 4 complications (fistulas/colostomy) were reported.

The rate of potency preservation, unfortunately, was not consistently documented prior to or following implantation, but historically it has been about 50% to 80% depending on which series is being reported. These numbers are often subject to patient selection bias (potent patients gravitate toward physicians that publish good numbers) and age bias (not actuarially adjusted to the natural decline in potency that occurs with aging). Further complicating collection of this data is the fact that many older patients refuse to answer these questions or answer them inconsistently depending on who is present with them in the room.

Table 3. *Subsequent Cancers Occurring 1–10 Years after Brachytherapy for Prostate Cancer in 400 Patients*

Cancer Type	No.
Bladder	3
Colon/rectum	3
Kidney	1
Leukemia	2
Lung	3
Melanoma	1
Oral cavity	1
Pancreas	1
Stomach	1

Risk of radiation-induced cancer. Much is known about complications related to rectal bleeding; less is known about the risks of inducing a secondary cancer from radiation. Table 3 documents some of the subsequent cancers that have developed in this group of patients.

It has been postulated that someone who has developed one cancer may be predisposed genetically or from exposure history to developing other cancers. Many cancers share similar risk factors.

It is also well documented that ionizing radiation can induce some cancers years to decades later. Our own data show four cancers found in the pelvic area, which include three bladder cancers and one rectal cancer. Since the minimum time requirement for attributing an induced cancer to radiation is 5 years after radiation exposure, only one case would satisfy the time requirement (a bladder cancer) and be reasonably attributed to radiation treatment due to its location. This translates into a risk of 1 in 400. Given the prevalence of bladder cancers in men of this age group, this may possibly overestimate the risk.

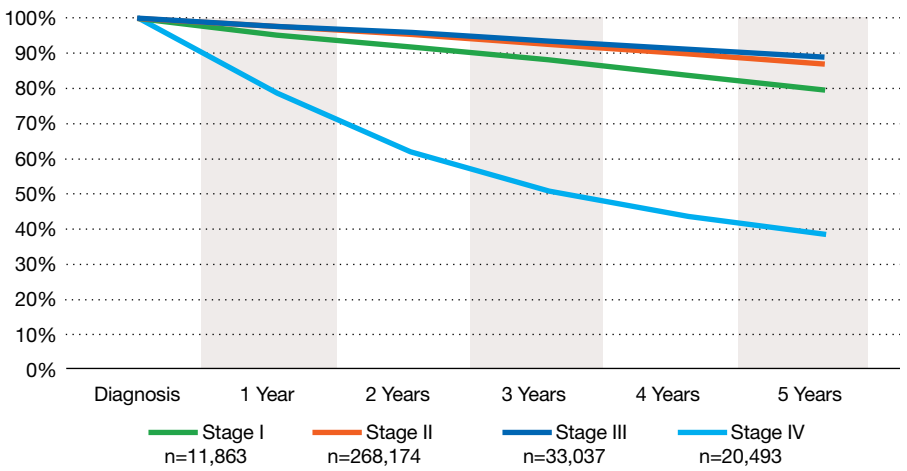
Comparison of Results with National Benchmarks

We compared the results of our experience with stage II prostate cancer treatment to that of the large National Cancer Data Base (NCDB) for prostate cancer survival. NCDB, a joint program of the Commission on Cancer and the American Cancer Society, is a nationwide oncology outcomes database for more than 1,400 Commission-approved cancer programs in the United States and Puerto Rico. Some 75% of all newly diagnosed cases of cancer in the United States are captured at the institutional level and reported to the NCDB. The NCDB data show a 5-year observed (actuarial) survival rate of 89% nationally[6] (Figure 2) compared with 91% for our brachytherapy patients (Figure 1).

Conclusion

Our results in treating prostate cancer with brachytherapy compare well with those of the 1,400 Commission-approved cancer programs reporting to the NCDB registry. Baylor Sammons Cancer Center has achieved an experience unique to the Northeast Texas area in its volume, duration, and follow-up. The results reaffirm the effectiveness of brachytherapy, the appropriateness of selection criteria, and the quality of application as practiced at Baylor Sammons Cancer Center. In the future, our experience will continue to provide insight on the long-term results of the procedure as well as elucidate how the continual incremental improvements that have been adopted impact outcomes. A good cancer registry is essential for an advanced cancer center and enormously beneficial in helping to determine where opportunities for improvement lie. It is also invaluable in compiling national trends and statistics and serves as a benchmark for comparison of a cancer center's results with those of other accredited centers throughout the nation.[7]

Figure 2. *NCDB Prostate Cancer Observed (Actuarial) Survival by Stage*



Acknowledgments

We would like to thank Dr. Neil Senzer for his valuable input and acknowledge his efforts in starting the brachytherapy program at Baylor Dallas. Also, we express our gratitude to Joshua Fine, MD, John Ware, MD, Michael Goldstein, MD, Myron Fine, MD, George Hurt, MD, James Sandin, MD, Bob Schoenvogel, MD, Ben Schnitzer, MD, and Steve Frost, MD, along with the many other urologists and internists who referred their patients to our center and provided follow-up information for this project. Finally, we want to thank our dedicated brachytherapy nurses, Carol Motley, RN, and Robin Wilks, RN, for their professionalism and selfless dedication.

Notes

1. American Cancer Society. *Cancer Facts & Figures 2008*. Atlanta, GA: American Cancer Society, 2008.
2. All toxicities are expressed using the Radiation Therapy Oncology Group/European Organisation for Research and Treatment of Cancer Late Radiation Morbidity Scoring Scheme.
3. Kollmeier MA, Stock RG, Cesaretti J, Stone NN. Urinary morbidity and incontinence following transurethral resection of the prostate after brachytherapy. *J Urol* 2005; 173(3):808–812.
4. Mueller A, Wallner K, Merrick G, Ford E, Sutlief S, Cavanagh W, Butler W. Perirectal seeds as a risk factor for prostate brachytherapy-related rectal bleeding. *Int J Radiat Oncol Biol Phys* 2004;59(4):1047–1052.
5. Kao J, Stone NN, Lavaf A, Dumane V, Cesaretti JA, Stock RG. ^{125}I monotherapy using D90 implant doses of 180 Gy or greater. *Int J Radiat Oncol Biol Phys* 2008;70(1):96–101.
6. American College of Surgeons. National Cancer Data Base/Commission on Cancer Survival Reports. Chicago: ACS, 2008.
7. Our experience with brachytherapy alone (i.e., without external beam radiation) compared with the results of published data from major brachytherapy cancer canters will be the subject of a future publication since the Commission on Cancer accreditation process requires comparison of site-specific results of our cancer center with results from NCDB.

Future Developments for Prostate Cancer at Sammons

The Baylor Sammons Cancer Center, along with the Mary Crowley Cancer Research Center, Texas Oncology, US Oncology, and the National Cancer Institute, offer a number of protocols for prostate cancer. Clinical trials have continued to evolve based on new insights and technologies. Given that the cure rate for low-risk prostate cancer patients treated with radiation or surgery is above 80% at 10 years and that prostate cancer typically afflicts men in their advanced years, most, but not all, of the new and innovative studies tend to focus on intermediate-risk or high-risk patients, patients who have metastatic disease at presentation, or patients in whom conventional treatment has failed. As a result, exploring new or innovative treatments for low-risk prostate cancer patients poses an ethical dilemma. Is it reasonable or even ethical, for example, to try something novel and unconventional when well-established, relatively safe treatments that are highly effective are available? This is really for the patient to determine.

Patients who want to try a new approach or explore adding a new adjunctive therapy to the more established treatments have choices at Baylor Sammons Cancer Center. For example, stereotactic body radiation therapy is now being offered to patients with early stage disease. In this approach, patients are given five high-dose fractions of very precisely focused radiation rather than the typical 8- to 9-week daily course of treatment. Early data suggest that stereotactic body radiation therapy may be as effective as standard radiation therapy and have acceptable side effects. Other improvements in the treatment of prostate cancer with radiation will take place as we increase our understanding of preservation of erectile function, determine who has micrometastatic disease at presentation, and improve our imaging and increase our dose conformality with the implementation of "dose painting."

Adjuvant treatments—such as giving radiation with selenium, celecoxib, docetaxel, or a vaccine—are currently being studied in clinical trials. In addition, investigational drugs, such as abiraterone acetate, have shown favorable results in metastatic prostate cancer and are now being considered for study in earlier-stage disease.

Building Hope *Through Research*

Personalized Medicine

The Center for Personalized Medicine, which began in 2001 and is led by Damien Chaussabel, PhD, brings together modern blood banking technology, novel genome analysis, and advanced data mining tools. From one small tube of blood, Dr. Chaussabel's group can measure the expression level of 48,000 different gene transcripts.

What began as an ambitious plan has developed into an international program in which scientists and physicians from Baylor Health Care System collaborate on studies with their peers from around the globe.

Not only can this research help diagnose diseases, but it also can be used to see if a patient is responding to therapy and medication. "We have made tremendous progress over the last 7 years in identifying the unique 'signatures' of many diseases and translating this information into useful clinical data," explained Jacques Banchereau, PhD, director of the Baylor Institute for Immunology Research. "By knowing the signature of a specific illness and what a healthy signature should be, we can monitor the effectiveness of a treatment plan."

Therapeutic Cancer Vaccines

Baylor Research Institute and the Mount Sinai School of Medicine are collaborating to develop therapeutic cancer vaccines for patients with lymphoma and myeloma. Additionally, the researchers will investigate ways to better diagnose autoimmune disorders such as arthritis and lupus.

Unlike traditional vaccines used to prevent diseases, the therapeutic vaccines being created by Baylor Research Institute and Mount Sinai will be designed as personalized cancer treatments using cells from the patient's own immune system. To develop the vaccines, Baylor researchers will cultivate dendritic cells, a class of white blood cells that initiate and control the body's overall immune response against foreign invaders, and manipulate them to attack the cancer. Baylor Institute for Immunology Research has made significant advances in the study of dendritic cells. It is currently applying this technique to develop and test vaccines for other diseases, such as malignant melanoma, breast cancer, and dangerous infectious diseases.

Early Detection for Lung Cancer

The Baylor Sammons Lung Cancer Center has joined the International Early Lung Cancer Action Program, a group of lung cancer experts dedicated to achieving early diagnosis, treatment, and eventual cure of lung cancer.

Dr. Richard Wood

Richard Wood, MD, medical director of the Baylor Sammons Lung Cancer Center and a physician on the medical staff at Baylor Dallas, said this is a significant step to establish early detection through low-dose computed tomography (CT) screening as an accepted practice. "We're trying to move the paradigm toward earlier detection of lung cancer, instead of waiting until a patient presents with symptoms of the disease," Dr. Wood said. "The key is to find the people who are asymptomatic. Patients who have smoked 20 years or more or who have had heavy exposure to second-hand smoke or occupational exposure to asbestos, beryllium, uranium, or radon are primary candidates."

The Baylor Sammons Lung Cancer Center started enrolling patients for this study in 2008. CT scans are provided at a reduced cost to high-risk patients, and the center is tracking the results.

"While CT screening for lung cancer is still considered experimental, we are documenting our findings and will continue to push for insurance companies to cover the cost," Dr. Wood said.

Aquatic Exercise for Breast Cancer Patients

Baylor's commitment to research for patients does not end in the laboratory. A study led by Michael Grant, MD, examines the potential effectiveness of aquatic exercise therapy for breast cancer patients suffering from lymphedema, a

Back row, left to right: Elaine Lagow, RN, BS, CNA, CCRC, Linda Miller, and Nancy Hawkins, RN, MEd, with Carol Cruz, the 300th participant in the Ovarian Study.

condition characterized by inflammation of a limb due to an excess collection of tissues and fluids. Approximately 15% to 20% of breast cancer survivors develop lymphedema as a result of their cancer treatments.

The effectiveness of aquatic therapy is based on the idea that water pressure helps compress the swollen limb and aids the movement of blood and fluids. In addition, water exercises relax muscles, decrease impact on joints, and promote deep breathing, which collectively decrease pain and allow participants to have better exercise experiences.

Early Detection of Ovarian Cancer

Baylor Sammons Cancer Center is participating in a multicenter trial focused on early detection of ovarian cancer in low-risk women. This 3-year study looks at postmenopausal women aged 50 to 74 who have at least one ovary and are cancer free, having had no chemotherapy or radiation therapy for at least a year. The goal for the Baylor site is to accrue 600 patients over a 3-year period. Since the study started in December 2007, 310 women have joined.

Site Tumor Conference Case Reports

By Marvin J. Stone, MD

When the Baylor Charles A. Sammons Cancer Center opened on May 1, 1976, one site conference on gynecologic oncology was already in place. There was also a "tumor board." Many physicians felt that the older concept of a tumor board, where a small group of physicians heard about patients with a variety of different types of cancer, was outmoded. New advances in multidisciplinary and combined-modality approaches created the need for separate committees for the major sites. Each site tumor committee in turn was responsible for organizing and running a site tumor conference.

The site tumor conferences have developed into successful endeavors. Baylor Sammons Cancer Center now holds 220 multidisciplinary and educational site-specific conferences each year, with case discussions of about 700 patients. Individual conferences focus on bone and soft tissue, breast, chest, skin, head and neck, the endocrine system, the gastrointestinal system, neurology, urology, gynecology, and hematopoietic diseases. Attendance has grown each year to more than 6,000 attendees in 2007, including representatives from multiple medical disciplines as well as fellows, residents, interns, nurses, and allied health professionals. Continuing medical education credit is provided.

All conferences are sponsored, planned, and implemented by Baylor Sammons Cancer Center site tumor committees, which report to the cancer center medical committee. These conferences have become the "nuts and bolts" of the cancer center and oncology activities at Baylor. They directly contribute to high-quality patient care and learning at multiple levels.

I know of no other cancer center or institution that conducts a similar scope of regular multidisciplinary oncology conferences. The success of our conferences is a result of active participation by numerous physicians. These conferences continue to thrive because of the enthusiasm and devotion to clinical excellence of many members of our medical staff.

Baylor University Medical Center Proceedings began publishing one case report in each quarterly issue, starting in April 2008. The first three published cases were as follows:

- Adair CF, Preskitt JT, Joyner KL, Dobson RW. Enlarged thyroid gland with normal thyroid function tests. *Proc (Bayl Univ Med Cent)* 2008;21(2):179–182.
- Mittal A, Felter D, Shiller SM, McCollum AD, Lamont JP, Mallat D. Gastrointestinal bleeding and cutaneous nodules. *Proc (Bayl Univ Med Cent)* 2008;21(3):331–334.
- Oh J, Karunanayake M, Stringer CA Jr. Invasive endometrial lesion in a patient with mental retardation. *Proc (Bayl Univ Med Cent)* 2008;21(4):426–429.

2008 Publications

1. Abair T, Card P, O'Shaughnessy J. Highlights from: The 33rd European Society of Medical Oncology Congress: September 2008; Stockholm, Sweden. *Clin Breast Cancer* 2008;8(6):481–486.
2. Adair CF, Preskitt JT, Joyner KL, Dobson RW. Enlarged thyroid gland with normal thyroid function tests [site tumor conference report]. *Proc (Bayl Univ Med Cent)* 2008;21(2):179–182.
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Building Hope *Through Philanthropy*

North Texas is expected to see a 21% increase in the number of cancer patients in the next 5 years. To meet that growing need, Baylor Health Care System is building the area's premier dedicated cancer center at Baylor University Medical Center at Dallas. The new cancer center will include a 10-story, 450,000-square-foot outpatient building and renovation of Collins Hospital and Sammons Tower at a cost of $350 million. Baylor Health Care System Foundation is spearheading the campaign to raise the funds to make this project a reality.

Pauline Gill Sullivan

$5 Million Gift for Blood Cancer Research

The Pauline Allen Gill Foundation recently gave $5 million in memory of Pauline Gill Sullivan to support the new cancer center at Baylor University Medical Center at Dallas. Nancy Seay, president of the Pauline Allen Gill Foundation, helped orchestrate the gift, which will support hematological research at Baylor Dallas and establish The Pauline Allen Gill Distinguished Chair in Hematological Cancer Research.

Mrs. Sullivan's oncologist, Brian Berryman, MD, will be instrumental in establishing the program. "Through the generosity of the foundation and the family of Pauline Gill Sullivan, physicians and researchers at Baylor will be able to conduct more clinical trials for patients with hematological cancers, helping us identify the most effective treatments for these diseases and, ultimately, bringing advanced care to Baylor patients," stated Dr. Berryman.

Darlene G. Cass and keynote speaker Geralyn Lucas at the Celebrating Women luncheon, which raised $2.2 million to battle breast cancer.

2008 Celebrating Women

Baylor Health Care System Foundation honored women fighting breast cancer at the ninth annual Celebrating Women luncheon on October 16, 2008, at the Hilton Anatole in Dallas. The event raised $2.2 million for breast cancer research, community outreach, and expanded technology for early detection and treatment throughout Baylor Health Care System.

More than 1,350 guests heard stories of women's struggles with the disease from keynote speaker Geralyn Lucas, author of *Why I Wore Lipstick to My Mastectomy.* The Circle of Care Award, which honors community heroes active in the fight against breast cancer, was given to Nancy and David Burgher and Highland Hills United Methodist Church Senior Pastor Sheron C. Patterson.

Dr. Thomas Hutson, Tony Romo, and Carolyn Berry at the EveryMan dinner, which promoted prostate cancer awareness and raised money to support expanded technology, research, and community outreach.

The Foundation will host its 10th annual Celebrating Women luncheon on October 22, 2009, at the Hilton Anatole. Actress Christina Applegate will be the featured speaker.

Gift for Imaging Center Technology

David Winter, MD, president of the Discovery Foundation, announced that the board of directors approved a $350,000 grant for new technology in the Darlene G. Cass Women's Imaging Center. The Discovery Foundation grant will allow Baylor to acquire positron emission mammography, or PEM, which uses a high-resolution gamma camera. Sometimes referred to as molecular breast imaging, this technology can pick up subtle differences in the appearance of tumor versus normal tissue. Conventional mammography can have a false-negative rate of up to 10%—partly due to dense breast tissues obscuring the cancer and the large overlap between the appearance of tumor and normal tissue. PEM will help reduce the instances of false-negative readings. Baylor will be the first imaging facility in the Southwest to have this technology.

EveryMan Event for Prostate Cancer

On April 30, 2008, Ramiro and Tony Romo joined Baylor Health Care System Foundation at the first EveryMan dinner at the Ritz-Carlton Hotel in Dallas. Ramiro Romo, who was diagnosed with prostate cancer in 2007, addressed the 250 guests attending the event designed to promote awareness of prostate cancer and raise money to support expanded technology, research, and community outreach. Panelists Steven Frost, MD, and Pick Scruggs, MD, provided details about the importance of early detection and available treatment options. Thomas Hutson, DO, PharmD, shared insights into the comprehensive research program at Baylor Health Care System and its vision for the future. Matthew Shuford, MD, also provided attendees an opportunity to interact directly with the da Vinci® surgical robot, used for advanced surgical procedures such as prostatectomies.

The Foundation will host EveryMan 2009 on May 13, 2009, at the Ritz-Carlton. Former New York City Mayor Rudy Giuliani will be the keynote speaker.

Telephone *Directory*

Referrals

Baylor Sammons Cancer Center at Dallas
Patient Navigation Program (214) 820-3535
Baylor Physician ConsultLine 1-800-9BAYLOR
Baylor Patient HelpLine 1-800-4BAYLOR

Administration

Cancer Center Administration
Alan M. Miller, MD, PhD
Director/Chief of Oncology (214) 820-2881
Marvin J. Stone, MD, Director of Oncology
Medical Education, Quality, and Safety (214) 820-3445
Donna Bowers, JD, RHIA, CHP,
Baylor Health Care System
Vice President/Oncology (214) 820-2800
Sylvia Coats, Director of Administration (214) 820-3433
Ryan T. Seymour, MBA, RHIA,
BHCS Director/Oncology (214) 820-6322
John McWhorter, MHA, President,
Baylor University Medical Center at Dallas (214) 820-4141
Texas Oncology, PA (214) 370-1000
R. Steven Paulson, MD, President and
Chairman of the Board
Joni Mokry, RN, OCN, Practice Director
Baylor Health Care System Foundation (214) 820-3136

Department of Oncology

Alan M. Miller, MD, PhD, Chief (214) 820-2881

Divisions

Gynecologic Oncology (214) 370-1300
C. Allen Stringer, Jr., MD, Director
Medical Oncology and Other
Internal Medical Subspecialties (214) 370-1000
Robert G. Mennel, MD, Director
Oncologic Pathology (214) 820-2251
Daniel A. Savino, MD, Director
Radiation Oncology (214) 370-1400
R. Pickett Scruggs, III, MD, Director
Surgical Oncology (214) 826-6270
John T. Preskitt, MD, Director

Cancer Center Programs

Graft-vs-Host Disease Clinic (GVHD) (214) 370-1500
Blood and Marrow Transplant
Inpatient Services (214) 820-2619
Blood and Marrow Transplant
Outpatient Center (214) 370-1500
National Marrow Donor Program (214) 820-4279
Darlene G. Cass Women's Imaging Center (214) 820-2430
- Diagnostic mammography
- Screening mammography
- Other breast imaging

W. H. & Peggy Smith Baylor Sammons
Breast Center (214) 820-9600
- Breast cancer prevention research trials
- Breast Care for a Lifetime™
- Breast health education
- Personal risk evaluation

Cutaneous Lymphoma Clinic (214) 370-1500
Hereditary Cancer Risk Program
- Breast and ovarian (214) 820-9600
- Gastrointestinal (214) 820-2692

Liver and Pancreas Disease Center (214) 820-1756
Lung Cancer Center (214) 820-6767
Lymphedema Program (214) 820-1931
- Lymphedema prevention and treatment services

Radiosurgery Center (214) 820-7285

Research

Baylor Institute for Immunology Research (214) 820-7450
Jacques Banchereau, PhD, Director
Baylor Research Institute (214) 820-2687
Michael A. E. Ramsay, MD, President
Breast Cancer Prevention Research Trials (214) 820-9600
Joyce A. O'Shaughnessy, MD, Director
Cancer Immunology Research Laboratory (214) 820-4123
Marvin J. Stone, MD, Director
Mary Crowley Medical Research Center (214) 370-1870
John Nemunaitis, MD, Executive Medical Director
National Surgical Adjuvant
Breast and Bowel Project (214) 820-9600
Michael D. Grant, MD, Director
US Oncology/Texas Oncology Research (214) 370-1000
Joanne L. Blum, MD, PhD, Site Leader

Support Services

Ernie's Appearance Center (214) 820-8282
- Prostheses and specialty care items for cancer patients

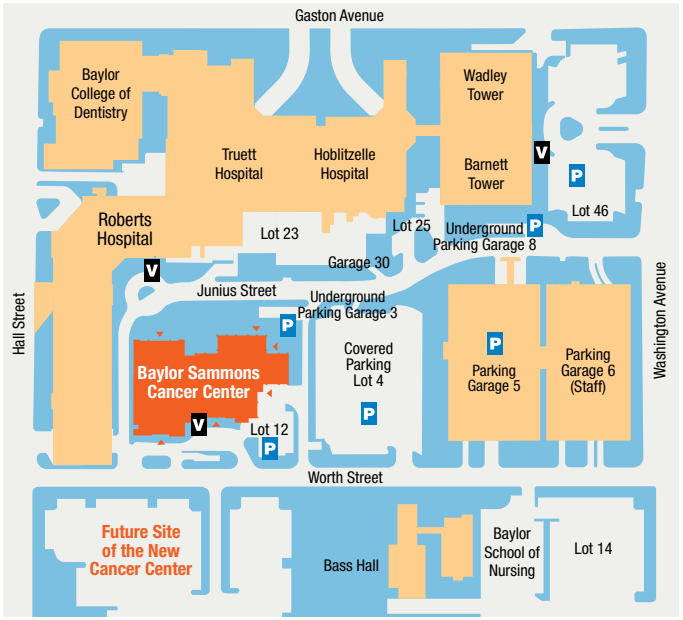
Screenings 1-800-4BAYLOR
- Skin/melanoma (May)
- Prostate cancer (Sept)

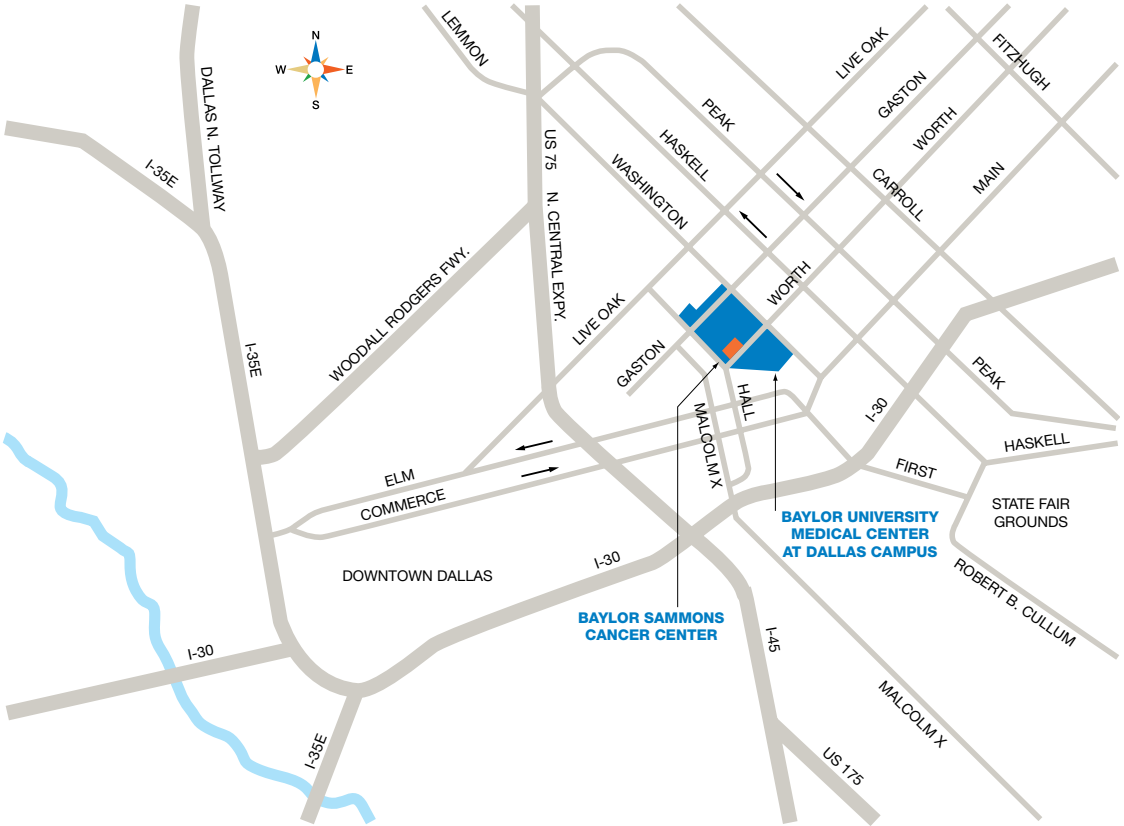
Smoking Cessation Program (214) 820-9791
- Martha Foster Lung Care Center

Virginia R. Cvetko Patient Education Center (214) 820-2608
- Barrett Lectureship
- Community resource referrals
- Individual counseling
- Nutrition education/support
- Patient/family education and support programs:
  > Amyloid Support North Texas
  > Blood and Marrow Transplant Inpatient Support Group
  > Breast Cancer Support Group
  > Carcinoid Cancer Texas Survivors
  > North Texas Myeloma Support Group
  > Oncology Inpatient Support Group
  > Ovarian Cancer Support Group
  > Prostate Cancer Education and Support Group
  > Support for People with Oral and Head and Neck Cancer
  > Virginia R. Cvetko Living with Cancer Series
  > Waldenström's Macroglobulinemia Support Group
- Patient resource centers/oncology libraries
  > 6 Collins Hospital
  > 6 Roberts Hospital

Worth Street Valet Parking (214) 820-8077
Patient Transport (214) 818-6400

Location *Maps*





Baylor Sammons Cancer Center is located on the campus of Baylor University Medical Center at Dallas and is accessible from U.S. 75 (North Central Expressway)/I-45 and 1-30.

Valet parking is available at the front entrance and other nearby locations. Self parking is conveniently located adjacent to the Baylor Sammons Cancer Center.

BAYLOR
Charles A. Sammons
Cancer Center at Dallas

Baylor University
Medical Center at Dallas
3500 Gaston Avenue
Dallas, Texas 75246

1-800-4BAYLOR
(214) 820-3535
BaylorHealth.com/DallasCancer

Baylor Health Care System wants cancer patients in North Texas to have access to advanced cancer prevention, screening, diagnosis, treatment and research—close to home where they can be supported by their loved ones. Baylor Health Care System Foundation supports that vision, and to that end, it is raising funds for Baylor's new, $350 million cancer center project. To learn more about giving opportunities, please contact the Foundation at (214) 820-3136 or Foundation@BaylorHealth.edu.

BAYLOR
HEALTH CARE SYSTEM
FOUNDATION