



THE CANCER CARE PROGRAM

2009 ANNUAL REPORT



Located at the entrance to the Cancer Center, the sculpture "Sunflowers" was created and donated to Stony Brook University Medical Center by local artist, Cruz, in honor of the care his wife, Patricia Hills Cruz, received as a patient. Constructed from the metal of a 100-year-old plow, it symbolizes hope and life. The artist designed the sculpture with the intent to convey positive thoughts about life and health for those who visit the Cancer Center.



CANCER CENTER

Visitor Parking

WELCOME TO STONY BROOK UNIVERSITY MEDICAL CENTER

A Message from Leadership



Newly constructed entrance to Stony Brook University Medical Center, part of ongoing modernization.

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We are pleased to bring you our Cancer Care Program's 2009 annual report. As one of our leading programs,

Cancer Care at Stony Brook not only exemplifies all that we stand for—bringing skilled and compassionate care to the people of Long Island—it also perfectly blends our three core strengths: clinical excellence, in which we have the resources to take on the most complex cases; cutting-edge research that advances the frontiers of science and clinical practice; and top-flight medical education, in which we shape the future of healthcare by preparing tomorrow's medical practitioners.

This report presents an overview of our services, details our approach to care, and features highlights of the past year, including research breakthroughs, pioneering diagnostic and surgical procedures, new treatment protocols,

and recently acquired state-of-the-art technology. We have also included statistics on the number of new patients and diagnoses.

In looking back, it was an extraordinary year for Stony Brook's Cancer Care Program on many levels: patient outcomes, physician recruitment, quality indices, research advances, external recognition, and credentialing and certification. The following pages not only highlight these achievements but also show why we are a major resource on Long Island, and how we are aggressively pursuing our goal to deliver world-class cancer care.

Our Mission

To improve the lives of patients, families, and communities, educate skilled healthcare professionals, and conduct research that expands clinical knowledge.

Our Vision

Stony Brook University Medical Center will be:

- A world-class healthcare institution, recognized for excellence in patient care, research, and healthcare education
- The first choice of patients for their care and the care of their families
- An academic medical center that attracts educators and students with the desire and ability to provide and receive the highest quality, innovative education
- One of the top ranked institutions for scientific research and training

Who We Are

A Tertiary Care Center. Stony Brook University Medical Center is the only tertiary hospital in Suffolk County and

the only academic medical center on Long Island with an on-site School of Medicine. With more than 5,400 employees, it is the largest hospital in Suffolk County. Certified for 546 beds, the Hospital treats approximately 30,000 inpatients and 220,000 outpatients, and performs over 18,000 surgical cases, annually.

A Regional Resource. As the only Level 1 Trauma Center in Suffolk County, Stony Brook is the regional referral center for trauma. The Hospital is also a regional referral center for stroke and stroke intervention, perinatal care and neonatal intensive care, burn care, amyotrophic lateral sclerosis (ALS), pediatric and maternal HIV/AIDS, pediatric and adult multiple sclerosis, and comprehensive psychiatric emergency services.

A Leader and an Innovator. Stony Brook consistently embraces the next generation of technology, often being the first on Long Island or even in the state to acquire it. Many Stony Brook physicians are leaders in their fields, not only pioneering new techniques and procedures but also serving as consultants and mentors/trainers to area physicians.

Priorities

Reaching Out to the Community. Highly committed to improving the health of its community, the Medical Center established and funds the First Responder Program in eastern Long Island and provides nearly 1,000 education and health-related programs annually. Stony Brook has adopted a patient and family centered care initiative that partners the patient/family unit with the medical team with the goal of better outcomes, improved communication, more informed decision making, greater patient safety, and higher patient satisfaction. The Medical Center recently concluded Phase 1 of the Major Modernization Project with an upgraded Emergency Department, new operating rooms, a new Women and Children's Center, and a new lobby. Phase II, begun in fall 2009, encompasses a dedicated Pediatric Emergency Department, newly expanded space for the Comprehensive Psychiatric Emergency Program with separate areas for adults and children, a new Neonatal Intensive Care Unit, completion of the Labor and Delivery Unit, and completion of the main lobby.

Promoting Education and Research.

The Medical Center continues to train medical professionals through the University's School of Medicine and the Health Sciences Schools—Dental Medicine, Health Technology and Management, Nursing, and Social Welfare. On the research front, Stony Brook scientists participate in clinical trials, national studies, and community-based projects. Approximately 10 percent of Stony Brook's patients participate in clinical trials, as compared to the two percent national average.

Focusing on Quality. Overall, patient satisfaction and safety scores have steadily increased. Mortality rates have decreased Hospital-wide for the past five years, one of the fastest declines in the nation. The Quality Assessment Review Board and the Patient Safety Council continue to help Stony Brook further improve clinical quality, processes, safety, and outcomes.

Results

Overall Excellence. The Medical Center has been recognized for healthcare excellence by many external groups, including the Institute for Healthcare Improvement, the Healthcare Association of New York State, the National Research Corporation, the University HealthSystem Consortium, and the U.S. Department of Health and Human Services. In 2008, Stony Brook received a Pinnacle Award—one of four given annually in NYS—for converting the Cardiac Intensive Care Unit into a high reliability unit, and was awarded for excellence in clinical care by an independent rating company of hospitals and physicians. In addition to the numerous awards for clinical excellence, Stony Brook received the Innovator of the Year Award for food services, and the Partner for Change Award, an environmental excellence award from Practice Greenhealth.



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CANCER CARE AT STONY BROOK UNIVERSITY CANCER CENTER

A Message from Cancer Program Leadership



Michael Hayman, PhD; Rose Cardin, RN; Robert I. Parker, MD; and Theodore G. Gabig, MD

2009 Cancer Program Leadership

Theodore G. Gabig, MD, Professor and Chief, Division of Medical Hematology/Oncology; Cancer Committee Chair; and Associate Director for Adult Clinical Programs, Stony Brook University Cancer Center

Robert I. Parker, MD, Professor and Vice Chair of Pediatrics for Academic Affairs; Director, Pediatric Hematology/Oncology; and Associate Director for Clinical Trials and Pediatric Clinical Programs, Stony Brook University Cancer Center

Michael Hayman, PhD, Professor, Molecular Genetics and Microbiology, and Associate Director for Research, Stony Brook University Cancer Center

Rose Cardin, RN, MSN, Associate Director of Nursing and Operations, Cancer Services

In a year marked by achievements, there is one that illustrates everything that is right about the Stony Brook University Cancer Care Program: Our Hospital-wide cancer program has been granted a full three-year accreditation by the American College of Surgeons (ACOS) Commission on Cancer as a Teaching Hospital level-approved cancer program.

Our Cancer Care Program received commendations in all possible areas, including clinical management, outcomes analysis, use of nationally recognized patient management guidelines, clinical trials, and community outreach prevention and early detection programs. Because of these stellar results, the Stony Brook University Medical Center's cancer program received an Outstanding Achievement Award from the ACOS.

This recognition is testament to the high quality of care provided by our program.

Another major accomplishment was the accreditation of the Carol M. Baldwin Breast Care Center by the National Accreditation Program for Breast Centers (NAPBC). We were the first breast center in New York State to receive a full, three-year accreditation, which puts our center in a small group of top-quality breast centers nationwide.

The NAPBC is a new accreditation program aimed to elevate the standard of care and raise the bar for quality in the delivery of breast care across the country. Participation is voluntary. Stony Brook chose to undergo the rigorous analysis and evaluation process simply because we believe our breast cancer care is unparalleled in the region. At the

heart of the NAPBC is that breast disease and breast cancer require a comprehensive, multidisciplinary, multi-specialty approach—something Stony Brook has been doing for the last 10 years.

Also, our Cytogenetics Lab received certification from the Children's Oncology Group for the analysis of chromosomal abnormalities in childhood leukemia—which recognizes our expanded capabilities in the molecular diagnosis of cancer.

What is important to point out is that this high quality and comprehensive level of care is the standard of care followed throughout our entire cancer program for every form of cancer we treat. We are committed to becoming a National Cancer Institute-designated comprehensive cancer center, which will make us just one of 22 in the country with this designation, and the only one on Long Island.

Other Highlights of the Year

Facilities

- Development and enhancement of our new outpatient Cancer Center continues. Located within the building is the Carol M. Baldwin Breast Care Center, the Center for Pain Management, and the outpatient Imaging Center with state-of-the-art equipment. The Cancer Center also offers amenities such as valet parking and Internet access in waiting areas. Facilities at the Medical Center used by patients with cancer also have been upgraded and expanded, including radiation oncology, the inpatient oncology unit, the specialized Bone Marrow Transplant Unit, the Hospital's operating rooms, and the Ambulatory Surgery Center.

Physicians

Eighteen Stony Brook physicians have been named to *New York* magazine's

"Best Doctors" list—a third of which are in our cancer program.

Stony Brook continually seeks out the most expert physicians, many of whom have national and even international reputations. Physicians who have recently joined Stony Brook's Cancer Care Program include:

Philip Bao, MD, who has joined the Division of Surgical Oncology and will focus his practice on treatment and management of malignant and benign tumors of the liver, pancreas, esophagus, and stomach using standard, laparoscopic, and robotic surgical techniques. For advanced abdominal cancers, he will provide new modalities such as heated intraperitoneal chemotherapy (HIPEC) for carcinomatosis.

David Fiorella, MD, in the Department of Radiology, is an important new member of the Neurologic Oncology Team. Dr. Fiorella has expertise in treating cerebral aneurysms, intracranial atherosclerosis, and stroke. In particular, he is one of the most experienced in the world in using the Pipeline Embolization Device for reconstruction of complex, and in some cases, otherwise untreatable cerebral aneurysms.

Agnes Kowalska, MD, who has joined

the Department of Neuro-oncology to help establish a Neuro Intensive Care Unit and expand basic research in neurovascular conditions.

Elliot Regenbogen, MD, who has joined the Division of Otolaryngology Head and Neck Surgery. His research includes the development of ultra high resolution immunofluorescent-based imaging systems for detection and treatment of benign and malignant disorders of the vocal cords, head and neck, and paranasal sinuses.

Technology and Treatments

Robot-Assisted Surgery. With the acquisition of the most advanced version of the da Vinci® S HD™ Surgical System, we have expanded our robot-assisted surgical program. This allows us to offer minimally invasive surgery, with its benefits of shorter recovery time, fewer complications, less trauma to surrounding tissue and, often, better clinical outcomes to patients needing cancer surgery, for example prostatectomy and hysterectomy.

Shorter Treatment Time. Stony Brook's breast surgeons and radiation oncologists are now using the new MammoSite® radiation system. This involves temporary implantation of a device into the lumpectomy cavity, which can then

“ Our Hospital-wide cancer program has been granted a full three-year accreditation by the American College of Surgeons (ACOS) Commission on Cancer as a Teaching Hospital level-approved cancer program. This recognition is testament to the high quality of care provided by our program.”

A Message from Leadership

assist in delivering full lumpectomy radiation in five days instead of the traditional six weeks of external radiation to the entire breast.

Strides in Treating Bladder Cancer.

Options for treating bladder cancer include local surgical resection and placement of chemotherapeutic agents into the bladder. In some cases, surgeons can also create a new continent bladder made from the intestine, allowing full restitution of urinary function. To help diagnose and stage bladder cancers earlier, leading-edge optical coherence tomography (OCT) technology is available.

Kidney Treatment. New oral agents such as sunitinib and sorafenib that target vascular endothelial growth factor receptors are available to patients with advanced disease.

Expanding Minimally Invasive surgery. The Upper Gastrointestinal and General Oncologic Surgery Group was formed to offer minimally invasive surgery for complex GI tumors and other diseases.

Only at Stony Brook. Stony Brook is the only hospital in Suffolk County to offer HIPEC (heated intraperitoneal chemotherapy) on tumors that have spread to the abdominal cavity from primary colorectal cancer, gastric cancer, appendiceal cancer, or mesothelioma. The procedure is designed to kill any remaining cancer cells after the bulk of the abdominal tumor is removed, giving patients as high as a 60 percent five-year survival rate.

Novel Therapies. David Fiorella, MD, member of the Neurologic Oncology Management Team and is the program leader for Diagnostic Neuroradiology and Endovascular Neurosurgery. Dr. Fiorella performed the first three transluminal angioplasty and stenting procedures for intracranial atherosclerosis with the Wingspan™ stent system in North America. He also performed the

first three aneurysm treatments using the Pipeline Embolization Device in North America, as well as the first intracranial angioplasty with the SeQuent® Please drug eluting-balloon catheter in the world in April 2008.

Education

Onsite Medical Training. In conjunction with Stony Brook University, we offer residencies in 19 medical specialties, and 27 fellowships, including training of nine medical hematology/oncology fellows, three surgical fellows, and 13 pediatric subspecialty fellows in the past year.

Continuing Education. Clinicians are offered continuing medical education through our cancer conference case presentation series.

Research

Leading Scientific Investigation. In conjunction with expanded and advanced clinical programs, a key component of Stony Brook's Cancer Care Program is research into the causes, prevention, treatment, and cure for cancer. Researchers and physician-scientists collaborate to conduct basic and clinical research, all with the goal of making strides in uncovering how cancer works and discovering ways to prevent and effectively treat the disease. And, as an

academic medical center, we have the resources to support and advance investigation and study. The School of Medicine and the Department of Preventive Medicine actively participate in research efforts and provide core support.

Stony Brook's General Clinical Research Center (GCRC), located at the Medical Center, is just one of 19 centers in the nation that receives funding from the National Institutes of Health. Our GCRC provides investigators with the resources necessary to conduct the clinical research that may translate to new and improved patient care methods.

World-Class Care

Stony Brook's Cancer Care Program provides world-class and compassionate care to Long Island residents in a comfortable and accessible environment—close to home. With the energy, talent, and vision of our dedicated Disease Management Teams; the resources of world-class researchers; new and expanded facilities; the most advanced equipment and technologies; an administration committed to success; and a supportive community, patients and their families can be confident that they will receive the highest quality care with the goal of effecting positive outcomes.

Stony Brook's General Clinical Research Center (GCRC) is just one of 19 centers in the nation that receives funding from the National Institutes of Health. Our GCRC provides investigators with the resources necessary to conduct the clinical research that may translate to new and improved patient care methods.

A TEAM APPROACH TO CARE

Making a Real Difference in the Quality of Care



Members of the Breast Care Team with Program Director Brian J. O'Hea, MD (foreground, third from left).

At Stony Brook University Medical Center, cancer care is greater than the sum of its parts. Yes, we have expert physicians, highly trained specialists, state-of-the-art facilities, the latest technology, and leading-edge research. But it's how well these elements work together that makes the real difference in the quality of our care.

Nowhere is this more apparent than in Stony Brook's site-specific Disease Management Teams. These twelve multidisciplinary teams provide a coordinated approach to cancer diagnosis, treatment, and follow-up. As a result, patients receive comprehensive cancer care delivered efficiently and seamlessly. This approach not only better serves patients—giving them well-managed care with a sense of continuity and comfort—but it contributes to outcomes that exceed national benchmarks. Disease Management Teams also participate in community education, screenings, and early intervention.

Who Is on the Teams?

Teams consist of combinations of oncologists with cancer subspecialties, surgeons, medical hematology/oncology physicians, radiation oncologists, pathologists, radiologists, researchers, registered nurses

and nurse practitioners with specialized cancer training, therapists, social workers, and other medical professionals. Patients are assigned a Patient Navigator, who facilitates scheduling, coordination of services, communication among team members, problem solving, and matching patients to available clinical studies. Physicians participate in ongoing Tumor Board meetings, where each patient is presented for staging and treatment planning. (For more on Tumor Boards, see page 37.)

A Multidisciplinary Approach

The multidisciplinary approach begins when a patient enters the program with a cancer diagnosis or suspected cancer. Based on diagnostic studies, staging, medical and family history, lifestyle, and other factors, an individualized management plan is created. During treatment, the team confers frequently and updates the plan when warranted. The team follows the patient along the continuum of care, providing follow-up, educational materials, referrals to community resources, and support groups. Because the team is directly involved with all aspects of care, members often establish long-term relationships with patients. This provides continuity of care and helps avoid many of the potential problems associated with fragmented care.

Key Benefits

One of the major advantages of the treatment approach of the Disease Management Teams at Stony Brook University Medical Center is access to basic research and clinical trials. In fact, many of the team members themselves may be involved in the research projects. This gives patients more treatment options, as well as access to the latest protocols and state-of-the-art interventions.

The Stony Brook Difference

Because Stony Brook has a pioneering minimally invasive surgery program and one of the most technologically advanced radiation oncology programs in the region, patient treatment regimens—whether surgery, radiation, or both—truly are state-of-the-art, with all the accompanying benefits. In the case of surgery, the minimally invasive techniques, including leading-edge robot-assisted surgery, can result in faster recovery times, fewer complications, less bleeding, and less trauma to the surgery site. In the case of radiation oncology, because of advanced positioning software and technology, patients receive a more highly targeted radiation dose with less damage to the surrounding tissues and organs. Medical oncology specialists work with surgeons and radiation oncologists to offer the most advanced options in systemic and targeted chemotherapy.

The teams also have developed quality dashboards with benchmarks that are continually reviewed for opportunities to improve patient care specific to their practice and interest, and develop new dashboard items measured against nationally established evidence-based benchmarks. An example is the Melanoma Management Team, which used the National Comprehensive Cancer Network (NCCN) guidelines on margin excision, achieving a 100 percent target consistently in 2008 and the first half of 2009.

Breast Cancer Management Team

OVERVIEW The only comprehensive academic program of its kind on Long Island, Stony Brook's expanding Breast Care Program treats more than 450 new patients with breast cancer annually with the most advanced treatment available. At the Carol M. Baldwin Breast Care Center, located in the Cancer Center outpatient facility, breast imaging specialists perform more than 8,000 mammograms and 2,000 sonograms a year. The program also makes available a highly specialized genetic counselor for women who may have inheritable breast cancer. And, in conjunction with the Department of Physical Therapy, women have access to a comprehensive, highly specialized lymphedema evaluation and treatment program.

The Breast Care Center has been a pioneer in a number of ways, including being the first on Long Island to offer digital mammography and being one of only seven centers in the world equipped with a tomosynthesis machine. This experimental technology, which produces 3D mammogram images, ideal for women with dense breasts, is still in the testing stage. In addition, Stony Brook's breast cancer surgeons specialize in breast conservation surgery, and were the first on Long Island to offer the less invasive sentinel node biopsy, widely considered the biggest advance in breast cancer surgery in the past several years.

Highlights

Prestigious Certification. The Carol M. Baldwin Breast Care Center at Stony Brook University Medical Center recently became the first breast center in New York State to earn full accreditation by the National Accreditation Program for Breast Centers (NAPBC). During this rigorous review process, the Carol Baldwin Breast Center met or exceeded all 27 standards, and there were no deficiencies.

New Radiation Treatments. Stony Brook's breast surgeons and radiation



Mammography technician Celeste Mazzaresse with a patient at the Carol M. Baldwin Breast Care Center.

oncologists are now using the new MammoSite® radiation system. This involves temporary implantation of a device into the lumpectomy cavity, which can then assist in delivering full lumpectomy radiation in five days instead of the traditional six weeks of external radiation to the entire breast. The Department also provides partial breast radiation via 3D conformal radiotherapy given in a series of 10 treatments over five days. This can be used with select patients with left-side breast cancer, where minimizing radiation doses to the heart and lung is critical.

Novel Chemotherapy. Oncologists are using standard and novel chemotherapy regimens—as well as new combinations that can dramatically improve survival rates—with the goal of becoming the standard regimens of the future. The program can also connect patients with resistant tumors to phase II experimental agents.

Clinical Trials. Stony Brook participates in a wealth of clinical trials and basic

research. One study, called TAILORx Trial (Trial Assigning Individualized Options for Treatment), looks at genetic profiling of tumors to determine which patients need chemotherapy. Other basic research projects look to gain a greater understanding of the biology of the breast and developing leading-edge treatments.

TEAM MEMBERS

Surgery: Brian O'Hea, MD, Team Leader and Director of the Carol M. Baldwin Breast Care Center; Martyn Burk, MD; Patricia Farrelly, MD; Louis Merriam, MD; Colette Pameijer, MD; Christine Rizk, MD; Trisha Fideli, RN; and Lynette LeePack-May, NP

Plastic and Reconstructive Surgery: Duc Bui, MD; Jason Ganz, MD; and Sami Khan, MD

Pathology: Jingxuan Liu, MD

Breast Imaging: Jayne M. Bernier, MD; Cliff Bernstein, MD; Sheri Ford, MD; and Roxanne Palermo, MD

Radiation Oncology: Allen G. Meek, MD, and Tae Park, MD

Medical Hematology/Oncology: Andrzej Kudelka, MD; Janice Lu, MD

BREAST CANCER SITE SURVEY

Breast cancer site survey of cases first diagnosed 2000-2006
Stony Brook University Medical Center (SBUMC) Cancer Registry
Data Base (n = 2,375)
compared to National Cancer Data Base (NCDB) benchmark data
USA (n = 1,217,647) and New York State (n = 82,660)

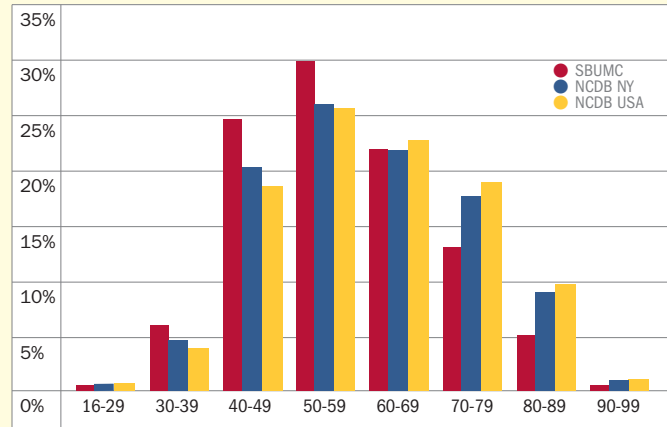
Breast cancer survival cases diagnosed 1998-2001
at SBUMC (n=1,344) compared to NCDB benchmark data for
USA Nationwide (1,344 hospitals n=555,078) and
Atlantic Region (188 hospitals in NY, NJ, PA n=88,844).

Breast cancer is the most frequently diagnosed cancer in women and is expected to be the second leading cause of cancer deaths in women in the United States in 2009, according to the American Cancer Society (ACS) publication reflecting National Institutes of Health (NIH) National Cancer Institute (NCI) Surveillance, Epidemiology, and End Results (SEER) data. Early detection through screening has been shown to reduce mortality from cancer of the breast. American Cancer Society screening guidelines recommend annual mammography for average-risk women age 40 years and older, and breast self-examination for women beginning in the early 20s. SBUMC offers breast health education through our community outreach programs.

A site-specific survey of breast cancer performed using SBUMC cancer registry data compares the patient characteristics of age and stage at diagnosis and histological cell type, and describes the treatment modalities utilized with American College of Surgeons (ACOS) Commission on Cancer (COC) benchmark data for the diagnosis years 2000 through 2006. The five-year survival rate for breast cancer patients at SBUMC is compared with ACOS COC National Cancer Data Base (NCDB) available data for the diagnosis years of 1998 through 2001. Charts and tables demonstrate SBUMC compared to NCDB nationwide and New York State specific data. Charted data for the study period show trends in age at diagnosis with patients seen at SBUMC presenting with a breast cancer diagnosis at an earlier age than nationally and in New York State. Twenty-three percent of our patients presented with AJCC TNM Stage 0 in situ breast cancers, and 38% presented with Stage 1, demonstrating 61% with an early stage diagnosis. The histological cell types for this group of breast cancer patients seen at SBUMC were various and included duct carcinoma in 54%, lobular carcinoma alone in 10%, and combined duct and lobular carcinoma in 12%, with other specified types represented in 24% of cases. Treatment modalities for breast cancer at SBUMC included surgical resection in 92.4% of patients, radiation therapy in 56%, hormones in 32%, and adjuvant or

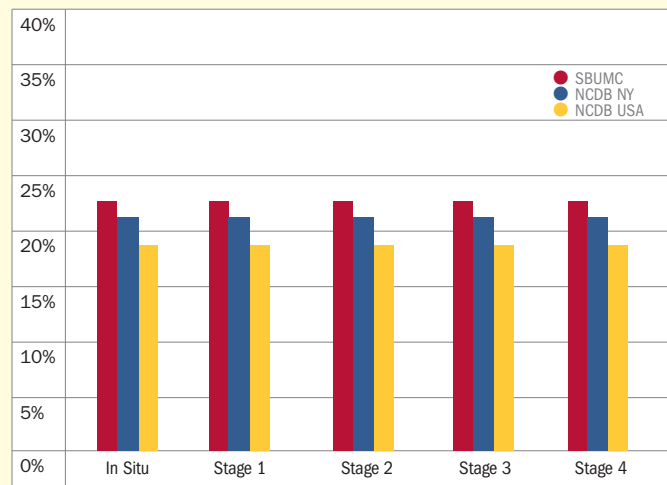
Breast Cancer: Age at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000-2006)



Breast Cancer: Stage at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000-2006)



Breast Cancer: Histology

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000-2006)

Histology	SBUMC	NCDB NY	NCDB USA
Duct Carcinoma	54%	62%	67%
Lobular Carcinoma, NOS	10%	11%	9%
Duct and Lobular Carcinoma	12%	9%	6%
Other Specified Types	24%	18%	18%

BREAST CANCER SITE SURVEY

neo-adjuvant chemotherapy 22%, and supportive and palliative care alone in 7%. According to the 2009 Centers for Disease Control and Prevention National Center for Health Statistics, breast cancer will be second only to lung cancer for women in 2009. Our survival chart shows the percentage of deaths from all causes, and compares SBUMC to NCDB data reported from hospital cancer registries nationwide and in New York State by stage at diagnosis. The NCCN clinical practice guidelines, which offer algorithms for the histological diagnosis, workup, staging, primary treatment, risk reduction, and surveillance follow-up are referenced for management of breast cancer patients. These guidelines include a section on survivorship and genetic testing.

Quality performance in prevention, detection, diagnostic workup, staging, treatment, and follow-up care are top priorities for the Stony Brook University Medical Center cancer care program clinical staff. The National Quality Forum (NQF) brought public and private payers together with consumers, researchers, and clinicians to broaden consensus on performance measures for breast cancer. The performance rates shown in ACOS COC Program Practice Profile Reports match the specifications of the breast cancer care measures endorsed by the NQF in April 2007. The Commission on Cancer has actively engaged hospitals with approved cancer programs in this process. The COC has instituted a facility feedback mechanism to promote awareness of the importance of charting and coding accuracy in line with evidence-based practice guidelines. In light of the national movement toward Pay for Performance (P4P), these reports provide COC-approved programs with the ability to examine program-specific breast cancer care.

Site survey prepared by the Cancer Registry Department, Stony Brook University Medical Center, September 2009.

Breast Cancer: Treatment Modalities

Utilized alone or in combination during the first course of planning and treatment at SBUMC during 2000–2006

- Surgery = 92.4%
- Radiation therapy = 56%
- Hormone therapy = 32%
- Chemotherapy = 22%
- Palliative and supportive therapy alone = 7%

Breast Cancer 5-Year Survival by Stage

Patients diagnosed in 1998–2001 Stony Brook University Medical Center SBUMC (n= 1,389) compared to National Cancer Data Base (NCDB) USA (1,344 Hospitals, n= 555,078) and NCDB Atlantic Region (NCDB AR) (188 Hospitals in NY, NJ, PA, n= 88,844). All causes.

	In Situ	Stage 1	Stage 2	Stage 3	Stage 4	All Stages
SBUMC	93.3%	90.7%	85.4%	63.4%	23.5%	85%
NCDB USA	95.1%	90.9%	82.2%	56.4%	18.6%	83.9%
NCDB AR	95.5%	90.9%	82.3%	54.9%	18.1%	83.9%
NCDB 95% Confidence Interval	94.9-95.2	90.8-91	82-82.4	55.9-57	18-19.2	83.8-84

Breast Cancer: Quality Indicators

Stony Brook University Medical Center (SBUMC) during 2004–2008

National Quality Forum (NQF) performance measurement indicators:

- Radiation therapy is administered within 1 year of diagnosis for women under age 70 receiving breast conservation surgery for breast cancer [BCS/RT].
- Combination chemotherapy is considered or administered within 4 months of diagnosis for women under 70 with AJCC T1c NO MO or Stage 2 or 3 ER or PR negative breast cancer [MAC].
- Hormone therapy or aromatase inhibitor is considered or administered within 1 year of diagnosis for women with AJCC T1c NO MO, or Stage 2 or 3 ER and/or PR positive breast cancer [HT].

NQF Indicator	2004	2005	2006	2007	2008
Radiation therapy following breast conservation surgery	96.1%	98.6%	97.1%	96.9%	99%
Adjuvant chemotherapy for ER/PR negative T1c or Stage 2 or 3	96.1%	96.1%	100%	100%	100%
Adjuvant hormone or aromatase inhibitor therapy for ER/PR positive T1c or Stage 2 or 3	96.5%	94.4%	96%	96%	96.7%

Colorectal Oncology Management Team

OVERVIEW The Colorectal Oncology Disease Management Team evaluates and manages treatment of patients with colon and rectal cancers, Crohn's disease, familial polyposis, ulcerative colitis, and other diseases of the large bowel. It places an emphasis on early screenings, particularly in high risk groups, and adheres to National Quality Forum guidelines for assessment of quality care.

Highlights

Imaging Technology. The team uses powerful imaging technologies that help surgeons remove disease and spare vital tissue, including endorectal ultrasound, magnifying endoscope, and minimally invasive laparoscopic surgical techniques such as laparoscopic colorectal surgery.

Clinical Trials. Patients with Stage II colon cancer can participate in clinical trials in which either surgery alone

or surgery and chemotherapy with 5-FU/leucovorin are used.

Staging. Patients with rectal cancer undergo staging via endorectal ultrasound and PET/CT scan or endocoil MR imaging. Treatment consists of combined chemotherapy and radiation.

Pioneering Approach. The team is currently using a pioneering approach on tumors that have spread to the abdominal cavity from primary colorectal cancer, gastric cancer, appendiceal cancer, or mesothelioma, which are typically difficult to treat. Called heated intraperitoneal chemotherapy (HIPEC), the procedure is designed to kill any remaining cancer cells after the bulk of the abdominal tumor is removed. This gives patients as high as a 60 percent five-year survival rate. Stony Brook is the only hospital in Suffolk County offering the procedure.

TEAM MEMBERS

Surgery: Roberto Bergamaschi, MD, PhD; Team Leader and Chief, Division of Colon and Rectal Surgery; Marvin L. Corman, MD; Paula I. Denoya, MD; Joshua Karas, MD, Colorectal Surgery Research Fellow; William B. Smithy, MD, Colorectal Fellowship Program Director; Geraldine Massimino, RN, Patient Navigator; Donna Keehner-Nowak, RN; and Patricia Pugliani, PhD, Data Manager

Gastrointestinal Medicine: Jonathan Buscaglia, MD; Chris Lascarides, MD; Ramona Rajapakse, MD; Robert Richards, MD; Basil Rigas, MD; and Isabelle Von Althen-Dagum, MD.

Pathology: Sui Zee, MD

Radiology: Seth O. Mankes, MD

Radiation Oncology: Bong Kim, MD

Medical Hematology/Oncology: Marisa Siebel, MD, and Shenhong Wu, MD, PhD

Enterostomal Therapy: Karen E. Chmiel, RN, and Susan Guschel, RN

COLON CANCER SITE SURVEY

Colon cancer site survey of cases first diagnosed 2000-2006
Stony Brook University Medical Center (SBUMC) Cancer Registry
Data Base (n = 413)
compared to National Cancer Data Base (NCDB) benchmark data
USA (n = 503,704) and New York State (n = 30,760)
Colon cancer survival cases diagnosed at SBUMC compared to NCDB
benchmark data for USA Nationwide and Atlantic Region.

Quality performance in prevention, detection, diagnostic workup, staging, treatment, and follow-up care are top priorities for the Stony Brook University Medical Center (SBUMC) cancer care program clinical staff. Colon cancer together with rectal cancer is the fourth most commonly diagnosed cancer in both men and women, and is among the most common causes of U.S. cancer deaths according to the American Cancer Society (ACS) publication reflecting National

Institutes of Health (NIH) National Cancer Institute (NCI) Surveillance, Epidemiology and End Results (SEER) data. A site specific survey of colon cancer performed using SBUMC cancer registry data compares the patient characteristics of age and stage at diagnosis, gender, histologic cell type, and describes the treatment modalities utilized with American College of Surgeons (ACOS) Commission on Cancer (COC) benchmark data for the diagnosis years 2000 through 2006. The five-year survival rate for colon cancer patients at SBUMC is compared with ACOS COC National Cancer Data Base (NCDB) available data for the diagnosis years of 1998 through 2001. Charts and table compare SBUMC data to NCDB nationwide and New York State-specific data.

The National Quality Forum (NQF) brought public and private payers together with consumers, researchers, and clinicians to broaden consensus on performance measures for colon and other cancers. The performance rates shown in ACOS COC Program

COLON CANCER SITE SURVEY

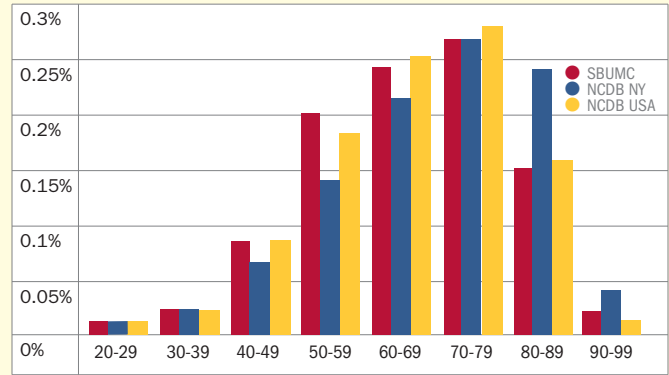
Practice Profile Reports match the specifications of the colon cancer care measures endorsed by the NQF in April 2007. The Commission on Cancer has actively engaged hospitals with approved cancer programs in this process. The COC has instituted a facility feedback mechanism to promote awareness of the importance of charting and coding accuracy in line with evidence based practice guidelines. In light of the national movement towards Pay for Performance (P4P), these reports provide COC-approved programs with the ability to examine program-specific colon cancer care.

Colon cancers are more successfully treated when detected early. Screening tests that can detect colon polyps before they become cancerous or at an early stage are colonoscopy and fecal occult blood testing, and should begin at age 50 for people of average risk. Through outreach, education, and cutting-edge technology, SBUMC offers our community colon cancer education and detection programs. SBUMC participates in cancer control activities and offers colonoscopy screening programs and clinical trials. Charted data for the study period show gender trends were consistent in that among patients with colon cancer, 51% were females, compared to 49% males. Trends in age at diagnosis show patients at SBUMC presented with a colon cancer diagnosis at an earlier age than nationally and in New York State. The high percentage of late stage patients seen at SBUMC in 2000 through 2006 reflects referrals for clinical trial protocols available to that population. Treatment modalities for colon cancer at SBUMC included surgical resection in 74% of patients, adjuvant chemotherapy for lymph node positive patients following surgery and neo-adjuvant chemotherapy in 23%, radiation therapy in 11%, and supportive and palliative care alone in 14%. Palliative care specialists are available to patients at initial presentation and to supplement and provide continued care through our specialized Survivorship and Supportive Care Program. The histologic cell types in the patients with colon cancer seen at SBUMC included adenocarcinoma (71%), mucinous adenocarcinoma (10%) and other specified types (4%). At SBUMC, 15% of patients presented with an adenocarcinoma arising in a polyp, compared to 12% recorded in New York State and 13% nationwide. According to the New York State Cancer Registry, the colon cancer mortality estimates for Suffolk County, New York are 118 males and 129 females, per 100,000 population. The survival data chart by stage at diagnosis and overall stages, for deaths from all causes, compares SBUMC to NCDB data reported from hospital cancer registries nationwide and in New York State.

Prepared by the Cancer Registry Department at Stony Brook University Medical Center.

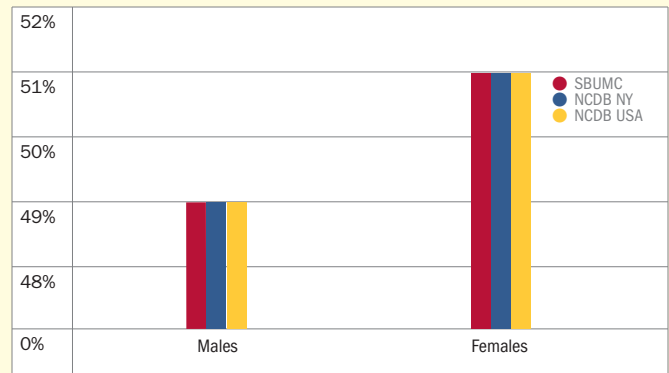
Colon Cancer: Age at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



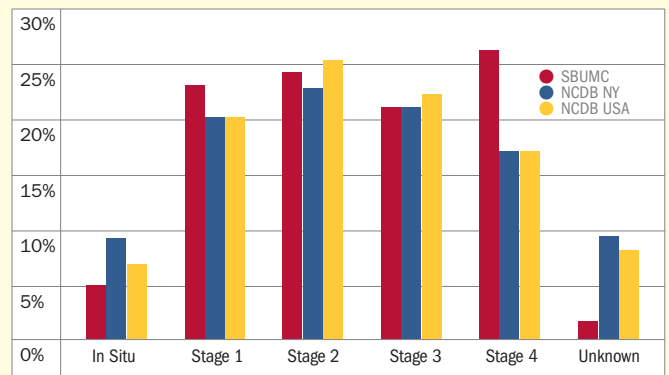
Colon Cancer: Gender Incidence

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



Colon Cancer: Stage at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



Colon Cancer: Histology

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)

Histology	SBUMC	NCDB NY	NCDB USA
Adenocarcinoma NOS	71%	67%	68%
Adenocarcinoma Arising in Polyp	15%	12%	13%
Mucinous Adenocarcinoma	10%	8%	8%
Other Specified Types	4%	13%	11%

Colon Cancer: Treatments

Utilized within 4 months of diagnosis Stony Brook University Medical Center (SBUMC) 2000-2006

- Surgery = 74%
- Chemotherapy = 23%
- Radiation therapy = 11%
- Palliative and supportive therapy alone = 14%

Colon Cancer 5-Year Survival by Stage

Patients diagnosed in 1998–2001. Stony Brook University Medical Center (SBUMC) (n= 269) compared to National Cancer Data Base (NCDB) USA (n=211,071) and NCDB Atlantic Region (NCDB AR) (n= 34,722). All causes.

	In Situ	Stage 1	Stage 2	Stage 3	Stage 4	All Stages
SBUMC	77.1%	70.6%	69.6%	50.4%	4.9%	44.9%
NCDB USA	77.8%	74.4%	63.9%	49.9%	6.6%	52.1%
NCDB AR	78.5%	75.5%	63.4%	48.9%	6.3%	51.9%
NCDB 95% Confidence Interval	77.8–79.2	74.4–75.3	63.5–64.4	49.4–50.3	6.3–6.8	51.4–52.5

National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology™ Colon Cancer

Colorectal cancer is the fourth most frequently diagnosed cancer and the second leading cause of cancer death in the United States. In 2009, an estimated 106,100 new cases of colon cancer and approximately 40,870 cases of rectal cancer will occur, and 49,920 people will die from colon and rectal cancer. Despite these statistics, mortality from colon cancer has decreased slightly over the past 30 years, possibly because of earlier diagnosis through screening and better treatment modalities. The NCCN clinical practice guidelines for managing colon cancer begin with the clinical presentation of the patient to the primary care physician or gastroenterologist and address diagnosis, pathologic staging, surgical management, adjuvant treatment, management of recurrent and metastatic disease, and patient surveillance. Guidelines also include a section on survivorship and new recommendations for KRAS mutation testing.

Reference: *Journal of the National Comprehensive Cancer Network*, Volume 7, Number 8, September 2009.

Colon Cancer: Quality Indicators

National Quality Forum (NQF) performance measurement indicators:

- Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer. [ACT]
- At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer. [12RLN]

NQF Indicator	2004	2005	2006	2007	2008
Adjuvant chemotherapy considered/received	100%/72%	100%/92%	100%/60%	100%/67%	100%/86%
12 or more regional lymph nodes resected	86%	81%	78%	72%	93%

Gastrointestinal, Upper, and General Oncology Management Team

OVERVIEW The Upper Gastrointestinal and General Oncologic Management Team focuses on the diagnosis and management of cancers or potential cancers of the esophagus, stomach, pancreas, bile ducts, small intestine, and liver. The group is dedicated to completing minimally invasive surgery for complex gastrointestinal (GI) tumors. Team leader Kevin Watkins, MD, brings years of experience in surgical oncology to the team with a focus on management of liver, biliary, pancreatic gastrointestinal, and esophageal lesions. The multidisciplinary team involves physicians who provide direct diagnostic and therapeutic care, surgery nurse specialists, and ancillary support staff who ensure that patients achieve the maximum benefit from their therapies.

Highlights

Diagnostics. The team strives to provide state-of-the-art diagnostics and works to build programs for the early recognition of tumors and other abnormal conditions of the upper gastrointestinal tract.

Staging. A critical step in the management of upper GI cancers is accurate staging, which allows the team to distinguish

patients with operable and inoperable disease. This may be done via endoscopic ultrasonography, computerized tomography (CT) scan, and positron emission tomography (PET) scanning.

Surgery. Surgery is the mainstay of therapy and is curative in 25 to 40 percent of highly select patients who develop resectable metastases in the liver and lung. Improved surgical techniques are utilized by Stony Brook's experienced surgical specialists.

Palliative Care. If the disease cannot be eradicated, the team strives to palliate the patient's symptoms and improve the quality of life. The team tracks the quality of life of cancer survivors to update the approach used. The team works with the Medical Center's Survivorship and Supportive Care Program.

New Specialization. The Upper Gastrointestinal and General Oncologic Surgery Group is new and growing, expanding the use of minimally invasive surgery for complex GI tumors and other diseases. Philip Bao, MD, has joined the Division of Surgical Oncology and will focus his practice on treatment and man-

agement of malignant and benign tumors of the liver, pancreas, esophagus, and stomach using standard, laparoscopic, and robotic surgical techniques. For advanced abdominal cancers, he will provide new modalities such as heated intraperitoneal chemotherapy (HIPEC) for carcinomatosis. His research includes intra-operative tumor imaging and surgical navigation, as well as decision analysis for cancer management.

TEAM MEMBERS

Surgery: Kevin Watkins, MD, Team Leader, Chief of Upper Gastrointestinal and General Oncologic Surgery; Philip Bao, MD; Michael Paccione, MD; Colette Pameijer, MD; Patty Zirpoli, RN, Patient Navigator; Donna Keehner-Nowak, RN; and Barbara Smith, NP

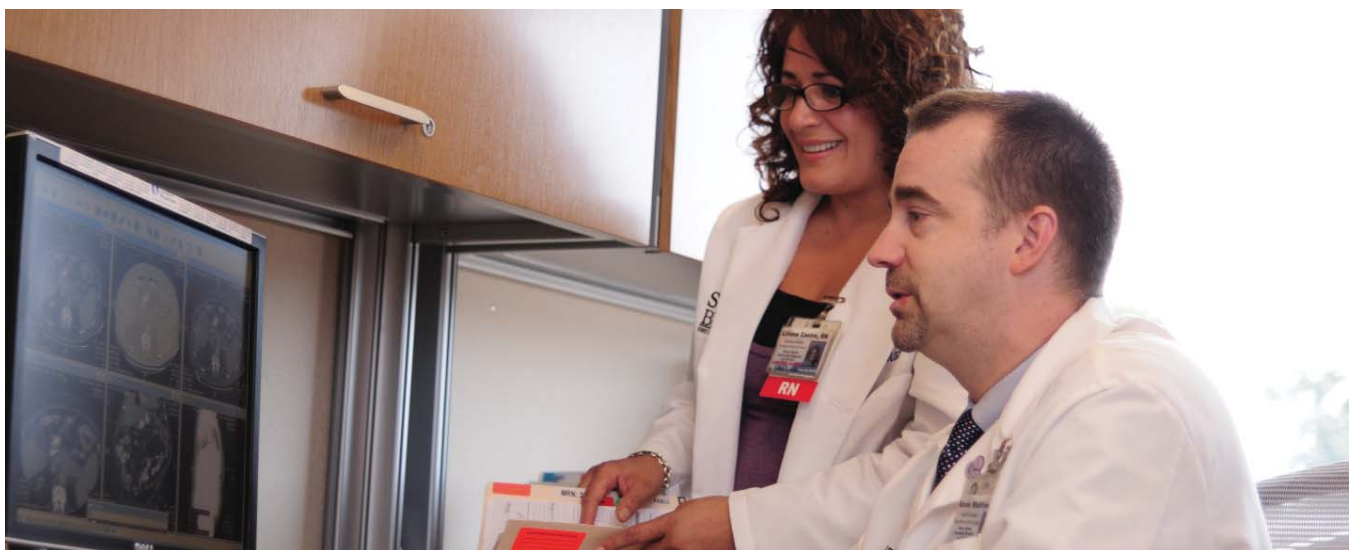
Gastrointestinal Medicine: Douglas Brand, MD; Jonathan Buscaglia, MD; Chris Lascarides, MD; Ramona Rajapakse, MD; Robert Richards, MD; and Isabelle Von Althen-Dagum, MD

Pathology: Galina Botchkina, MD; Bernard Lane, MD; and Sui Zee, MD

Radiology: Seth O. Mankes, MD, and Carl Tack, MD

Radiation Oncology: Bong Kim, MD

Medical Hematology/Oncology: Roger Keresztes, MD, and Marisa Siebel, MD



Dr. Kevin Watkins, with Liliana Castro, RN, reviews CT images.

Gynecologic Oncology Management Team

OVERVIEW The Gynecologic Oncology Management Team treats cancers of the ovary, uterus (endometrium), cervix, vulva, vagina, peritoneum, and fallopian tube using a three-pronged approach. The team provides comprehensive, multi-disciplinary care for women with known or suspected gynecologic cancers, as well as for those with complicated gynecologic surgical and selected pre-invasive conditions. The team conducts research into the development and treatment of these cancers. And team members are committed to educating healthcare professionals and the public.

In 2008, there were 5,954 office visits and 1,600 new patients. Stony Brook participates in the Gynecologic Oncology Group (GOG), a national research organization funded by the National Institutes of Health to provide patients access to cutting-edge therapy. Team members co-authored several GOG manuscripts, and 28 new patients were enrolled in GOG studies in 2008. The team is participating in a two-year educational grant from the New York State Department of Health for increasing awareness of ovarian cancer in primary care practitioners, the lay population, and in underserved Hispanic/Latino women—efforts that were repeated in a national collaboration as well. An additional grant will focus on the middle school population.

Highlights

Surgery. Surgical procedures performed include radical pelvic and exenterative, gastrointestinal, urological, and reconstructive plastic surgery. There were 993 surgery cases in 2008, 652 which were classified as major, 281 as minor.

Chemotherapy. The team, which includes physicians, a clinical pharmacist, and chemotherapy-certified nurses, is experienced in administering intravenous, oral, and intraperitoneal chemotherapy, and in 2008, administered 1,648 chemotherapy cycles.



Dr. Pearl consulting with Drs. Weiss and Kudelka

Radiation. In conjunction with the Department of Radiation Oncology, the team develops treatment plans, places brachytherapy devices, and administers intraperitoneal radioisotopes.

Clinical Trials. Ongoing clinical trials include evaluation of the role of chemotherapy following radiation in women with advanced cervical cancer, assessing patients' end-of-life preferences, and several industry-sponsored phase II chemotherapy trials for patients with ovarian or cervical cancer. In collaboration with the Division of Medical Oncology, scientists are working to develop a method to isolate viable ovarian cancer cells and identify early ovarian cancer antigens via DNA microassay. With the Department of Surgery, scientists are

investigating the association between obesity, inflammation, and cancer. Several other research projects are attempting to identify genes that play a role in ovarian cancer as well as to validate a new screening blood test.

TEAM MEMBERS

Surgery and Chemotherapy: Michael Pearl, MD, Team Leader, and Director, Division of Gynecologic Oncology; Marlo Dombroff, RPAC, Physician Assistant; Sylvia Macco, RN; and Michelle Burke, Clinical Research Assistant

Pathology: Sharon Liang, MD, PhD; Meenakshi Singh, MD; and Carmen Tornos, MD

Radiation Oncology: Edward Valentine, MD, and Tamara Weiss, MD

Medical Hematology/Oncology: Andrzej Kudelka, MD

Head and Neck, Thyroid Cancer Management Team

OVERVIEW This Disease Management Team is dedicated to the care of cancers in the head and neck region, including malignancies of the thyroid gland; the salivary glands; and the aerodigestive tract, which includes oral cavity, pharynx, larynx, nasal cavity, nasopharynx, and sinuses. It focuses on multidisciplinary team consultation with surgeons, radiation oncologists, medical oncologists, pathologists, and, in the case of thyroid cancer, endocrinologists. Thyroid cancers are highly curable with appropriate staging and treatment. For primary head and neck cancers, the two major goals are controlling the disease and maintaining a good quality of life.

Highlights

Treatment Options. Patient treatment plans for thyroid cancer can include advanced radiation therapy modalities using external beam, radioiodine, and Thyrogen®. For early stage head and neck cancer, the teams may utilize single modality treatment, for example surgery, endoscopic laser, or radiation. These have the benefit of shorter hospital stays and good functional outcomes. Later Stage III and some Stage IV cancers are typically treated with chemotherapy and radiation.

Surgical Advances. One of the most recent advances in the surgical treatment of thyroid cancer available to our patients is minimally invasive video-assisted thyroidectomy (MIVAT), which uses much smaller incisions than the traditional thyroidectomy and results in smaller scars and less post-operative pain.

Reconstructive Surgery. The team also provides reconstruction of surgical defects after cancer removal to restore both functionality and aesthetics in the head and neck area.

Speech Pathology. Speech pathology preventative and rehabilitative swallowing therapy services are available to improve quality of life for patients at risk or who present symptoms of dysphagia.

New Specializations. Elliot Regenbogen, MD, has joined the Division of Otolaryngology-Head and Neck Surgery. Board certified in otolaryngology with expertise in laryngology and general otolaryngology, his expertise complements the strengths of the existing Ear, Nose, and Throat (ENT) faculty. He specializes in the practice of general otolaryngology, head and neck surgery and advanced diagnosis and treatment of voice and swallowing disorders. His research includes the development of ultra high-resolution immunofluorescent-based imaging systems for detection and treatment of benign and malignant disorders of the vocal cords, head and neck, and paranasal sinuses.

TEAM MEMBERS

Surgery: Ghassan Samara, MD, Team Leader; Elliot Regenbogen, MD, David Schessel, MD, Gerty Fortune, RN, and Frances Tanzella, NP

Dentistry: Denise Trocheset, DDS

Endocrinology: Harold Carlson, MD; Marina Charitou, MD; Marie Gelato, MD; Anoop Kapoor, MD; Igor Kravets, MD; Harmeet Narula, MD; and Steven Weitzman, MD

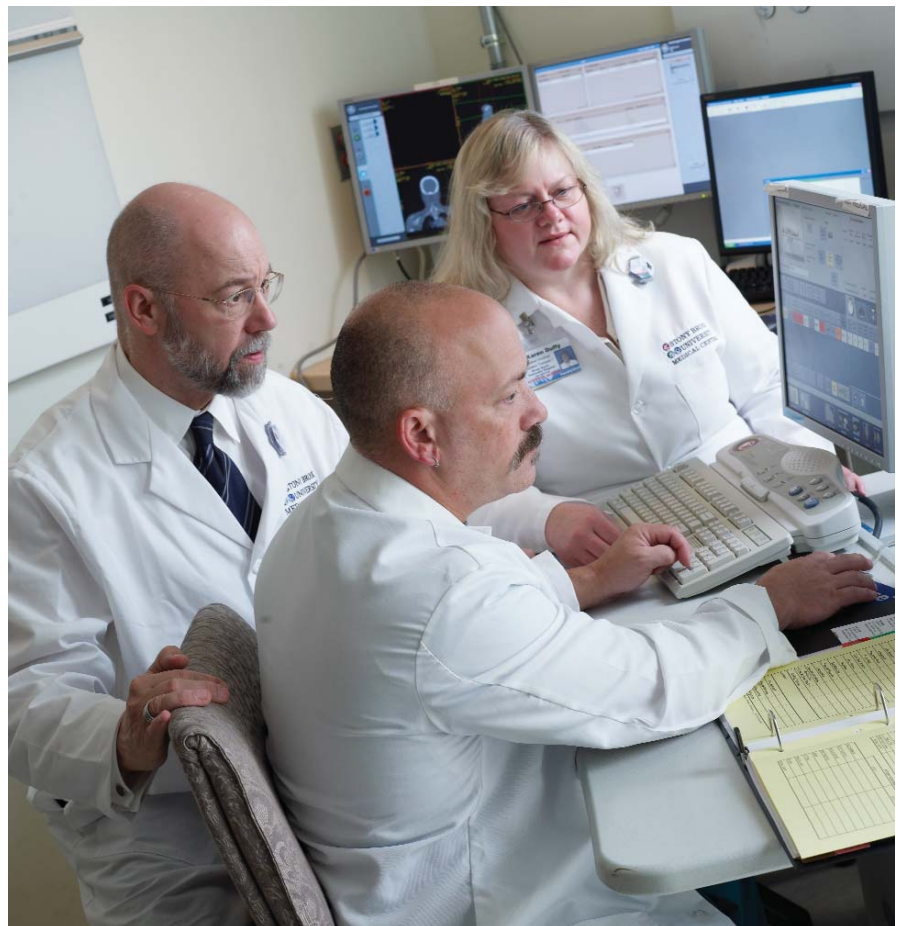
Pathology: Alan Heimann, MD

Radiology: Bruce Chernofsky, DO; Robert Matthews, MD; Steven West, DO; and Zengmin Yan, MD

Radiation Oncology: Edward Valentine, MD, and Tamara Weiss, MD

Medical Hematology/Oncology: Roger Keresztes, MD, and Andrzej Kudelka, MD

Speech Pathology: Kathleen McCloskey, MA, CCC-SLP



Dr. Valentine with Steve Schindler, RTT, (foreground), and Karen Duffy, RTT

Lung Cancer Management Team

OVERVIEW The Disease Management Team at the Lung Cancer Evaluation Center (LCEC) provides comprehensive programs to diagnose and treat patients with lung cancer. As lung cancer is the leading cause of cancer death in the United States, Stony Brook has invested considerable resources in early detection, risk assessment by markers, noninvasive staging, and combined modality therapeutic approaches. This provides more accurate staging before surgery and allows promising new advances, such as neoadjuvant chemotherapy prior to resection.

Highlights

State-of-the-Art Technology. This includes radiofrequency ablation; image-guided radiotherapy; PET/CT fusion imaging scanning; interventional bronchoscopy; stenting; transbronchial needle aspiration for nonsurgical

diagnosis and staging with onsite pathology, cautery, laser, and brachytherapy. Three-year results for these less-invasive modalities have just become available and they are very favorable.

Surgery. Thoracic surgery remains the preferred treatment for curative intent, and procedures performed include pneumonectomy, lobectomy, VATS lobectomy, wedge resection, thoracoscopy, and mediastinoscopy. Recently, the program has matured to where five-year results stage for stage have become available.

Mortality Rates. The mortality associated with procedures performed at Stony Brook has been consistently lower than the reported national average of three to five percent.

Clinical Trials. Patients can participate in ongoing protocols in every phase of di-

agnosis and treatment, including national studies through the Eastern Cooperative Oncology Group and the American College of Surgeons Oncology Group.

New Expertise. The LCEC team is adding an interventional bronchoscopist and a cancer pulmonologist dedicated primarily to the LCEC.

TEAM MEMBERS

Surgery: Thomas V. Bilfinger, MD, Team Leader, and Chief, Thoracic Surgery, and Director, Lung Cancer Evaluation Center; Sunday Campolo-Athans, NP; Lisa Repper, RN, LCEC Patient Navigator; April Plank, NP; and Maureen Farrell, LCEC Administration
Pulmonary Medicine: Igor Chernyavskiy, MD
Pathology: Philip Kane, MD
Radiology: William Moore, MD
Radiation Oncology: Bong Kim, MD
Medical Hematology/Oncology: Theodore G. Gabig, MD, and Roger Keresztes, MD

Leukemia, Lymphoma, and Transplantation Management Team

OVERVIEW The Leukemia, Lymphoma, and Transplantation Management Team treats blood-related cancers and cancers of the lymphatic system. The modalities that are used include the most current diagnostic testing, chemotherapy, immunotherapy, radiation, and stem cell transplantation. Stony Brook's Blood and Marrow Stem-Cell Transplant Program is the only program in Suffolk County that is specifically designed for patients receiving stem cell transplantation.

Team members involved in the transplant process meet weekly to discuss each patient's treatment plan, as well as the medical and psychosocial issues involved. They work closely together to ensure that each patient's needs are met and that the transplant, which is a very complex procedure, is carried out seamlessly. Oncology-certified nurses coordinate

the Leukemia/Lymphoma Bone Marrow Transplant Services and serve as point persons to provide support for the patient and family during the entire process.

Highlights

Stem Cell Transplants. Stony Brook University Medical Center opened the Blood and Bone Marrow Transplant Unit in 1994 and revamped it in 2004 to allow the Hospital to offer both autologous stem cell transplants (in which patients use their own stem cells) and allogeneic transplants (in which patients use stem cells from a matched donor).

Professional Affiliations. Stony Brook is a member of the Cancer and Leukemia Group B (CALGB); the National Marrow Donor Program (NMDP); and the Center for International Bone Marrow Trans-

plant Registry (CIBMTR). CIBMTR maintains and analyzes global stem cell transplant outcome data and supports stem cell transplant clinical trials. The NMDP provides matched donors for allogeneic stem cell transplants.

TEAM MEMBERS

Medical Hematology/Oncology: Shambavi Richard, MD, Team Leader; Fengshuo Lan, MD, PhD; Josephine Lobrutto, NP; Emily Locher, RN, OCN; Elizabeth Schumann, RN; Nirmala Singh, RN; Michelle Stevens, NP, AOCNS; and Nabil Hagag, PhD, Scientific Director
Pathology: Marc Golightly, PhD; Youjun Hu, MD; and Frederick Miller, MD
Blood Bank Services: Tahmeena Ahmed, MBBS, and Dennis Galanakis, MD
Radiation Oncology: Tae Park, MD, and Edward Valentine, MD

Melanoma Management Team

OVERVIEW The Melanoma Management Team is dedicated to the comprehensive management of patients with the deadliest form of skin cancer, melanoma. This includes education, community awareness, screening, and access to clinical trials. Most patients are first evaluated through the Department of Dermatology. In 2008 there were greater than 13,000 outpatient visits. Some patients with early melanoma can be managed exclusively through the Department of Dermatology. Those needing lymph-node sampling or skin grafting are evaluated by the Department of Surgical Oncology. More than 90 percent of patients with melanoma are treated with surgery alone. Patients with advanced or recurrent disease have their cases reviewed at the Tumor Board meeting to establish optimum treatment. All of our patients are entered into a melanoma database, which tracks patient population and outcomes. Patient population remains high, with 151 new patients seen last year. The average annual incidence of melanoma in Suffolk County is 158 cases per year, which makes Stony Brook the major melanoma treatment center on Long Island. The team is composed of dermatologists, surgical oncologists, medical oncologists, radiation oncologists, pathologists, patient navigators, nurse practitioners, and a data manager.

Highlights

Clinical Trials. The team works to have clinical trials available to all patients. Some are national (i.e., the Eastern Cooperative Oncology Group), and others are Stony Brook's own. Currently, Stony Brook has high accrual rates into its psychosocial and tumor profiling studies.

Advanced Treatment. Stony Brook has begun isolated limb infusion for recurrent melanoma that is limited to an extremity. In this procedure, the arm or leg with the recurrent melanoma is isolated from the rest of the body by a tight tourniquet. Catheters, which circulate warm chemotherapy, are inserted in the main artery and vein to that extremity. While not a cure, it can control the disease for a period of time.

Tissue Bank. The team established a tissue bank of melanoma specimens. This detailed information will be combined with the clinical database to help establish new guidelines for treatment and risk of recurrence. To ensure continuity of care, the team created a patient network database with information on visits and dates of skin examinations and screenings, available to the Melanoma Management Team.

Community Screenings and Outreach.

The team held its fourth annual skin screening at the Cancer Center. Of the more than 200 attendees, 124 between ages 17 and 100 were screened. Other outreach initiatives by our team of physicians and nurses included high school health education classes for students and parents and participation in the Hospital's Kids Health and Safety Expo.

New Clinic. Adam Korzenko, MD, Department of Dermatology, is establishing a skin cancer clinic at the Cancer Center to expand treatment of patients with skin cancer. It is coordinated with the melanoma clinic led by Colette Pameijer, MD, of the Department of Surgical Oncology.

TEAM MEMBERS

Surgical Oncology: Colette Pameijer, MD, Team Leader; Claire Smith, RN, Patient Navigator; and Patricia Pugliani, PhD, Research Administration

Dermatology: Evan Jones, MD, Chair, Department of Dermatology; Peter Klein, MD; Adam Korzenko, MD; and Deborah Deierlein, NP

Pathology: Frederick Miller, MD

Radiology: Elaine Gould, MD

Radiation Oncology: Edward Valentine, MD

Medical Hematology/Oncology: Andrzej Kudelka, MD

Neurologic Oncology Management Team

OVERVIEW The Neurologic Oncology Management Team, created to better respond to the needs of patients receiving treatment for tumors involving the central nervous system, brain, and spine, provides tertiary management of benign and malignant tumors. The team offers interdisciplinary consultation, advanced diagnostic methods, and treatment planning.

Highlights

Advanced Imaging. With the Depart-

ment of Radiology, the team uses advanced imaging technology for diagnosis including high-field MRI, MR angiography, MRI spectroscopy, diffusion with MRI, CT scanners with CT angiography and bloodflow, SPECT, and PET scans.

Advanced Techniques. Our neurosurgeons use advanced techniques and equipment such as image-guided neuronavigation, microsurgery, interoperative ultrasound, and awake craniotomy with

cortical mapping for surgery near sensitive areas of the brain. They also use minimally invasive techniques such as neuroendoscopy; endovascular neurosurgery, which provide preoperative embolization, intraarterial delivery of chemotherapy, and intraoperative angiography; minimal-access spinal surgery; and stereotactic radiosurgery.

New Technologies. New technologies to treat complex cerebrovascular lesions

are now being used. David J. Fiorella, MD, PhD, specializes in the treatment of cerebral aneurysms, intracranial atherosclerosis, and stroke. He performed the first three transluminal angioplasty and stenting procedures for intracranial atherosclerosis with the Wingspan™ Stent System in North America, as well as the first in the world intracranial angioplasty with the Sequent® Please Drug Eluting Balloon in April 2008.

World-Renowned Expertise. Dr. Fiorella is one of the most experienced worldwide in using the Pipeline Embolization Device for reconstruction of complex, and at times otherwise untreatable cerebral aneurysms. He performed the first three aneurysm treatments using the

Pipeline Embolization Device in North America.

Clinical Research. Clinical research is a major component of an academic medical center. As such, the Neurologic Oncology Team is actively involved in clinical research projects. One promising project is looking at investigational biologic agents to inhibit growth factors that modify abnormal function of several pathways. This is important because molecular analysis of malignant cells may provide information on the sensitivity of the tumor to a given therapeutic combination, which in turn may help in our ability to predict response, early relapse, and the side effects of cancer treatment.

TEAM MEMBERS

Surgery: Raphael Davis, MD, Team Leader; Michael Egnor, MD, Director of Pediatric Neurosurgery; David J. Fiorella, MD, PhD, Program Leader for Diagnostic Neuroradiology and Endovascular Neurosurgery; Robert Galler, DO; Frederick Gutman, MD; Arthur Rosiello, MD; and David Schessel, MD, PhD

Pathology: Roberta Seidman, MD

Radiology: Bruce Chernofsky, DO; Clemente Roque, MD; Steven West, DO; Zengmin Yan, MD

Radiation Oncology: Tae Park, MD, and Edward Valentine, MD

Medical Hematology/Oncology: Shenhong Wu, MD, PhD

Pediatric Oncology Management Team

OVERVIEW Stony Brook's Pediatric Oncology Management Team has been at the forefront of using a multidisciplinary approach to treat cancer. With the highest patient satisfaction scores at the Medical Center, it has become a model for other departments, who have seen increases in their scores after adopting the care paradigm. Since the Pediatric Oncology Program began in 1991, the team has treated more than 500 children with malignant tumors. In 2008, the team had 1,800 inpatient visits and 2,200 outpatient visits. In addition, greater than 50 percent of the children in Suffolk County with childhood tumors were treated at Stony Brook, two-thirds of whom were enrolled in clinical trials and other investigational therapies. Stony Brook's rate of clinical trial participation is equal to or greater than national statistics, and its disease-specific cure rates remain at or above the national benchmarks for major childhood cancers such as acute leukemia, brain tumors, lymphoma, neuroblastoma, Wilms tumors of the kidney, and bone and soft tissue sarcomas.

Highlights

Professional Affiliations. All of the team's pediatric surgeons, radiation



Patricia Murray, RN, with patient and his mother at the outpatient Cancer Center.

oncologists, and pediatric oncologists are members of the prestigious Children's Oncology Group.

Nationally Recognized Program. The team's growing School Re-Entry Program, offered to all school districts on Long Island free of charge, has received both regional and national recognition.

Research. Laboratory research includes

investigating the mechanism of tumorigenesis for neuroblastomas and brain tumors; studying the late effects of cancer therapy, focusing on the development of bone mineral loss during therapy (this study encompasses one of the largest groups of such children treated for childhood cancer); and studying children with bone marrow failure diseases such as Fanconi anemia.

A Team Approach to Care

Support Services. The team support services, including the parent support group, Our Little Heroes, and specialized sibling and bereavement programs, are open to all Suffolk County families, regardless of where they receive treatment.

Laboratory Certification. The Cytogenetics Laboratory received certification from the Children's Oncology Group for the analysis of chromosomal abnormalities in childhood leukemia.

Quality of Life Initiatives. Because comfort and quality of life are so important to patients with cancer, particularly children, the Department continually seeks new initiatives. This year, the non-profit organization "Splashes of Hope" provided colorful sea-themed murals, which were placed in clinical exam rooms, chemotherapy infusion areas, and the waiting area of the Cancer Center to help

the children relax. This was funded by a grant from the Laurence W. Levine Foundation, which selected Stony Brook for the project, along with an additional grant secured by New York State Senator John Flanagan (R-East Northport). In addition, Sunrise Day Camp, a day camp dedicated to children with cancer, started "Sunrise on Wheels," where Hospital volunteers brought pieces of the day camp experience to children awaiting treatment in the Pediatric Hematology/Oncology outpatient clinic. Also, 21 pediatric patients with cancer treated at Stony Brook, along with 24 of their siblings plus physicians and staff participated in Camp Adventure on the grounds of Camp Quinipet on Shelter Island. This one-week respite was sponsored by the American Cancer Society. While numerous hospitals in the region support and send their patients to Camp

Adventure, a significant portion of the campers each year are represented by Stony Brook staff, patients, and siblings.

TEAM MEMBERS

Pediatric Medical Hematology/Oncology:

Robert I. Parker, MD, Team Leader, and Director, Pediatric Hematology/Oncology; M. Yasar Celiker, MD; Edward L. Chan, MD; Devina Prakash, MD; Debra Giugliano, RN, CPNP, CPON; Patricia Losquadro, RN; Rosemary A. Mahan, RN, CPNP; Kammy McLoughlin, CSNP; Patricia Murray, RN; Maria Narine, RN, CPNP; Lori Seda, RN; and Jeralyn Sigwart RN, MS, PNP, CNS, Assistant Director of Nursing, Department of Pediatrics and Child Life

Pediatric Surgery: Thomas Lee, MD, and Richard Scriven, MD

Pathology: Cynthia Kaplan, MD

Radiology: Dvorah Balsam, MD

Radiation Oncology: Edward Valentine, MD, and Tamara Weiss, MD

Sarcoma Management Team

OVERVIEW Soft tissue tumors encompass a wide variety of tumors that arise most commonly from fat, muscle, or connective tissue anywhere in the body. They are uncommon, and account for only 1.5 percent of cancer cases in the U.S. each year, or about 8,600 cases per year. There is no age, gender, or race predisposition for sarcoma, and few known risk factors. In a majority of patients, the cause is unknown. Sarcomas arise most commonly in the extremities, with 15 percent arising in the retroperitoneum. Retroperitoneal sarcomas often grow to a very large size before they are identified.

Highlights

The Sarcoma Management Team is dedicated to the comprehensive management of patients with these tumors. This includes initial diagnosis, staging, treatment and follow-up care. Patients are often evaluated first by their primary care doctor, or a general, vascular, or orthopedic surgeon. When patients are referred



Patient Navigator Claire Smith, RN, (left) with Drs. Valentine and Pameijer.

to the Sarcoma Team, their cases are discussed at a multidisciplinary conference and a treatment plan is developed in accordance with NCCN guidelines. Most patients can be treated with limb sparing or minimally invasive techniques, and other specialists such as plastic or orthopedic surgeons may collaborate to achieve excellent functional outcomes.

TEAM MEMBERS

Surgical Oncology: Colette Pameijer, MD, Team Leader; Philip Bao, MD; Kevin Watkins, MD; Claire Smith, RN, Patient Navigator

Pathology: Sonya Hwang, MD

Radiology: Elaine Gould, MD

Radiation Oncology: Bong Kim, MD

Medical Hematology/Oncology: Andrzej Kudelka, MD

Urologic Oncology Management Team

OVERVIEW The Urologic Oncology Management Team provides comprehensive care for all genitourinary malignancies, including cancers of the prostate, urinary bladder, adult kidney, and testis. Care ranges from screening at-risk individuals to treating those with advanced disease and providing access to clinical trials for patients with malignant tumors. In 2009, Stony Brook's Department of Urology was again ranked among the top 50 in the nation by *U.S. News & World Report* (August 5, 2009). In 2007, the Hospital became the first in Suffolk County to acquire the da Vinci® S HD™ Surgical System, the most technically advanced robot system available. Rahuldev S. Bhalla, MD, a nationally recognized robotic surgeon, has developed the robotics program in urology and has performed more than 400 robot-assisted surgeries to date. He continues to investigate new techniques and instrumentation. Community education also is an important focus of the team. In 2009, the outreach team provided approximately 1,300 men free prostate screenings across Long Island, with a special focus on the high-risk groups in the African American and Hispanic communities.

Highlights

Prostate Cancer Management Options.

As a leader in the management of prostate cancer, Stony Brook offers robot-assisted, open, or laparoscopic surgery; radiation therapy with external beam and/or radiation seed implants; cryotherapy; hormonal therapy; and investigational therapies.

Leading-Edge Treatment for Bladder Cancer.

Bladder cancer treatments include local surgical resection and placement of chemotherapeutic agents into the bladder. Some may be candidates for creation of a new continent bladder made from the intestine allowing full restitution of urinary function. Robot-assisted surgery may also be an option for appropriate candidates who require removal of the bladder (cystectomy). During diagnostic cystoscopic surgeries, the team

uses leading-edge optical coherence tomography (OCT) technology to help diagnose and stage bladder cancers earlier.

New Approaches to Kidney Cancer. For adult kidney cancer treatment, the team provides open and laparoscopic radical nephrectomy and partial nephrectomy. Patients with advanced disease can receive immunotherapy with cytokines, such as interleukin-2, and other agents. In addition, new oral agents such as sunitinib and sorafenib that target vascular endothelial growth factor receptors are available to patients with advanced disease. Patients with kidney insufficiency may have “nephron sparing” surgery (partial kidney removal) to preserve kidney function.

Clinical Trials. The team participates in a number of clinical trials and basic research including investigating novel agents such as alefacept, optimizing treatment with new agents currently being used in clinical practice, identifying cancer markers in the urothelium, and investigating the role of environmental toxins, specifically diesel fuels, in bladder cancer.

- Victor Romanov, PhD, and visiting scientist Galina F. Reshetnikova, MD, in collaboration with the Department of Pharmacology, are investigating the role of 3 NBA (a major toxic component of diesel exhaust) in carcinogenic transformation of bladder urothelium. They are looking at the role of metabolic enzymes activating 3 NBA, DNA damage and formation of carcinogenic mutations induced by this carcinogen in neoplastic transformation of bladder urothelium. This study is supported by a research award.
- Dr. Romanov and Terry Whyard, MS, Research Associate, have studied the role of prostate-specific antigen (PSA) in bone and lymph node metastasis and are investigating the role of PSA in metastatic cell motility, invasion and proliferation, as well as the regulation

of PSA secretion and activity by bone components.

- Wayne Waltzer, MD, and Dr. Romanov are co-investigators in aristolochic acid nephropathy (AAN) and its associated urothelial cell cancer, supported by a program project grant from the National Institute of Environmental Health Sciences (NIEHS). Target tissues for aristolochic acid (AA) are the renal cortex and urothelium of the upper urinary tract (renal pelvis and ureter). In humans, the effects of this nephrotoxin, when ingested orally, are manifested in so-called Balkan endemic nephropathy. Ureters are being used by Dr. Romanov to isolate and culture primary urothelial cells. Functional genomics (microarray and micro RNA) studies on these cultured cells are then performed following treatment of these cultures with AA. These studies have been reported at national and international meetings. Dr. Romanov also is involved in NIEHS PPG research designed to identify genes responsible for susceptibility to AAN. He and Tom Rosenquist, PhD, Department of Pharmacology, have developed a mouse model of AAN that mimics all aspects of the human disease. Using inbred strains of mice, they have identified quantitative trait loci conferring sensitivity to the toxin. This advance has enabled the demarcation of human genes responsible for AAN.

TEAM MEMBERS

Surgery: Wayne Waltzer, MD, Team Leader and Chair, Department of Urology; Howard L. Adler, MD, Director of the Prostate Care Program; Rahuldev S. Bhalla, MD, Director of Robotics and Minimally Invasive Surgery; Matthew Petersen, PA; Melanie Dale, RN, Patient Navigator; Kathleen Kelly Lyon, RN; Jeanne Martin, NP; and Arlene Shaw, RN
Pathology: Jingxuan Liu, MD
Radiology: Marlene Zawin, MD
Radiation Oncology: Tae Park, MD
Medical Hematology/Oncology: Shenhong Wu, MD, PhD

ESSENTIAL TO THE TEAM

Leading-edge Programs Deliver Comprehensive and Optimal Treatment

Surgery

Program Leader: Todd K. Rosengart, MD,
Chair, Department of Surgery

OVERVIEW Surgeons in Stony Brook's Department of Surgery offer the highest degree of specialization and expertise. Together, these specialized surgical services not only contribute to the unique range and top quality of healthcare provided at Stony Brook University Medical Center but also constitute the solid foundation of the Medical Center's surgical residency programs. Recognizing the relationship between volumes and outcomes, each surgeon focuses on a specific area of cancer. In addition, the Department of Surgery works closely with the Divisions of Medical Hematology and Oncology and Radiation Oncology to provide multimodality approaches to cancer—often collaborating to design and implement new protocols for treatment of various tumors.

Implementation

The Department has been on the forefront of using minimally invasive surgical techniques, including laparoscopy and robot-assisted surgery. It also has a number of members with expertise in advanced diagnostic techniques such as sentinel node biopsy for staging breast cancer and malignant melanoma. A major role for surgeons is serving as members and leaders of the Disease Management Teams and Tumor Board conferences. Stony Brook's surgeons are partners in more than 50 protocols approved by the Medical Center's Institutional Review Board, including American College of Surgeons Oncology Group research protocols, the National Surgical Adjuvant Breast and Bowel Project, Cancer and Leukemia Group B, and the National Institutes of Health-funded research on consent for tumor bank tissues.

The Department's surgeons are the primary collaborators with pathologists in the Stony Brook Tumor Tissue Bank.



Dr. Rahuldev S. Bhalla at the da Vinci console as he performs robot-assisted surgery.

This state-of-the-art research resource will facilitate future cancer biomarker discovery and validation to position Stony Brook as a national leader in the field of translational research—underlining Stony Brook's commitment to accelerating advances in cancer care. The Tumor Tissue Bank will help increase the accuracy of diagnosis and improve the ability to predict clinical outcomes. Further, the Department's participation in the Tumor Tissue Bank will help develop novel treatments that can be tailored for individual patients as part of the emerging focus on personalized medicine.

New Initiatives. This year, in order to broaden minimally invasive surgery for complex gastrointestinal (GI) tumors and other diseases of the GI tract, the Department created the Division of Colon and Rectal Surgery and the Upper Gastrointestinal and General Oncologic Surgery Group. These new initiatives are key components in the development of an advanced, comprehensive surgical program at Stony Brook for treating GI and soft tissue malignancies in ways that are less invasive and lead to better outcomes for

patients. Surgical oncologists are using laparoscopic and other minimally invasive surgical methods, including robot-assisted surgery, in the treatment and management of tumors of the GI tract, liver, pancreas, esophagus, and stomach. Beyond conventional procedures, they have also brought Stony Brook to the forefront of technology in the treatment of advanced malignancies with use of intraperitoneal chemotherapy and isolated limb infusion, methods that deliver heated chemotherapy directly to the area affected by cancer while sparing the rest of the body. With seven new faculty recruitments this year alone, the Department anticipates further advances in clinical care and translational research.

In addition, this year surgical residents and surgical faculty teams faced off in the game of "Surgical Jeopardy," created by the American College of Surgeons. Modeled in format after the popular TV show, the game featured content on cancer staging to test and increase surgeons' knowledge relevant to the management of cancer patients.

Hematology and Oncology

Program Leader: Theodore G. Gabig, MD, Chief, Medical Hematology/Oncology

OVERVIEW With its comprehensive program in cancer treatment and research, the Division of Hematology and Oncology evaluates and treats a wide range of malignant diseases using chemotherapy, biologic response modifiers, targeted therapies, and other new systemic therapies. Led by best-in-field physicians and researchers, the Department includes nurse practitioners, chemotherapy-certified oncology nurses, a Patient Navigator who is an oncology-trained nurse, and research nurses—most of whom participate in the site-specific Disease Management Teams. The Medical Oncology Inpatient Unit maintains 37 beds, four of which are dedicated for bone marrow transplantation. The outpatient oncology cancer clinic provides chemotherapy and expert oncology nursing, and sees approximately 11,000 patient annually.

Implementation

The Department oversees a number of specialty programs, including the Blood and Bone Marrow Stem-Cell Transplant Program. With its own specialized unit that maintains state-of-the-art infection control, the program offers services for autologous and allogeneic bone marrow transplantation for leukemia, lymphoma, and multiple myeloma. Clinical trials are

open for every major cancer site and include treatment for prostate, breast, and colon cancers; glioblastoma multiforma; and aggressive malignant astrocytomas. Research includes development of a system for detecting new cancer cell markers and for isolating cancer cells circulating in the blood. The Department also collaborates with national research groups and pharmaceutical companies.



Dr. Theodore G. Gabig and Kathleen Gioconda, RN, with patient.

Nursing

Program Leaders: Lee Anne Xippolitos, RN, PhD, Chief Nursing Officer, and Rose C. Cardin, RN, Associate Director of Nursing and Cancer Services

OVERVIEW Specialty-trained oncology nurses are vital members of the Disease Management Teams, which provide expert care to patients with cancer at Stony Brook University Medical Center. Nurses are committed to compassionate and seamless service during all phases of treatment along the cancer care continuum including outpatient clinics, adult and pediatric inpatient units, patient navigator services, radiation oncology, consultation and liaison services, clinical trials, and the blood and bone marrow transplant unit. The model of practice recently adopted by the Hospital is Patient and Family Centered Care. Its core elements are dignity, respect, information sharing, and collaboration and participa-

tion, which have been integrated into the daily routine of all oncology nurses. They conduct patient and family rounds and are consistent participants in the Oncology Partners in Care Advisory Board.

Implementation

As patient volume and services expand, the Department has continued to recruit high quality, dedicated nurses with experience in oncology. Many are certified as oncology nurses as well as hold advanced degrees in nursing. Throughout 2008, the team focused on those fundamentals of nursing practice which enabled them to spend quality time with each patient. They streamlined services to provide a holistic and healing environment during a patient's hospitalization. This intensely focused "back to basics" care was successful

in helping meet specific targets aimed at improving patient satisfaction scores.

Nursing services at the outpatient cancer center have been designed specifically using this model of care. Oncology nurses are also highly skilled and highly trained to perform outpatient chemotherapy/biotherapy, minor surgical procedures, and infusion therapy for a diverse patient population. Because outpatient cancer services are centrally located in one place, staff can collaborate with other specialties within the center to ensure that patient needs are met. In addition, the recently remodeled breast care center nurse navigation program was a key factor in the recent accreditation by the National Accreditation Program for Breast Centers as a nationally accredited breast care center—the first in New York State.

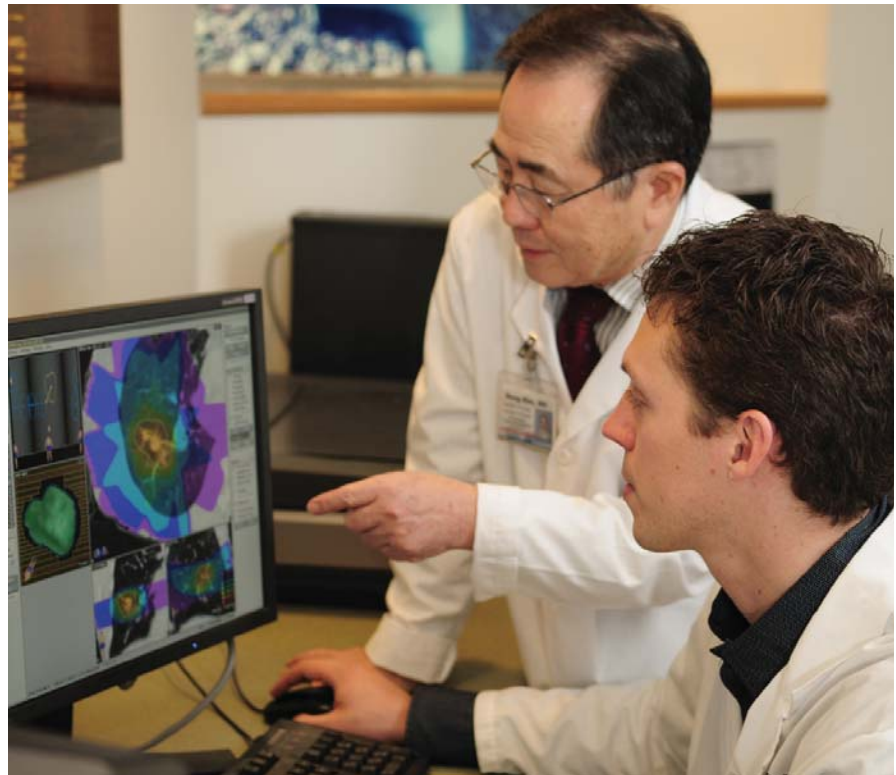
Radiation Oncology

Program Leader: Allen G. Meek, MD, Chair and Clinical Director, Radiation Oncology

OVERVIEW Stony Brook's Department of Radiation Oncology works with staff from the Hospital, the School of Medicine, and the Research Foundation of New York to deliver comprehensive, state-of-the-art cancer care with a focus on delivering highly targeted radiation that limits exposure to normal tissue. Team members also play a key role on the Disease Management Teams. The Department's innovative approaches to treatment and its ongoing acquisition of advanced technology has made it a regional resource. In fact, the American College of Radiation Oncology (ACRO) Practice Accreditation program determined that the Department meets its high standards, and in many aspects exceeds those standards. Department members include: 5 physicians, 5 physicists, 3 medical dosimetrists, 15 radiation therapists, 8 nurses and nursing assistants, 6 administrators, and 16 clerical/secretarial staff. In 2008, the Department saw 1,037 consults and delivered 17,540 external beam radiotherapy treatments. In addition, it performed 425 low- and high-dose rate brachytherapy procedures (I-131, Pd103, I-125, Sm 153, SR90, HDR, T&O), 12 prostate implants, 123 radioiodine ablations for thyroid cancer, and a total of 24 radiosurgery procedures.

Implementation

- Radiotherapy procedures available include external beam radiotherapy from three linear accelerators (delivered via either three-dimensional conformal or intensity modulated beams); low- and high-dose rate brachytherapy (delivered intracavitarily, orally, intravenously, or surface, with the prostate seed implant program offering an alternative in which the seeds are placed directly into the prostate gland); total body radiotherapy; and stereotactic radiosurgery and stereotactic radiotherapy using a linear accelerator with a special BrainLAB micro multileaf collimator. Other treatments include



Dr. Bong Kim and physicist Jameson Baker view CT images necessary in treatment planning.

radioimmunoglobulin administration and radiotherapy using a CT simulator to facilitate a sophisticated treatment planning program. The MammoSite® radiation system used by Stony Brook's surgeons and radiation oncologists enables full lumpectomy radiation in five days instead of the traditional six weeks of external radiation to the entire breast.

- New equipment includes a state-of-the-art ExacTrac® X-ray 6D System for image-guided radiation therapy (IGRT); Varian's Real-Time Position Management Respiratory Gating System; GE's Advantage 4D™ CT Software to overcome tumor motion; the Eclipse® Treatment Planning System that helps radiation beams conform to the shape of the tumor; and the Varian ARIA® Oncology Information System, which supplies an electronic patient medical record.

- The Department, in conjunction with the Department of Radiology, has a residency program in medical physics. With Stony Brook University's School of Health Technology and Management, the Department also trains medical dosimetrists.
- Research focuses on clinical trials, including developing software and hardware to advance radiation treatment techniques and investigating new techniques or applications.
- Radiation therapist Steve Schindler designed a "Rays of Hope" logo for the Department's Sunshine Club newsletter. The logo was also used on coffee cups for the Radiation Oncology staff, as well as on a pin for patients to celebrate their last treatment—given on "graduation day" from radiation oncology treatment.

Diagnostic Radiology

Program Leader: John Ferretti, MD, Interim Chair, Diagnostic Radiology

OVERVIEW Diagnostic imaging plays a critical role in initial cancer diagnosis, treatment planning, and palliative therapies through interventional techniques and cancer monitoring. The Department of Radiology offers state-of-the-art clinical care and recently has expanded to enhance services. This includes adding healthcare professionals with expertise in thoracic disease, breast imaging, virtual colonoscopy, and body MRI. With the recent recruitment of world-renowned cardiologist Michael Poon, MD, Stony Brook now offers cutting-edge cardiac imaging using CT and MRI technology, which can diagnose patients who present with chest pain without interventional procedures. Several radiology faculty attendings are involved with research projects related to cancer imaging, as well as developing new modalities in breast cancer imaging.



Charles Mazzaresse, MPS, RT, and Dr. Maryanna Mason.

Physicians from the Department attend multidisciplinary Tumor Board meetings, where they provide consultation and review images during case presentations.

Implementation

The Department of Radiology continues to acquire leading-edge equipment, in-

cluding a position emission tomography/computed tomography (PET/CT) scanner, which can more accurately detect and stage malignancies; a new 64-slice CT scanner, which has increased speed and accuracy along with the ability to produce high-resolution 3D images; and two 1.5 Tesla MRI scanners, which have increased speed and accuracy and can perform non-invasive diagnosis of malignancies. This year, the Department implemented the use of a specialized endorectal MR coil to enhance staging of rectal and prostate cancer. Also, ultrasound units have been upgraded with tissue harmonics and an increased field view; some can even perform 3D imaging. The Department continually upgrades its picture archiving and communications system for rapid access to digital images at multiple sites for both radiologists and clinicians.

Pathology

Program Leaders: Kenneth R. Shroyer, MD, Chair, Department of Pathology, and Meenakshi Singh, MD, Vice Chair for Anatomic Pathology

OVERVIEW The Department of Pathology supports cancer diagnosis and management with specialty tests, including expanded cytogenetic services and molecular tests; performs clinical research; maintains a Frozen Tissue Bank; and uses specially designed information systems for standardization in cancer diagnosis and treatment. Pathology faculty specializing in the areas of breast, gynecology, digestive, thyroid, genitourinary, lung, melanoma, sarcoma, leukemia, and lymphoma provide Disease Management Team support. In addition, they participate in departmental meetings and site-specific cancer conferences

Implementation

- Departmental advances include adopting the use of synoptic protocols for

reporting cancer specimens on surgical resections. In 2008, applying College of American Pathologists guidelines, the Department's performance exceeded the 90 percent national benchmark in this category and contributed to successful Hospital-wide cancer program accreditation, with commendation.

- Fine needle aspiration services have been recently added. A new Fine Needle Aspiration (FNA) Cytopathology Service at the outpatient cancer center allows many patients to receive their preliminary diagnosis on the same day of their visit.
- CAP/ASCO Guidelines for HER2 in breast cancer have been implemented. Continued research is investigating molecular events associated with tumor-cell invasiveness; mechanisms responsible for immortalization and



Dr. Meenakshi Singh and residents examine sections from specimens.

dysregulation of the cell cycle in tumor cells; the carcinogenic effects of radiation; and the development of novel biomarkers for cancer.

CLINICAL SUPPORT

Specialized Services Contribute to Coordinated Care

Pain Management

Program Leaders: Peter Glass, MB, ChB, FFA (SA), Chair, Department of Anesthesiology; Brian Durkin, DO, Director, Center for Pain Management; Chris Page, MD, Director, Acute Pain Service; Carole Agin, MD; Irina Lokshina, MD; Farrokh Maneksha, MD; Margaret Fischer, NP; Stacey Hildebrand, NP; Diane Santangelo, NP; and Julie Scheuermann, NP

OVERVIEW Using a multidisciplinary approach, the Pain Management Team works closely with the patient's oncologist to address pain management needs on both an inpatient and outpatient basis. The team also helps patients—including those living with chronic pain—with strategies for

managing and living with pain to maintain normalcy in their lives. The program dedicates resources to education and research, and can refer patients to research studies when appropriate.

Implementation

Hospitalized patients can receive oral, intravenous, or central axis (epidural or intrathecal) medications administered through conventional routes or by patient-controlled analgesia (PCA) machines. Outpatients with chronic pain

are evaluated and treated at the Center for Pain Management located in the Cancer Center. Staffed by anesthesiologists and nurse practitioners with expertise in pain management, the Center for Pain Management treats acute, chronic, benign, and cancer-related pain. Modalities include acupuncture, nerve blocks, infusions, intrathecal pumps, and dorsal column stimulators. A dedicated fluoroscopy suite allows the Center to offer fluoroscopic-guided procedures in addition to ultrasound-guided injections.

Nutrition Services

Program Leaders: Jeannie Gaspard, RN, MSN, OCN, Assistant Director of Nursing; Lisa L. Richter, MS, RD, Clinical Nutrition Manager; Andrea McNaught, RD, Inpatient Adult Oncology Dietitian; Janice Antino, RD, Inpatient Pediatrics Oncology Dietitian; and Jennifer Fitzgibbon MS, RD, CDN, Outpatient Adult/Pediatrics Oncology Dietitian

OVERVIEW Nutrition can play a role in cancer prevention, support the patient's health during treatment, and help prevent recurrence. Stony Brook University Medical Center employs registered dietitians and nutrition experts to counsel patients and their families on appropriate strategies for eating. They devise an individual nutrition plan based on the patient's medical and family history, lifestyle factors, and personal goals. Counseling is available to adult and pediatric patients on an inpatient and outpatient basis. A dedicated full-time oncology dietitian is available at our outpatient Cancer Center. In 2008, Stony Brook nutritionists served an estimated 600 new patients.

Implementation

After assessing the patient, the dietitian provides the patient and/or caregiver with individualized written information and



Registered Dietitian Jennifer Fitzgibbon consults with a patient.

verbal counseling, focusing on foods that help ensure optimal nutrition and that will also be enjoyable. Inpatient meals are provided by a "room service" menu system, overseen by an award-winning executive chef, which allows patients to request meals according to their own schedules and tastes. Outpatient services focus on optimizing nutrition during treatment, as

well as offering strategies and clinical options if side effects hinder nourishment. Inpatients and outpatients receive continual monitoring so that eating plans can be modified appropriately; follow-up care and referral to community resources is part of the service. The Department also provides community education and support with a focus on cancer prevention.

Physical Rehabilitation

Program Leader: Catherine M. Tuppo, PT, MS, CLT-LANA, Director, Physical and Occupational Therapy, and Director, Lymphedema Therapy

OVERVIEW The Department of Physical and Occupational Therapy provides both inpatient and outpatient physical rehabilitation for adult and pediatric oncology patients. The primary goal is to improve a patient's functional capabilities. Therapeutic interventions are tailored to meet the individual needs of each patient.

Implementation

All referred patients receive a detailed assessment by a therapist followed by

an individualized treatment plan that incorporates the goals of the patient and family. Staff maintains close communication with the referring physician(s) over the course of care. The Department has a Lymphedema Therapy Program on an outpatient basis. The majority of patients in this program have breast cancer-related lymphedema; other patients have gynecologic, melanoma, or varied cancer etiologies. Specially trained physical therapists incorporate the principles of complete decongestive therapy (CDT) as the clinical modality to reduce the

swelling associated with lymphedema and to improve limb and overall function.

A therapeutic yoga program is supervised and coordinated by a physical therapist who is a certified yoga instructor. The program is offered on an outpatient basis, and is available to patients with cancer, as well as to family and friends. The Department is involved in community and patient education, where topics include the benefits of exercise, lymphedema awareness, and yoga, and it participates in research, with an emphasis on lymphedema.

Pharmacy

Program Leaders: Jeannene Strianse, RPh, Director; Benny Chan, RPh; John Farrell, RPh; and Scot Weber, RPh, BCOP

OVERVIEW The Pharmacy Department at Stony Brook University Medical Center provides chemotherapy compounding and dispensing services to both adult and pediatric inpatients and outpatients. For efficiency and convenience, each area has its own pharmacy. All are certified USP 797-compliant facilities that meet the most rigorous government requirements for the

preparation of sterile compounds. They also employ state-of-the-art equipment and quality control measures that surpass stringent government requirements.

Implementation

Stony Brook's pharmacy services are delivered by knowledgeable and experienced licensed pharmacists who make patient safety a top priority. They adhere

to strict operating procedures. Only specially trained registered pharmacists compound and dispense antineoplastic medications. Each order undergoes a multiple double-check process in which the pharmacist reviews the physician order, recalculates the dosage, performs allergy checks, and identifies potential drug-drug or drug-food interactions. The result: an efficient, reliable, and, most important, a safe operation.

Survivorship and Supportive Care Program

Program Leader: Lynn Hallarman, MD, Palliative Care Specialist

OVERVIEW This Hospital-based program has a mission to help relieve suffering and improve the quality of life for patients with a life-threatening cancer diagnosis—whether they are receiving curative treatments or comfort measures. It also addresses the unique needs of the family during this time. The program takes a whole-person interdisciplinary approach to assess and treat cancer-related symp-

oms. This year, the Survivorship and Supportive Care Program received the National Consensus Project 2009 Quality In Palliative Care Leadership Award, just one of nine first-ever recipients of this award—and the only academic medical center to be given the award.

Implementation

Led by board-certified palliative care expert Lynn Hallarman, MD, the core team includes two full-time nurse practi-

tioners. A focus of the team is to help reduce the severity of disease symptoms for patients, and help people plan for and obtain quality of life during their illness and medical treatments. Members work closely with the primary treatment team, and smooth the transition to home and community. Since first introduced in 2007, the program has helped more than 1,200 patients and families cope with the physical, emotional, and spiritual symptoms of a life-threatening cancer.

PATIENT SUPPORT AND ADVOCACY

Specially Trained Staff Facilitate Patient Needs

Social Work Services

Program Leaders: Susan McCarthy, LMSW, MS, Director of Social Work Services; Jo Ann McCaslin, LCSW, Social Work Supervisor; Mohini Jose, LCSW, Social Work Supervisor, In-patient LLT Social Worker, Gynecologic Cancer Support Group; Shirley Calhoun, LCSW-R, Medical and Pediatric Oncology Cancer Center/Carol M. Baldwin Breast Care Center, Breast Cancer Support Group; Paulet Farquharson, LCSW-R, Surgical Oncology and Radiation Oncology, Upper GI Cancer Support Group, Cancer Education Series; Darlene Kenny, LCSW, Medical and Pediatric Oncology Cancer Center/Carol M. Baldwin Breast Care Center; Margaret Carr, LMSW, Leukemia and Blood Disorder Support Group, Gift for Kids Support Group; Kevin Lycke, LCSW, ACSW, Inpatient Medical Oncology, Gift for Kids Support Group; and Geoffrey O'Connell, LCSW, Medical and Pediatric Oncology Cancer Center, Prostate Cancer Support Group



Darlene Kenny, LCSW, counsels a patient.

OVERVIEW As an integral component of Stony Brook's comprehensive cancer care program, professional social workers are experts in the psychosocial care for patients with cancer and their families. Social workers are available to both inpatients and outpatients. They can assess patient and family need in order to assist with a number of things including individual and family counseling, coping with a

cancer diagnosis, navigating benefit and entitlement programs, providing resources, facilitating support groups, continuum of care planning, and referrals and education.

Implementation

In addition to their work on the Disease

Management Teams and their one-on-one patient care, social workers facilitate a number of active support groups addressing specific cancers, including breast, prostate, lymphoma, gynecologic, and upper GI. They also co-facilitate a cancer education series program.

Child Life Program

Program Leaders: Michael Attard, CCLS, Megan Kusterer, and Paulette Walter, MEd, CCLS, Inpatient Child Life Program Specialists; Lauren Sharaby, CCLS, Outpatient and Inpatient Child Life Program Specialist; and Jeralyn Sigwart RN, MS, PNP, CNS, Assistant Director of Nursing, Department of Pediatrics and Child Life

OVERVIEW The Child Life Program brings one of the most important elements to children who find themselves in what can be a scary hospital environment: play. Based on the theory that play is fundamental to a child's growth and development, the Child Life Program is available to patients in the Pediatric Hematology/Oncology Division in both the ambulatory and inpatient units. Using a variety

of "tools"—including three supervised playrooms filled with games, toys, and arts and crafts—Child Life Specialists work closely with the child, family, and medical team to reduce anxiety and provide the opportunity to engage in everyday childhood activities to "normalize" the experience and help reduce the stress of being in the hospital or at the clinic. The role of Child Life is very active in both the inpatient and outpatient services of the Cancer Center.

Implementation

Child Life Specialists support the patient during invasive or painful procedures

using guided imagery, relaxation, and/or distraction techniques. They also provide pre-operative teaching and medical play to help prepare the child and family for an upcoming treatment. In addition, they collaborate with the medical team and local schools to ease the child's re-entry to school, promoting sensitivity and acceptance among peers. Recently a fundraiser called "Music Idol for Kids" was held to benefit the Child Life Program and the Sunrise Fund. Organized by Idol Entertainment and SSLI Recording Studio, it featured 30 vocal adult contestants, many from the Stony Brook campus community.

Community Outreach and Education

Program Leaders: Yvonne Spreckels, Director, Community Relations; Sabra Boughton, NP, PhD, Patient Education Coordinator; Margaret Davis, Project Associate for Witness Project® of Long Island; and Susan McCarthy, LMSW, Director of Social Work Services

OVERVIEW As a dedicated steward of community health, Stony Brook University Medical Center is committed to helping individuals and community-based organizations gain access to healthcare services and live healthier lives. This has manifested by partnering with other organizations in the community; providing workshops, lectures, seminars, and screenings; working with school districts to teach students about nutrition, exercise, and the dangers of tobacco; and providing child safety information to parents, educators, and school nurses.

Implementation

In the second half of 2008, the Department educated 1,400 persons on a variety of topics including tobacco cessation and lung, breast, prostate, and pediatric cancers. It screened 568 men for prostate cancer and 133 people for colorectal cancer. During the past year, the Department also was involved in educating 711 persons on skin cancer and sun exposure, along with 1,427 people on tobacco use and second-hand smoke—surpassing annual goals for community member outreach. Some of Stony Brook’s other initiatives included:

- Publishing *Better Health, Better Living*. This is a community newsletter that reaches more than 200,000 area residents with key information on health education, prevention, screenings, and available Hospital services.
- Reaching underserved communities. To identify health issues and address healthcare disparities, a key initiative is the Health Occupations Partnership for Excellence program, which educates secondary school students from low-resource/high-need districts on healthcare

careers, health issues, and achieving academic success. Stony Brook has also partnered with the Suffolk County Department of Health’s Office on Minority Health to provide free screenings, prevention/education, and health insurance assistance programs.

- Continuing diversity awareness. A cultural diversity committee worked on meeting patients’ diversity and cultural needs in 2008 and 2009. Patients’ cultural, religious, spiritual, dietary, pain and language needs are assessed as part of the nursing history and physical exam, and are included throughout the plan of care, when possible. The ASK method was used with every patient encounter: A = awareness of patient specific needs, S = sensitivity to those needs always, and K = knowledge to become culturally proficient. Each nursing unit has the cultural diversity reference book titled “Culture and Clinical Care” at the nursing station.
- Addressing the disparity in breast cancer morbidity rates in populations

through the Witness Project® of Long Island at the Cancer Center. The program targets women of African descent, who have lower rates of breast cancer than other ethnic groups yet die at higher rates, by promoting awareness and screenings. The project reached hundreds of community members in 2008.

- Helping mark the conclusion of cancer treatment. A group of firefighters from Suffolk County donated two bells from the Bohemia and East Brentwood Fire Departments to be displayed in the lobby of the Stony Brook University Cancer Center for outpatient services. Patients are invited to ring the bells to commemorate the completion of chemotherapy treatment. When a patient rings the bell, it symbolizes putting cancer in the past, and moving on with life. With input from the Cancer Community Advisory Group for Stony Brook, the firefighters—some of whom are themselves cancer survivors—chose this donation as a way to express gratitude to the doctors and others who helped them get through treatment.



Nurses Aide, Anastasia Asare, checks a patient’s blood pressure.

Cancer Liaison Physician

Program Leader: Colette Pameijer, MD, Surgical Oncologist and Cancer Liaison Physician

OVERVIEW The cancer liaison physician is a liaison at many levels: between the Hospital and the community, between the national standards organizations and the Hospital, and between the Cancer Committee and the various departments at Stony Brook University Medical Center. For example, the liaison collaborates with the Cancer Committee to meet and exceed cancer program standards and improve clinical practice. In particular, the liaison works with the Disease Management Teams to develop best practices, evaluate compliance with adopted guide-

lines, expand participation in clinical trials, and improve quality of care. The liaison also works with local agencies and the American Cancer Society (ACS) on community outreach and education and participates in peer group meetings to provide direction according to criteria established by the American College of Surgeons Commission on Cancer.

Implementation

In addition to ongoing quality initiatives for the management of Stage III lymph node positive colon cancer and Stage I, II, and III breast cancer, the priority

areas for 2008 were quality improvement, advocacy, American Cancer Society partnership, clinical trials, and comprehensive cancer control. Highlights include studies on data quality and completeness for breast and colorectal cancer; quality improvement dashboard reviews of National Comprehensive Cancer Network guidelines for patient management; community outreach and education on skin cancers and melanoma; ACS partnerships; and comprehensive cancer control in partnership with the New York State Consortium.

Cancer Helpline

Program Leaders: Teresa Beutel, Director, Healthcare Teleservices/Resource Center, and Lori Tischler, RN, Oncology Nurse

OVERVIEW The Cancer Helpline is staffed by specially trained oncology nurses. This confidential helpline is available to callers with questions and concerns about cancer. These questions may include such things as prevention, risk, screening, detection,

second opinions, terminology, and current research. Our Cancer Helpline also serves as a way to encourage community members to act promptly and seek early detection and intervention. Our healthcare professionals can also help callers with referrals to physicians and provide valuable information about community services.

Implementation

The Cancer Helpline is available at (800) 862-2215, Monday through Friday, between 8:30 am and 6:00 pm. Community members also can access the helpline via the Medical Center Web site, which allows individuals to send e-mail questions or view the answers to frequently asked questions.

Chaplaincy Services

Program Leaders: Chaplain Stephen Unger, Director of Chaplaincy; Chaplain Anne Coulehan; and Chaplain Madeline Queck

OVERVIEW Chaplaincy services are the clinical professional discipline specializing in the spiritual component of healthcare delivery. At Stony Brook University Medical Center, it is an important part of the comprehensive Body-Mind-Spirit model for quality-integrated healthcare. Chaplaincy is valued for many reasons, not the least of which is the relationship

between a strengthened spirit and effective cancer treatments. In addition, because a diagnosis for cancer often becomes the catalyst for a spiritual search, having qualified chaplains experienced in cancer care available 24/7 adds another dimension to the healing process. Chaplains can assist patients in strengthening their coping skills, developing hope, and finding meaning during what can be a very intense time in their lives.

Implementation

Chaplains visit patients in the Medical Center and the oncology clinics. They attend to the spiritual needs of patients and families on an interfaith basis, and accommodate requests for specific faith traditions. Chaplains support staff, participate in interdisciplinary care rounds, aid in ethical and end-of-life decision making, assist with support groups, and provide bereavement and grief support.

BASIC AND CLINICAL RESEARCH

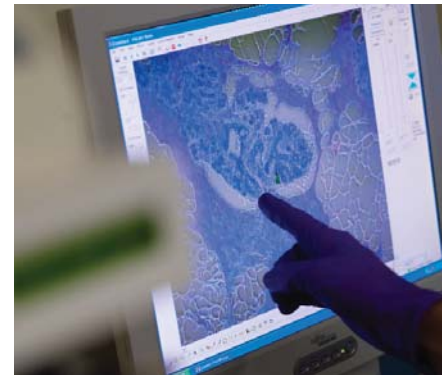
Advancing Methods of Prevention, Diagnosis, and Treatment

At Stony Brook University Medical Center, researchers take on the full gamut of cancer research. They ask some of the most basic questions: **What causes cancer? How does it spread? Is there a more accurate way to screen? They study populations in order to understand the environmental and genetic components of cancer. They investigate promising diagnostic technology. They help develop novel treatment modalities in the research laboratory. They test the latest therapies in a clinical setting. They participate in multi-site studies. They collaborate with national and community-based organizations. They painstakingly track and catalog results, postulate and revise theories, and spend years evaluating the efficacy of medications, vaccines, and procedures.**

They do this for one reason: To advance the understanding and treatment of cancer. As a premier academic medical center, Stony Brook puts the full weight of its resources, facilities, and scientific talent behind this goal.

Although all 25 departments in the School of Medicine participate in research, a primary research affiliate at Stony Brook University Medical Center is the Department of Preventive Medicine, which conducts cancer research projects and provides core support to other departments, primarily in biostatistics and epidemiology. The residency program in Preventive Medicine and Public Health receives training support from the American Cancer Society and a federal Health Resources and Services Administration Grant.

The General Clinical Research Center (GCRC) at Stony Brook University Medical Center has received high scores from the National Center for Research Resources (NCRR) of the National Institutes of Health (NIH). In addition, all major components of the GCRC—which includes leadership, diversity of research initiatives, collaborative efforts, and institutional support—were rated outstanding. The evaluative report specifically highlighted the direction of the GCRC, its increased collaboration with Brookhaven



National Laboratory, outstanding patient safety protocols, and exceptional plans for future research. The NCRR cited the biostatistical and informational components of the GCRC as “a model of what bioinformatics should be.” In addition, the NIH has already funded Stony Brook with a planning grant to prepare and apply for the Clinical and Translational Science Award, which would increase translational research and create an infrastructure to promote accelerated biomedical discovery and application of novel diagnostics and therapeutics.

New and Ongoing Studies and Trials

Following are highlights of some of the key research projects at Stony Brook University Medical Center.

Understanding the Molecular Mechanism of Hepatocellular Carcinoma by Focusing on the IQGAP Proteins

Goal: To understand the molecular mechanism of liver cancer development (hepatocellular carcinoma, or HCC). Working with genetically engineered mice, researchers are studying the IQGAP1 (which has been found to be present in increased levels in colon cancer) and IQGAP2 proteins—identifying

their function, their physiological role in cancer development, their interaction with each other, and how IQGAP2 may serve as a molecular guard from liver cancer development. Researchers hope to test novel therapies based on modulation of IQGAPs presence in the liver on these genetically engineered mice.

Collaborators: Led by Valentina Schmidt, PhD, Assistant Professor, Division of Hematology, Stony Brook University Medical Center.

The Selenium and Vitamin E Cancer Prevention Trial (SELECT)

Goal: Now in year nine, this 12-year

prevention clinical trial is designed to study whether selenium and vitamin E can prevent prostate cancer. An ancillary study began this year to investigate whether these supplements can prevent colon cancer.

Collaborators: Led by Iris Granek, MD, Preventive Medicine Chair, the trial is sponsored by the National Cancer Institute. Centers throughout the United States, Canada, and Puerto Rico participate. Stony Brook, with 372 men, has one of the highest enrollments in the nation.

The Barbados National Cancer Study

Goal: To conduct an epidemiological study of environmental and genetic risk factors for prostate and breast cancer in

the African-Caribbean population of Barbados. Stony Brook was awarded a \$4 million grant from the NCI to continue the prostate component of the study for an additional five years. This part of the study investigates genetic and obesity-related factors for disproportionately high rates of prostate cancer in men of African descent.

Collaborators: Led by M. Cristina Leske, MD, MPH, DSc, from the Department of Preventive Medicine, is collaborating with the National Human Genome Research Institute, the Ministry of Health in Barbados, the University of West Indies, and the Translational Genomic Research Center in Arizona.

The SCOPE Program (Suffolk County Preventive Endoscopy)

Goal. To launch a colorectal screening and education program for low-income adults age 50 or older who have little or no health insurance coverage for regular screenings. Screening colonoscopies are done by Stony Brook gastroenterologists.

Collaborators: The Centers for Disease Control and Prevention (CDC) awarded Stony Brook—one of only five institutions in the country to receive CDC funding—\$2.2 million for the project. Also collaborating are Suffolk County Department of Health Services, the ACS, the Department of Preventive Medicine, Surgical Oncology and Gastrointestinal Divisions in the Departments of Medicine, as well as the Departments of Pathology and Diagnostic Radiology. Dorothy S. Lane, MD, MPH, Director; Mary Cavanagh, MD, MPH, Lead Public Health Clinician; Catherine Messina, PhD, Project Data Manager.

Studying the Mechanisms Behind Tamoxifen-Induced Endometrial Cancer

Goal. To discover the biochemical causal mechanisms in tamoxifen—which is a first-line antiestrogen for the treatment and prevention of breast cancer—associated with increased endometrial cancer, and to develop new and safer antiestrogen agents. This research, conducted by Shinya Shibutani, PhD, Pharmacological Sciences, has identified some genetic and toxic changes associated with tamoxifen-induced endometrial cancer.

Collaborator: The National Institute of Environmental Health Sciences.

Technology to Accurately Diagnose Metastatic Tumor Cells in the Blood

Goal. To develop an integrated technology that can define “metastatic” cancer cell gene expression in the blood, which, in turn, can lead to detection of cancer in its early stage. This is a key breakthrough because currently no technology exists for isolating cancer cells from blood, as they occur at rates of one in 100 million. The technology is being tested for cancers of the ovary, pancreas, colon, prostate, breast, and lung. It may be particularly useful in diagnosing and staging lung cancer, which is difficult to biopsy.

Collaborators: With an NCI grant, researcher Wen-Tien Chen, PhD, in the Department of Medicine, works with clinicians at Stony Brook University Cancer Center and the General Clinical Research Center (GCRC), both of which provide blood and tissue samples of colon and breast cancers. In addition, as a joint venture with Stony Brook University, Dr. Chen has established a biotechnology company focusing on commercializing cell separation technologies (WTC1) in the form of blood tests for cancer diagnoses.

Colorectal Cancer Screening Demonstration Project

Goal. To increase colorectal cancer screening in the state by addressing the needs of the large and diverse population of adults ages 50 and older.

Collaborators: Led by Dorothy S. Lane, MD, MPH. Sponsored by the CDC and in collaboration with the Suffolk County Department of Health Services.



Graduate student Matthew Titmos in the translational research laboratory.

The National Women’s Health Initiative (WHI) Clinical Center at Stony Brook

The WHI is currently involved in several national, highly influential studies:

WHI Clinical Trial and Observational Study. This national study, with follow-up through 2010, has had a profound effect on medical practices following the findings of post-menopausal hormone trials. The clinical trials tested the role of hormone therapy; low-fat diet high in fruit, vegetables, and grains; and calcium and vitamin D supplements on the health of 3,400 post-menopausal women. Major outcomes studied are breast and colorectal cancer, cardiovascular disease, and fractures due to osteoporosis.

Collaborators: Dorothy S. Lane, MD, MPH, Principal Investigator, and Iris Granek, MD, MS, Co-Principal Investigator, both of whom are also investigators for the National Health Lung and Blood Institute.

“Decisions about Cancer Screening in Older Women.” This NCI-supported study examines the decision-making strategies used by women over age 65 for breast, cervical, and colorectal cancer screening. Because it involves the same women enrolled in the WHI observational study, a wealth of information is accessible.

Collaborators: Catherine Messina, PhD, Principal Investigator; Dorothy S. Lane, MD, MPH, and Iris Granek, MD, MS, Co-Investigators.

Stony Brook’s Institute of Chemical “Biology and Drug Discover

Currently, two NCI-funded projects look promising. One is on the discovery and development of the new generation taxoids, led by Iwao Ojima, PhD, that identified IDN5109 (SB-T-101131) as a promising drug candidate. Another focuses on the development of tumor-targeted drug conjugates specifically delivered to tumors and internalized into tumor cells so that potent anticancer agents are released into the cytoplasm.

Grant Highlights



Targeted Research Opportunities

Stony Brook has received Targeted Research Opportunities (TRO) grants that will advance efforts in translational research in the areas of cancer, human genetics, high-tech imaging, and biomedical engineering and technology development. Funding comes from a coordinated effort by the Office of Scientific Affairs and the Office of the Vice President for Research with the Coulter Foundation, the Carol M. Baldwin Fund, The Ward Melville Heritage Organization, and the Catacosinos Fund.

Breast Cancer Research Grants

Emily Chen, PhD, Assistant Professor, Department of Pharmacological Sciences, was chosen for a grant based on her biochemical and molecular research

that analyzes how breast cancer cells capable of organ-specific metastasis enter, survive, and grow in targeted organs. Results may lead to novel diagnostic markers and therapeutic targets for patients with advanced metastatic breast cancer.

Wei-Xing Zong, PhD, Assistant Professor, Department of Molecular Genetics and Microbiology, was honored for his work in examining the role of autophagy in breast cancer cell death in response to chemotherapy. Dr. Zong hopes to determine whether autophagy should be inhibited or enhanced to achieve specific outcomes in anti-cancer therapy.

ACS-Funded Grant

Edward Chan, MD, Department of Pediatrics, was awarded a grant by the American Cancer Society (ACS), begun

in July 2009. Dr. Chan and his team are investigating tyrosine kinase receptors as predictors for a patient's response for targeting chemotherapy, as well as identifying new targets for treatment of cancer. The ACS-funded project examines the RON receptor as biomarkers and targets for head and neck cancer.

NIH Cancer Grants

Stony Brook University physicians and scientists conduct research with the support of NIH-funded grants. Patrick Hearing, PhD, Department of Molecular Genetics and Microbiology, just renewed the NIH-NCI Training Grant "Cancer Biochemistry and Cell Biology" for another five years. This grant, which has run for 31 years, will bring in more than \$2 million to support the training for seven predoctoral students and four postdoctoral fellows.

In addition, the following investigators have been awarded NIH cancer grants: Jian Cao, MD; Howard Crawford, PhD; Arthur Grollman, MD; Bernadette Holdener, PhD; Charles Iden, PhD; Dorothy Lane, MD, MPH; M. Cristina Leske, MD, MPH; Jerome Liang, PhD; Catherine Messina, PhD; Ute Moll, MD, MS; Iwao Ojima, PhD; Ghassan Samara, MD; Kenneth Shroyer, MD, PhD; and Jennie Williams, PhD.

Symposium

Cancer Center Symposium

The Cancer Center, along with the Department of Molecular Genetics and Microbiology, conducts symposia such as the symposium titled, "Tumor: Host In-

teractions." The symposium, organized by Michael Hayman, PhD, Howard Crawford, PhD, and Ute Moll, MD, MS, Department of Pathology, was attended by 130 area physicians and scientists.

This events featured internationally renowned experts in cancer and cell biology. Due to the event's success, subsequent cancer research symposia are planned.

Examples of Published Research

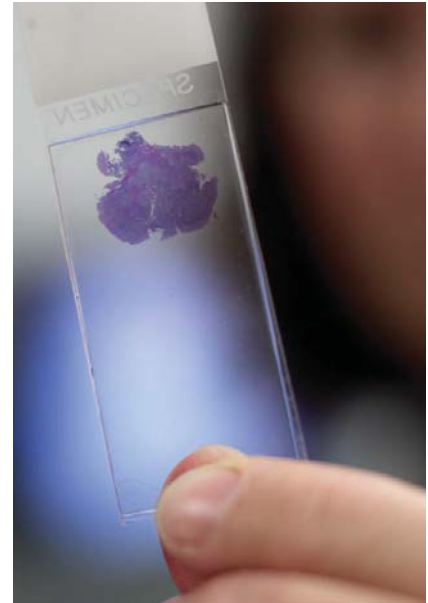
Investigation Advances Science

Investigators in the Department of Urology, in collaboration with the Department of Medicine, have published research that has expanded the current knowledge base for prostate cancer metastasis and may eventually lead to the development of new treatments for trials in humans. Other investigators in the Department, working with the Department of Surgery, have published research that demonstrates the utility of urine telomerase activity as a screening tool for prostate cancer—with future studies planned to investigate the potential benefit of this as a first-line screening test.

The Stony Brook Tissue Bank

Translating Basic Science into Improved Clinical Practices

Established in 2004 in the Department of Pathology by the Medical Center and the School of Medicine, this facility banks normal, abnormal, and malignant tissue specimens and serums to support the discovery of molecular diagnostics and markers of disease progression. The laboratory is directed by surgical pathologist, Youjun Hu, MD, assisted by experienced researcher Gayle Lark. Dr. Hu works closely with cancer surgeons to obtain tissue specimens under informed patient consent.



The Cancer Clinical Trials Office

Program Leaders: Robert I. Parker, MD, Medical Director for Clinical Trials; Patricia Hentschel, NP, Administrative Director for Clinical Trials; and research nurses Patricia Delli Bovi, RN; June Giardelli, RN; Kim Lykтей, RN; Carol Martin, RN; and Maryann Parrish, RN

The Cancer Clinical Trials Office assists Stony Brook University Cancer Center investigators in developing and completing scientifically valid clinical trials in an organized, cost-effective, and methodologically sound manner. Major areas of responsibility include protocol support services, such as activation and monitoring, data management, and providing research nursing support. The office is involved in a number of interdisciplinary multicenter clinical trials groups including the Eastern Cooperative Oncology Group (ECOG), the Children's Oncology Group (COG), the American College of Surgeons Oncology Group (ACSOG), the National Surgical Adjuvant Breast and Bowel Project (NSABP), Cancer and Leukemia Group B (CALBG), the Gynecologic Oncology Group (GOG), and the Radiation Therapy Oncology Group (RTOG). In addition, the office coordinates in-house

therapeutic research as well as phases I, II, and III pharmaceutical research trials. Patients receive information about availability of cancer-related clinical trials through formal mechanisms that include brochures and pamphlets, Web sites, patient information packets, the patient library, patient support group seminars on clinical trials, research coordinator, and the Patient Navigators.

The overall goal of the Clinical Trials Program is to continue to provide patients with the most effective treatments for cancer. All clinical trials conducted at major academic cancer centers, including the Stony Brook University Cancer Center, are managed by experienced physicians who carry out these treatment trials on patients to achieve maximum safety and comfort.

Patients treated for cancer at Stony Brook have the opportunity to participate in the Clinical Trials Program of the Stony Brook University Cancer Center. Clinical trials offer patients access to the most promising treatments for many types of cancers, and patients in clinical trials are

among the first to receive new treatments before they are commonly available.

It is widely accepted that patients who participate in clinical trials do at least as well as patients who are offered standard treatment, with the chance of even better outcomes. Patient participation in clinical trials is vital to advancing treatments for specific cancers. Clinical trials are developed when a new drug or treatment regimen offers the potential for benefit beyond the standard treatment. All of the most effective standard cancer treatments have come about because of their initial use in clinical trials.

Clinical trials are often conducted through national cooperative research groups. Stony Brook University Medical Center oncologists participate in several national cooperative research groups that coordinate clinical trials under sponsorship of the National Cancer Institute. In addition, the Cancer Center develops clinical trials for cancer prevention and treatment based on research developed by Stony Brook University investigators.

QUALITY AND STANDARDS

Working to Meet and Exceed Nationwide Quality Standards

Cancer Registry

Program Leaders: Vincine Kelly, CTR, Director; Margaret Celestino, Follow-Up Secretary; Audrey Hassett, CTR; Phillip Lindenmuth, CTR; and Carole Whitehead, CTR, Abstractors

OVERVIEW The Cancer Registry electronically stores case records on all types of tumors entered into a database. Case ascertainment includes search and analysis of all inpatient, same-day-stay, and emergency room admissions as well as all ambulatory and clinic encounters and physician practice visits for cancer care. The database contains 430,905 records, with 35,021 added since the active case reference date of January 1, 1993. Epidemiologic data and annual follow-up are maintained on analytic cases. In accordance with national standards, security procedures are in place for confidentiality and disaster recovery.

Since its inception in 1984, the Cancer Registry Department has played an integral part in the interdisciplinary cancer

care teams by collecting relevant information, providing useful statistical summaries, and disseminating information about cancer program standards to members of the clinical, research, administrative, and education faculty. Staff provides input at cancer conferences and committee meetings, and works to meet the institution's responsibility for Department of Health-mandated cancer reporting.

Implementation

Qualified researchers, administrators, and clinicians utilize de-identified cancer registry statistics for research, education, grant writing, administrative planning, cancer quality dashboards, and clinical outcomes measurements. Stony Brook's participation in the American Cancer Society's Datalinks Web site and the Commission on Cancer's National Cancer Data Base annual call for data, as well as other special studies,

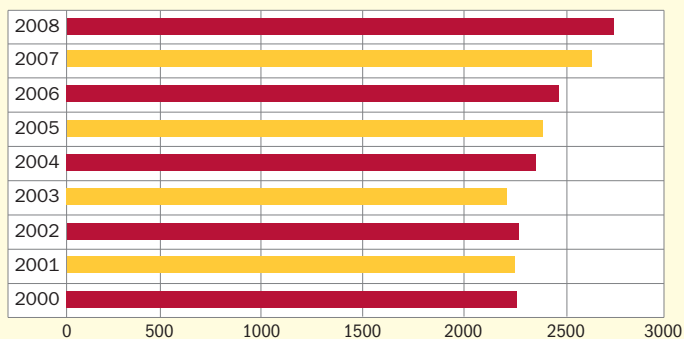
contributes to the national database. This year, the registry participated in national quality measures of adjuvant therapy and staging in breast, and colon and rectal cancer.

For collected data to meet specific quality standards, continuous quality assessments are performed daily via electronically programmed coding edits, weekly by physician advisor review, and annually by National Cancer Data Base electronic edit programs. Physician advisors review 10 percent of analytic cases in the database for accuracy in use of the collaborative staging system. The staff participates in the appropriate continuing education and professional association activities, and Stony Brook frequently hosts conferences and workshops.

Stony Brook's annual cancer incidence tables and site specific surveys are posted on our Web site at <http://sbumc.informatics.sunysb.edu/cancerregistry>.

CANCER STATISTICS

Number of Patients with Cancer New to Stony Brook University Medical Center
Annually, 2000 through 2008



New Cancer Patients at Stony Brook University Medical Center
2000-2008 Trends

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
New Patient	2,248	2,238	2,252	2,200	2,334	2,381	2,482	2,618	2,738
Year-to-Year Change	Baseline	-10 (-0.4%)	+14 (+0.6%)	-52 (-2.3%)	+134 (+6.1%)	+47 (+2.0%)	+101 (+4.2%)	+136 (+5.5%)	+120 (+4.5%)

Source: Stony Brook University Medical Center Cancer Registry data base accessions

Cancer Statistics at Stony Brook University Medical Center, Stony Brook, NY

Cancer Site Distribution in 2008 by Case Type, and TNM Stage, Patient Type, Gender, Stage Groups

PRIMARY SITE	TOTAL	PATIENT TYPE		GENDER		AJCC STAGE GROUP						
		New	Re-Tx	Male	Female	0	I	II	III	IV	Unk	N/A
ALL SITES	2738	2122	616	1176	1562	299	716	503	323	388	110	399
ORAL CAVITY	36	27	9	25	11	1	6	4	5	15	5	0
Lip	5	3	2	4	1	1	2	0	0	0	2	0
Tongue	9	7	2	6	3	0	3	0	1	4	1	0
Oropharynx	2	1	1	1	1	0	0	0	1	0	1	0
Hypopharynx	3	1	2	3	0	0	0	0	0	3	0	0
Other Oral	17	15	2	11	6	0	1	4	3	8	1	0
DIGESTIVE SYSTEM	284	193	91	167	117	10	44	59	59	81	22	9
Colon	82	49	33	42	40	0	17	16	19	23	6	1
Rectum	34	25	9	19	15	1	3	10	11	8	1	0
Anus/Anal Canal	8	8	0	4	4	1	0	3	3	1	0	0
Esophagus	19	11	8	16	3	0	1	4	4	8	2	0
Stomach	28	19	9	20	8	1	6	1	4	10	4	2
Liver	32	21	11	29	3	0	7	5	11	4	5	0
Pancreas	49	36	13	23	26	7	5	10	6	18	3	0
Other Upper Gi	32	24	8	14	18	0	5	10	1	9	1	6
RESPIRATORY SYSTEM	377	303	74	183	194	0	91	16	105	132	23	10
Nasal/Sinus	2	1	1	2	0	0	0	0	0	1	0	1
Larynx	16	14	2	10	6	0	3	0	8	4	1	0
Lung/Bronchus	356	285	71	168	188	0	88	16	97	126	22	7
Other Respiratory	3	3	0	3	0	0	0	0	0	1	0	2
BLOOD AND BONE MARROW	132	77	55	80	52	0	0	0	0	0	0	132
Leukemia	91	60	31	56	35	0	0	0	0	0	0	91
Multiple Myeloma	26	12	14	14	12	0	0	0	0	0	0	26
Other Hematopoietic	15	5	10	10	5	0	0	0	0	0	0	15
SARCOMA SOFT TISSUE	23	22	1	16	7	0	2	6	8	3	3	1
SARCOMA BONE	5	1	4	4	1	0	0	1	1	1	2	0
SKIN	165	139	26	112	53	50	68	22	11	4	5	5
Melanoma	151	130	21	100	51	49	67	18	8	4	4	1
Other Cutaneous	14	9	5	12	2	1	1	4	3	0	1	4
BREAST	495	405	90	3	492	138	174	103	41	22	16	1
FEMALE GENITAL	304	247	57	0	304	74	124	22	34	19	10	21
Cervix Uteri	87	71	16	0	87	57	18	6	3	3	0	0
Corpus Uteri	135	113	22	0	135	0	79	11	19	8	5	13
Ovary	53	38	15	0	53	1	18	4	9	8	5	8
Vulva	27	23	4	0	27	16	7	1	3	0	0	0
Vagina	1	1	0	0	1	0	1	0	0	0	0	0
Fallopian Tube	1	1	0	0	1	0	1	0	0	0	0	0
MALE GENITAL	294	206	88	294	0	0	10	238	10	27	9	0
Prostate	278	194	84	278	0	0	0	233	10	26	9	0
Testis	14	11	3	14	0	0	10	4	0	0	0	0
Penis	2	1	1	2	0	0	0	1	0	1	0	0
URINARY SYSTEM	160	121	39	115	45	26	71	10	10	39	3	1
Bladder	70	46	24	57	13	23	18	8	0	20	1	0
Kidney/Renal Pelvis	86	72	14	56	30	2	52	2	9	19	2	0
Ureter/Urethra	4	3	1	2	2	1	1	0	1	0	0	1
BRAIN AND CNS	139	109	30	55	84	0	0	0	0	0	0	139
Brain (Benign)	5	5	0	2	3	0	0	0	0	0	0	5
Brain (Malignant)	44	35	9	26	18	0	0	0	0	0	0	44
Meninges/Cns Other	90	69	21	27	63	0	0	0	0	0	0	90
ENDOCRINE	186	168	18	52	134	0	103	9	23	11	4	36
Pituitary/Adrenal	36	29	7	18	18	0	0	0	0	0	0	36
Thyroid	150	139	11	34	116	0	103	9	23	11	4	0
LYMPHATIC SYSTEM	91	65	26	49	42	0	22	13	15	34	7	0
Hodgkin's Disease	16	13	3	3	13	0	3	5	3	4	1	0
Non-Hodgkin's	75	52	23	46	29	0	19	8	12	30	6	0
UNKNOWN PRIMARY	34	28	6	16	18	0	0	0	0	0	0	34
OTHER/ILL-DEFINED SITES	13	11	2	5	8	0	1	0	1	0	1	10

This report includes all patients first encountered in 2008 at SBUMC for cancer of the named primary site and carcinoma in-situ cases.

Tumor Boards

OVERVIEW A key component of the Cancer Care Program and integral to patient management at Stony Brook University Medical Center, tumor board meetings provide a valued forum for the exchange of information, consultation, and collaboration. Cases are presented for diagnostic assessment of prognostic indicators, clinical and pathologic staging, treatment planning, re-treatment and review of outcomes, and educational purposes during all phases of care. Clinical staging, molecular markers, existing prognostication methods, and nationally recognized guidelines are utilized as is diagnosis, treatment planning, and outcomes assessment. Tumor Board meetings also provide opportunities to participate in research protocols and to consider new and emerging standards for patient management.

Implementation

Multidisciplinary departmental and site-focused Tumor Board meetings were

Tumor Board Schedule

Breast	Fridays, 7:30 am
Colon and Rectum	Fridays, 2:00 pm, Weeks 1 and 3
GI Upper	Tuesdays, 7:30 am, Week 3
Gynecologic	Wednesdays, 7:00 am, Weeks 1, 3, 5
Head and Neck, Thyroid	Tuesdays, 7:30 am, Week 1
Leukemia/Lymphoma	Fridays, noon
Lung	Wednesdays, 3:30 pm, Weeks 1 and 3
Melanoma	Tuesdays, 7:30 am, Week 2
Neurologic Oncology	Tuesdays, 5:00 pm Week 1
Pediatric	Mondays, 4:00 pm, Weeks 2 and 4
Sarcoma	Tuesdays, 7:30 am, Week 4
Urology	Tuesdays, 7:30 am, Week 2

held each week at Stony Brook University Medical Center in 2008 and 2009. Physicians representing diagnostic radiology, pathology, surgery, and medical oncology participated in ongoing facility-wide conferences. Other participants included representatives from pulmonary medicine, dentistry, nursing, pain management, social work, pharmacy,

nutrition, physical therapy, speech and hearing, cancer registry, and clinical trials research. In addition, faculty, residents, interns, fellows, and students in all specialties attend and participate in discussion relevant to clinical education. Tumor Board case clinical presentation series offers AMA Category 1 CME credits to eligible attendees.

Quality Management

Program Leaders: William Greene, MD, Chief Quality Officer; Marc Shapiro, MD, Assistant Chief Quality Officer; and Pamela Boremski, RN, Quality Management Practitioner

OVERVIEW The Cancer Services Quality Management Program works to ensure the delivery of safe, effective, efficient, and accessible care to meet or exceed patient expectations. Part of the Department of Continuous Quality Improvement, the program also responds to direction from the Cancer Committee and Cancer Quality Service Group in setting performance improvement priorities that directly affect patient care. The program fosters a work environment that encourages the creation, assessment, and redesign of processes and systems, with each staff member of the cancer services team playing a role.

Implementation: Because cancer program standards demand that patients receive care and outcomes comparable to nationwide standards, Stony Brook University Medical Center developed a Cancer Services Dashboard and Cancer Services Balanced Scorecard. Using input from the Cancer Committee, the Cancer Center Executive Leadership Council, the site-focused Disease Management Teams, and other cancer services professional staff, data are collected on selected indicators and compared to benchmarks. The Medical Center also reviews national guidelines, such as those provided by the National Comprehensive Cancer Network, College of American Pathologists, and

Commission on Cancer, and selects benchmarks for quality monitoring.



Sheri Ford, MD, Lynette Leepack, NP, and Janice Lu, MD

Professional Education in Cancer Care July 2008 to June 2009

AMA PRA Category 1 Approved
School of Medicine/Office of Continuing Medical Education (OCME), Stony Brook University

PROGRAM TITLE	DATES	DEPARTMENT	LOCATION
Endometrial Carcinoma and Obesity	July 2, 2008	Pathology	SUNY SB
Immunohistochemical Classification of Tumors: Methods and Validation	July 30, 2008	Pathology	SUNY SB
Recent Advances in Lymphoma Diagnosis	Sept. 17, 2008	Pathology	SUNY SB
Follicular Lymphoma	Sept. 24, 2008	Pathology	SUNY SB
20th Annual Conference on Mammography and Other Breast Imaging	Sept. 27, 2008	OCME	Melville, NY
The Spectrum of Tumors and Tumor-like Conditions of the Central Skullbase	Nov. 5, 2008	Radiology	SUNY SB
Comprehensive Review of Endometrial Carcinoma	Nov. 12, 2008	OB/GYN	SUNY SB
Melanoma, Depth of Excision	Nov. 20, 2008	Dermatology	SUNY SB
Prostate Cancer	Dec. 17, 2008	Medicine	SUNY SB
Surgery Breast Conference Tumor Board	Jan. 9, 16, 23, 30; Feb. 6, 2009	Surgery	SUNY SB
Surgery Colorectal Tumor Board	Jan. 9, Feb. 2, Mar. 6, Apr. 3, May 1, June 5, 2009	Surgery	SUNY SB
Bilineal and Biphenotypic Leukemias—How Different Are They?	Jan. 14, 2009	Pathology	SUNY SB
Personalized Care in Breast Cancer	Jan. 21, 2009	Medicine	SUNY SB
A Link Between Smoking and Breast Cancer?	Jan. 21, 2009	Pediatrics	SUNY SB
The Common Biology of Cancer and Aging	Jan. 28, 2009	Pathology	SUNY SB
Genetic Evaluation of Breast Cancer—Diagnosis and Treatment	Jan. 28, 2009	OB/GYN	SUNY SB
Hepatocellular Carcinoma	Feb. 18, 2009	Pathology	SUNY SB
Epidemiology of Gynecologic Cancers	Feb. 18, 2009	OB/GYN	SUNY SB
Genetics of Gynecologic Cancers	Feb. 25, 2009	OB/GYN	SUNY SB
Premalignant Conditions of the Cervix and Vagina	March 4, 2009	OB/GYN	SUNY SB
Endometrial Carcinoma: Controversies and New Trends	March 18, 2009	Pathology	SUNY SB
Epithelial Ovarian and Fallopian Tube Cancer	March 18, 2009	OB/GYN	SUNY SB
Urology Tumor Boards	Apr. 14, May 12, June 9, 2009	Urology	SUNY SB
Lung Cancer Evaluation Center Tumor Board	June 17, 2009	Cardiothoracic Surgery	SUNY SB

The Cancer Committee

The Cancer Committee is the designated multidisciplinary body for the administrative oversight, development, and review of cancer care services at Stony Brook University Medical Center. The Committee communicates directly with the Medical Center’s medical board, and its activities and recommendations directly impact programs. Members include physician representatives from the medical, surgical, diagnostic, and clinical areas along with representatives from supporting services involved with the care of patients with cancer. Its composition must include board-certified physicians from surgery, medical

oncology, radiation oncology, diagnostic radiology, and pathology, along with a cancer liaison physician, clinical research manager, pain control/palliative care specialist, and representatives from Medical Center administration, nursing, social services, cancer registry, and quality assurance. In 2009, two community physicians were invited to attend: Michael Theodorakis, MD, Outpatient Community Cancer Director, and Jeffrey Vacirca, MD, Inpatient Community Cancer Director.

The charge of the committee is to provide leadership to plan, initiate, stimulate,

and assess the institution’s cancer-related activities, in accordance with the Commission on Cancer requirements for cancer program accreditation. Under the leadership of the Cancer Committee in 2008 and 2009, our Breast Care Center program was awarded national accreditation. In addition, the Medical Center’s overall cancer care program received the highest approval rating from the American College of Surgeons Commission on Cancer (CoC) as a Teaching Hospital Approved Cancer Program, with full commendation on all standards. We were also granted the Outstanding Achievement Award from this organization.

Physician Members

Theodore G. Gabig, MD, Hematology/Oncology, Committee Chair
 Howard L. Adler, MD, Urologic Surgery
 Roberto Bergamaschi, MD, Colorectal Surgery

William Greene, MD, Clinical Affairs
 Lynn Hallarman, MD, Survivorship and Supportive Care
 Andrzej Kudelka, MD, Medical Oncology
 Seth O. Mankes, MD, Diagnostic Radiology
 Brian O’Hea, MD, Breast Surgery

Christopher Page, MD, Anesthesia/Pain Management
 Colette Pameijer, MD, Surgery, ACOS Liaison
 Robert I. Parker, MD, Pediatric Oncology
 Meenakshi Singh, MD, Pathology
 Tamara Weiss, MD, Radiation Oncology

Non-Physician Members

Teresa Beutel, Healthcare Teleservices
 Pamela Boremski, RN, Quality Management
 Sabra Boughton, RN, Patient Education
 Rose C. Cardin, RN, Cancer Center Administration
 Jennifer Fitzgibbon, RD, Oncology Nutrition

Jeannie Gaspard, RN, OCN, Outpatient Cancer Services
 Patricia Hentschel, RN, OCN, Clinical Trials
 Vincine Kelly, CTR, Cancer Registry and Committee Coordinator
 Susan McCarthy, LMSW, Social Work
 Kathleen Noone, RN Oncology Unit Manager

Yvonne Spreckels, Community Relations
 Lori Tischler, RN, Cancer Helpline
 Cathy Tuppo, PT, Physical Rehabilitation
 Stephen Unger, Pastoral Care
 Scot Weber, RPh, Pharmacy
 Lee Anne Xippolitos, PhD, RN, Chief Nursing Officer

Contact Numbers

Phone numbers are in the 631 area code unless otherwise stated.

Cancer Center	638-1000	Neurosurgical Oncology	444-1210
Cancer Helpline	(800) 862-2215	Nursing Administration/Chief Nursing Officer	444-2780
Cancer Registry	444-9844	Nutrition	638-0709
Carol M. Baldwin Breast Care Center	638-1000	Pain Management Services	638-0800
Chaplaincy	444-8157	Pathology	444-2222
Child Life Program	444-3840	Patient Education Services	444-5263
Clinical Trials	638-0839	Pediatric Oncology	444-7720
Colorectal Surgery	444-2704	Physical and Lymphedema Therapy	444-4240
Dermatology	444-4200	Preventive Medicine	444-2190
Diagnostic Radiology	638-2121	Radiation Oncology	444-2200
Gynecologic Oncology	638-1000	Social Work Services	444-2552
Head and Neck Oncology	444-8410	Support Groups	444-4000
HealthConnect®	444-4000	Surgical Oncology	444-1825
Hematology/Oncology	638-1000	Survivorship and Supportive Care Program	638-2801
Leukemia/Lymphoma/Transplant	638-1000	Upper Gastrointestinal Cancer Services	444-8052
Lung Cancer Evaluation Center	444-2981	Urologic Oncology	444-1948

INVESTING IN THE BEST IDEAS IN MEDICINE

Supporting the healthcare needs of Long Islanders

Pivate support is essential to our progress, and we are fortunate to have many individuals and groups supporting our research efforts. The Long Island League to Abolish Cancer (LILAC), established in 1967, is a group of volunteers who raise funds to support cancer research, and Stony Brook University Medical Center has been a grateful recipient of several pieces of equipment needed for basic lab research. This year, researchers in the Department of Pharmacological Sciences at Stony Brook University Medical Center received a grant from LILAC enabling the purchase of a DNA imager, an ultraviolet (UV) light and camera source that enables researchers to analyze DNA gels of tissue to advance molecular studies of cancer.

Over the past 12 years, LILAC has given the Medical Center more than \$85,000 to support instrumentation for cancer research initiatives in areas such as molecular markers for cancer, proteins and cancer, and cancer stem cells. A portion of the 2009 grant was funded by a newly formed group called LILAC's "Teens Against Cancer." The group includes teenagers from Half Hollow Hills High School in Dix Hills, who volunteered their time during the past school year to raise funds for LILAC.

Philanthropy is the platform for progress and essential to the fulfillment of our



Jeanne Greenfield, CPNP, with a young patient in the pediatrics playroom.

vision to achieve NCI designation and provide world-class cancer care.

Investments in faculty recruitment, capital projects, and technology are needed. Choosing to invest in Stony Brook University's Cancer Center will make a lasting impact on the lives of many for years to come.

For more information on how you can help Stony Brook University Medical Center and the Long Islanders we serve, please call Stony Brook University Advancement at (631) 444-2899 or visit www.StonyBrookMedicalCenter.org/giving.

Bibliography

Cancer Incidence and Mortality for Suffolk County New York 2002-2006, New York State Department of Health Cancer Registry, Albany, NY, November 2008.

Cancer Prevention and Early Detection Facts and Figures, American Cancer Society, Atlanta, GA, 2009.

Cancer Surveillance Review, Surveillance, Epidemiology and End Results Program (SEER), National

Institutes of Health, National Cancer Institute, Bethesda, MD, 1975-2005.

Clinical Practice Guidelines in Oncology, *Journal of the National Comprehensive Cancer Network*, Volume 7, Number 8, September 2009.

Commission on Cancer, Cancer Program Standards, 2004, Revised Edition. American College of Surgeons, Chicago, IL, July 2009.

Hospital Comparison Benchmark Reports, Breast and Colon. (2000-2006); Cancer Program Practice Reports (CP3R), for Breast, Colon and Rectal

Cancers, 2004-2006 Diagnoses; National Cancer Data Base, Commission on Cancer, American College of Surgeons, Chicago, IL, June 2009.

NCDB Survival Reports. Cases Diagnosed, Breast (C50.0-C50.9), Colon (C18.0-C18.9). National Cancer Data Base, Commission on Cancer, American College of Surgeons, Chicago, IL, 1998-2001.

Survival and Time Interval from Surgery to Start of Chemotherapy among Colon Cancer Patients, Owens, et al, *Journal of Registry Management*, Volume 36, Number 2, Summer 2009.

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